The Works Of the late Right Honorable Henry St. John, Lord Viscount Bolingbroke

In Five Volumes, complete.

Bolingbroke, Henry St. John

London, 1754

Essay I. Conserning the nature, extent, and reality of human knowledge.

urn:nbn:de:hbz:466:1-60908

ESSAY THE FIRST.

CONCERNING

The NATURE, EXTENT, and REALITY

OF

HUMAN KNOWLEDGE.

ESSAY THE FIRST.

CONCERNING

The NATURE, EXTENT and REALITY

OF

HUMAN KNOWLEDGE.

SECTION I.

AMONG the many cavils that have been deviſed againſt the demonſtrated exiſtence of a firſt, intelligent, ſelf-exiſtent Cauſe of all things, this has been one; that things known muſt be anterior to knowledge, and that we may as well aſſert that the images of objects we ſee reflected made thoſe objects, as that knowledge, or intelligence made them. HOBBES is accuſed of reaſoning on this principle in his Leviathan, and his book de Cive, by the author of the Intellectual Syſtem of the Univerſe, and his argument in the place, where he mentions the notions that reaſon dictates to us, concerning the divine attributes, is thus ſtated. " Since " knowledge, and intelligence are nothing more in us, than " a tumult of the mind, excited by the preſſure of ex- " ternal objects on our organs, we muſt not imagine there is

" any

" any ſuch thing in God, theſe being things which depend " on natural cauſes." Now I think, this charge a little too haſtily brought, and a little too heavily laid. So will any man who reads the context. HOBBES having ſaid that, when we aſcribe will to God, we muſt not conceive it to be in him, what it is in us, but muſt ſuppoſe it to be ſomething analogous which we cannot conceive. He adds, " in " like manner when we attribute ſight, and other ſenſations, or " knowledge, and intelligence to God, which are in us no- " thing more, than a certain tumult of the mind, excited by " the preſſure of external objects on our organs, we muſt " not imagine that any thing like this happens to God." I am far from ſubſcribing to many notions which HOBBES has advanced. But ſtill the plain and obvious meaning of this paſſage, according to my apprehenſion, is not to deny that the ſupreme Being is an intelligent Being, but to diſtinguiſh between the Divine and human manner of knowing. If HOBBES did not aſſert a diſtinct kind of knowledge, and attribute " the ſame clearly to God Almighty" upon this occaſion, the omiſſion will not ſerve to fix the brand of atheiſm upon him. On the contrary, whatever his other opinions were, this opinion may be reconciled to the moſt orthodox theiſm. It is more reaſonable and carries along with it a more becoming reverence, than the learned writer who makes the objection ſhews; when, like other divines, he ſuppoſes clearly by his reflections on this paſſage, and indeed by the whole tenor of his writings, that intelligence and knowledge in God are the ſame as intelligence and knowledge in man; that the divine differs from the human in degrees, not in kind, and that by conſequence if God has not the latter, he has none at all.

ABSURD and impertinent vanity! We pronounce our fellow animals to be automates, or we allow them inſtinct, or we beſtow

beſtow graciouſly upon them, at the utmoſt ſtretch of liberality, an irrational ſoul, ſomething we know not what, but ſomething that can claim no kindred to the human mind. We ſcorn to admit them into the ſame claſs of intelligence with ourſelves, tho it be obvious, among other obſervations eaſy to be made, and tending to the ſame purpoſe, that the firſt inlets, and the firſt elements of their knowledge, and of ours, are the ſame. But of ourſelves, we think it not too much to boaſt that our intelligence is a participation of the divine intelligence; that the mind of man, like that of God, contains in it the ideas of intelligible natures; that it does not riſe from particular to general knowledge, but deſcends from univerſals to ſingulars; hovers, as it were, aloft over all the corporeal univerſe; is independant of the bodies that compoſe it, or proleptical to them, and in the order of nature before them.

Such wild notions as theſe, or the magic of ſuch unmeaning ſounds, and articulated air, which the warm imaginations of Aſia and Africa firſt produced, have been ecchoed down to the preſent age, and have been propagated with ſo much ſucceſs even in our northern and cold climates, that the heads of many reverend perſons have been turned by a praeternatural fermentation of the brain, or a philoſophical delirium. None has been ſo more, I think, ſince the days of the latter platoniſts, and the reign of the ſchoolmen who may be called properly the latter peripatetics, than that of the divine I have juſt now quoted. He read too much to think enough, he admired too much to think freely, and it is impoſſible to forbear wiſhing that he had taken due notice of a paſſage in Tully's Offices, "Ne ut quidam Graeca verba inculcantes jure optimo "rideamur." Greek phraſeology was in faſhion among the Romans, as well as Greek philoſophy, in Tully's days, and

it is reaſonable to believe that many things paſſed then under a Greek varniſh, that would not have paſſed ſo well in mere Latin; juſt as we may obſerve, that many things have paſſed by the help of Greek and Latin among us, that would not have paſſed ſo well in mere Engliſh. TULLY reformed this pedantry indeed, but he did it rather with a view to enrich his language, than to determine his ideas, and he loſt little or no advantage by the reformation: that advantage I mean which men take, who affect to know more than they do know, from which affectation the academicians, as much as they diſclaimed knowledge, were not free. He invented Latin to anſwer Greek words; and readers, like writers, being apt to imagine that every new word denotes ſomething new, this expedient ſerved well enough to help out a ſyſtem, or to get rid of troubleſome objections. Thus vain phraſeology has been always called in to the aſſiſtance of vain philoſophy, and a learned miſt has been raiſed in order to ſurprize, and impoſe, or to eſcape. Theſe are ſome part of the arguties verbales, againſt which MONTAGNE declaims: and, to ſpeak in his ſtyle, they may ſerve to enrich a man's tongue, but they will leave his underſtanding as poor as they found it, and much more perplexed.

I RETURN to the ſubject immediately before me, and I ſay that, ſince there muſt have been ſomething from eternity, becauſe there is ſomething now, the eternal Being muſt be an intelligent Being, becauſe there is intelligence now, (for no man will venture to aſſert that non-entity can produce entity, or non-intelligence intelligence) and ſuch a Being muſt exiſt neceſſarily, whether things have been always as they are, or whether they have been made in time; becauſe it is no more poſſible to conceive an infinite than a finite progreſſion of effects without a cauſe. Thus the exiſtence of a God is demonſtrated,

monſtrated, and cavil againſt demonſtration is impertinent. It is ſo impertinent, that he who refuſes to ſubmit to this demonſtration, among others of the ſame kind, has but one ſhort ſtep more to make in order to arrive at the higheſt pitch of abſurdity: for ſurely there is but one remove between a denial of the exiſtence of God, and a denial of our own exiſtence; becauſe, if we have an intuitive knowledge of the latter, we have the ſame intuitive knowledge of all thoſe ideas that connect the latter with the former in demonſtrating à poſteriori.

Now if the exiſtence of ſuch a Being can be demonſtrated, the atheiſt and the divine are both defeated. The atheiſt, becauſe the intelligence of this firſt cauſe of all things muſt have preceded all exiſtence, except his own, with which it is coeternal. The divine, becauſe an eſſential difference is eſtabliſhed, in conſequence of this demonſtration, between God's manner of knowing, and that which he has been pleaſed to beſtow on his creatures. Human knowledge is not only poſterior to the human ſyſtem, but the very firſt elements of it are ideas which we perceive impreſſed by outward objects on our minds: and it will avail little to urge that our minds muſt be ſtill independent of outward objects, ſince we not only know what is, but can frame ideas of what may be, tho it is not; becauſe every man who pleaſes may perceive, that all the ideas he frames of what is not are framed by the combinations he makes of his ideas of what is, and in no other manner, nor by any other means whatſoever. Thus then, if we could be ſuppoſed to know that there is an ideal world in the divine intellect, according to which this ſenſible world was made, yet ſtill the difference between the human and divine manner of knowing would admit of no compariſon.

But it was too presumptuous in Plato to assert that the supreme Being had need of a plan, like some human architect, to conduct the great design, when he raised the fabric of the universe: and it is still more presumptuous to assert not only that the divine intellect is furnished with ideas, like the human, and that God reasons and acts by the help of them, but that your ideas and mine are God's ideas, and that the modifications (for that is the fashionable term) of our minds are the modifications of God's mind. We talk indeed of the eternal ideas of the divine mind, and allude to our manner of knowing, that we may understand ourselves and be understood by others the better, just as we are forced very often to employ corporeal images when we speak of the operations of our own minds. But these expressions, so much abused by those who are in the delirium of metaphysical theology, have no intention to be understood in a literal sense among men who preserve their reason. If they had, they should never be employed by me, since I should think them prophane as well as presumptuous.

I should think them silly too, and mere cant; for as one difference between God's manner of knowing and ours arises from what we are able to demonstrate concerning God, so there arises another from what we may know if we shut our ears to the din of hard words, and turn our attention inwards concerning man, and concerning these very ideas. Our knowledge is so dependent on our own system, that a great part of it would not be knowledge perhaps, but error, in any other. They who held, as I learn from doctor Cudworth that some philosophers did hold, that "sensible ideas, and "phantasmes are impressed on the soul, as on a dead thing," maintained, no doubt, a great absurdity. Aristotle's opinion

nion was more conformable to univerſal experience, for he aſſerted, according to SEXTUS EMPIRICUS, that ſenſe was like the inſtrument, and intellect like the artificer; that ſenſe was firſt in the order of mental operations, but that intellect was firſt in dignity. Now this compariſon is juſt enough. We have internal as well as external ſenſe, mental as well as corporeal faculties, and active as well as paſſive powers, if you will allow paſſivity as well as activity to be included in the idea of power. But then, as our ſenſes are few, incapable of giving us much information, and capable of giving it falſely, unleſs we are on our guard againſt their deceptions; ſo the faculties of our minds are weak, and their progreſs towards knowledge not only ſlow, but ſo confined, that they are not able to carry it to the full extent of the ideas, about which they are converſant, and which they have all contributed to frame. We muſt conceive, as well as we can, the knowledge of the ſupreme Being to be immediate, and abſolute. Knowledge in us is mediate by the intervention of ideas, not only as far as ſenſible objects are concerned, and that goes a great way, but in the whole. It is ſuch knowledge as we are fitted by the organization of our bodies, and the conſtitution of our minds to acquire. It is ſuch as reſults from the relation eſtabliſhed between them, and the ſyſtem to which they belong. It is knowledge for us. It is, in one word, human, and relatively to us, when it is rightly purſued, real knowledge.

GENERAL ideas, or notions, ſuch as the mind frames by it's innate powers, ſuch as are ſaid to be architypes, and to refer to nothing beſides themſelves, may ſeem to be materials of axiomatical, ſcientifical, and, in a word, of abſolute, real knowledge. But even this boaſted knowledge is very precarious. Theſe ideas, or notions are not taken with exactneſs from the nature of things on many occaſions, and the ſame

affections, and imperfections of the mind, that corrupt the firſt, corrupt the ſubſequent operations of it. Ideas or notions are ill abſtracted firſt, and ill compared afterwards. The more complex, the more obſcure they are, and the more important, the more liable they are likewiſe to be abuſed by prejudices and habits that infect the mind, and put a wrong bias on it. But further; our progreſſion in this knowledge, ſuch as it is, ſtops always very ſhort of our aim. We ſoon want ideas, or want means of comparing thoſe we have, and it is in vain that we ſtruggle to get forward. It is in vain that we endeavor to force that barrier, which God has oppoſed to our inſatiable curioſity. To what purpoſe, indeed, ſhould we force it, if that was in our power, ſince we have reaſon to acknowledge, with the utmoſt gratitude to the Author of our nature, that every thing neceſſary to our well-being in the ſtate wherein he has placed us lies on the human ſide of this barrier, within that extent, I mean, where the operations of our minds are performed with eaſe and vigor, and are attended with the certainty of knowledge, or the ſufficient probability of opinion? Not only unattainable, but difficult, very often, is a term ſynonymous to unneceſſary; as we might prove, I think, by ſome examples drawn even from mathematical knowledge. In ſhort, the profound meditations of philoſophers, which we are ſo apt to admire before we have thought for ourſelves, have as much regard paid to them as they deſerve, when they are made the amuſements of men of ſenſe and leiſure; when they are uſed as exerciſe, without any other aim than to invigorate, and ſtrengthen the mind, and prepare it for ſomething more conducive to our happineſs, and therefore more properly our buſineſs.

" The

" The good, the juſt, the meet, the wholeſome rules
" Of temperance, and aught that may improve
" The moral life.*"

This ſhort account of human ideas, and human knowledge, no part of which can be applied, without blaſphemy, and abſurdity, to the ſupreme Being, nor be denied, without folly, and effrontery, of the human, is ſufficient, I ſuppoſe, to conſtitute another difference between God's manner of knowing, and ours: a difference ariſing from thoſe imperfections, and limitations of which every man is conſcious.

But it is time now to aſk what then is the preciſe notion we are to entertain of the human mind? Shall we continue to think with ſome philoſophers antient, and modern, that the ſoul, the rational ſoul, for they have given us more than one, is a ſpiritual, and divine ſubſtance, " furniſhed with forms, " and ideas to conceive all things by, and printed over with " the ſeeds of univerſal knowledge, tho the active ener- " gies of it are fatally united to ſome local motions in the " body, and concurrently produced with them by reaſon of " the magical union betwixt the ſoul and the body?" Shall we ſay too, that from this union all the imperfections of the human mind proceed, and that the perfection of our nature is to be quite abſtracted from ſenſation, like the Janguis, or illuminated ſaints of the Indoſtan, whom Bernier mentions? Shall we endeavor, like theſe philoſophers, by intenſeneſs of thought, by faſting and other auſterities, to riſe up to the contemplation of the divinity, whom they aſſure that they ſee like a white, lively, ineffable light? Or ſhall we ſoften theſe pretenſions a little, and embrace the ſyſtem of a modern philo-

* John Phillips.

philoſopher *, who affirms that God is the place of ideas, as ſpace is of body, and that this all perfect mind containing the ideas of all created beings, it is in God alone that we perceive every thing exterior to the ſoul? Shall we aſſume like another philoſopher †, that our ideas are the only real ſenſible things; that we have no reaſon to imagine there are any ſubſtances but active thinking ſubſtances, and that it is abſurd to aſcribe power to bodies, or to ſuppoſe any power but active power, any agent but ſpirit, or any actions of ſpirit without volition?

Who does not ſee all this to be as inconceivable as that which it pretends to explain? Have the authors of ſuch ſyſtems, from Plato down to that fine writer Malebranche, or to that ſublime genius, and good man, the biſhop of Clovne, contributed to make us better acquainted with ourſelves? I think not. They have done all that human capacity can do in a wrong method; but all they have done has been to vend us poetry for philoſophy, and to multiply ſyſtems of imagination. They have reaſoned about the human mind à priori, have aſſumed that they know the nature of it, and have employed much wit, and eloquence to account for all the phaenomena of it upon theſe aſſumptions. But the nature of it is as much unknown as ever, and we muſt deſpair of having any real knowledge at all about it, unleſs we will content ourſelves with that which is to be acquired, à poſteriori. The mind of man is an object of phyſics, as much as the body of man, or any other body: and the diſtinction that is made between phyſics, and metaphyſics, is quite arbitrary. His mind is part of his nature, as well as his body. Both of them together conſtitute his whole being, and as the firſt is the moſt noble part, I preſume, we ſhould determine his

* Malebranche. † Berkeley.

his ſpecies by it principally, which we do not, if his mind was not more liable than his figure to be confounded with that of other animals. Let us content ourſelves therefore to trace his mind, to obſerve it's growth, and the progreſs it makes from it's infancy to it's maturity. Let us be content with particular, and experimental knowledge, upon which we may found a few general propoſitions, ſuch as are or may be properly called axiomata media. But let us aim no longer at a general knowledge, too remote for our ſearch; nor hope to diſcover more of intellectual nature by internal ſenſe, than we are able to diſcover of corporeal nature by external. All that we can know of one and the other is, that we have ſuch and ſuch ſenſes, and ſuch and ſuch faculties, and that divers ſenſations of the body and operations of the mind are produced in them on ſuch and ſuch apparent occaſions.

SECT. II.

To meaſure rightly our intellectual ſtrength, and to apply it properly, in order neither to impoſe, nor be impoſed upon, is our point of view. I ſhall not, therefore, ſay any thing further about the nature of mind in general, that ſecret ſpring of thought, unknown and unknowable, but ſhall content myſelf to obſerve, in Mr. LOCKE's method and with his aſſiſtance, ſomething about the phaenomena of the human mind, by which we may judge ſurely of the nature, extent, and reality of human knowledge. I ſay, we may judge ſurely of them; becauſe our ideas are the foundations, or the materials, call them which you pleaſe, of all our knowledge; becauſe without entering into an enquiry concerning the origin of them, we may know ſo certainly as to exclude all doubt, what ideas we have; and becauſe, when we know this, we know with

the ſame certainty what kinds, and degrees of knowledge we have, and are capable of having.

THUS we know that the firſt ideas, with which the mind is furniſhed, are received from without, and are cauſed by ſuch ſenſations, as the preſence of external objects excites in us, according to laws of paſſion and action, which the Creator has eſtabliſhed. What theſe laws are, and how external objects become able to make ſuch impreſſions on our organs, we know as little, and it is impoſſible to know any thing leſs, as thoſe philoſophers do, who have pretended, moſt extravagantly, to explain theſe laws, and to account for theſe impreſſions; or as thoſe philoſophers know of another ſyſtem, who denying, as extravagantly, that any ſuch power can belong to body, and affirming that it is abſurd to talk of paſſive power, confine all activity and aſcribe all ſuch ideas of ſenſation to ſpirit alone. We are far from knowing how body acts on body, or ſpirit on ſpirit; how body operates on mind, and produces thought, or how mind operates on body, and produces corporeal motion. But this I know, that a leaf of wormwood conveys to my mind, by the ſenſe of ſight, and that of touch, for inſtance, the ideas of color, extenſion, figure, and ſolidity, as certainly as I know that it conveys thither, by the ſenſe of taſte, the idea of bitter; and as certainly as I know that the act of my mind, called volition, produced the motion of my hand which gathered the leaf. Our ignorance of cauſes does not hinder our knowledge of effects. This knowledge has been thought ſufficient for us, in theſe caſes, by infinite wiſdom: and nothing can be more ridiculous than to hear men affirm dogmatically, when they gueſs at moſt, and that very wildly, and very precariouſly.

As

As theſe ideas come to us from without, ſo there are others that ariſe in the mind, and proceed from the perception of it's own operations, to which a ſtill greater number is to be added, that ariſe there from the concurrence of theſe joint cauſes, from perceptions of outward and inward operations, from external, and internal ſenſe. Perception is the firſt faculty the mind exerts, and is common, whatever ſome of the others may be, to us and to the whole animal kind. The faculties that come in play afterwards ſeem to be active, but this ſeems to be paſſive; for we perceive ideas, however raiſed in the mind, whether we will or no: their eſſe is percipi, to have them we muſt perceive that we have them. Without this paſſive power, or this faculty, external objects might act upon us, but they would act to little purpoſe, for they would excite no ideas: as, on the other hand, without this action of external objects, the power or faculty of perception would be uſeleſs, or rather null, and by conſequence all the other powers or faculties of the mind.

THERE is nothing, philoſophically ſpeaking, at leaſt I could never find, to my ſorrow, that there is any thing, which obliges us neceſſarily to conclude that we are a compound of material, and immaterial ſubſtance. If we are ſo, contrary to all appearances, (for they denote plainly one ſingle ſyſtem, all the parts of which are ſo intimately connected, and dependent one on another, that the whole begins, proceeds, and ends together) this union of a body and a ſoul muſt be magical indeed, as doctor CUDWORTH calls it. So magical, that the hypotheſis ſerves to no purpoſe in philoſophy, whatever it may do in theology, and is ſtill leſs comprehenſible than the hypotheſis which aſſumes that, altho our idea of thought be not included in the idea of matter, or body, as the idea of figure is, for inſtance,

in that of limited extenſion, yet the faculty of thinking, in all the modes of thought, may have been ſuperadded by omnipotence to certain ſyſtems of matter; which it is not leſs than blaſphemy to deny, tho divines and philoſophers, who deny it in terms, may be cited, and which, whether it be true or no, will never be proved falſe by a little metaphyſical jargon about eſſences, and attributes, and modes.

But however this may be, concerning which it becomes men little to be as dogmatical as they are on one ſide of this queſtion at leaſt, and whatever ſtrength and vigor, independent on the body, may be aſcribed to the ſoul, the ſoul exerts none till it is rouſed into activity by ſenſe. A jog, a knock, a thruſt from without is not knowledge *. No. But, if we did not perceive theſe jogs, knocks, and thruſts from without, we ſhould remain juſt as we came into the world, void even of the firſt elements of knowledge. Not only the inward, active powers of the mind would be unemployed, but we may ſay, that they would be non-exiſtent. The human ſoul is ſo far from being furniſhed with forms and ideas to perceive all things by, or from being impregnated, I would rather ſay than printed over, with the ſeeds of univerſal knowledge, that we have no ideas till we receive paſſively the ideas of ſenſible qualities from without. Then indeed the activity of the ſoul, or mind commences, and another ſource of original ideas is opened: for then we acquire ideas from, and by the operations of our minds. Senſation would be of little uſe to form the underſtanding, if we had no other faculty than mere paſſive perception; but without ſenſation theſe other faculties would have nothing to operate upon, reflection would have by conſequence nothing to reflect upon, and it is by reflection that we multiply our ſtock of ideas, and fill that magazine, which

* Cudworth.

which is to furniſh all the materials of future knowledge. In this manner, and in no other we may ſay, that "all our ideas "ariſe from our ſenſes, and that there is nothing in the mind "which was not previouſly in ſenſe." But theſe propoſitions ſhould not be advanced, perhaps, as generally as they are ſometimes by logicians, leſt they ſhould lead into error, as maxims are apt to do very often. Senſation is the greater, reflection the ſmaller ſource of ideas. But theſe latter are as clear, and diſtinct, and convey knowledge that may be ſaid to be more real than the former. Senſe gave occaſion to them, but they never were in ſenſe properly ſpeaking. They are, if I may ſay ſo, of the mind's own growth, the elements of knowledge, more immediate, leſs relative, and leſs dependent than ſenſitive knowledge, as any man will be apt to think, who compares his ideas of remembering, recollecting, bare thought, and intenſeneſs of thought, with thoſe of warm and hot, of cool and cold. DES CARTES might have ſaid, "I ſee, I "hear, I feel, I taſte, I ſmell; therefore I am." But ſurely he might ſay too, "I think, I reflect, I will; therefore I am." Let us obſerve, however, that it belongs only to a great philoſopher to frame an argument to prove to himſelf that he exiſts, which is an object of intuitive knowledge, and concerning which it is impoſſible he ſhould have any doubt. In the mouth of any other perſon, "I think, therefore I am," would be very near akin to I am, therefore I am *.

THUS it will appear when we contemplate our underſtanding in the firſt ſteps towards knowledge, that corporeal, animal ſenſe, which ſome philoſophers hold in great contempt, and which

* Je ne vois pas que vous ayez eu beſoin d'un ſi grand appareil, puiſque d'ailleurs vous etiez deja certain de votre exiſtence, et que vous pouviez inferer la même choſe de quelque autre que ce fut de vos actions, etant manifeſte par la lumiere naturelle que tout ce qui agit eſt, ou exiſte.

Objec. of GASSENDI to the ſecond Medit.

which does not deſerve much eſteem, communicates to us our firſt ideas, ſets the mind firſt to work, and becomes, in conjunction with internal ſenſe, by which we perceive what paſſes within, as by the other what paſſes without us, the foundation of all our knowledge. This is ſo evidently true, that even thoſe ideas, about which our reaſon is employed in the moſt abſtract meditations, may be traced back to this original by a very eaſy analyſe. Since theſe ſimple ideas therefore are the foundations of human knowledge, this knowledge can neither be extended wider, nor elevated higher than in a certain proportion to them. If we conſider theſe ideas like foundations, they are extremely narrow, and ſhallow, neither reaching to many things, nor laid deep in the nature of any. If we conſider them like materials, for ſo they may be conſidered likewiſe, employed to raiſe the fabric of our intellectual ſyſtem, they will appear like mud, and ſtraw, and lath, materials fit to erect ſome frail, and homely cottage, but not of ſubſtance, nor value ſufficient for the conſtruction of thoſe enormous piles, from whoſe lofty towers philoſophers would perſuade us that they diſcover all nature ſubject to their inſpection, that they pry into the ſource of all being, and into the inmoſt receſſes of all wiſdom. But it fares with them, as it did with the builders in the plains of Senaar, they fall into a confuſion of languages, and neither underſtand one another, nor are underſtood by the reſt of mankind.

HAVING taken this view of our firſt, and ſimple ideas, it is neceſſary, in order to make a true eſtimate of human knowledge, that we take ſuch a view likewiſe of thoſe faculties by the exerciſe of which our minds proceed in acquiring knowledge. I have mentioned perception; and retention, or memory ought to follow: for as we ſhould have no ideas without perception, ſo we ſhould loſe them, as faſt as we get them, without

without retention. When it was objected to DES CARTES that, if thought was the eſſence of the ſoul, the ſoul of the child muſt think in the mother's womb; and when he was aſked, how then it came to paſs that we remember none of thoſe thoughts? He maintained, according to his uſual method, one hypotheſis by another, and aſſumed that memory conſiſts in certain traces made on the brain by the thoughts that paſs through it, and that as long as they laſt we remember, but that the brain of the child in the womb being too moiſt, and too ſoft to preſerve theſe traces, it is impoſſible he ſhould remember out of the womb what he thought in it. Thus memory ſeems to be made purely corporeal by the ſame philoſopher, who makes it on ſome occaſions purely intellectual. He might diſtinguiſh two memories by the ſame hypothetical power, by which he diſtinguiſhed two ſubſtances, that he might employ one or the other as his ſyſtem required. If you conſult other philoſophers on the ſame ſubject, you will receive no more ſatisfaction: and the only reaſonable method we can take, is to be content to know intuitively, and by inward obſervation, not the cauſe, but the effects of memory, and the uſe of it in the intellectual ſyſtem.

BY this faculty then, whatever it be, our ſimple ideas, which have been ſpoken of already, are preſerved with greater, and our complex ideas, which remain to be ſpoken of, with leſs facility. Both one and the other require to be frequently raiſed in the mind, and frequently recalled to it. I ſay, with the reſt of the world, to be raiſed, and to be recalled; but ſurely theſe words come very ſhort of expreſſing the wonderful phaenomena of memory. The images that are lodged in it preſent themſelves often to the mind without any freſh ſenſation, and ſo ſpontaneouſly, that the mind ſeems as paſſive in theſe ſecondary perceptions, as it was in receiving the firſt impreſſions. Our ſimple ideas, and

even our complex ideas, and notions return ſometimes of themſelves, we know not why, nor how, mechanically, as it were, uncalled by the mind, and often to the diſturbance of it in the purſuit of other ideas, to which theſe intruders are foreign. On the other hand, we are able, at our will and with deſign, to put a ſort of force on memory, to ſeize, as it were, the end of ſome particular line, and to draw back into the mind, a whole ſet of ideas that ſeem to be ſtrung to it, or linked one with the other. In general; when images, eſſences, ideas, notions, that exiſted in any mind, are gone out of it, and have no longer any exiſtence there, the mind is often able to will them into exiſtence again, by an act of which we are conſcious, but of which we know nothing more, than that the mind performs it. Theſe phaenomena are more ſurprizing, and leſs to be accounted for than the action of external objects on the organs of ſenſe in the firſt production of ideas, which is an obſervation that deſerves the notice of thoſe philoſophers who deny ſuch action becauſe they cannot comprehend it.

But ſtill this faculty is proportioned to our imperfect nature, and therefore weak, ſlow, and uncertain in it's operations. Our ſimple ideas fade in the mind, or fleet out of it, unleſs they are frequently renewed: and the moſt tenacious memory cannot maintain ſuch as are very complex, without the greateſt attention, and a conſtant care, nor always with both. All our ideas in general are recalled ſlowly by ſome, and ſucceſſively by every mind. Themistocles was famous, among other parts wherein he excelled, for his memory, but when he refuſed the offer Simonides made him, it was, I ſuppoſe, becauſe he did not want the poet's ſkill to improve his memory, and becauſe he knew by experience, that the great defects of this faculty are neither to be cured, nor ſupplied by art. In what proportion ſoever it is given, it may be improved to

ſome degree, no doubt, but memory will never preſent ideas to the human mind, as it does perhaps to ſuperior intelligences, like objects in a mirror, where they may be viewed at every inſtant, all at once, without effort or toil, in their original freſhneſs, and with their original preciſion, ſuch as they were when they firſt came into the mind, or when they were firſt framed by it. Could memory ſerve us in this manner, our knowledge would be ſtill very imperfect; but many errors into which we fall, and into which we are ſeduced, would be avoided, and the endleſs chicane of learned diſputation would be ſtopped in a great meaſure. It is for this reaſon I have ſaid ſo much of this faculty of the mind, as you will have occaſion ſoon to obſerve.

THE faculties, neceſſary for my purpoſe to be mentioned next, are thoſe of compounding ſimple into complex ideas, and of comparing our ideas, which implies the juſt and nice diſcernment of them, in order to perceive the innumerable relations which they bear to one another. Theſe are ſome of the ſteps by which the mind attempts to riſe from particular to general knowledge. They have been called arts of the mind, but improperly, in ſome reſpects; for tho the mind is forced to employ ſeveral arts, and to call in ſenſe to the aid of intellect, even after it has full poſſeſſion of it's ideas, to help out it's imperfect manner of knowing, and to lengthen a little it's ſhort tether; yet the compoſition, and compariſon of ideas is plainly a leſſon of nature: this leſſon is taught us by the very firſt ſenſations we have. As the mind does not act till it is rouzed into action by external objects; ſo when it does act, it acts conformably to the ſuggeſtions it receives from theſe impreſſions, and takes with it's firſt ideas the hints how to multiply, and improve them. If nature makes us lame, ſhe gives crutches to lean upon. She helps us to walk where we

cannot run, and to hobble where we cannot walk. She takes us by the hand, and leads us by experience to art.

NATURE then has united in diſtinct ſubſtances, as we commonly ſpeak, various combinations of thoſe qualities, each of which cauſes in us the ſenſation it is appropriated to cauſe, and our organs are fitted to receive; ſo that ſeveral being thus combined, and making their impreſſion together, may be ſaid to cauſe a complex ſenſation. Thus we receive, among other ideas, thoſe of ſoft and warm at the ſame inſtant, from the ſame piece of wax; or of hard and cold from the ſame piece of ice. Thus again; we receive the more complex ideas which ſubſtances ſtill more compoſed, that is, ſubſtances wherein a greater variety of theſe qualities co-exiſts, are fitted to raiſe in us, ſuch, for inſtance, as the idea of a man, or an horſe. As ſoon as we are born, various appearances preſent themſelves to the ſight, the din of the world ſtrikes our ears, in ſhort a multitude of impreſſions made on the tender organs of ſenſe convey a multitude of ideas ſimple and complex, confuſedly, and continually into the mind. The latter indeed, whether nature obtrudes them, or we make them, are compoſed of the former, and therefore we give very properly the firſt place to theſe in all diſcourſes concerning ideas. But they have a priority of order rather than of exiſtence; for the complex idea of the nurſe comes into the mind as ſoon as the eyes of the child are opened, and is moſt probably the firſt idea received by the ſight, tho the ſimple idea produced by the taſte of milk may have got into the mind a little ſooner. Nor does the leſſon of nature end here: ſhe carries it on to all the different compoſitions of our ſimple ideas, and to all the different combinations we frame of our ſimple, and complex ideas; from ſubſtances to modes, the dependencies, and affections of ſubſtances, and from them to the relations of things one to another;

another; that is, ſhe carries it on to all the operations of the mind, and to all the objects of our thoughts in the acquiſition of knowledge.

If I meaned by modes nothing but manners of being, as ſome do, I ſhould not aſcribe our ideas of them to a further leſſon of nature. She taught us this leſſon, when ſhe obtruded on us the complex ideas of ſubſtances. At leaſt it ſeems ſo to me, who cannot comprehend the diſtinction of ſubſtances, and of mode or manner of being, as of two ideas that may be perceived ſeparately, the one of a thing that ſubſiſts by itſelf, the other of a manner of being which cannot ſubſiſt by itſelf, but determines this thing to be what it is. I cannot conſider a mode without referring it in my mind to ſomething, of which it is or may be the mode: neither can I conſider a ſubſtance otherwiſe than relatively to it's modes, as ſomething whereof I have no idea, and in which the modes, of which I have ideas, ſubſiſt. The complex idea we have, of every ſubſtance, is nothing more than a combination of ſeveral ſenſible ideas which determine the apparent nature of it to us. I ſay the apparent nature, and to us; for I cannot agree that theſe modes, ſuch of them as fall under our obſervation, limit the real nature, or determine even the apparent nature to other beings. On the whole it will appear, whenever we conſider this matter further, that the far greateſt part of what has been ſaid by philoſophers about Being, and ſubſtance, indeed all they have advanced beyond thoſe clear and obvious notions which every thinking man frames, or may frame without their help, is pure jargon, or elſe ſomething very trite, diſguiſed under a metaphyſical maſk, and called by an hard name ontology, or ontoſophy.

But to proceed, or rather to return; I underſtand by mode,

in this place ſomething elſe, ſomething that carries our knowledge further than the complex ideas of ſubſtances. I underſtand in ſhort what Mr. LOCKE underſtands by ſimple and mixed modes. The various combinations that our minds make of the ſame ſimple idea, and the various compoſitions that they make of ſimple ideas of different kinds. Theſe ideas added to thoſe of ſubſtances, and the whole ſtock compleated by ſuch as the mind acquires of the relations of it's ideas, in comparing them as far as it is able to compare them, make up the entire ſyſtem of human knowledge: and in the proceſs of it from firſt to laſt, we are aſſiſted directly or indirectly by the leſſons of nature that have been, or that are to be mentioned.

IDEAS of things computable, and meaſurable are the objects of mathematics. Ideas of moral, and immoral actions are the objects of ethics. From whence has the mathematician his firſt ideas of number, or his firſt ideas of ſolid extenſion, of lines, ſurfaces, and figures? From whence has the moraliſt his firſt ideas of happineſs, and unhappineſs, of good, and evil? The mind can exerciſe a power, in ſome ſort arbitrary, over all it's ſimple ideas, that is, it can repeat them at it's pleaſure, and it can frame them into complex ideas, without any regard to actual, tho with a regard to poſſible exiſtence; which regard will be always preſerved, unleſs the mind be diſordered. The mind then has a power of framing all the different compoſitions, and combinations of ideas about which theſe ſciences are converſant; but yet theſe operations are not performed by the native energy of the mind alone, without any help, without any pattern. Nature lends the help, nature ſets the pattern, when complex ideas of theſe modes and relations force themſelves on the mind, as the complex ideas of ſubſtances do.

THAT

That every diſtinct object of external, and internal ſenſe gives us the idea of an unit, or of one, is obvious to reflection: and I think it is no leſs obvious, that theſe objects ſuggeſt to the mind, nay oblige the mind to make various repetitions of this idea, and to frame all the ſimple modes of number by adding unit to unit. Thus for inſtance, we look up by day and we ſee one ſun, by night and we ſee one moon. Plutarch's countryman, indeed, counted two moons; for he could not conceive that the moon he had left behind him in Boeotia, and that he ſaw at Athens, were the ſame. But tho we ſee but one ſun, and one moon, we ſee many ſtars. We attempt to count them, that is, we aſſign marks, or ſounds to ſignify how many times we repeat the idea of an unit, which each of them gives us ſeparately; or elſe we form a confuſed idea of numberleſs repetitions of this idea, like the ſavages who lift up both hands, and extend their fingers to ſhew that they have ſeen ten ſuns on their journey, or hold out an handful of their hair when they want to ſignify a number of ſuns which they cannot ſignify otherwiſe; becauſe they have neither ſounds, nor marks for the greater collections of units.

As arithmetic is one, ſo is geometry another conſtituent part of mathematics, and the very name points out to us, not only the objects, but the original of this ſcience. I do not believe, on the word of Herodotus, nor even of Strabo, that the Egyptians were the inventors of it. I believe this, almoſt as little, as I believe on the word of Joſephus, that antideluvian aſtronomers had engraved their obſervations on two pillars which exiſted in his time. But this tradition, whereby the invention of geometry is aſcribed to a nation more antient than tradition itſelf, tho it may be fabulous, communicates to us, like

like many others that are ſo, a true fact. The true fact, I think, is this; that as ſoon as men ceaſed to range the woods, and plains in common, like their fellow animals, if they ever did ſo; as ſoon as ſocieties were formed, and in thoſe ſocieties a diviſion of property was made; nature that led them to aſſign, led them to aſcertain poſſeſſions. They did both, moſt probably, at firſt by ſight, and gueſs. They paced out theſe poſſeſſions afterwards in length, and breadth; and ideas of modes of ſpace were framed like ideas of modes of number: an unit twelve times repeated makes a dozen, twenty times repeated it makes a ſcore. The length of one of their feet was, to theſe firſt geometricians, like an unit to the firſt arithmeticians. So many feet, five, I think, according to PLINY, made a pace, and one hundred and five and twenty of theſe made a ſtated meaſure of diſtance that continued long in uſe; for the ſtadium conſiſted of one hundred and twenty-five paces, according to the ſame author. Thus meaſuring, the practical part of geometry, came into uſe: and when it had been applied to two dimenſions, it was ſoon applied to all three. The uſe of it was great, not only in the firſt diſtribution of property, but in every alteration of it, and eſpecially after ſuch confuſions of it, as the inundations of the Nile might cauſe annually in Egypt, or other devaſtations in that and in other countries.

NATURE that urged men, by neceſſity, to invention, helped them to invent. The natural face of a country taught them to give it an artificial face, and their own firſt rude eſſays in laying out lands, and building habitations, led them to contemplate the properties of lines, ſurfaces, and ſolids; and, little by little, to form that ſcience, the pride of the human intellect, which has ſerved to ſo many great and good purpoſes, and the application of which is grown, or growing perhaps,

haps, into ſome abuſe. Nature ſet the example, example begot imitation, imitation practice, practice introduced ſpeculation, and ſpeculation in it's turn improved practice. I might eaſily run through other examples of the ſame kind, to ſhew how the firſt principles of arts and ſciences are derived from ideas furniſhed by the productions, and operations of nature, ſuch as our ſenſes repreſent them to us; nay, how inſtinct inſtructs reaſon, the inſtinct of other animals the reaſon of man. But this would be ſuperfluous trouble in writing to you, who have touched this ſubject ſo well, where you introduce nature ſpeaking to man, in the third of your ethic epiſtles.

I WILL only mention, as I propoſed to do, the ideas, or notions, about which moral philoſophy is converſant. I diſtinguiſh here, which I ſhould have done perhaps ſooner, and I think with good reaſon, between ideas, and notions; for it ſeems to me, that as we compound ſimple into complex ideas, ſo the compoſitions we make of ſimple, and complex ideas may be called, more properly, and with leſs confuſion and ambiguity, notions. Simple ideas, ſimple modes, complex ideas, mixed modes, and relations of all theſe, as well as the relations of the relations, are frequently blended together voluntarily, as uſe invites, or judgment directs; and, thus blended, they may therefore ſeem to be original, and untaught. But yet certain it is, that ſuch notions as theſe obtrude themſelves on the mind, as naturally and as neceſſarily, tho not ſo directly nor immediately, as the complex ideas of ſubſtances, or any other complex ideas. Let us obſerve this in an example. We ſee one man kill another: and the complex idea, ſignified by the word kill, is obtruded on our ſenſe as much as the complex idea of the man killed, or of his killer. The mind retains this image, and joining to it various ideas of circumſtances and relations of cauſes, and effects, of motives

tives and conſequences, all which ideas have been raiſed in our minds by experience and obſervation, ſuch notions as we intend by the words murder, aſſaſſination, parricide, or fratricide are framed.

NATURE teaches us, by experience and obſervation, not only to extend our notions, but to diſtinguiſh them with greater preciſion, juſt as we learn to rectify ſimple ideas of ſenſation, and to controul ſenſe by ſenſe, if I may ſay ſo. Mr. LOCKE obſerves, that we learn firſt the names of theſe complex ideas and notions from other men, and the ſignification of them afterwards. Which is true, and it is the moſt early, and moſt common method whereby we acquire them. But this makes no alteration in the caſe. Whether the impreſſions that excited theſe complex ideas, and gave the mind occaſion and means to form theſe notions, were made on our minds, or on the minds of other men; and whether the names that ſignify them were given by us, or by others, it is plain that nature taught mankind to make them, directly when ſhe obtruded them, and indirectly when we ſeemed to invent them without any aſſiſtance from outward objects. The firſt is evident of itſelf, and the ſecond will appear ſo too, if we conſider that in learning their names, and the ſignification of theſe names, we learned to decompound them; and that by learning to decompound ſome, the mind was inſtructed to compound others, even ſuch, perhaps, as exiſted by theſe means in idea and notion, before the combinations, whereof they became the architypes, exiſted in act. Our ideas of relations, and of the relations of relations which are comprehended ſo often in our complex ideas, or notions, are not poſitive beings that exiſt by themſelves, and can be contemplated by themſelves. Modes are the affections and dependencies of ſubſtances; relations are the affections and dependencies of ſubſtances and modes; and

no one of them can exiſt any longer than both the ideas that produced it, or by the compariſon of which it was framed, ſubſiſt. It might ſeem therefore the leſs likely, that outward objects ſhould communicate ſuch ideas to the mind, or even inſtruct the mind to frame them; and yet ſo it is. That act of the mind that ſets two objects before our internal ſight, and by referring from one to the other includes both in the ſame conſideration, is plainly ſuggeſted to us by the operations of outward objects on our ſenſes. We can neither look up, nor down without perceiving ideas of bigger and leſs, of more and fewer, of brighter and darker, and a multitude of other relations, the ideas of which ariſe in the mind as faſt as the ideas of things of which they expreſs the relations, and almoſt prevent reflection. When the mind, thus taught, employs reflection, the number of theſe relative ideas increaſes vaſtly. Thus for inſtance, when we obſerve the alterations that are made by nature, or by art, in our complex ideas of ſubſtances, or when we reflect on the continual viciſſitude and flux of all the affections, and paſſions, and the conſequences of them, how can we avoid framing the ideas of cauſe and effect? That which produces, or ſeems to us to produce the alteration gives us the idea of cauſe, and that which receives the alteration gives us the idea of effect. I go no further into the conſideration of our ideas of relations phyſical, and moral. They are numberleſs, and they muſt needs be ſo; ſince every idea, or notion we have, though it be in itſelf one ſingle object of thought, becomes the object of a thouſand when it is compared with all thoſe with which it may be compared in ſome reſpect or other.

SECT. III.

These, and such as these are all the ideas we have really, and are capable of having, derived originally from sense, external and internal. These too, and such as these are the faculties by which we improve and increase our stock, and such as all these are, such must our knowledge be; for since human knowledge is nothing else than the perception of the agreement or disagreement, connection or repugnancy of our ideas, those that are simple must determine the nature of of those that are complex; those that are complex that of our notions; our notions that of the principles we establish, and that of the principles we establish that of all the consequences we draw from them. Error, in any one step of this gradation, begets error in all that follow: and tho we compare ever so exactly, conclude ever so truly, and in a word reason ever so well, our reasoning must terminate in error whenever this happens. It cannot terminate in knowledge. But before I leave this subject, I must go over it again, that I may carry the reflections upon it further.

How inadequate our ideas are to the nature of outward objects, and how imperfect therefore all our knowledge is concerning them, has been observed transiently above, and has been too often and too well explained to be over much insisted on by me. That there are such objects, material objects, neither spirits nor ideas, and that they act on one another and on us in various manners, and according to various laws, no man can doubt, any more than he can doubt of that perception by which he distinguishes their presence and their absence, according to the difference between the ideas they excite in one case, and those he retains in the other. We can

doubt of this, I think, no more than we can doubt whether we are free agents, or whether we are neceſſarily determined to all we do; no more than we can doubt of many other things of which philoſophers have pretended to doubt, or have really doubted: for either, they have meaned on many occaſions to exerciſe their wit, and to triumph in the ſubtilty of their genius, or they have been tranſported by over-heated imaginations into a philoſophical delirium. The firſt have perplexed knowledge more than they have improved it: and if the laſt have not made many converts, whilſt they have argued againſt ſelf-evidence, they have multiplied uſeleſs diſputes, and miſpent much time.

Here then, at our firſt ſetting out in the ſurvey of knowledge, we find an immenſe field in which we cannot range, no nor ſo much as enter beyond the out-ſkirts of it: the reſt is impenetrable to us, and affords not a ſingle path to conduct us forward. Could we range in that field, we ſhould be unable to walk in our own. I mean, that if our ſenſes were able to diſcover to us the inmoſt conſtitutions, and the real eſſences of outward objects, ſuch ſenſes would render us unfit to live, and act in the ſyſtem to which we belong. If the ſyſtem was not made for us, who pretend on very weak grounds, I think, to be the final cauſe of it, we at leaſt were made for the ſyſtem, and for the part we bear, among terreſtrial animals. Other creatures there may be, and I believe readily there are, who have finer ſenſes than men, as well as ſuperior intelligence to apply and improve the ideas they receive by ſenſation. The inmoſt conſtitutions, the real eſſences of all the bodies that ſurround them, may lie conſtantly open to ſuch creatures; or they may be able, which is a greater advantage ſtill, ſo "to frame, and ſhape to themſelves organs of ſenſation, "as to ſuit them to their preſent deſign, and the circumſtances

" of the object they would conſider," according to that ſuppoſition which Mr. LOCKE calls an extravagant conjecture of his, but which that great man might very reaſonably make; ſince it aſſumes no more than this, that ſome other creatures are able to do by their natural conſtitution, and ſo as to obtain full and abſolute knowledge, what we are able to do by art very imperfectly, and yet ſo as to attain a greater degree of partial and relative knowledge than our ſenſes, unaſſiſted by art, could communicate to us.

BUT be this as it will, concerning which we can only gueſs; it is, I think, evident, that altho outward objects make impreſſions on the organs of ſenſe, and may be ſaid therefore to cauſe ſenſations, yet theſe ſenſations are determined in the whole animal kind that we know, and to which we belong, according to the conſtitutions of the ſeveral ſpecies, as theſe conſtitutions are framed according to the uſes and ends for which each ſpecies is deſigned, and to which it is directed. Innumerable inſtances might be brought to illuſtrate, and confirm this truth. It will be ſufficient to do ſo by making a few ſhort obſervations on our own ſpecies alone. The ſame outward objects then produce the ſame ſenſations in all men, as far as ſelf-preſervation is immediately concerned: and there is at leaſt an apparent uniformity of ſenſations in all other caſes, ſufficient to maintain the commerce of men one with another, to direct their mutual offices without confuſion, and to anſwer all the ends of ſociety. Further than to theſe purpoſes, the determination of their ſenſations does not ſeem to be in all men the ſame. The ſame objects ſeem to cauſe different, and oppoſite ſenſations in many particular inſtances, in as much as they give pleaſure, and excite deſire in one man, whilſt they give no pleaſure, nor excite any deſire, nay whilſt they give pain, and provoke averſion in another. All men feel alike the

effects of fire that burns, or of steel that divides their flesh: and my butler, who has tasted both, will no tbring me a bottle of wormwood-wine when I ask for a bottle of sack. But yet the Greenlander quaffs his bowl of whale's-grease with as much pleasure as you and I drink our bowl of punch: and if his liquor appears nauseous to us, ours appears so to him. Habit, that second nature, may sometimes account, as well as sickness, for this difference that seems to be in human sensations. But still it will remain true, that this difference in many, and various instances, proceeds from our first nature, if I may say so; that is, from a difference in the original constitution of those particular bodies in which this apparent difference of sensation is perceivable. The principle of this diversity is as unknown to us as the more general principle of uniformity; but whether it be laid in the natural constitution, or in the alterations that habit or sickness may produce, our observation will be verified, that human sensations are determined by the actual disposition, whether original or accidental, of human bodies, and cannot therefore help to communicate to us any knowledge of the inward constitutions, or real essences of the bodies which excite them, nor indeed any knowledge but of themselves. To discover in what manner, and by what powers, external action and internal passion co-operate to produce sensation, it is in vain to attempt: and a philosophical mind will be much better employed in admiring and adoring the divine wisdom that appears equally in the diversity, and in the uniformity of our sensations, as it would not be hard to shew if this was a place for those reflections, than in such vain researches. Vain indeed they will appear to be to any man of sense, who considers with attention and without pre-possession, what has been writ on this subject by men of the greatest genius.

But as vain as theſe reſearches are, and as impoſſible as it is to know more of our ſenſations than that we have them, and that we receive them from outward objects, yet are we not to think the uſe of our ſenſes as limited, as Malebranche would have us believe it to be. They were given *, he ſays, for the preſervation of our bodies, and not to teach us truth. The firſt part of this aſſertion is agreeable to the ſyſtem of nature. The latter, is agreeable, I think, to no ſyſtem but that of his own imagining, which is ſo extravagantly hypothetical in many, and the principal parts, that it has made no great fortune in the world, tho the utmoſt ſubtilty of wit, and all the powers of language are employed to ſupport it. Notwithſtanding, therefore, ſuch ſyſtems as theſe, for it is not ſingle of it's kind, we may continue to believe what conſtant experience dictates to us, that our ſenſes, tho few, confined, and fallible, are given not only for the preſervation of our bodies, but to let into the human mind the firſt elements of knowledge, and to aſſiſt, and direct the mind in all the progreſs it makes afterwards.

That human knowledge is relative, not abſolute, has been ſaid already. We neither do, nor can know the real eſſence of any one ſubſtance in the world, not of our own: and when we talk of the powers, and qualities, and ſometimes of the natures of ſubſtances, either we talk ignorantly, or we refer to their effects, by which alone we diſtinguiſh them, and in which alone we know any thing of them. They who diſtinguiſh between the primary, and ſecondary qualities of ſubſtances, do not ſo much as pretend that the ſecondary qualities, ſuch as colors, or taſtes for inſtance, are any repreſentations of the outward exiſtences that cauſe them: and the diſputes about ſolidity,

* Recherche de la verité. L. 1. c. 10.

ſolidity, extenſion, and motion which is mobility in action, as mobility is motion in power, ſhew how inadequate our ideas are of the primary qualities; tho theſe are ſaid to be reſemblances of patterns really exiſting in all bodies whether we perceive them or not.

But tho the knowledge here ſpoken of be not complete, nor abſolute, becauſe our ideas, concerning which alone human knowledge is converſant, are inadequate to the nature of things; yet is it real knowledge in ſome degree, and relatively to us. This I mean. Our ſimple ideas, whoſe various co-exiſtencies compoſe all our complex ideas of ſubſtances, are certainly adequate in this ſenſe; they are real effects of real powers, and ſuch as the all-wiſe author of nature has ordained theſe powers to produce in us. I ſay in us, for it is not incongruous to ſuppoſe, nor will theſe ideas be leſs adequate, nor this knowledge leſs real, if it be ſo that the ſame powers may be ordained to produce other effects on other creatures of God. This paper gives me the idea that I call white, it may give ſome other idea to ſome other creature. Theſe ideas are different, but they are both adequate to our uſe, and the knowledge real; for they are both real, and natural effects of real, correſponding powers.

As low as theſe principles, of any real knowledge that we can acquire of ſubſtances, are laid, it is from them we muſt take our riſe: and there is no wonder therefore if we proceed ſlowly, and have not been able to proceed far even ſince the ſtudy of nature has been purſued in a right method. Whilſt the ſymbolical phyſics of pythogoreans and platoniſts prevailed, and whilſt natural philoſophy was made to conſiſt in little elſe than a logical cant, which Aristotle invented, and his diſciples propagated, error was cultivated inſtead of

ſcience,

ſcience, ignorance was maſked, and men paſſed for naturaliſts without any knowledge of nature. The caſe would be much the ſame if ſome modern philoſophers could have ſucceeded in eſtabliſhing a ſuppoſed ſcience that they call metaphyſics, to be like an higher ground from which we might deſcend to phyſics, from generals to particulars, from ſpeculations about what may be, down to affirmations about what is. But there have been men ſince the reſurrection of letters, at the head of whom our Verulam juſtly claims his place, who have delivered common ſenſe from the chains of authority, and by expoſing antient, have put us on our guard againſt many of thoſe modern whimſies. The generality of philoſophers, therefore, have been far from adopting this inverted rule, this unnatural method of ſtudying nature. They have ſeen not only that laborious induſtry is the price impoſed on all our acquiſitions of knowledge, but that natural knowledge, the knowledge, I ſhould ſay, of the ſyſtem of nature can never be real, unleſs it be begun, and carried on by the painful drudgery of experiment. Extunditur uſu.

By experiments well made, for they too may be made ill, theſe men have acquired a knowledge of ſome particular ſubſtances, of thoſe at leaſt which are neareſt to them, which they can handle, and even torture at their pleaſure, and force, if I may ſay ſo, to give them information. The knowledge I mean is that of the ſenſible qualities and powers co-exiſting in each particular ſubſtance: and this is real knowledge as far as it goes, according to what has been explained above. When a multitude of particular ſubſtances are thus known, and thus diſtinguiſhed, philoſophers venture to frame general propoſitions concerning them, and concerning others too, by the help of analogy: and when the propoſitions, and the concluſions drawn from them are confirmed by uniform

form experience, they acquire a probability almoſt equivalent to certainty, and which muſt be accepted for it. This, however, is not ſtrictly knowledge. The naturaliſt who has made a thouſand experiments, with the utmoſt care and ſkill; the chemiſt who has, in like manner, decompoſed a thouſand natural, and compoſed as many artificial bodies, are ſtill liable to be deceived; becauſe it may happen that the action of one particular body ſhall not produce ſometimes the ſame effects, which the action of other bodies of the ſame ſpecific appearance has produced on innumerable trials. Our real knowledge goes no further than particular experiment: and as we attempt to make it general, we make it precarious. The reaſon is plain. It is a knowledge of particular effects that have no connection, nor dependency one on another, even when they, or more properly the powers that produce them, are united in the ſame ſubſtance: and of theſe powers conſidered as cauſes, and not in their effects, we have no means of attaining any knowledge at all. It may be, that bodies act on one another, according to their bulk, figure, and texture of their ſolid parts, by motion and pulſion, or gravity and attraction. It may be, that their action proceeds from other cauſes, ſo remote from all human conception, that we are unable not only to gueſs at them, but even to ſuſpect thatthey are. But whatever they be, ſince they are neither known nor knowable by us, what have philoſophers to do more than to redouble their induſtry in multiplying experiments, as much as they have means and opportunities of doing, ſince there may be a deficiency, but never an exceſs of them? Thus they may proceed in obtaining knowledge of particular ſubſtances by the help of their ſenſes, and in improving and applying this knowledge to greater advantage by the help of their intellect. Senſe and intellect muſt conſpire in the acquiſition of phyſical knowledge; but the latter muſt never proceed independently of the former. Ex-

periment is that pillar of fire, which can alone conduct us to the promiſed land: and they who loſe ſight of it, loſe themſelves in the dark wilds of imagination. This many have done from the infancy of philoſophy, which has laſted longer than we are apt to imagine; and which one might be tempted to think, on ſome occaſions, continues ſtill, by a fondneſs to retain ſome of the rattles and bawbles of early ages. Theſe rattles and bawbles have been laid aſide, however, by no philoſophers ſo much as by thoſe who have applied themſelves to cultivate experimental phyſics: and therefore as imperfect as our knowledge of nature is, and muſt be always, yet has it been more advanced within leſs than two centuries, than it had been in twenty that preceded them.

All the helps, that human wit and induſtry can procure, have been employed. Microſcopes and teleſcopes have been invented. Geometry has been applied to natural philoſophy, and algebra to geometry. With all theſe helps, our knowledge of nature has advanced in degree, but not in kind. There are microſcopical corpuſcles in bodies, as there are teleſcopical ſtars in the heavens, neither of which can be diſcovered without the help of one, or the other, of theſe glaſſes. But with this help, we can no more diſcover all the corpuſcles of any one body, than we can all the ſtars of the univerſe: and beſides, as to the former, if glaſſes could magnify enough to expoſe them all to our ſight, we ſhould know indeed more component particles of bodies, but we ſhould remain as ignorant of their mechanical affections, as we now are; becauſe we ſhould remain ignorant of the mechanical affections of theſe corpuſcles, or of that inward ſpring which puts theſe atoms into motion, and directs their ſeveral operations.

As

As to the celeſtial bodies which are objects of aſtronomical obſervation, they muſt be reckoned objects of natural philoſophy likewiſe; ſince they are parts of the ſame univerſal ſyſtem of nature. We take up the teleſcope, indeed, and not the microſcope to contemplate them, becauſe they are at ſuch immenſe diſtances from us: and we are ſo little concerned to know of what ſubſtances they are compoſed, or what ſubſtances they contain, that if we were not hindered by the utter impoſſibility, we might be ſo by the apparent inutility, from attempting to acquire any ſuch knowledge of them, as we labour to acquire of the outward objects that environ us in our own planet. This planet is our home, and it imports us to know as much as we can of the inward ſtructure and furniture of it. We have not the ſame concern about other habitations. But it is agreeable, and in ſome reſpects uſeful, to know the general face of the country about us. It is probable that mere curioſity begat aſtronomy: and that the uſes, to which this noble ſcience is applicable, were diſcovered afterwards. I am apt to think, that the firſt men were excited more to phyſical reſearches, by the ſhining phaenomena of the heavens, than by thoſe of the earth. Their wants forced them to look down; but as the moſt immediate of theſe were ſupplied, they began to look up again: and the men who had leaſt to do, Aegyptian, or Chaldaean ſhepherds, perhaps, were the firſt aſtronomers. But as mean and rude as the beginnings of it were, aſtronomy was ſoon cultivated by the moſt learned men, and by the greateſt princes, if we believe the traditions of antiquity concerning Belus, Atlas, and others, to have had any foundation in the truth of things. Thus much is ſure, it has been cultivated many thouſands of years, and wherever arts and ſciences have floriſhed, this ſcience has floriſhed at the head of them.

It is lawful, methinks, to conclude from hence, that a ſcience, which it has been the buſineſs of learned men in all countries, where learning has floriſhed, to advance, would have been brought to a great degree of perfection, if there had been any near proportion between the object of it and human means of knowledge. But as ſome bodies baffle our enquiries, and eſcape our knowledge by being too minute, theſe enormous maſſes do the ſame by being too remote. Our ſenſe of ſight fails us; and when our ſenſes fail us in natural philoſophy, whoſe object is actual not poſſible exiſtence, our intellect is of little uſe. It may be ſaid, it will be ſaid, that our knowledge of the heavenly bodies is brought to a great degree of perfection, and is going on daily to a greater, by the inceſſant labors of many learned men; that we have a much more extenſive, a more exact, and a truer view of the phaenomena than ever, by the vaſt advances that have been made in every part of mathematics; that we calculate their magnitudes, meaſure their diſtances, determine their figures, deſcribe their orbits, compute the degrees of their velocity, and perform a multitude of other operations concerning them, the reſult of every one of which is knowledge, with the utmoſt accuracy. It will be added, that we are not only thus able to account for appearances, but that we penetrate into the phyſical cauſes of them, that we diſcover the forces by which theſe bodies act on one another, the laws of their motion, and of their direction, by which the order and harmony of the whole ſyſtem is governed and maintained.

This may be ſaid, and more to the ſame effect, without contradiction on my part; for it is true in the main, truer than panegyric is generally. But ſtill I apprehend, that when we conſider the whole matter, as it muſt be conſidered to make a true

true eſtimate of the extent of this knowledge, that is, when we compare the objects of this ſcience with the progreſs that has been made in it, by the united labors of mankind, we ſhall find much more reaſon to admire the induſtry, and perſeverance of philoſophers, than to applaud their ſucceſs. What do we know beyond our ſolar ſyſtem? We know indeed juſt enough to give us nobler, and more magnificent ideas of the works of God, than antient philoſophy could ſuggeſt. We know that this ſyſtem to which our planet belongs, and beyond which men did not carry their thoughts antiently nor ſuſpect any other, is but a minute part of the immenſe ſyſtem of the univerſe, of the τὸ πᾶν as you Greeks, I think, call it. But as to any particular knowledge that we have, or even imagine that we have, it is next to nothing. Well may we be thus ignorant of all the ſolar ſyſtems beyond our own, the very phaenomena of which, except the twinkling of ſome of their ſuns and our fixed ſtars, are imperceptible to human ſight; when there are ſo many phaenomena in our own ſolar ſyſtem, for which we cannot account, and ſo many others, probably, that we have not yet diſcovered; when there are, even in that of the earth we inhabit, ſo many things that have hitherto eſcaped the utmoſt penetration of our ſenſes, and the utmoſt efforts of our intellect, with all the aſſiſtance that art can give to both. We cannot trace the courſe of comets, for inſtance, through all their oblique orbits: but can we trace the circulation of water that falls on our earth in rain, or that riſes in ſprings? "Veniet tempus," ſays SENECA in the ſeventh book of his natur alqueſtions, "quo iſta, quae nunc latent, in lucem "dies extrahet; et, longioris aevi diligentia, veniet tempus quo "poſteri noſtri tam aperta nos neſciſſe mirentur." This time may come, perhaps; but if we judge of what is to come, by what is paſt, we may be tempted to think that the revolution of the platonic year will be complete as ſoon.

THE

THE progreſs of a ſcience, which, like this of natural philoſophy, is the work of ages, muſt be liable, as it has been and will be, to various interruptions. The ground that has been gained will be frequently loſt. The lateſt ſyſtems or hypotheſes may not be always the trueſt: and when they are ſo, the advancement of ſcience may not be accelerated by them as much as it has been retarded by thoſe that were falſe. In a word, I do not believe that SENECA would be ſo much ſurpriſed if he roſe from the dead, as we may imagine, at the progreſs that has been made ſince his days. What further progreſs will be made depends on many contingencies, and it is hard to ſay. But this is ſure, that altho knowledge acquired facilitates the acquiſition of more to a certain point, yet the progreſs we attempt to make beyond that point grows more and more difficult, and becomes a little ſooner, or a little later, quite impracticable; for nothing can be truer in phyſics, as well as in thoſe general reaſonings which are called metaphyſics, than what MONTAIGNE has ſaid, "les extremitez de notre per-"quiſition tombent toutes en eblouiſſement."

LET us carry theſe reflections one ſtep further, and we ſhall have carried them as far as is neceſſary, to ſhew how little we are fitted to acquire the knowledge to which we aſpire, and which we ſometimes pretend that we have, concerning bodies either terreſtrial or celeſtial. To inveſtigate truth with ſucceſs, in mathematics, in natural philoſophy, and indeed on every occaſion where it is difficult to be found, the analytic method muſt be employed not only in the firſt place, but as far as it can be employed about the objects of our enquiry. It has been much improved, and it has been thus employed, by the moderns. Many of them have been careful to make all the obſervations and experiments in their power, and from them they have drawn general concluſions by induction. This

now is the utmoſt that our nature, and the nature of things without us, admit to be done: and when it is ſo well done, that no objection, drawn from experience, can be made to theſe concluſions, they have a right to be placed in the rank of things known by us. But let us not be miſtaken. Tho this be human, it is not abſolute knowledge; becauſe it is not founded in abſolute certainty. Further diſcoveries of the phaenomena may contradict theſe concluſions: or, ſuppoſing no ſuch diſcoveries to be made, other concluſions may be deducible from the ſame phaenomena, or other cauſes of them may be aſſignable, for aught we know. So far is this method of reaſoning, from particular obſervations and experiments to general concluſions by induction, from amounting to real demonſtration, tho it be the beſt in our power.

THIS is the caſe when the minds of men are bent ſolely to the diſcovery of truth. But ſomething worſe happens when human affections and paſſions mingle in their enquiries, as they often do; for philoſophers are not free from them. The Stoics themſelves, with all their boaſted apathy, were as little ſo as any other men. When this happens, philoſophers haſten too much from the analytic to the ſynthetic method, that is, they draw general concluſions from too ſmall a number of particular obſervations, and experiments: or, without giving themſelves even this trouble, they aſſume cauſes, and principles before eſtabliſhed, as if they were certain truths, and argue from them. Nothing can be more abſurd than theſe proceedings. It is agreed, I think, out of the ſchools at leaſt, that ARISTOTLE was eminently guilty of them; for he dealt more in common notions, than experiments, and built a world with categories, that is, by a certain logical arrangement of words: and yet even ARISTOTLE ſeems to have warned philoſophers againſt this abuſe; for he taught, according to the report of SEXTUS

SEXTUS EMPIRICUS, that they ſhould not neglect ſenſe and ſeek for reaſons, " poſthabito ſenſu quaerere rationem ;" that is, that they ſhould not carry ſpeculation further than experiment and obſervation authoriſe it firſt, and confirm it afterwards. The principal reaſons of a contrary conduct may be found in lazineſs, and vanity ; in the firſt ſometimes, in the other always. Philoſophers have found it more eaſy, and more compendious to imagine, than to diſcover ; to gueſs, than to know. They have taken, therefore, this way to fame, which has been their object, at leaſt, as much as truth : and many a wild hypotheſis has paſſed for a real ſyſtem.

STRATO was a famous philoſopher, the ſcholar of THEOPHRASTUS, and the maſter of PTOLEMY PHILADELPHUS. As little, and as ill as we are informed of the ſtate of natural philoſophy among the more antient naturaliſts of Greece, ſuch as PYTHAGORAS, ANAXAGORAS, DEMOCRITUS, and others, whoſe names are preſerved tho their works are loſt, we know enough of PLATO and ARISTOTLE, whoſe works have been preſerved, perhaps more to the detriment than to the advancement of learning, to determine what the ſtate of it was in the days of STRATO. We know that it was no longer the ſtudy of nature by obſervation, and experiment ; but that it conſiſted in a jargon of words, or at beſt in ſome vague hypothetical reaſonings : and yet STRATO, who could not have told the aegyptian king how the idea of purple, the color of his robe, was produced, pretended to account for all the phaenomena, and among other doctrines, to eſtabliſh that of the plenum, for he laughed at the vacuum, as well as at the whole atomical ſyſtem of DEMOCRITUS.

HYPOTHESES are much in the favor of ſome philoſophers ; for there have been many STRATOS even among the moderns.

But hypotheſes may be employed without being abuſed. In all our attempts to account for the phaenomena of nature, there will be ſomething hypothetical neceſſarily included. The analytic method itſelf, our ſureſt road to ſcience, does not conduct us further than extreme probability, as it has been obſerved; and this probability muſt ſtand us in lieu of certainty. But when we cannot arrive by this method at ſuch a probability, is it reaſonable to make an hypotheſis? Is it reaſonable, when we cannot draw from obſervation and experiment, ſuch concluſions as may be ſafe foundations on which to proceed by the ſynthetic method in the purſuit of truth, to aſſume certain principles, as if they were founded in the analytic method, which have been never proved, nor perhaps ſuggeſted by the phaenomena, in hopes that they may be ſo afterwards? In a word, when the only clue we have fails us; which is moſt reaſonable, to ſtop ſhort, or to puſh forwards without any clue at all into the labyrinth of nature? I make no ſcruple of deciding in a caſe, ſo plain, that it would be a ſilly affectation of modeſty, not modeſty, to heſitate. When the phaenomena do not point out to us any ſufficient reaſon why, and how a thing is as we diſcover it to be, nor the efficient cauſe of it, there is a ſufficient reaſon for ſtopping ſhort, and confeſſing our ignorance; but none for ſeeking, out of the phaenomena, this reaſon, and this cauſe which we cannot find in them. This is learned ignorance, of which the greateſt philoſophers have no reaſon to be aſhamed. "Rationem— "harum gravitatis proprietatum ex phaenomenis nondum po- "tui deducere, et hypotheſes non fingo," ſaid our NEWTON, after having advanced natural knowledge far beyond his cotemporaries, on the ſure foundations of experiment, and geometry. How preferable is this learned ignorance to that ignorant learning, of which ſo many others have fooliſhly boaſted? DES CARTES, who mingled ſo much hypothetical with ſo much

much real knowledge, boasted in a letter to his intimate friend the minime MERSENNE, " that he should think he knew no-" thing in natural philosophy, if he was only able to say how " things may be, without demonstrating that they cannot be " otherwise." LEIBNITZ, who dealt in little else than hypotheses, speaking, in his reply to BAYLE's reflections on his pre-established harmony, of the ridiculous whimsy of his Monades, and the rest of his metaphysical trash, compares himself to ANTAEUS; asserts that " every objection gives him new " strength," and boasts vainly, that he might say without vanity, " omnia praecepi, atque animo mecum antè peregi."

IT will be urged, perhaps, as decisive in favor of hypotheses, that they may be of service, and can be of no disservice to us, in our pursuit of knowledge. An hypothesis founded on mere arbitrary assumptions will be a true hypothesis, and therefore of service to philosophy, if it is confirmed by many observations afterwards, and if no one phaenomenon stand in opposition to it. An hypothesis that appears inconsistent with the phaenomena will be soon demonstrated false, and as soon rejected. This reasoning, which is the sum of all that can be said for them, will not hold good, I think, in either case, enough to countenance the abuse of them, which is made by the very persons who urge this plea in favor of them. That such an hypothesis may be true, is within the bounds of possibility; because it implies no contradiction to suppose that men, who pass their lives in guessing, may guess sometimes right. A man may throw ten sixes with ten dice; but no man in his senses would lay that he did, nor venture his stake on such a chance. In the other case, it is true that an hypothesis inconsistent with the phaenomena may be soon demonstrated false. But it is not true that it will be as soon rejected. If philosophers are fond of making hypotheses, their disciples are

as

as zealous to defend them. The honor of a whole ſect is thought to be engaged, and every individual is piqued that another ſhould ſhew that to be falſe, which he has all his life taken to be true; ſo that notwithſtanding all the graces of novelty, a new truth will have much to do to diſlodge an old error. Inſtances of this ſort are innumerable. Let us produce one from aſtronomy itſelf.

If any hypotheſis was ever aſſumed with a plauſible probability, that which we call the ptolemaic was ſo. The apparent face of the heavens led men to it. We may ſay, that the phaenomena ſuggeſted it, and that the revolution of the ſun, planets, and ſtars, in ſeveral ſpheres round the earth, could ſcarce be doubted of by men who aſſumed any general concluſions, inſtead of drawing them all from a long courſe of particular obſervations carefully and learnedly made. The plauſibility of this falſe hypotheſis, and the authority of the peripatetic-ſchool, eſtabliſhed it on the ruins of the true ſyſtem which Pythagoras had brought long before into Italy from the eaſt and which was probably that of the Egyptian, and Chaldaean aſtronomers. Falſe as it was, it maintained it's credit thirteen or fourteen centuries, if we reckon only from the time of the Alexandrian aſtronomer Ptolemy to that of Copernicus. Many difficuties had occurred, but as faſt as they did ſo, new aſſumptions were made to reconcile them, till the whole became one complicated heap of hypotheſis upon hypotheſis. It was baniſhed at laſt, and a truer ſyſtem took it's place. The fautors of hypotheſes would have us believe, that even the detection of their falſhood gives occaſion to our improvement in knowledge. But the road to truth does not lie through the precincts of error, and the improvement of aſtronomy was not owing to the deſtruction of the ptolemaic hypotheſis; but the deſtruction of this hypotheſis was owing to the improvement

of aſtronomy. If this hypotheſis had never been made, Copernicus would not have had the honor of reviving the pythagorean ſyſtem, but mankind would have had the benefit of purſuing, without interruption, a ſyſtem founded on knowledge, inſtead of purſuing, during an interval of ſo many centuries, an hypotheſis founded on aſſumption.

To this antient, let us join a modern inſtance to ſuggeſt the ſame reflections, and confirm the ſame proofs. The ſyſtem of Des Cartes dazzled and impoſed at firſt. It was ſoon attacked however, but it has not been ſo ſoon defeated. No man, perhaps, was ever ſo fit, as this philoſopher, to make, and maintain an hypotheſis; to aſſume, and to improve and defend his aſſumptions. The notion he entertained, and propagated, that there is beſides clear ideas, a kind of inward ſentiment of evidence, which may be a principle of knowledge, is, I ſuppoſe, dangerous in phyſical enquiries as well as in abſtract reaſoning. He who departs from the analytic method, to eſtabliſh general propoſitions concerning the phaenomena on aſſumptions, and who reaſons from theſe aſſumptions, afterwards, on inward ſentiments of evidence, as they are called, inſtead of clear and real ideas, lays aſide, at once, the only ſure guides to knowledge. No wonder then if he wanders from it. This Des Cartes did very widely in his conſtruction of a world, and yet by dint of genius he gave a great air of ſimplicity and plauſibility to his hypotheſis, and he knew how to make even geometry ſubſervient to error. It proved in other hands, indeed, the inſtrument of detecting his errors, and of eſtabliſhing truer principles of natural philoſophy. He furniſhed to others arms againſt himſelf, among the reſt to our Newton; for tho the ſyſtem of the latter be no more owing to the hypotheſis of the former, than that of Copernicus to that of Ptolemy, yet was it the application of geometry

geometry to phyſics, that enabled the britiſh philoſopher to make ſo many admirable diſcoveries: and the introduction of geometry into phyſics muſt be acknowledged due to the french philoſopher. To conclude, by bringing this example to our purpoſe. The plenum of DES CARTES is well nigh deſtroyed; many of his laws of motion are ſhewn to be falſe; the mills that ſerved to grind his three elements are demoliſhed: and his fluid matter in which, as in a torrent, the planets were carried round the ſun, whilſt a ſimilar motion in the particular vortex of every planet impelled all bodies to the center, is vaniſhed. Notwithſtanding all this; how ſlowly, how unwillingly have many philoſophers departed from the carteſian hypotheſis? They have had recourſe to the moſt forced ſuppoſitions to defend it; and when it has been demonſtrated falſe in one of the principal parts, in that of his fluid matter, whoſe rapid circulation he ſuppoſes to cauſe the fall of bodies, and the motion of the planets, and which he invented to explain theſe phaenomena, we ſhall be told very gravely, that ſome fluid matter or other may, however, in ſome manner or other, be the cauſe of theſe phaenomena. It is even ridiculous to obſerve the ſame men tenacious of an hypotheſis neither deduced from the phaenomena, nor conſiſtent with them, and averſe to receive, or at beſt extremely ſcrupulous about receiving, a ſyſtem built on obſervation and experiment, not on aſſumption, and which all the phaenomena conſpire to eſtabliſh.

IF philoſophers meaned nothing more than the diſcovery of truth, they would confine themſelves to thoſe rules by which alone, and to thoſe bounds of enquiry within which alone, we are able to diſcover it. But a predominant principle of vanity makes them break theſe rules, and paſs theſe bounds. Not content with philoſophical liberty, they affect to proceed licentiouſly: and it is this affectation that makes them ſo fond of hypo-

hypotheſes, by the means of which, how imperfect ſoever their knowledge is, their pretended ſyſtems are ſtill complete. Thus it has happened that natural philoſophers have filled their works with fictions, and, like lying travellers, have given deſcriptions of countries through which they never paſſed. They have done even more, they have affected to reveal the ſecrets of courts they never ſaw. This I mean; they have not only ſuppoſed exiſtences that never exiſted, but have preſumed themſelves able to give a ſufficient reaſon for every thing that does exiſt. LEIBNITZ, who had much knowledge and ſome ſagacity, but too much pretended ſubtilty and real preſumption, impoſed this obligation on philoſophers, the obligation of adulterating phyſics with metaphyſics. Thus for inſtance, he thought himſelf obliged to give a ſufficient reaſon how, and why the extenſion of body, or body according to the Carteſians, becomes poſſible; for tho actuality may, he denied that poſſibility could proceed from the will of God. He found this reaſon neither in ſenſible extenſion, nor in the inſenſible atoms that compoſe body. But he found it happily in his Monades, that is in ſimple, unextended beings, that are the only ſubſtances, and that compoſe all extenſion, which God could not have created if he had not created them firſt. Is it worth while to acquire the name of a great philoſopher, at the expence of amuſing mankind with ſuch hypothetical extravagancies? Surely not.

SINCE I have ventured to cenſure DES CARTES on this head, on which he was very liable to cenſure, I think myſelf obliged to juſtify him on another, on which he has been accuſed very unjuſtly. STRATO might be an atheiſt, for what I know, tho mention is made, in the catalogue of his works preſerved by DIOGENES LAERTIUS, of three books that he wrote concerning the gods. But the paſſage in the academics of TULLY, where

it is ſaid, that he did not employ the gods in making the world, "negat operâ deorum ſe uti ad fabricandum mundum," will not perſuade me that he was ſo. Nothing can be more conſiſtent than to acknowledge a ſupreme Being, the ſource of all exiſtence, the firſt efficient cauſe of all things, and to account for the phaenomena by phyſical and mechanical cauſes, by matter and motion. This DES CARTES therefore endeavored, and might endeavor to do without forfeiting the character of a good theiſt. Philoſophers might very reaſonably object to his hypotheſis, but divines had the leſs reaſon to do ſo; becauſe, beſides proving the exiſtence of the ſelf-exiſtent Being by an argument which he thought good, and which has been urged as deciſive by MALEBRANCHE and others, the very foundation of his doctrine reſts on theſe principles, that God created matter and that he impreſſed two motions on the parts of it. But my Lord BACON, a much better apologiſt than I am, had obviated the objection made to DES CARTES long before this philoſopher had writ, in the third book of the augmentation of ſcience: and the paſſage is ſo conſiderable, that I will dwell, with your leave, a little upon it.

THIS great author then was ſo deſirous to keep metaphyſicians in countenance, by keeping metaphyſics in the rank of ſciences, that he reſolved at any rate to give them an object. As ſuch he aſſigned the doctrine of formal cauſes: and indeed if he had admitted the forms of PLATO, forms entirely abſtracted from matter, theſe would have been imaginary objects in his ſcheme of ſome ſcience more ſublime than phyſics. But theſe he rejects deſervedly, as theological ſpeculations that infected and corrupted the whole of PLATO's natural philoſophy: ſo that he left himſelf no forms to eſtabliſh as objects of metaphyſics, but ſuch as muſt be diſcovered, if they are to be diſcovered,

diſcovered, by phyſics; which he himſelf admits in effect, when he ſays, that we may diſcover them if we turn our eyes to action and uſe; that is, to the action and uſe of ſubſtances, whoſe forms are the ſpecies of things; and which he confirms, I think, by the examples he brings to explain this inexplicable doctrine, or rather unattainable ſcience. In default of this, that the learned chancellor might provide ſome object for metaphyſics, he eſtabliſhed the inquiſition, or reſearch of final cauſes as a ſecond. He ſhould not be much concerned, he ſays, if the order of this reſearch, that he would place among metaphyſics, and that has been placed uſually among phyſics, were alone concerned. Now here I venture with fear and trembling, but I muſt venture, for the love of truth puſhes me on, to differ from this great man. The order according to which the doctrine of final cauſes is confined to the known phyſical province, inſtead of being tranſlated to a metaphyſical region, appears to me not only uſeful, but neceſſary to be preſerved, as well to advance real knowledge, as to prevent error, both philoſophical and theological. The more we proceed in the ſtudy of nature, under the conduct of experimental philoſophy, the more diſcoveries we make and ſhall make of the infinite wiſdom as well as power of it's author. The ſtructure of the parts, the deſign and harmony of the whole, will be matter of perpetual aſtoniſhment, and ought to be a motive to the moſt devout adoration of that ſupreme, and incomprehenſible Being, of God the maker and the preſerver of the univerſe. I ſaid the harmony and deſign, as well as the ſtructure; for beſides the admirable contrivance which appears in the bare ſtructure of all the bodies, animal bodies eſpecially, that ſurround us, as well as of our own, when we contemplate them without any regard to their diſtinction, wants, or uſes, there appears ſomething ſtill more admirable when we contemplate them in theſe reſpects. Some-

times we can diſcover neither efficient, nor final cauſe; ſometimes, but more rarely, both. Sometimes we diſcover the former, and the latter eſcapes our enquiry. Sometimes again the final cauſe is more obvious than the efficient, as in one of the inſtances brought by my lord BACON; for ſurely this final cauſe, that eye-laſhes were given to ſhadow and defend the eye, is much more evident than the efficient cauſe he aſſigns, or any other, perhaps, that can be aſſigned. But in all caſes where ſuch diſcoveries are made really, they are made by phyſical reſearches. When we proceed in the inveſtigation of them by the help of experimental philoſophy, we put ourſelves under the conduct of God, who leads us by the knowledge of his works to the knowledge of himſelf. But when we abandon this method, and pretend by the ſtrength of our intellect to arrive at ſuperior ſcience, we put ourſelves under the conduct of imagination, the worſt guide a philoſopher can chuſe, and never ſo ſeducing, nor ſo dangerous as in the brighteſt genius. This remark is abundantly confirmed in general by the experience of all ages *.

FOR

* IT comes into my thoughts to mention, upon this occaſion, another opinion, which caſts a ridicule on all religion. If we are able to collect any truth from our obſervations on the mundane ſyſtem, beſides that of a ſelf-exiſtent and intelligent firſt cauſe of all things, it is that of final cauſes. The certainty we have of theſe makes part of the demonſtration of the other, and is the ſublimeſt and moſt important ſpeculation in which natural philoſophy can terminate. I ſay terminate, becauſe the abſurdity of thoſe philoſophers, who, in the courſe of their enquiries, aſſigned final inſtead of phyſical cauſes, has been already expoſed. The abuſe which thoſe who profeſs theology in all religions make of final cauſes is of another kind, and may ſerve as a further example of the fantaſtical and profane notions which men aſſume hypothetically, when they carry their reaſonings about ſpirit and ſpiritual things, without regard to what experience might teach them, up to the divine nature and oeconomy.

MANKIND, in general, eſteem their ſpecies to be the final cauſe of the whole creation, and each ſociety or ſect of men is inſtructed to eſteem itſelf a principal, if not the ſole, object of providence. On this foundation even they, who never obſerved, perhaps, any of the numberleſs and aſtoniſhing inſtances

For theſe reaſons which might be greatly extended and inforced, I cannot ſubſcribe to the partition of ſcience which our famous chancellor makes on this occaſion. They, who have no pretenſions to be eſteemed natural philoſophers, profit in their ſeveral profeſſions of the diſcoveries which theſe philoſophers make about efficient cauſes. Juſt ſo divines, or they who call themſelves metaphyſicians, may profit of thoſe which the ſame philoſophers make about final cauſes: and when they

of order, contrivance and deſign, which are obvious in the conſtitution of things, aſcribe, and inſtruct others to aſcribe, every event that is produced, in the ordinary courſe of nature, to extraordinary interpoſitions of God's immediate and particular providence, juſt as they may be ſtrained to ſuit prejudice, intereſt, vanity, and paſſion. I need not bring examples in proof. They will occur to you faſt enough, to ſhew how a doctrine, that ſhould increaſe our admiration of God's infinite wiſdom and power, and enliven all the acts of adoration that we direct to this incomprehenſible Being, plunges men by the abuſe they make, and a wrong application of it, into error and ſuperſtition. It is error proportioned to the comprehenſion of every mind, and to the vanity of every heart. It prevails, therefore, eaſily, and ſpreads from the higheſt down to the loweſt ranks of men. If the ridiculous queſtion, which SENECA puts in his book concerning providence, "nunquid hoc "quoque à Deo aliquis exigit, ut bonorum virorum etiam farcinas ſervat?" had been put to your pariſh clerk, he would have anſwered, I doubt not, with much holy aſſurance, in the affirmative, and would have inſerted, among his anecdotes, ſome ſpecial examples of wallets, and bundles providentially ſaved, or recovered. The Stoics are ridiculed, in TULLY's academical queſtions, for having low notions of the divinity, and ſuch as ſuppoſed among the gods a worker like MYRMECIDES, who was famous in his time, as well as one CALLICRATES, for making bees, and flies, and ants, and other ſmall inſects in ivory. The joke was unjuſtly applied, as far as it was applied to this general poſition, that nothing could be without God, "cupis quidem vos majeſtatem deducitis," ſays the academician, "uſque ad apium, formicarumque perfectionem: ut etiam inter Deos MYRMECI-"DES aliquis minutorum opuſculorum fabricator fuiſſe videatur." This joke on the Stoics was unphiloſophical and ſilly. But what advantage would this academician have taken over them, if he could have laid to their charge, not only that they made God the immediate author of the leaſt, as well as of the greateſt productions in nature, but that they made him the efficient cauſe of every immoral ſentiment and action? He would have had then a large field, indeed, wherein to exult, "in quo poſſit exultare oratio." But the Stoics, as abſurd and as ſuperſtitious as many of their opinions were, gave him no ſuch advantage. He muſt have waited till our age, to have had ſuch a monſtrous opinion as this to combat among the profeſſors of theiſm.

they do so in such a manner as to create, and maintain in the minds of men, a due awe and reverence of the supreme Being, these discoveries will be productive of the best, and noblest effects; far from being barren like virgin's consecrated to God, as the chancellor expresses himself, rather prettily than truly. "Causarum finalium inquisitio sterilis est, et "tanquam virgo Deo consecrata nil parit." But still there will be as little reason to advance, that the investigation of final causes is a part of metaphysics, or of theology, as there is to say, that the investigation of efficient causes is the object of every profession wherein some knowledge concerning them is employed.

Now, tho I cannot subscribe to this partition of science, nor think the order in which the research of final causes is placed at all indifferent, yet I subscribe most readily to all that is said in the same place against those who substitute final in lieu of efficient causes. Both are objects, but distinct objects of physics, and nothing can tempt men to confound them but a sort of laziness and vanity. By one they are led to decline some trouble, and by the other to hope to conceal their ignorance. We shall not be at all uncharitable, in assigning such motives to the two philosophers, who have distinguished themselves by this proceeding, in which they have been followed, as in other absurdities, by numbers. PLATO had a luxuriant imagination, and a great flow of words. It cost him, therefore, much less to invent final causes, and to expatiate theologically upon them, than it would have done to pursue the discovery of efficient causes by the slow and painful course of experiments. ARISTOTLE had great subtilty of genius, and the same ambition that made him think, like an Ottoman prince, to use my lord BACON's simile, that he could not reign securely, unless he put all his brethren

to death, made him think too, that he ought at any rate to maintain his pretenſions to univerſal knowledge. For this purpoſe he perplexed what he could not explain, and in the inſtance before us he diſcourſed logically about final cauſes, to conceal his ignorance of the efficient. I ſhould be unwilling to warrant any fact on the authority of JUSTIN MARTYR, on whom the idleſt tales were able to impoſe; but the bare report that ran in Greece concerning the death of this philoſopher, who was ſaid to have drowned himſelf in the Negropontic current, for ſhame that he had not diſcovered the cauſe of it, may ſerve to ſhew, that the character he has at this day, is that which he had in his own age and country. Upon the whole, it may very well be, that DEMOCRITUS and others, whether atheiſts, or theiſts, who gave, or ſeemed to give no place to God, nor intelligence in the production of the phaenomena, nor made any mention by conſequence of final cauſes, but applied themſelves wholly to the diſcovery of material efficient cauſes, might penetrate, for that very reaſon, deeper into natural philoſophy than they could have done, if they had recurred often to the wiſdom and power of God, like PLATO, to thoſe of nature like ARISTOTLE, and to final cauſes like both. This might be, and my lord BACON who thinks ſo, and who approved this method of purſuing the ſtudy of phyſics, prepared, therefore, an apology for DES CARTES, long before this philoſopher wanted it.

THERE is a paſſage in PLATO which I ſhall have occaſion to quote, in another place, and to another purpoſe, where SOCRATES after reading a treatiſe of natural philoſophy which ANAXAGORAS had writ, ſneers at him, and complains, that he who aſcribed the ſtructure of the univerſe to a ſupreme mind, labored ſo much in the explanation of material, inſtead of diſcourſing about final cauſes. This paſſage would prove

prove beyond diſpute, if any proof was wanting, that PLATO introduced, or ſupported at leaſt by the authority of SOCRATES, the abſurd cuſtom of ſubſtituting final intentional cauſes in the place of mechanical and material; and that philoſophers, who were as good theiſts as himſelf, tho they did not affect ſo much theology, purſued the ſtudy of nature in the ſame method as the materialiſts, tho they aſſerted an intelligent firſt cauſe, which the others denied.

THE truth is, that neither theſe philoſophers, nor even the others could proceed in the inveſtigation of material cauſes, without diſcovering ſometimes the intentional, final cauſes of things; becauſe the latter are often, tho not always, ſo plainly pointed out by the former, that he who does not ſee them muſt ſhut his eyes on purpoſe. When they are not thus plainly pointed out, it is vain preſumption to pretend to account for them: and SOCRATES would have had no reaſon to complain, if a naturaliſt, a ſtranger to Athens, looking at him in his priſon, and ſeeing him fettered and chained, had ſhewn how it came to paſs that he could not walk, and that he could ſit, without preſuming to determine why he was there.

To conclude and wind up this ſection; there is no ſtudy, after that of morality, which deſerves the application of the human mind, ſo much as that of natural philoſophy, and of the arts and ſciences which ſerve to promote it. The will of God, in the conſtitution of our moral ſyſtem, is the object of one. His infinite wiſdom and power, that are manifeſted in the natural ſyſtem of the univerſe, are the object of the other. One is the immediate concern of every man, and lies therefore within the reach of every man. The other does ſo too, as far as our immediate wants require, and far enough to excite awe and veneration of a ſupreme Being in every attentive mind.

But further than this, a knowledge of phyſical nature is not the immediate and neceſſary concern of every man; and therefore a further enquiry into it becomes the labor of a few, tho the fruits of this enquiry be to the advantage of many. Diſcoveries of uſe in human life have been ſometimes made; but theſe fruits in general conſiſt chiefly in the gratification of curioſity. Their acquiſition, therefore, is painful: and when all that can be gathered are gathered, the crop will be ſmall. Should the human ſpecies exiſt a thouſand generations more, and the ſtudy of nature be carried on through all of them with the ſame application, a little more particular knowledge of the apparent properties of matter, and of the ſenſible principles and laws of motion might be acquired: more phaenomena might be diſcovered, and a few more of thoſe links, perhaps, which compoſe the great immeaſurable chain of cauſes and effects that deſcends from the throne of God. But human ſenſe, which can alone furniſh the materials of this knowledge, continuing the ſame, the want of ideas, the want of adequate ideas would make it to the laſt impracticable to penetrate into the great ſecrets of nature, the real eſſences of ſubſtances, and the primary cauſes of their action, their paſſion, and all their operations; ſo that mankind would ceaſe to be, without having acquired a complete and real knowledge of the world they inhabited, and of the bodies they wore in it.

SECT. IV.

HAVING now ſaid all that occurs to me at preſent, concerning our complex ideas of ſubſtances, whoſe architypes are without us; I proceed to take ſome further notice than has been yet taken by me, of our other complex ideas and notions which are ſaid to have their architypes within us, and which

may be ſaid, I think, more properly in the ſame ſenſe to be architypes themſelves. Nor is this the ſole difference, by which they are diſtinguiſhed from the former. Thoſe of ſubſtances are received by the mind in it's paſſive, theſe are framed by the mind in it's active ſtate. They are framed by the mind as the mind has need of them, and therefore on no ſubjects ſo much as on thoſe that regard the thoughts, the opinions, the affections, the paſſions, and the actions of mankind. The archi-types of our ideas of ſubſtances exiſt whether our minds perceive them or not. Theſe being architypes themſelves, and having no exiſtence out of the mind, have no permanent exiſtence any where, not even in the mind; for there they exiſt no longer than whilſt they are the immediate objects of thought. They ceaſe to exiſt, when they ceaſe to be perceived. But the mind, having once made them, can recall them into being, and employ them to facilitate the acquiſition and communication of knowledge. It is true indeed, and it has been obſerved already, that nature ſeems to obtrude, or obtrudes even the complex ideas of modes and relations upon us, as well as thoſe of ſubſtances. But ſtill there is a plain difference between the two caſes, which muſt be a little more and more preciſely developed, than it has been in the ſecond ſection. Both are leſſons, but different leſſons of nature. Senſe alone is immediately concerned in one, whether we receive by it the firſt impreſſions of outward objects, or whether we correct, and determine the ideas theſe impreſſions have given us. But intellect is immediately and principally concerned in the other. Intellect ſerves in the uſe and application of ideas acquired by ſenſe, but has no ſhare in framing them. Intellect on the other hand has always an immediate, and principal ſhare, and is ſometimes alone employed, in framing our complex ideas and notions of modes and relations. Thus, for inſtance, to mention a ſimple as well as a mixed mode; when we obſerve certain termi-

terminations of finite extenſion, or certain proceedings of men to men, the leſſon of nature does not conſiſt in this, that theſe are patterns by which, and according to which the ideas, or notions we ſpeak of, are framed, without any ſhare taken by the mind except that of perception; but it conſiſts rather in giving hints, if I may ſay ſo, which are vague, and neither determined, nor claſſed, like our ideas of ſubſtances; and the mind, taking theſe hints, frames by the exerciſe of it's diſcerning, compounding, and comparing faculties, theſe ideas or notions. The terminations of extenſion, that are ſeen by us, produce ideas no doubt; but I chuſe on this occaſion to deſign them as hints, becauſe they do not ſo much give, as ſuggeſt the ideas which the mind frames by conſidering theſe terminations of the extreme parts of extenſion, both diſtinctly, and relatively. Confuſed appearances of this ſort ſtrike the ſenſes, but the ideas of particular figures, as well as the general notion of figure, may be framed independently of theſe ſenſations by the mind. In like manner, an action which we ſee performed, as in the caſe of killing mentioned above, gives an idea no doubt; but this idea, in the reſpect in which it is conſidered here, is nothing more than an hint to the mind, that paſſes from a bare perception of the action to contemplate all the circumſtances of it, and all the relations both of the action, and of the actors, and ſo frames by reflection, without the concurrence of ſenſation, ideas and notions of another kind, both particular and general. This is the great intellectual province, wherein our minds range with much freedom, and often with exorbitant licence, in the purſuit of real, or imaginary ſcience. We add ideas to ideas, and notions to notions, and by conſidering the habitudes and relations of all theſe, we acquire at length ſuch a multitude as aſtoniſhes the mind itſelf, and is both for number and variety inconceivable.

When we take ſuch a general view of human knowledge, and repreſent to ourſelves all the objects that our minds purſue, and in the purſuit whereof we pretend not only to reaſon on leſs or greater grounds of probability, but moſt commonly to demonſtrate, we are apt to entertain an high opinion, and to make extravagant encomiums of our intellect. But when we enter into a ſerious and impartial detail concerning this knowledge, and analyſe carefully, what the great pretenders to it have given and give us daily for knowledge, we ſhall be obliged to confeſs, that the human intellect is rather a rank than a fertile ſoil, barren without due culture, and apt to ſhoot up tares and weeds with too much. By ſuch combinations of ideas as I have been mentioning, we ſhorten and facilitate the operations of our minds, as well as the communication of our thoughts. Our knowledge becomes general, and our intellect ſeems to be leſs dependent on ſenſe. From which obſervations philoſophers have entertained falſe notions of what they call pure intellect, and have flattered themſelves that they could extend their knowledge, by the power the mind exerciſes in framing complex ideas and notions, very far beyond the narrow bounds to which it is limited by ſimple ideas, over which the mind has not the leaſt original power, and which muſt therefore, let the mind compoſe, combine, and abſtract them as it pleaſes (for it cannot make any) determine the extent of our complex ideas and notions.

But, beſides the limitations impoſed on the mind by the human conſtitution, there is another which we ourſelves muſt impoſe on it, if we deſire to combine our ideas and our notions ſo as to obtain, by their means, real and uſeful knowledge. It is the more neceſſary to inſiſt on this limitation, becauſe philoſophers have not only neglected it too much in practice, but endeavored to eſtabliſh opinions inconſiſtent with it. Ob-

ſerve the chain of theſe opinions. The human mind is a participation of the divine mind, or an emanation from it, or ſomething very analogous to it. The eſſences of things do not depend on God; for if they did, things might be poſſible and impoſſible at the ſame time according to his will, which implies contradiction. The divine intelligence is the ſcene of all things poſſible: but tho the divine will be the ſource of actuality, it is not ſo of poſſibility. Poſſibility and impoſſibility are fixed natures, independent on God. The knowledge of things poſſible, independently of their exiſtence, is abſolute knowledge. The knowledge of things actual, in conſequence of their exiſtence, is relative knowledge. The human mind is capable of both. Philoſophers may, therefore, contemplate the intelligible natures, the fixed and unalterable eſſences of things, whether the will of God determines them to actual exiſtence or not. Philoſophers may reaſon therefore not only from their own ſyſtem, that of actuality; but from God's, that of poſſibility. Theſe opinions, ſome of which are nearly true, others of which are abſolutely falſe, and all of which are liable to much abuſe, have been advanced: and theſe, and others of the ſame kind, are the neceſſary foundations of the moſt ſublime metaphyſics. Let us deſcend from ſuch imaginary heights; place ourſelves on the human level, and conſider from thence what this part of human knowledge is, concerning which we are now to ſpeak, and from whence, and how it ariſes.

It has been obſerved, in ſpeaking of that part of natural philoſophy which contemplates ſubſtances, that we muſt never loſe ſight of experience, if we aim at acquiring real knowledge. But we may go further on as good grounds, and affirm, that the ſame rule muſt be followed in that other part of natural philoſophy (for ſuch it is if it be any thing) which contemplates mind; and in all our general, or abſtract rea-

ſonings about moral, or other matters. I am far from ſaying that we ſhould not reaſon about things poſſible, as well as things actual, or that we ſhould exclude every thing hypothetical out of our reaſonings. I know too well, that probability is our lot oftner than certainty. But this I ſay, that we ſhould never reaſon about the firſt, except under the direction of the laſt, and much leſs in contradiction to the laſt. God's knowledge precedes all exiſtence. All exiſtence proceeds from his knowledge and his will. He made things actual, becauſe he knew them, and why ſhould I not ſay becauſe he made them poſſible? But we poor creatures ſhould not be able to gueſs at things poſſible, if we did not take our riſe from things actual. Human knowledge is ſo entirely and ſolely derived from actual Being, that without actual Being, we ſhould not have even one of thoſe ſimple ideas, whereof all the complex ideas and abſtract notions that turn our heads are compoſed. Theſe complex ideas and abſtract notions, to be materials of general and real knowledge, muſt have a conformity with exiſtence. They muſt be true, not in an idle metaphyſical ſenſe, that they are really what they are; but in this ſenſe, that they are true repreſentations of actual, or of ſuch poſſible exiſtence, as experience leaves us no room to doubt may become actual.

That this is agreeable to the common ſenſe of mankind undebauched with philoſophy or ſuperſtition, the univerſal practice of mankind may ſerve to convince us. The human mind is able to frame many complex ideas and abſtract notions, to which no names have been aſſigned in any language, becauſe they have not been brought into uſe among any people. Many other complex ideas and abſtract notions have names aſſigned to them in one language, and are in uſe among one people, and have no ſuch names, nor are in any ſuch

uſe among another. What ſhall we ſay is the reaſon of ſuch obvious matters of fact? The reaſon appears to me to be plainly this. Men are determined to frame theſe complex ideas, and abſtract notions, by the want they have of them: and the want they have of them ariſes from hence, that they obſerve certain combinations of beings, of actions, of modes, and relations to exiſt, relatively to which they could neither think, diſcourſe, nor act, all which it is often either their inclination, their intereſt or their duty to do, unleſs they applied their minds to the framing of ſuch ideas and notions. Men form, therefore, no where, complex ideas and notions of combinations of this kind, which they have obſerved to exiſt no where as in the firſt caſe. Nor do they form them always where ſuch combinations do exiſt; tho they are not enough obſerved to have the want of theſe ideas, and notions perceived as in the ſecond caſe. Theſe ideas and notions are ſo neceſſary to the improvement of knowledge, that as we proceed in acquiring, and communicating it by the employment of ſome, ſo the knowledge we acquire makes it neceſſary in every ſtep we advance to frame, and to employ more, that we may proceed further.

It is reaſonable to believe that the firſt of men had framed no ideas, nor notions of jealouſy, envy, anger, malice, treachery, and murder in paradiſe, nor perhaps out of it, before Cain ſlew Abel. Then, no doubt, he framed all theſe, and thoſe of aſſaſſination and fratricide beſides, and invented words to ſignify them as he had invented names for all the beaſts of the field, and fowls of the air, when they paſſed in review before him. Since the days of Adam, and his unhappy fall, as the number, and the iniquity of his poſterity encreaſed, ſo has their experience: and therefore legiſlators, and the founders of commonwealths, and all thoſe who have civilized and inſtructed mankind, have been careful to obſerve the behavior,

and the dealings of men with one another in the ſame, and in different ſocieties. They have remarked the circumſtances, and the conſequences of every action relatively to the happineſs and unhappineſs of mankind. Thoſe of one ſort have been termed virtues, thoſe of the other vices: and as theſe virtues and vices have ariſen, and have offered themſelves to obſervation, the ſame perſons, political and moral philoſophers, have proceeded in determining complex ideas or notions of them, and in marking the ſeveral combinations by diſtinct names, in order to promote the practice of virtue, and to reſtrain vice by improving the natural ſanctions of rewards and puniſhments.

Thus then the principles of the law of nature, and of civil juriſprudence have been collected à poſteriori, by experience and obſervation: and the ſame method ſhould be taken in every part of philoſophy, tho I have inſiſted particularly on this alone. We ſhould not ſuffer, much leſs encourage, imagination to rove in the ſearch of truth. To know things as they are, is to know truth. To know them as they may be, is to gueſs at truth. Judgment and obſervation guide to one, imagination and ſpeculation to the other. To know them as they are, the mind muſt be conſtantly intent to frame it's ideas and notions after that great original, nature; for tho theſe ideas and notions are properly and uſefully framed by the mind, that they may ſerve as architypes by which we reaſon, and according to which we judge, yet muſt all the parts of them be taken from nature, and no otherwiſe put together than nature warrants. As well may the painter copy the features of a face on which he never looks, by pure gueſs, as the philoſopher frame his ideas and notions of nature, phyſical and moral, by pure intellect. One may draw a metaphyſical man, and the other invent a metaphyſical hypotheſis. But the features of the picture, and the ideas and notions of the ſyſtem being taken

taken from imaginary not real exiſtence, the picture will be the picture of no body, and the ſyſtem the ſyſtem of nothing. Nay, there is ſtill a worſe conſequence that follows often, becauſe it is almoſt unavoidable. Imagination ſubmitted to judgment will never go beyond knowledge founded on experience, or high probability immediately deducible from it. But when imaginations naturally warm, and excited by a ſtrong deſire of being diſtinguiſhed, break looſe from this controul, tho the poſſible man, and the poſſible ſyſtem may be ſo compoſed as to contain nothing abſolutely impoſſible, yet they may contain ſomething monſtrous, like thoſe productions wherein nature deviates from her regular courſe. Whenever this happens, and it has often happened in philoſophy, it muſt not be deemed a jot leſs abſurd to take theſe ideas and notions for real architypes, or the ſyſtem they compoſe for a ſyſtem of real knowledge, than it would be to take ſuch monſtrous productions for the architypes of any ſpecies.

This proceeding is the more dangerous, becauſe we may accuſtom our minds to contemplate chimeras till they grow familiar to us, and paſs for realities. After which we ſhall not fail to reaſon from them, and to controul even what is, by what imagination has told us may be. The very reverſe ſhould be our practice. All that we imagine may be, ſhould be compared over and over with the things that are: and till ſuch a compariſon and analyſe has been well and ſufficiently made, all argumentation is impertinent. We can frame ideas of a centaur, or an Hipogryph. No contradiction is implied by ranking them among poſſible beings. We can ſhew wherein theſe complex ideas agree and diſagree. We can reaſon, frame propoſitions, affirm, and deny concerning them; but yet every man who is not out of his ſenſes will confeſs, I ſuppoſe, that theſe ideas are fantaſtical, and that it is, therefore, abſurd

abſurd to reaſon about them. They are phantaſtical becauſe their ſuppoſed architypes do not exiſt. The reaſoning about hem is abſurd, becauſe it is abſurd to reaſon about ſubſtances that are not actual, tho they may be poſſible.

But I aſk, is it a jot leſs abſurd to frame ideas, and notions, of mixed modes and relations, any otherwiſe than experience ſhews us that nature warrants to do. Mr. Locke has obſerved truly, that "mixed modes are made for the "moſt part out of the ſimple ideas of thinking, and motion, "wherein all action is comprehended, and out of that of "power, from whence we conceive all action to proceed." Now if this be ſo, is it not evident that mixed modes, how much ſo ever mixed, are reſolvable, and ſhould be analyſed into ideas leſs complex, and theſe ultimately into ſimple ideas? Is it not evident that whether we conſider intellectual, or corporeal agency, whether we frame mixed modes of powers as modifications of thought and motion, or whether we conſider them only for want of being able to do more, in the actions they produce, is it not evident that we muſt have recourſe on all theſe occaſions to exiſtence, exiſtence of powers, and actions, or of actions at leaſt?

The example of power and action, which I employ in ſpeaking of mixed modes, is equally applicable to the caſe of relations, among which that of cauſe and effect is one of the moſt conſiderable, as it is the relation, concerning which the mind of man is the moſt curious to acquire knowledge. All our ideas of relation are framed by the compariſon the mind makes of one idea with another: as theſe ideas therefore are phantaſtical, or real, ſo our ideas of their relations, how juſtly ſoever the mind makes the compariſon, are in effect phantaſtical, or real too. The compariſon therefore muſt be not only that of ideas with ideas, but that of ideas with the objects

jects of them, with things. This recourse to existence is so truly the only sure rule by which we can frame our ideas in such a manner as to make them proper materials of real human knowledge at least, that it is, I suppose, a mistake most commonly when we are thought to frame phantastical ideas of relations, by a wrong comparison of real ideas. I suppose we shall find on such occasions, if we observe closely, that the phantastical idea of relation does not arise so much from a wrong comparison of real ideas which the mind contemplates, as from a voluntary or involuntary corruption of the reality of these supposed real ideas.

I SAY voluntary, or involuntary, because philosophers are apt to make complex ideas and notions of all kinds, not only wantonly, but unfairly. These ideas and notions should be composed in order to assist the mind in forming opinions, or acquiring knowledge. But it is obvious to observation, that men begin very often by forming strange opinions, or by taking them on trust; and afterwards put together inconsistent, and inadequate ideas, which they suppose to be both consistent, and adequate, in order to frame such ideas of mixed modes and relations, as may help them to impose, or defend their opinions with some appearance of plausibility. The mind wanders easily; and is easily, more easily led into error about modes and relations, than about substances: and error about the former, may be concealed better, and defended more plausibly by metaphysical chicane, than about the latter. Let us keep our minds, therefore, constantly intent on those criterions which our physical and moral systems hold out to us: and if by surprise, inadvertency, or prepossession we have been led too far from them, let us return to them as to the oracles of truth. For want of doing one or the other, into what extravagant opinions, under the specious names of metaphysical,

or

or theological ſcience, have not men been carried? You give us philoſophy in a poetical dreſs. You adorn, but do not diſguiſe, and much leſs corrupt the truth. There are who have given us mere poetry in a philoſophical dreſs: and, I think, you muſt admit that PLATO, MALEBRANCHE, and a good friend of ours, to inſtance in none of inferior note, are as truly poets as HOMER and you. In a word, the boaſted power of framing complex ideas, and abſtract notions, will be found, as it is exerciſed, to be ſo far from ſhewing the great force and extent of human intellect, and from raiſing man up to divinity, that it will ſhew, on the contrary, how weak and how confined this intellect is, and ſink him down, if you will allow me ſuch an expreſſion, into that animality above which he affects ſo vainly to riſe.

THIS now, whereof we have taken ſome view in ſeveral of it's branches, is that noble fund of ideas from whence all our intellectual riches are derived. The mind of man does often what princes and ſtates have done. It gives a currency to braſs and copper coined in the ſeveral philoſophical and theological mints, and raiſes the value of gold and ſilver above that of their true ſtandard. But the ſucceſs of this expedient is much alike in both caſes. In different ſects, as in different ſtates, the impoſition paſſes; but none are the richer for it.

ONE great advantage that has been reaped ſince the reſurrection of letters, and ſince the improvements of modern philoſophy in the ſtudy of nature intellectual and corporeal, has been this, that men have diſcerned their ignorance better than they did in the days of ignorance, and that they have diſcovered more and more of it, as they have advanced in knowledge. A great part of this diſcovery is that of the limitation as well as imperfection of our ſimple and complex ideas

and notions. Limited and imperfect they are, no doubt, and yet it would be well for us if they had no other defect. Another, and, on many occaſions, a greater belongs to them; for, even in the narrow compaſs to which they extend, they are apt to fluctuate and vary: ſo that beſides the difficulty of determining them well, there is that of preſerving the determination of them ſteadily in our minds. He, who is attentive to do ſo, muſt acknowledge the difficulty he finds of this ſort even in his private meditations. But the difficulty encreaſes vaſtly when he is to communicate theſe ideas and notions in diſcourſe or writing, and above all if he is obliged to enter the liſts of diſputation.

Our complex ideas being aſſemblages of ſimple ideas, that have often no other connection except that which the mind gives them, we might be eaſily led to conceive the difficulty of this taſk by a bare reflection on the weakneſs of memory, and if I may ſay ſo, on the ſeeming caprice of this faculty, before we were made ſenſible of it by repeated experiences. The ideas that are lodged there begin to fade almoſt as ſoon as they are framed. They are continually ſlipping from us, or ſhifting their forms; and if the objects that excited ſome did not often renew them, and if we had not a power to recall others before they are gone too far out of the mind, we ſhould loſe our ſimple, and much more our complex ideas, and all our notions would become confuſed and obſcure. The mind would be little more than a channel through which ideas, and notions glided from entity into nonentity. But our caſe is not ſo bad. They are often renewed, and we can recall them as often as we pleaſe. There is, however, a difference between the renewing of them, and the recalling of them. When ideas are renewed by the ſame objects that excited them firſt in the mind, they are renewed ſuch as they were. The light

light and heat of the ſun will cauſe the ſame ſenſations, and ſtronger perhaps of the ſame kind, in the man who has not ſeen one nor felt the other in many years, than they cauſed in him formerly. Juſt ſo any operation, or affection of the mind, which has been long unperceived, will appear the ſame it uſed to appear to our inward ſenſe, when it is perceived anew by reflection. But when we are forced to recall our complex ideas, the caſe is not the ſame, at leaſt when they are ſuch as are not in common uſe. Thoſe of mixed modes and relations, for inſtance, that philoſophers ſometimes employ, and to which the mind ſcarce ever adverts on other occaſions, may well receive ſome alteration even when they are recalled readily, tho this alteration is the leſs perceptible, perhaps, on account of that very readineſs with which they are recalled. But when they are recalled with difficulty, and dragged back ſlowly, as it were, and by pieces and parcels into the mind, it is no wonder if they receive much greater alteration. They are then in ſome ſort recompounded, and tho this may be for the better as well as for the worſe, yet ſtill they vary, and every variation of them begets ſome uncertainty and confuſion in our reaſoning. Thus it muſt be, when beſides our ſimple ideas, ſuch numberleſs collections of ſimple and complex ideas, and ſuch numberleſs combinations of all theſe into notions, are to be held together and to be preſerved in their order by ſo weak a mental faculty as that of retention.

Names indeed are given to ſignify all our ideas and all our notions to ourſelves and to others, and to help the memory in meditation as well as in diſcourſe. When they are aſſigned to complex ideas, they are meant as knots according to the very proper image Mr. Locke gives of them, to tie each ſpecific bundle of ideas together: and in theſe reſpects they are not only uſeful, but neceſſary. It happens, however, that

names, far from having theſe effects, have ſuch very often as are quite contrary to theſe. Whilſt we retain the names of complex ideas and notions, we imagine that we retain the ideas and notions; but the ideas and notions ſhift and vary, whilſt the names remain the ſame. The ſcene of the mind, like a moving picture, muſt be governed with attention, that it may bring into our view the images we want, and as we want them. Otherwiſe ideas that are foreign to our actual train of thinking will frequently ruſh into our thoughts, and become objects of them whether we will or no. But there is another and a greater miſchief which will flow from this conſtitution of the mind, unleſs the utmoſt attention be employed, and often when it is. The former is a ſort of violence, which cannot be offered unperceived, and may be therefore reſiſted. This that I am going to mention ſteals ſo ſilently upon us, that we do not perceive it very often even when it has worked it's effect. When we recall our ideas and notions, whether this be done with eaſe or difficulty, we review them in ſome ſort: and if they are more liable to have been altered, we have a better chance for perceiving any alteration that may have been made in the determination of them. But when the ideas and notions we want preſent themſelves, as it were of themſelves, to the mind, under their uſual names and appearances, we are apt to employ them without examination, and perhaps we advert very often to nothing more than the word by which we are uſed to ſignify them. In this manner our ideas and notions become unſteady imperceptibly, and I would not anſwer that ſomething may not happen to me of this kind, even in writing this eſſay, tho I am on my guard againſt it. How much more muſt it happen to thoſe who are not thus on their guard?

Every man imagines that his ideas and notions are his own in every ſenſe, but every man almoſt deceives himſelf in this caſe. When we learn the names of complex ideas and notions, we ſhould accuſtom the mind to decompound them, as I believe it has been obſerved already, that we may verify theſe, and ſo make them our own, as well as learn to compound others. But very few are at this trouble, and the general turn of education is contrived to keep men from taking it. Bred to think as well as ſpeak by rote, they furniſh their minds, as they furniſh their houſes or cloath their bodies, with the fancies of other men, and according to the mode of the age and country. They pick up their ideas and notions in common converſation, or in their ſchools. The firſt are always ſuperficial, and both are commonly falſe. Theſe are defects in the firſt determination of our ideas and notions, and if we join to theſe the obſtinacy and negligence that become habitual in moſt men, we ſhall find no reaſon to be ſurprized that abſurd opinions are tenaciouſly embraced, and wildly and inconſiſtently defended. Uniformity of ideas in error would have, at leaſt, this advantage: error would be more eaſily detected and more effectually exploded.

But ſuppoſing the contrary of all this, ſuppoſing our ideas and notions to have been determined truly, and preſerved ſteadily, we muſt not flatter ourſelves, that we are quite ſecure againſt the evil conſequence that is obſerved in this place to flow from the imperfect conſtitution of the human mind. The very temper of the mind, a little too much remiſſneſs, or a little too much agitation, affections that are grown up, or paſſions that are inflamed, may occaſion ſome alteration in our ideas and notions, in the very moment that we employ them. If it be ſmall, it will be unperceived by us. If it be great,

great, the affection or paſſion that cauſed it will excuſe it, perhaps juſtify it to us. But however ſmall and almoſt imperceptible, even to a cool mind that is on it's guard againſt it's own weakneſs, ſuch alterations may be, each in itſelf; yet beſides that, each of them may produce others, each of them, tho ſmall in the idea, or notion, may become of great conſequence in the courſe of that reaſoning, wherein this idea or notion is frequently employed, or which turns perhaps upon it. A few ideas, or parts of ideas, that ſlip out of the bundle of covetouſneſs, make it the bundle of frugality: and a few, added to that of frugality, make it the bundle of covetouſneſs.

Thus it happens when we diſcourſe with ourſelves. But when we diſcourſe with others, the difficulty doubles; for beſides that of maintaining a ſteady determination of our own ideas and notions, we have the additional difficulty very often of communicating, and always of maintaining the ſame ſteady determination in thoſe of another. This is our caſe; that of every one in his turn, not only when mixed modes and relations, but in ſome degree, even when ſubſtances are our objects: and I perſuade myſelf that you have been more than once ready to laugh or cry, in the midſt of ſeveral rational creatures, who talked of things quite different, called them by the ſame names, and imagined that they talked of the ſame things. The choirs of birds who whiſtle and ſing, or ſcream at one another, or the herds of beaſts who bleat and lowe, or chatter and roar at one another, have juſt as much meaning, and communicate it juſt as well. At leaſt I preſume ſo, for I can affirm of no ſpecies but my own. All of them ſeem to have ideas, and theſe ſeem often to be better determined in the birds and beaſts, than in men. All of them ſeem to have, in theſe loud converſations, ſome general meaning.

ing. But none of them ſeem to have that preciſion, order, and connection of ideas and notions, which can alone make up rational diſcourſe.

Such is the common converſation, ſuch the ordinary correſpondence of men with one another. Such too for the moſt part are all the public diſcourſes that are held, and the ſolemn harangues of the pulpit. But the matter grows ſtill worſe when any controverſy is concerned. Tho truth be one, and every neceſſary truth be obvious enough, yet that there muſt be various opinions about it among creatures conſtituted as we are, is as certain as that there are ſuch opinions. Truth however is ſeldom the object, as reaſon is ſeldom the guide; but every man's pride, and every man's intereſt requires that both ſhould be thought to be on his ſide. From hence all thoſe diſputes, both public and private, which render the ſtate of ſociety a ſtate of warfare, the warfare of tongues, pens and ſwords. In that of the two firſt, with which alone we have to do here, diſputes become conteſts for ſuperiority between man and man, and party and party, inſtead of being what they ſhould be, compariſons of opinions, of facts and reaſons; by which means each ſide goes off with triumph, and every diſpute is a drawn battle. This is the ordinary courſe of controverſy, not among the vulgar alone, but among ſage philoſophers and pious divines, whoſe conduct is not more edifying than that of the vulgar. Will it be pretended that the ſchools of religion and learning have, in this reſpect, any advantage over other public aſſemblies, over coffee-houſes and taverns? If it is, we may ſafely deny it; becauſe we can eaſily prove the contrary. In vain will it be urged, that men who have much learning, and who are accuſtomed to inveſtigate, and to fix the moſt abſtruſe and momentous truths, muſt of courſe, and even without ſuperior parts, be better able nicely to diſ-

cern, to determine, and to compare and to connect ideas and notions, than those who neither poſſeſs the ſame learning and the ſame habits, nor have the ſame art of reaſoning. This may be in ſome reſpects true, but upon the whole it is not ſo: and a plain man would overwhelm the ſcholar who ſhould hold this language, by ſhewing, in numerous inſtances, the weakneſs of the human mind, that of this very ſcholar perhaps in ſome; the narrow confines, and in them the inſtability of our ideas and notions, the impertinence of logic, the futility of metaphyſics, the blaſphemy of divinity, and the fraud of diſputation.

The beſt, and even ſuch as paſs for the faireſt controverſial writers, improve by artifice the natural infirmity of the human mind, and do on purpoſe what is here lamented as an evil not always to be avoided. They confound ideas, and perplex the ſignifications of their ſigns, ſo as may ſerve beſt the intention, not of diſcovering truth, but of having the laſt word in the diſpute. This practice is ſo common, and eſpecially where favorite intereſts, and on their accounts favorite tenets, are concerned, that I think no writings of this ſort can be produced, wherein it is not employed, more or leſs, on both ſides. How indeed ſhould it be otherwiſe, when ſkill in diſputation is eſteemed a great part of learning, and the moſt ſcandalous frauds are applauded under the name of ſubtilty? Whatever excites men to it, whether pride, or ſelf-intereſt, or habitual and inveterate prepoſſeſſion and bigotry, by which they are induced to think, that the worſt means may be employed to ſerve the beſt cauſe, which is always the cauſe they have embraced, it is fraud ſtill. It is pious fraud, if you pleaſe: I would rather call it theological; but the doctor who ſhifts the idea, and keeps the word appropriated to it, that he may ſerve any purpoſe, is as arrant a cheat as the ſaint who

interpreted the ſame paſſage of ſcripture in different ſenſes, according to the different opinions his orthodoxy required him to oppoſe. We may lament the imperfections of the human mind, we may blame thoſe who do not give their attention to frame, and to preſerve their ideas and notions with all the exactneſs neceſſary to make them materials of knowledge, not of error. But we have a right to abominate thoſe who do their utmoſt to render the diſcovery of truth impracticable, to perpetuate controverſy, and to pervert the uſe and deſign of language. I prefer ignorance to ſuch learning, SWIFT's Bagatelle to ſuch philoſophy, and the diſputes of a club where it does not prevail, to thoſe of an academy or univerſity where it does.

IT is, in truth, in thoſe places, and wherever metaphyſics and theology have been made ſciences, that the arts of controverſial legerdemain are practiſed with moſt licence, dexterity, and ſucceſs. Ideas of corporeal ſubſtance are not ſo liable to vary, nor ſo expoſed to perplexity and confuſion by the abuſe of words, as the ideas that we have, or rather that we ſuppoſe we have, of thinking ſubſtance. Every complex idea of any corporeal ſubſtance is not the ſame preciſe collection of ſimple ideas in every mind. But the moſt ſenſible of it's qualities, thoſe that are the moſt obvious to us according to the buſineſs we have with it, ſuch as mark moſt, and diſtinguiſh enough, are put together in every mind. The peaſant has not the ſame idea of gold as the miner, nor the miner as the chemiſt. This will be ſaid, and it will be ſo far true, that the chemiſt will have more ideas of qualities co-exiſting in this metal than the miner, and the miner more than the peaſant. But the collection of ſimple ideas in the mind of him who has feweſt will be ample, and diſtinct enough to fix the ſort there, and to anſwer all his purpoſes: and, as long as na-

ture maintains theſe collections of ſenſible qualities, the ideas of them can be neither confounded, nor loſt. As long as gold, and iron, and men, and horſes are in the world, their complex ideas will exiſt in human minds invariably: and tho they may be more complex in ſome than in others, yet the additional ideas that encreaſe, will not alter the collection enough to beget any material ambiguity.

The caſe is widely different when thinking ſubſtance becomes the object of our contemplation, when philoſophers pretend by a ſuppoſed ſcience, not only to ſpiritualize matter in ſome ſort, if you will allow me to expreſs myſelf ſo, and to conſider forms abſtracted from all matter, incorporeal eſſences and intelligible natures; but to reaſon and dogmatize about immaterial ſpirits, and to make ſouls, for inſtance, as many as they want, ſouls for the world, for men, for all other animals, and for vegetables, ſouls rational and irrational, ſouls immaterial, and ſouls of ſo fine a texture, that they approach immateriality, tho they are material. All ſuch ideas and notions, and all ſuch as are framed concerning them, are ill determined, and conſequently ill preſerved. Uncertain in their origin, they muſt needs be unſteady in their progreſs, and in the uſe that philoſophers and divines make of them. Our ideas of corporeal ſubſtances are, no doubt, inadequate and ſuperficial, and ſuch as cannot reach the eſſence of any one particular ſubſtance; but they reach far enough for our uſe: and as far as this uſe is concerned, nay even a little further, the ſyſtem of corporeal ſubſtances lies open to us. They are criterions in our power; and according to them we verify, correct, and maintain by obſervation and experience, as we acquire, the preciſe determinations of our ideas of them. But when we proceed from phyſics to that which is called metaphyſics, and pretend to knowledge of general natures and im-

material beings, what do we leſs than pretend to general knowledge, where we are not capable of having even particular knowledge, properly ſo called? and to particular knowledge, where we have no criterion ſufficient to verify, correct, and maintain all the ideas and notions that we put together, in order to compoſe ſomething that paſſes for it? The ſole criterion we have of immaterial ſpirit is our own ſpirit. The idea we have of thought by reflection, is as clear as that we have of extenſion by ſenſation. The ideas we have of ſome few modes of thinking, are as clear as thoſe we have of numberleſs modes of extenſion. So far then we have a criterion, by which to judge of the immaterial ſpirits we are pleaſed to create. I call them the creatures of metaphyſics and theology; becauſe in truth, conſidered as diſtinct ſubſtances, they are ſuch. All ſpirits are hypothetical, except the infinite ſpirit, the father of ſpirits, the ſupreme Being. But how confined is this criterion that extends no wider, nor riſes any higher than the narrow confines, wherein we have perceptions of the operations of our own minds? They afford much room for imagination, and few means of knowledge. Our ideas of knowledge and power for inſtance, that ariſe from the perceptions we have of our own ſpirits, are applicable to them, and triable by them. But as ſoon as metaphyſicians and divines preſume to apply them improperly, to reaſon concerning the knowledge of the ſupreme Being on thoſe of the firſt ſort, which have in this application no criterion; and to reaſon concerning the liberty of man on thoſe of the ſecond ſort, without a due regard to what we experience in ourſelves, which is their true criterion; how vague, and how unſteady do all theſe ideas, and theſe notions we frame by them, become? Of how much incoherent diſcourſe, of how many repugnant opinions has not this abſurd manner of philoſophizing been productive? In a word, and to conclude this ſubject

here at leaſt, all our metaphyſical and theological ideas and notions are vague and unſteady as well as phantaſtical, for the moſt part, for want of criterions by which it is in our power to try them in the ſubjects about which we employ them, or for want of trying them by the criterions by which it is in our power to try them.

These inconveniences the lovers of truth may eaſily avoid. We are under no obligation to be metaphyſicians or divines. But there is another inconveniency not ſo eaſy to be avoided on ſubjects more important, becauſe more real than thoſe commonly called metaphyſical and theological. The inconveniency I mean to ſpeak of here, and have referred to already, conſiſts in the difficulty of preſerving ſteadily ſome of our ideas and notions when they are well determined, rightly taken from the nature of things, and tried and approved by their proper criterions. Mathematical, as well as moral ideas and notions, are made by the mind: and tho ſuggeſted to it by ſenſible objects, yet both are properly creatures of the mind, and there they remain to be employed as architypes. Thus far both are in the ſame caſe. But the difference that follows is great in itſelf, and in it's conſequences. The mathematician can call his ſenſes in at every inſtant to aid his intellect; and by making his ideas become objects of his ſight, as he does when he draws diagrams that are copies of them on paper, he not only purſues ſteadily, but is able to communicate to others, demonſtrations which he could neither purſue, nor retain by the ſtrength of his mental faculties alone, nor explain to others by the help of words. Words are ſigns, not copies of ideas. An idea, a moral idea for inſtance, may be eſſentially changed, and the ſign that ſtood for it before may ſtand for it afterwards, without cauſing always an immediate perception in the mind of this change. But whenever

ever the leaſt change is made in any idea of which we have before our eyes an outward viſible copy, that change is perceived inſtantly; and the determination of ideas, which the mind is unable to maintain, is thus maintained by one of our ſenſes. Moral ideas and notions, therefore, of which no ſuch copies can be made, which are held together in the mind with the names aſſigned to them by nothing but the retentive power of the mind, and which can be ſignified by nothing but ſounds that bear no reſemblance to them, muſt fluctuate and vary, beget all the confuſion, ſpread all the obſcurity, and give occaſion to all the fraud I have mentioned.

Definitions, it has been ſaid, will prevent, or remedy this evil, and morality may be placed by the help of them "among "the ſciences capable of demonſtration." That the firſt and great principles of natural religion may be demonſtrated, and that ingenuous minds may be trained to make a juſt application of them in ſome particular caſes, I acknowledge. But that the preciſe meaning of moral words can be ſo fixed and maintained, that the congruity or incongruity of the ideas and notions they ſtand for ſhall be always diſcerned; clearly and uniformly, I do not believe. Definitions, therefore, conſiſting of words, they cannot anſwer Mr. Locke's purpoſe, as it would not be hard to ſhew in the very inſtances he brings. Intellect, the artificer, works lamely without his proper inſtrument, ſenſe; which is the caſe when he works on moral ideas. Whenever he can employ this inſtrument, and as far as it can ſerve him, which is the caſe when he works on mathematical ideas, he works ſecurely. I apprehend, therefore, that to expect a new method ſhould be ever found, of preſerving as ſteadily and invariably our moral ideas and notions, as we preſerve thoſe that are mathematical, is not very different from expecting that a method ſhould be found, ſome time or other, of rendering

ing

ing things, that are not objects of ſight by nature, viſible by art. Ideas and notions of virtue and vice, very clearly defined, have been often confounded by ſchoolmen and caſuiſts, in the moſt flagrant caſes. They are ſo ſtill by them and others in moſt diſcourſes, and in all diſputes about political or moral affairs. But no mathematician ever confounded the idea of any triangle with that of a ſquare, nor that of a ſquare with that of a circle.

SECT. V.

I HAVE dwelled the longer on complex ideas and notions, becauſe tho ſimple ideas are truly the firſt principles of all our knowledge, yet the complex ideas into which they are compounded by nature, and the complex ideas and notions into which we compound them by the operations of our minds, are the more ready and immediate principles on which we endeavor to eſtabliſh general knowledge. We could not attain it even in ſuch degrees as are proportionable to our wants, and to the deſign of infinite Wiſdom in making us what we are, in placing us where we are, and in giving us the faculties we have, without their aſſiſtance. If then theſe ideas and notions are ſo limited, as I have deſcribed them, by nature, and if we muſt often limit them ſtill more by judgment, that they may be ſtill more ſurely productive of real knowledge; if within this extent too they are ſo liable to be inacurately framed, unſteadily maintained, and uncertainly communicated, there will reſult from theſe conſiderations ſufficient reaſons to confound the pride of philoſophers, and to expoſe the vanity of much pretended ſcience. But theſe reaſons acquire ſtill greater force, when we add ſome further conſiderations to the former. The leſſon of nature, as I have called it, that is the information and inſtruction we gain by obſerving the conſtitution of

our

our phyſical and moral ſyſtems, and the ſtate and courſe of things that exiſt conſtantly, or tranſiently in them, ends with our complex ideas and notions. When nature leaves us, we are forced to put ourſelves, in our ulterior progreſs towards general knowledge, under the conduct of her mimic, art: ſo that if our feet are apt to ſlip, if we totter in the way, and are ſubject to ramble out of it, whilſt nature is our guide, all this muſt needs happen much more when we have no other guide but art, and when we are reduced to ſupply natural imperfection by expedients. The truth is, the further we proceed under the conduct of art, the further we attempt to carry our thoughts beyond thoſe originals whereby nature, obtruding on ſenſe complex ideas of what does exiſt, and ſuggeſting ideas and notions of what may exiſt, informs and inſtructs the mind, the more liable we are to fall into error by framing our ideas and notions wrong, by preſerving unſteadily even thoſe that we frame right, by preſuming that we have ideas when we have really none, or that we know what we mean when we have no meaning at all. Metaphyſicians and divines have raiſed their reputations on little elſe: and it will be worth our while to examine the truth of this aſſertion in ſome few inſtances, among many that might be produced. I ſay, it will be worth our while, becauſe the errors in opinion, like the faults in conduct of the greateſt men, are of the worſt conſequence, and deſerve the moſt to be detected; becauſe theſe philoſophers, above all other men, have rendered the human mind the flatterer, the deceiver, and the debaucher of itſelf, "blanda adulatrix, et quaſi lena ſui." In ſhort, becauſe they have ſubſtituted mental artifice in the place of mental art, and have thereby encouraged mankind to continue ridiculouſly an imaginary progreſs in ſearch of ſcience, when nature and art are both at a ſtand.

How

How difficult, nay how impracticable the enlargement of knowledge, and communication of our thoughts to one another would be, if we remained abſolutely confined to particulars, and unleſs means were found of ſupplying this defect, is obvious to reflection. The mind, therefore, makes it's utmoſt efforts to generalize it's ideas, begins early with ſuch as are moſt familiar, comes in time to thoſe that are leſs ſo, and is never at reſt till it has found means of conceiving as well as it can it's ideas collectively, and of ſignifying them in that manner to others. Complex ideas are made by uniting ſeveral ſimple ideas that have often no connexity, nor relation to each other, except what the mind gives them, in one idea. General ideas, or notions are attempted by endeavoring to aſſemble in one a variety of ideas, or notions, that have a relation, or likeneſs to each other. Nature helps in the firſt of theſe operations, as we have obſerved above; and we perform it, or we may perform it, with ſucceſs. But ſhe affords us little or no help in the laſt; and we fail in the attempt. She ſhews us men, but not man in general, and the ſame may be ſaid of all other ſubſtances. She ſhews us, or we frame, ideas of particular figures; but neither does ſhe ſhew us, nor can we frame any idea of figure in general, nor general ideas of particular kinds of figure, any more than we can frame a general idea of ſubſtance, or of any particular kinds of ſubſtances. Once more, ſhe ſhews us particular actions, and inſtances of behavior of men towards men, or we frame ideas in our minds of ſuch particular actions, or inſtances of behavior, and we term them juſt, or unjuſt; but neither does ſhe ſhew us, nor can we frame any idea of moral or immoral in general, no nor any general idea of theſe particular kinds, juſt and unjuſt. The mind would make all theſe creatures if it could; but not having this natural power, an art is properly, and uſefully

employed to make particular ideas ſerve the purpoſes of general, by giving them the rank of architypes in the mind, and to make particular notions become general, by compriſing them in definitions that we refer to as to architypes of particular kinds. Thus knowledge, particular by nature, becomes in ſome degree general by art.

It would be abſurd to imagine, as ſome philoſophers have imagined, that nature caſts her productions in certain ſpecific moulds. But we may ſay, when we ſpeak of things as they appear to us, that they are claſſed in different ſorts, which we diſtinguiſh by our ſenſations. Our ſimple ideas are many, as many as the ſenſible qualities of outward objects that excite them in us. But the various combinations of theſe ſimple into complex ideas of ſubſtances are innumerable, and yet each of theſe combinations is as diſtinctly and uniformly perceived by us, as the ſimple ideas contained in it. By this it is, and without this it could not be, that both of them anſwer God's deſign, and man's uſe. If mankind in general did not receive the ſame impreſſions, and by theſe impreſſions the ſame ſenſations from outward objects, much confuſion and diſorder would ariſe in human life. Without troubling ourſelves to enquire like * Malebranche, whether the ſame motions of the fibres are conſtantly produced by the ſame objects, or whether the ſame ſenſations are conſtantly produced, and the ſame ideas excited in the ſoul by the ſame motions of the fibres, of all which he knew no more than ſuch ignorant men as you and I are; let us content ourſelves to underſtand this uniformity as it has been explained in the third ſection, and conformably to experience.

This

* Recher. de la Verité, lib. 1. c. 13.

This being eſtabliſhed, we may obſerve further, that the mind proceeds to generalize, in the utmoſt extent, the ſimple ideas it has got, tho not the complex ideas of ſubſtances; as if, the component ideas being generalized, men had perceived there was no need of generalizing the complex ideas compounded of them, and of ſomething whereof they had only an obſcure idea ſuggeſted to the mind by all their ſenſations, an idea of ſubſtance wherein the ſenſible qualities producing ſimple ideas inhered. In the caſe, therefore, of ſimple ideas we employ, to ſpeak the language of philoſophy, not only concrete but abſtract terms, and we ſay, for inſtance, not only that milk or ſnow is white, but we talk of whites in general, and ſignify them by the abſtract term whiteneſs. The adjective white, joined to a ſubſtantive, is the ſign of a particular idea, and neceſſary, therefore, as well as proper to be uſed in ſpeaking of particular ſubſtances, by every one of which it is determined. But the ſubſtantive whiteneſs is authoriſed by cuſtom alone, and is determined by nothing. It is a term invented by the art of the mind. When it is uſed, I perceive no determinate, ſpecific, general idea, wherein all the various tints of white which I have perceived, and many there may be which no human eye has ever perceived, are comprehended. I have no perception of a general idea of white abſtracted from every particular idea of this ſort. The idea I have, when this word is uſed, is always that of ſome particular white extenſion, or of ſeveral ſuch whoſe ideas ruſh confuſedly into the mind together.

In the caſe of ſubſtances, the art of the mind is not carried quite ſo far, tho it makes as we grow up, by obſervation and experience, ſome attempts of this kind towards general knowledge. The child who pratttled of papa and mama, of crop and

tray, advances in years, and talks of man and woman, of horſe and dog, and ſoon after of animal. He learns certain common names by which he ſignifies beings that appear to him alike, and give him nearly the ſame complex ideas. He learns another common name ſtill more comprehenſive, by which he ſignifies things that do not give him, even nearly, the ſame complex ideas, but that are confined however to the ſame claſs by ſome peculiar, ſimple ideas, and contradiſtinguiſhed by them from every other claſs more or leſs. The words man, or animal, raiſe in his mind no general idea; but in this caſe, as in the former, ſome particular idea of man, which the mind can frame without thinking of ALEXANDER, or HENRY, riſes there, and becomes repreſentative of all men in general: or elſe ſeveral ideas of men, and other animals, ruſh confuſedly into the mind together; that is, ſo rapidly, that tho they are truly ſucceſſive, yet this ſucceſſion is imperceptible. Thus far the art of the mind is carried towards a general knowledge of ſubſtances, and cuſtom has authoriſed it no further. The ſchools indeed invented, among many other words to which they had no clear nor determinate ideas annexed, thoſe of humanity and animality. Now if nothing more had been intended by thoſe words than to ſignify, by one ſound, all that we underſtand when we ſpeak of the apparent natures of men and animals, ſuch as they appear to our ſenſes, I cannot ſee that they deſerved to be rejected, and I ſhall make no ſcruple to uſe them if the occaſion of doing ſo preſents itſelf. But if they are employed by any profound ontoſophiſt, as they were by the ſchoolmen, who pretended to have ſuch general ideas abſtracted from all particulars, ideas of general natures and real eſſences of ſubſtances; they deſerve to be rejected as much as the gobleity and fableity of PLATO, with which the cynic made himſelf ſo merry. Even the general names of ſimple ideas of ſenſation can be received,

according to my apprehenſion, in no ſenſe but the former: and whiteneſs, if we aſſumed that we had ſuch a general idea, abſtracted from all particulars, and adequate to the real eſſence of white, would deſerve to be exploded as much as humanity and animality. All theſe words muſt be confined to their proper uſe, and not applied to any other ſignification. In the firſt caſe they will be ſubſervient to an art, in the latter to an artifice of the mind.

The ſame caution that is to be had, when the mind generalizes it's ſimple and complex ideas of ſubſtances, is to be had, and the ſame diſtinction is to be made between general and abſtract ideas, in the ſenſe in which the latter are ſuppoſed by ſome philoſophers to be framed by the mind, when we employ words to ſignify our ideas of modes and relations. We ſay, for inſtance, not only that certain figures are triangular, but we diſcourſe of triangularity. We ſay not only that ſuch an action is juſt, but we diſcourſe of juſtice. We ſay not only that ſuch things are ſimular or like, but we diſcourſe of ſimilitude or likeneſs. We have not however any ideas of ſuch general natures abſtracted from all the particular ideas that we ſuppoſe to be comprehended in them. Theſe words triangularity, juſtice, likeneſs, recall to the mind ſome particular idea or notion of each ſort, or elſe a confuſion of particular ideas or notions, as was ſaid in the caſe of ſubſtances. They excite no other idea nor notion. But yet the difference between the two caſes is vaſt. Our ideas, and notions, of modes and relations, being creatures of the mind, tho we are unable to frame any that are not particular in their ſeveral kinds, and have by conſequence in our minds no idea nor notion, abſtracted and diſtinct from all the particular ideas and notions that the mind has framed of every kind; yet the real eſſence of each particular being the particular idea or notion that the mind

has framed, we are able to aſcertain by definitions, and to reduce into propoſitions, a general nature; of which every particular idea or notion does, and muſt partake, to be of that kind, that is, to be what it is. I do not know, and therefore I cannot define, nor advance propoſitions concerning ſubſtance in general, nor the real eſſence of any particular ſubſtance, nor by conſequence the manner in which, and qualities by which they produce the ſimple and complex ideas I receive from them; nor finally the conformity, if any ſuch there is, between all theſe ideas and their architypes. But I know, and can define the real eſſence of all triangles; which I name triangularity. Tho I have no idea of triangularity "abſtract-"ed with pains and ſkill from the ſeveral ſpecies of triangles, "and preſent to the mind independently of them," yet I know that this definition, "a ſpace included by three lines "that meet at three angles," contains in it the real eſſence of every particular triangle whereof I have the idea. A philoſopher may take as much pains as he pleaſes to abſtract from thoſe particulars wherein the ſpecies differ, and to retain thoſe only wherein they agree, which CUDWORTH calls the cutting off chips, as I remember; tho he frames, by this method, the definition I have mentioned, yet neither he who framed it, nor his ſcholar who learned it, will be able, I preſume, to conſider a "ſpace included by three lines that meet at three "angles," without having ſome particular triangle in his mind. If we had an abſtract idea of triangularity, properly ſo called, it might be ſaid to be the idea of all triangles; but it could not be ſaid, as it has been ſaid, to be the idea of none. In ſhort, we define the general nature of triangles on the conſideration of particular triangles: and this definition is a true propoſition in abſtract conſideration, tho it be not an abſtract idea. But to make it of any uſe, we muſt deſcend to particular knowledge again; that is, to particular, real

real ideas, which might have been purſued, tho the terms of this definition had never been invented.

THUS again, I know the general nature, the real eſſence of juſtice, and am able to define it in very clear propoſitions, tho I am not able to frame any general idea or notion of it abſtracted from all particulars, and containing them all. It is not, moſt certainly, to do as we would be done by; for that is more properly a definition of benevolence, than of juſtice, as every one, who conſiders the conſtant force and the occaſional injuſtice of ſelf-love muſt admit. But it conſiſts in a diſpoſition to give to every one what is his own, where there is property; to deal by others according to the natural fitneſs or unfitneſs of things where there is no property, and in other diſtinct notions, which will altogether amount to a definition, if we may be ſaid to define, when we only enumerate particular notions, and we can do nothing more when we ſet about to explain the general nature of juſtice; for which I may appeal to every man who has meditated well on this ſubject. To conclude; I know the general nature, and the real eſſence of likeneſs, and am able to explain it by a very ſhort definition; for it conſiſts in that relation which ariſes from an uniformity of appearance in things that are diſtinct in exiſtence. But ſtill I have no general idea nor notion of this relation, abſtracted from all my particular ideas of things ſo related *.

WHAT

* THESE diſputes about abſtraction may be deemed after all, perhaps, to be purely verbal. A looſe determination of the word idea may have given occaſion to them. A proper diſtinction between ideas, and notions, may help to reconcile them. Theſe two words are commonly uſed by inadvertency and habit, or authority, as if they were ſynonimous. Mr. LOCKE, and even his antagoniſt in this diſpute, the biſhop of Cloyne, have uſed them ſo. I have done the ſame in all I have writ to you. But I think that the example before us ſhews how neceſſary it is to diſtinguiſh them, in order to maintain a philoſophical preciſion of terms.

THE

WHAT advances now do we make in general knowledge by this expedient which the art of the mind has invented? Not ſuch

THE word idea ſhould, I preſume, be held to ſignify one ſingle perception of the mind, whether ſimple or complex, whether produced by the impreſſions of outward objects, or by the operations of our own minds, by ſenſation or reflection. Theſe ideas are preſerved in the memory by frequent repetitions of the ſame impreſſions, and the ſame operations. But thoſe of them which can be painted, as it were, on the canvaſs of the mind, like ſingle objects of internal ſight, and like pictures of the original impreſſions which were made on it, or of the original forms which were raiſed in it, are beſt preſerved and moſt ſteadily determined. They are all particular, and have no generality but that of application. They repreſent to the mind that which does, or may exiſt. Of that which neither does, nor can exiſt, we can have no idea. The ideal man, or the ideal horſe, which the mind perceives, is a particular idea that repreſents all the men, and all the horſes that exiſt, or ever did exiſt; and the ideal triangle is as truly a particular idea that repreſents all the triangles that exiſt, or can exiſt in the mind, or out of it. The mind indeed has a power of varying, without deſtroying the idea, for inſtance, it adds wings to the man, and to the horſe, one becomes an angel, the other an hypogriph: and as it can repreſent the ideal man to be white or black, crooked or ſtrait, ſo it can repreſent the triangle to be rectangle, oblique, equilateral, equicrural, or ſcalenon. Thus far the mind can generalize it's ideas, and I think myſelf ſure that mine can generalize them no further. But when we have been accuſtomed to call every thing an idea, that is an object of the mind in thinking, we fall eaſily into that confuſion of language, whereby men are led very often, as I apprehend that they are in the preſent caſe, to diſpute, and to mean the ſame thing. We might avoid it, I preſume, if we diſtinguiſhed between ideas and notions, if we conceived the former to be particular in their nature, and general only by their application, and the latter to be general in their nature, and particular only by their application; in ſhort, if we conſidered how notions ſucceed ideas, and how they become the immediate inſtruments of general knowledge, when theſe can be ſuch no longer. Particular ideas of actual, or poſſible exiſtence, are made general in ſome ſort, that is, in their effect, as it has been ſaid, and as it is allowed on all hands. But the power of generalizing ideas is ſo inſufficient, that it goes no further. We make one phantaſme of a man ſtand for all men, and one of an horſe for all horſes; but here our progreſs by ideas, that is by ſingle perceptions of the mind, ſtops. We have none of humanity, nor of horſeity, and much leſs have we any of animality. Juſt ſo the phantaſme of a particular triangle ſtands for every triangle of that ſpecies, but we have no idea of triangularity, and much leſs of figure. We make a particular ſtand for a general idea in this caſe, as in the two former; but in no caſe can we make ideas that are particular, and that can repreſent only what does, or may exiſt, become ideas of general natures that cannot exiſt. There is however a great difference between caſes of the former, and

caſes

ſuch as philoſophers would have believed, but ſome however. Tho we cannot by any power of the mind frame ideas of general natures and eſſences, which neither do nor can exiſt ſeparately from particulars, yet is it ſome advance to be able to comprehend, under one conſideration, a great number of particulars, by appropriating general names to the ſeveral lots, if the term may be allowed me, into which the mind has ſorted it's ideas and notions. The expedient facilitates extremely, as every man who thinks muſt obſerve, not only the communication of our thoughts to others, but the progreſs of them in their ſeveral trains, and all the operations of the mind about it's ideas; for tho theſe general names have no abſtract ideas annexed to them, nor, ſtrictly ſpeaking, any ideas or notions, yet are they not unaccompanied by ideas and notions. That would be to have no meaning at all,

caſes of the latter kind. The eſſences of ſubſtances are abſolutely unknown to us, but the eſſences of complex modes are perfectly known, ſo that we have clear and diſtinct notions, tho we cannot have clear and diſtinct ideas, nor indeed any ideas at all of them. From the contemplation of particular triangles we collect a notion of their general nature. We do more; by contemplating the various terminations of finite extenſion, we collect a notion of the general nature of figure. We have ideas of theſe no more than we have ideas of humanity or animality, but we know what we mean, and are able to explain our meaning when we ſpeak of theſe, which we are not when we ſpeak of the others.

Much more might be ſaid to ſhew the difference between complex ideas and notions, and between general and abſtract ideas, and the advantage that thoſe (in the conception of which, internal ſenſe, and in the communication of which, external ſenſe help intellect) have over ſuch as are meerly objects of intellect. I might expoſe, even to ridicule, the ſtir that is made about the pains and ſkill our maſters pretend that they take to form the ſuppoſed idea of triangularity, for inſtance, that they may teach their ſcholars to know a triangle when they ſee it; tho the meaneſt of their ſcholars, who have been uſed to contemplate particular triangles, will have made this notable diſcovery, "that every triangle is a ſpace "comprehended by three lines, and containing three angles," without any help of theirs, or ſkill or pains of his own. All the merit of our maſters ſeems to be this, they begin to learn at the right, they begin to teach at the wrong end; which is an obſervation that may be enforced by what Mr. Locke himſelf ſays about maxims

all, whereas they have a meaning, a plain and uſeful meaning or intention. What they have not, they borrow. They create no ideas in the mind, but they give occaſion to the mind to collect and apply ſuch ideas and notions as are there already. They call them forth, they marſhal them, as it were, and by the manner in which, and, by the occaſions on which they do ſo, theſe names produce all the effect they are deſigned to produce, and carry us towards general knowledge, as far as our feeble intellect can crawl with their aſſiſtance, and much further than we could advance without it.

I THINK I have ſaid nothing here which is not obvious and plain, and yet I have oppoſed, in almoſt all I have ſaid, men of the greateſt name in philoſophy. But when we muſt oppoſe them, or bely intuitive knowledge, there is no reaſon to heſitate. I know that, tho I can make ſome abſtractions of my ideas, I am utterly unable to make ſuch abſtractions as Mr. LOCKE and other great maſters of reaſon have taken it for granted that they could and did make. This I know as intuitively, and as certainly, as I know that I exiſt. If the difference lay in the degree alone, I ſhould readily acknowledge that other men might abſtract better, and further than myſelf. But I am conſcious that there is no ſuch power in my mind in any degree, and therefore I conclude, ſince we are all made of the ſame clay, a little coarſer or a little finer, that there is no ſuch power in their minds. I conclude, after my lord BACON, that, " ſince abſtract ideas have been intro-
" duced, and their dignity exalted with ſo much confidence
" and authority, the dreaming part of mankind has in a man-
" ner prevailed over the waking." If Mr. LOCKE could dream he had ſuch a power as he deſcribes this of abſtracting to be (a power to form with " ſome pains and ſkill the ge-
" neral idea of a triangle," for inſtance, " neither oblique,

" nor rectangle, neither equilateral, equicrural, nor ſcalenon, " but all, and none of theſe at once *") let writers learn to be leſs dogmatical, and readers to be leſs implicit. It is undeniable that there is ſuch a thing as philoſophical delirium. Men of the cooleſt tempers, we ſee, are liable to be ſeized by it, and when they are ſo, even their minds are apt to flatter, to deceive, and to debauch themſelves. I quote this as an inſtance of the mind's being debauched, as well as flattered and deceived; for ſurely it is a ſort of debauchery to turn art into artifice: and he does no leſs, whether he means it or not, who, inſtead of employing general words for the purpoſes we have mentioned, vends them for ſigns of ideas abſtracted as no mortal could ever abſtract.

SINCE knowledge has encreaſed, their own knowledge and that of other men, philoſophers and divines have been forced to moderate their pretenſions. They have fallen a little in the value they had ſet on human intellect: and I ſuſpect, or rather I would hope, that they muſt fall a good deal more, how unwilling ſoever they may be to part with that tinſel, which has paſſed ſo long for gold and ſilver. But there is ſtill a remainder of the old leaven in philoſophy. Many opinions that were aſſumed without any proof, or on the ſlighteſt, are ſtill entertained as opinions, or eſtabliſhed as doctrines. Among theſe groſs errors there is ſcarce any more groſs, or of more extenſive influence, than this that ſuppoſes a power in the mind, which the mind has not, and the reality of ideas of general natures, tho theſe cannot exiſt abſtractedly from particulars. This error is the great principle on which many fine-ſpun logical and metaphyſical ſpeculations proceed, and from moſt of which we might be delivered, to the honor of common ſenſe, the improvement of real knowledge, and the advantage of mankind, if it was ſuf-

* Eſſay l. 4. c. 7.

ſufficiently exploded. Till it is ſo, and as long as the leaven of this error among others continues to ferment, men will be apt to miſpend their time in ſearch of fantaſtic knowledge, by the means of imaginary powers. The field of knowledge, which BACON, and DES CARTES, and LOCKE have purged of ſo many weeds, may be therefore over-run again by a new crop ſpringing from old roots that they neglected to grub, or helped to preſerve. Metaphyſics may not only maintain, but confirm and enlarge their empire. The lofty madneſs of PLATO, and the pompous jargon of ARISTOTLE, may be propagated again, with as great ſucceſs as ever, from thoſe colleges and ſchools that deſerved once the name of venerable bedlams. The learned of another generation may ſee, perhaps univerſally, immaterial eſſences and eternal ideas in the divine mind; they may contemplate ſubſtantial forms, and comprehend even the entelechia, whilſt they neither ſee viſible, nor feel ſolid extenſion. All this may happen, and if dullneſs ſhould re-eſtabliſh her empire in poetry, whilſt that of madneſs is reſtored in philoſophy, how glorious an age may the next become, when all the defects, and all the follies of this are complete? Once more, all this may happen. Our learned queen intereſts herſelf in nice and ſubtil diſputations about ſpace: from metaphyſics ſhe riſes to theology. She attends frequently to the controverſy, almoſt fourteen hundred years old, and ſtill carried on with as much warmth, and as little ſucceſs as ever, about that profound myſtery the Trinity. She ſtudies with much application the "analogy of "revealed religion to the conſtitution and courſe of nature." She underſtands the whole argument perfectly, and concludes, with the right reverend author, that it is not "ſo clear a caſe "that there is nothing in revealed religion." Such royal, ſuch lucrative encouragement muſt needs keep both metaphyſics and the ſublimeſt theology in credit; and in ſhort,

"Signs following ſigns, lead on the mighty year."

In the mean time, let what has been here ſaid ſtand for one example of the arts employed by the mind to enlarge it's knowledge, and let it ſerve to ſhew how theſe arts degenerate into artifice, deceive even the mind that invented them, and, inſtead of enlarging knowledge, enlarge and multiply error.

ANOTHER example of the ſame kind it may be proper to conſider. HOBBES ſays ſomewhere, that words are the counters of wiſemen, and the money of fools. The obſervation is juſt, and the expreſſion happy. Ideas and notions are the money of wiſemen, and they pay with theſe; whilſt they mark and compute with words, the money of fools. But yet ſo difficult is the intellectual commerce, ſo narrow the intellectual fund, that the wiſeſt men are frequently obliged to employ their money like counters, and their counters like money; in one caſe, however, without loſs, in the other without fraud. We may be ſaid to do the firſt, that is, to employ our money like counters, when we employ ideas of one kind to mark and ſuggeſt ideas of another. We employ, as it were, in this caſe, good and current money of one ſpecies, to compute and fix the ſum payable in another: and thus guineas may ſtand in the place of ſhillings, or ſhillings ſerve to repreſent guineas. This happens whenever we make uſe of figures, and figures are ſo interwoven into language, that they make up a great part of our diſcourſe, and a greater than is commonly apprehended.

THE figurative ſtile is peculiarly that of poets, or of the tribe neareſt allied to theirs, I mean orators. In this ſtile the frightened wave returns: or CICERO, in his Philippics, thunders againſt ANTHONY. To employ this ſtile with true propriety is hard no doubt. It muſt needs be hard to keep up an

an exact preciſion and propriety of ideas and words, when two ſets of each are concerned, ſince it is extremely ſo to keep them up, when one ſet of each is alone the buſineſs of the mind. It is hard for another reaſon; becauſe imagination, whoſe talents are neither preciſion nor propriety, not the former at leaſt, is employed in the application of one of theſe ſets of ideas and words to the other, and becauſe it rarely happens that great heat of imagination, and great coolneſs of judgment, that happy aſſociation which forms a genius, and appears eminently in all your writings, go together, and keep pace with one another. When they do ſo, the figurative ſtile, that ſome of our neighbours have almoſt rejected even out of poetry, and that we have abuſed moſt licentiouſly in it, ſerves to enforce, as well as to explain and adorn, but never to deceive. Somebody has ſaid of the boldeſt figure in rhetoric, the hyperbole, that it lies without deceiving: and, if I may venture to make a little alteration, in a definition given by my lord BACON, I will ſay of rhetoric in general, the practice of which I eſteem much, the theory little, that it applies images, framed or borrowed by imagination, to ideas and notions which are framed by judgment, ſo as to warm the affections, to move the paſſions, and to determine the will; ſo as to aſſiſt nature, not to oppreſs her.

BUT beſides the uſe which poets make with ſome profuſion, as they have a right to do, and orators make, or ſhould make more ſparingly, of this art of the mind, which, transferring ideas from one ſubject to another, makes that become graceful and reaſonable, and thereby uſeful when the application is judicious, which would be monſtrous and abſurd, and thereby hurtful without it; there is another uſe, which the ſevereſt philoſophical writers may and do make of it in their meditations,

tions, as well as in their diſcourſes; an uſe that if it does not ſerve to increaſe, ſerves moſt certainly to facilitate and propagate knowledge. They who meditate (for every man, and probably every animal thinks) muſt have obſerved, that the mind employs all it's forces, and memory and imagination among the reſt, not only to form opinions, or to arrive at knowledge, but to ſet the objects of opinion, or knowledge, in the fulleſt and cleareſt light for its own ſatisfaction, and for the eaſe of communicating theſe thoughts to other minds in the ſame order, and with the ſame energy as they are contemplated by it. Not only judgment compares in a ſteady train, ideas and notions that are preſent to it and thoſe that are intermediate, thoſe that ſagacity diſcovers to help the proceſs of comparing; but memory and the faculty of imagining are employed to bring in adventitious helps. Such they may be called, for tho foreign ideas divert the attention of the mind, when they break in unſought and by violence, they help it often when they have been ſought and are admitted by choice. They lead the mind, indirectly and round about as it were, in many caſes, to ſuch truths, or to ſuch evidence of truth as could not have been attained ſo eaſily, nor ſo fully without them.

Mr. Locke, in the preface to his famous eſſay, as he entitled it with great modeſty, ſince it is ſurely the moſt complete work of this kind that any language can boaſt, excuſes himſelf for "dwelling long on the ſame argument ſometimes, and "for expreſſing it different ways, by alledging that ſome ob-"jects had need to be turned on every ſide; and that when "a notion is new, it is not one ſimple view of it that will gain "it admittance into every underſtanding, or fix it there with "a clear and laſting impreſſion—— that our underſtandings "are no leſs different than our palates;" and more to the ſame purpoſe. Now if it be neceſſary to preſent our notions

to the view of others in ſeveral lights, and under variety of expreſſions, I cannot ſee why they ſhould not be ſometimes viewed thro the medium of figure; nor why the palates of thoſe who reliſh this ſtile ſhould not be gratified. Mr. Locke gratifies them in this very place, and in moſt pages of his work. What is the juxta-poſition of ideas? what is that chain which connects, by intermediate ideas that are the links of it, ideas that are remote, but figurative ſtile? what elſe are thoſe dormant, that is, ſleeping pictures, which are wakened as it were, and brought into appearance by an act of the mind? what elſe are the pictures drawn there, but laid in fading colors, or the images calcined to duſt by the flames of a fever? His invective therefore, againſt figurative ſpeech, in his chapter of the abuſe of words, muſt be underſtood not of the uſe, but of the abuſe of this ſtile, tho it ſeems to go further, or it will not be agreeable to his own practice, nor to the truth as I imagine. Falſe eloquence there is no doubt, and fraudulent eloquence too. Figurative ſtile often cauſes one, and is often employed by the other; but there is falſe and fraudulent reaſoning too without eloquence: and we may find as much trifling and fallacy in ſome of the moſt dry didactic writings, as can be ſhewn in thoſe of poets and orators.

Rhetoric may be a powerful inſtrument of deceit and error, and ſo may logic too. Both of them are impertinent when they are reduced into arts, and are cultivated and followed as ſuch. But if rhetoric were baniſhed out of the world, and logic with it, eloquence and reaſon would ſtill remain. Mr. Locke ſays very figuratively, and very eloquently, ſpeaking againſt figure and eloquence, that they have "like the fair-ſex too prevailing beauties, to be ſpoken a-"gainſt." He could not ſpeak againſt them out of their language. How ſhould he? We may diſaffect eloquence as much

as

as we pleaſe, or nature may have ſaved us this trouble by refuſing us the talent, but we muſt ceaſe to ſpeak if we lay figurative ſpeech wholly aſide. Figures are ſo neceſſary in the communication, at leaſt, of our thoughts, that they are wove into the very conſtitution of language, as we have obſerved already. If we did not chuſe, we ſhould be forced to employ them often in common converſation about common objects, and the ordinary affairs of life; and they are ſtill more neceſſary, when ſubjects more abſtruſe and more abſtracted from ſenſible objects are concerned.

God alone knows how nearly external and internal ſenſe, of which we have one common perception, tho the objects be different, and tho the latter be occaſioned and limited by the former, are allied. All that will ever be ſaid to explain it, will explain no more than all that has been ſaid already. But however, to aſſert that there is no other ſource of ideas but ſenſation, is to aſſert ſomething moſt evidently falſe; for to explain what has been touched already, or hinted at leaſt, we have as determinate, and as clear ideas of thought, as of extenſion or ſolidity; of our inward faculties, of their operations, and of the modes of thinking, as of the powers, the actions, and the modifications of mere body. Were it otherwiſe, we ſhould have no intellectual ideas at all; for ideas, if they cannot be repreſented in thought without corporeal images, are not ſuch moſt certainly. But now, tho corporeal images have nothing to do in framing, they have much to do, and bear a principal part in communicating intellectual ideas. I ſay a principal part only, for ſome of theſe are ſignified without their help. We ſay, that we perceive, diſcern, abſtract, compound, or compare our ideas; but we ſay too, that we think, and that we know. The former expreſſions, and a multitude of others, are taken from outward and applied figu-

ratively to inward ſenſations. The latter, and ſome few others perhaps, ſignify immediately, and without any figure, the intellectual idea they are deſigned to ſignify.

If we aſk how all this comes to paſs, the true anſwer ſeems obvious enough. By an art, which experience has ſuggeſted to the mind. The ideas of outward objects have their criterions in theſe objects. Body is the architype of corporeal ideas, and this criterion therefore is common to all mankind. But intellectual ideas having no ſenſible, have no ſuch common criterion. He who had firſt ideas of extenſion and ſolidity, and who invented the words, could explain his meaning by appealing to the ſenſes of other men. But he could not communicate his ideas of reflection by the ſame ſhort and eaſy method, the paſſion of his mind in receiving theſe ideas by ſenſation, nor the operations of his mind about them afterwards. He borrowed therefore corporeal images to expreſs them, and talked of perceiving, diſcerning, and ſo on, in the figurative ſtile. Thus we may conceive how men came to employ corporeal ideas, for the moſt part, to explain the intellectual phaenomena, and ſometimes to aſſiſt even their own reflections on them. The art was reaſonably invented, and uſefully employed. But it ſoon became artifice, as ſoon as philoſophers took into their heads to affect ſuch ſcience as they are incapable of attaining. Then it was that they employed, among many other expedients, the abſurd uſe of figures that figured no real ideas, nor any thing more than philoſophical dreams, and whimſies of overheated brains. The ſame practice has continued from that time to this, from Plato down to Malebranche, from Aristotle down to Leibnitz, from Plotinus and Jamblicus down to Agrippa and Fludd. It begins to grow out of date. Men require now ſomething more real than figure, more preciſe than alluſion, and more particular than

metaphyſical abſtractions. Philoſophers may write as ſublimely as they pleaſe about pneumatics, or the doctrine of ſpirits, and as profoundly as they pleaſe about ontology, or the doctrine of Being abſtracted from all being. They will be taken up for amuſement, like other writers of romance, and be laid aſide like them, when any thing more worthy of attention preſents itſelf to the mind.

It is time, indeed, that they ſhould be treated in this manner, and that men who betray themſelves ſhould impoſe no longer on others. When I ſay that they betray themſelves, I mean it particularly with regard to the inconſiſtency of their pretenſions and their practice. St. Austin ſays, ſomewhere or other, for I quote the paſſage from the logic of Port-royal, that "men are ſo accuſtomed ſince the fall to conſider corporeal things alone, the images of which come into the brain by the ſenſes, that moſt of them believe they cannot conceive a thing when they cannot repreſent it to themſelves under a corporeal image." Such an one, I ſuppoſe, was the logician, who for want of enlarging his definition of idea to whatever is an object of the mind in thinking, or for want of ſupplying this defect by a true definition of notion, which would have been better perhaps, was ſo abſurd, and ſo profane, as to advance that we conceive God under the image of a venerable old man, becauſe we have no other ſenſible idea of him. But ſince the miſtaken belief ſpoken of by St. Austin is owing to cuſtom, and is that of moſt men only, I would aſk why ſo great a philoſopher, and ſaint, as he was, followed this evil cuſtom, and filled his works with more, and more forced applications of corporeal images to intellectual and divine ſubjects than any writer, perhaps, of that metaphoriſing and allegoriſing age? Shall we ſay with one of his diſciples, who in every other reſpect, and even in this was his equal

equal at leaſt, that " the ſoul is become ſince the fall as if " it were corporeal by inclination, and that the love it has for " things ſenſible diminiſhes conſtantly the union, or the rela- " tion it has to things intelligible * ?" But beſides that one of theſe fathers aſcribes to a fatal neceſſity, what the other aſcribes only to an ill habit, how can this happen to thoſe extraordinary men, who abſtract their ſouls from every thing material, and wrap themſelves up in pure intellect ſo frequently, altho they confeſs that " the mind depends in ſome ſort on a portion " of matter ?" How can it happen to ſouls that are " united " with the ſupreme mind immediately, and in a moſt intimate " manner, tho the diſtance between them be infinite † ?"

ORDINARY men may be content to make the moſt of the commerce they find eſtabliſhed in their nature between ſenſe and intellect, to puſh their enquiries about mind as far, and no further than a few general notions which intuitive obſervation will juſtify, and in this proceſs, and in the communication of their intellectual ideas, to avail themſelves of corporeal ideas, and to make the little they know of body ſubſervient to the leſs that they can know of mind. This is enough, no doubt, for vulgar ſouls confined to material habitations, wherein they feel the weight of an heavy atmoſphere, and the malignity of an eaſterly blaſt. But it is not enough for thoſe who are raiſed above the vulgar, metaphyſicians by nature, divines by grace, " all whoſe ideas are to be found in the effi- " cacious ſubſtance of the divinity ††," and into whom " an " human ſoul, and a rational mind were inſinuated not to be " quickened, not to be bleſſed, not to be illuminated, except " by the very ſubſtance of God §." Theſe men are more

* RECHERCHE de la verité, l. 1. c. 13. † Ib. pref. †† RECHERCHE de la ver. l. 3. p. 2. c. 6. § Inſinuavit nobis Chriſtus animam humanam, et mentem rationalem non vegetari, non beatificari, non illuminari niſi ab ipsâ ſubſtantia Dei. Ib. cited from St. AUSTIN in JOAN. trac. 23.

converſant with intelligible than ſenſible beings, with the intellectual world over which they range, than with the material world whoſe exiſtence they deny ſometimes, and therefore it ſhould ſeem that it would have been more eaſy to them to have invented a metaphyſical language, than to have continued the uſe of words already appropriated to ideas as diſtant as thoſe of real beings from the entia rationis, or as thoſe of body from thoſe of ſpirit. It would have been likewiſe of extreme benefit to mankind, whom theſe philoſophers take ſo much generous pains to inſtruct, if they had been able, by the help of ſuch a language, to ſet their ſublime conceptions in a direct and full light, inſtead of that indirect and half light which comes reflected from images foreign to them.

I AM ready, therefore, on this account to lament that the attempt of biſhop WILKINS, to form ſuch a language, miſcarried, and that LEIBNITZ neither finiſhed his alphabet of human thoughts, nor his metaphyſical algebra. It may be ſaid perhaps, that theſe helps, great as they would be, would be ſuch only for the greateſt genii, and that we have, therefore, a vaſt obligation to theſe philoſophers, who make no longer the diſtinction that their predeceſſors made of initiated and profane, but deliver the myſteries of their ſcience in vulgar language, with condeſcenſion to our groſs conceptions, that would never comprehend them if they were kept in their native abſtraction, inſtead of being cloathed with ideas that fall under the view of imagination. Juſt ſo, it is ſaid, that the ſacred authors writ agreeably to all the vulgar notions of the ages and countries in which they lived, out of regard to their ignorance, and to the groſs conceptions of the people: as if theſe authors had not writ for all ages and all countries, or as if truth and error were to be followed like faſhions

where

where they prevailed. This condeſcenſion, then, is very ill placed, and it would have become much better the great men we ſpeak of, to have raiſed their fellow creatures up, than to have let themſelves down; to have cured us of all our errors, than to have left us in any; and to have abſtracted us, or to have taught us plainly the great ſecret of abſtracting ourſelves in our mediations from all things ſenſible, than to have left us immerſed in them.

But to ſpeak more ſeriouſly and more plainly; the truth is, that if theſe admired maſters of reaſon did not hold the vulgar language, and make up their intellectual ſchemes of corporeal ideas, they would have nothing to ſay more than every man, who contemplates his own mind with attention, may know without their help. They are ſo far from being confined and clogged by the uſe of the idea they take from body and apply to mind, that it is by their means alone they extend their range and ſeem to riſe. Obſerve how father Malebranche ſets out in the very firſt ſection of his Reſearch of truth. He begins by conſidering perception and will. One of theſe is a paſſive, the other an active power of the mind. We know them intuitively, or the ideas we have of them by reflection are perfectly clear and diſtinct, ſo clear and diſtinct, that diſinitions and explanations of theſe, as of all our ſimple ideas, can only ſerve to perplex the mind and to render them obſcure. To what purpoſe then did this philoſopher deſcend into a long detail of compariſons between theſe two faculties of the mind, and two of the properties that belong to matter, that of receiving figures, and that of being determined to various motions? It was not neceſſary to explain What needed no explation, but it was neceſſary to lay, as he did lay with much ingenuity tho very precarioufly, ſome of the foundations of this ſyſtem.

This is the common practice of metaphyſical writers, and what Malebranche and our Berkeley have done ſo plauſibly, and ſo agreeably, that they, who are far from admitting the ſyſtems of either, read the writings of both with the utmoſt pleaſure the moſt heavy philoſopher, whoſe name ever ended in us, pretends to feel. Nor ſhall we be much ſurprized at their ſucceſs, if we conſider how the moſt extravagant poets, ſuch as Ariosto for example, who wander continually beyond the bounds of nature, and wherever a lawleſs fancy leads them, ſoften ſometimes the groſſeſt abſurdities under the maſk of figures. Struck by theſe, the mind grows attentive to them, ſtops it's attention there, and rather ſuppoſes an application than examines it.

When amuſement alone is concerned, and not inſtruction, this may be pardonable on both ſides, in the author and in the reader. But in more ſerious ſtudies, where one writes to inſtruct, and the other reads to be inſtructed, it is pardonable in neither. One rule, therefore, ought to be obſerved inviolably, the rule I mean of admitting, or rejecting figures as they are juſtified, or not juſtified by their application. Their application is their criterion. Metaphyſicians and divines, therefore, who have made figures and compariſons of ſo great conſequence by their uſe of them, ſhould conſider that the principal and moſt proper uſe of them, is like that of varniſh on a picture. As a painter would be thought mad who ſhould varniſh an unpainted canvaſs, ſo muſt they be expoſed to this cenſure, or to one more ſevere, if it appears at any time that they had no clear and determinate ideas in their minds, concerning intellectual ſubjects, and ſpiritual natures and operations, when they employed, under pretence of explaining them, ſo many others borrowed from the objects of ſenſe. When they have

really ſuch ideas in their minds, they muſt remember too that figures and compariſons are varniſh ſtill. It muſt not be uſed to alter the intellectual picture, it muſt only ſerve to give a greater luſtre, and to make it better ſeen. Intellectual ideas and notions, in the mind of the philoſopher or divine, ſhould lead them to the invention of figures, and theſe figures ſhould lead the ſcholar to theſe intellectual ideas and notions. When the latter is not ſo led, eaſily and almoſt unavoidably, the figures are improper, or he has a right to conclude that the philoſopher or divine had no ſuch ideas nor notions in his mind. Now the firſt of theſe proceedings is impertinent, and the ſecond is an arrant fraud. Figures in general, theſe of ſpeech, and all others that do not typify determinately, are unworthy of rational creatures, how much more of God? and figures that typify nothing, are nothing, or they are worſe than nothing; they are ſo many lies, ſince they pretend to denote ſomething real, when nothing real exiſts. How the ſight of that brazen ſerpent, which MOSES erected in the deſart, cured the ISRAELITES of the venomous bites of real ſerpents, I know not. Miraculouſly, ſay our divines. Juſt as other images work cures at this day, ſay your divines. Be this as it will, the figure typified very determinately what God intended it ſhould typify, when he ſaid, "pone eum pro ſigno." But when your divines and ours agree to make it a ſign of the Chriſt lifted up on the croſs, and crucified, he muſt be very cabaliſtical indeed who can diſcover the ſame determination. Real ſerpents had cauſed a real plague. A brazen ſerpent was the figure that ſignified this event to be over. It ſignified, therefore, at the ſame time, that the ſon of God himſelf was to come into the world near two thouſand years afterwards, to deliver mankind from the allegorical plague of ſin, which he did not moſt certainly cauſe. How reaſonable is one, how abſurd the other application

tion of this figure? How neceſſary is it therefore to examine ſcrupulouſly the application of every figure, that we may not be impoſed on by falſe appearances? But I will conclude theſe Reflections by an example taken from figurative ſpeech. It will be thus more cloſe to my purpoſe, and that it may be the ſtronger to ſhew the abuſe of figures, it ſhall be taken from one that has a real, and be contraſted with one that has an imaginary application.

THE word diſcourſe is derived from a Latin verb, which ſignifies to run about, and by the motion of our legs, and the agitation of our whole body (for when the word was invented all men believed they had bodies) to traverſe many different grounds, or the ſame ground many different ways. Now the application of this corporeal image to what paſſes in the mind, or to the action of the mind when we meditate on various ſubjects, or on many diſtinct parts of the ſame ſubject, and when we communicate theſe thoughts to one another, ſometimes with greater, and ſometimes with leſs agitation and rapidity, is obvious. It anſwers as nearly as ſuch applications can anſwer, and there is no danger that this figure ſhould communicate a falſe idea, or fail to produce that which it is deſigned to produce. There can be neither equivocation, perplexity, nor diſappointment in the uſe of it.

THE word inſpiration is derived, like the other, from a Latin verb which ſignifies to blow in; and it has been ſaid, that "the image might be borrowed to denote an action of God "in an extraordinary manner, influencing, exciting, and en- "lightening the mind of a prophet, or apoſtle." How many aſſumptions are here in one ſhort ſentence? and how impoſſible muſt it be to come at any thing on which a reaſonable mind can reſt, whilſt figures are explained by other figures that want

want explanation as much? Influencing is a vague term, and may be applied ſeveral ways with equal propriety. But exciting and enlightening denote different kinds of action, and neither of them has any relation to inſpiration, or blowing in. Here then is metaphor heaped on metaphor, without any true application to an intellectual idea, and we know as little what is meant by inſpiration as we did before. I conceive inſpiration even leſs than abſtraction. The latter, ſuch as it is repreſented by moſt philoſophers, appears to me impoſſible; but I conceive what the ſuppoſed operation of the mind ſignified by this figurative term is, and by conceiving what is meant, or the application of the term, I conceive the apparent impoſſibility of the thing. But I have no more conception of this ſuppoſed action of the divine on the human mind, than I have of the ſpiration by which the Holy Ghoſt proceeds from the Father and the Son, according to the deciſion of the council of FLORENCE that met to reconcile the Greek and Latin churches in the fifteenth century. The doctors of abſtraction, therefore, require that we ſhould believe againſt knowledge, and thoſe of inſpiration, that we ſhould be implicit without it. Now this would be a great deal too much, even if we did not know the uſe that has been made of the ſuppoſed natural power of abſtraction, and of the ſuppoſed ſupernatural gift of inſpiration. But both are ſufficiently known, and it is a little too late, and but a little, to impoſe either on us in the character of philoſophers. If we ſubmit to be implicit in another character, and in one of the caſes, as far as it is neceſſary to keep us even now within the pale of the Chriſtian Church, we ſhall do very prudently. But it will be true, however, that the term of inſpiration is a figure that gives us no intellectual idea, becauſe it is not really the image of any.

THERE was a time, and it laſted long, when this term was employed in a literal ſenſe. I refer to the time when Heatheniſh, Jewiſh, and Chriſtian ſuperſtition prevailed ſeparately firſt, and then unitedly. Ignorance and fear produced ſuperſtition, and ſuperſtition in it's turn maintained ignorance and fear in the minds of men. Thus ſuperſtition broached the notion of inſpiration, and when the notion was once eſtabliſhed, and the fact believed, ſuppoſed inſpiration ſerved to confirm and authorize ſuperſtition. That which has happened in ſo many other inſtances, happened in this, a groundleſs and abſurd opinion which grew into vogue in dark ages, and was conſecrated by a rude and ignorant people, prevailed in ages more enlightened. Men adopted what they would not have invented, and knowledge ſeemed to increaſe for no other reaſon, or to no other purpoſe, than to defend, to cultivate and to improve error.

INSPIRATION, which has been ſince aſcribed to a metaphyſical cauſe that metaphyſicians cannot explain, was eſteemed at firſt a phyſical operation that was obvious to the ſenſes. The goats of CORETAS approached a cavern on the hill of PARNASSUS. They fell into ſtrange agitations, and made an unuſual noiſe. The ſhepherd followed them, and as ſoon as he came near enough to receive the influence of the ſubterranean inſpiring blaſt, he began to be agitated like his goats, and to prophecy like them; for we may believe, as reaſonably as any part of the ſtory, that the only difference conſiſted in this, his language was underſtood, that of his goats was not. On this experience was the Temple built, and the famous oracle eſtabliſhed at DELPHI, "commune humani generis oraculum," as LIVY calls it. The PYTHIAN prieſteſs ſat on a tripod, leſt ſhe ſhould fall into the cavern when her head

began to turn, and from thence ſhe uttered with prophetic fury the inſpirations ſhe received, not from above, but from below. Many other examples might be brought of ſuch phyſical inſpirations, but this one is ſufficient for my preſent purpoſe; at leaſt it will be fully ſo when I have added, that they maintained their credit ſo well, and ſo long, even among philoſophers, that TULLY introduces his brother who was a zealous Stoician, as a perſon entirely convinced of their reality. So convinced he appears, that when an objection taken from the diſrepute into which this oracle began to fall, is oppoſed to the argument he had drawn from its univerſal reputation, QUINTUS thinks it ſufficient to anſwer on this phyſical principle, that the inſpiring virtue of the earth which uſed to excite and enlighten the mind of the Pythoneſs, might be worn out by age, as rivers have been ſeen to dry up, or to change their courſe *.

BUT this was not the ſole, tho it might be the firſt notion of a divine inſpiration. HESIOD, and your HOMER, and others more ancient than either, had filled the world with daemons and genii: and as poets were the philoſophers of thoſe ages among the Greeks, the machinery of poetry came ſoon to be that of philoſophy. PLATO, as great a poet as any of them in the garb of a philoſopher, multiplied vaſtly theſe imaginary beings, and aſſigned them different ranks and different employments. He made the ſyſtem of an intellectual world, and, in the reſpect I am going to mention, as abſurdly as many others, but more reverentially toward the ſupreme Being. He ſuppoſed a chain of intermediate beings from man up to God; and it is evident that theſe beings were in his ſyſtem the agents of the ſupreme being, both in the creation and government

* ——Poteſt vis illa terrae quae mentem PYTHIAE divino afflatu concitabat evanuiſſe vetuſtate, ut quoſdam evanuiſſe amnes aut in alium curſum contortos & deflexos videmus. De Divin. l. 1.

of the world. He did not raiſe up man to an immediate communication with God. The diſtance and the diſproportion ſeemed to him too great. He ſuppoſed him influenced, that is excited and reſtrained, enlightened and inſpired, as well as made, by other created beings, by whom this diſtance was nearly at leaſt filled up, and this diſproportion gradually leſſened. In his ſyſtem, therefore, a greater reverence was ſhewn to the ſupreme Being than in thoſe of ſome other theologians, in which God confers familiarly with men, and acts a part, not only in the moſt important, but in the moſt trifling ſcenes of our human farce. But ſtill the abſurdity remained of ſuch a gradation of beings. That there is a gradation, I doubt not, upwards, as our ſenſes inform us that there is one downwards. But ſuch a gradation, by which finite approaches nearer and nearer to infinite, is inconceivable. The diſtance and diſproportion will be ſtill infinite.

But to return, and to conclude what I ſhall ſay about the notions that obtained among the Heathens on this ſubject; for you know that I have reſerved to myſelf a right of following the matter as it riſes before me, without obſerving in theſe eſſays, any more than I uſed to do in our converſation, a juſt proportion in the members of my diſcourſe. The cauſes of inſpiration then were principally theſe, an intoxicating wind or vapor that blew into the inſpired perſons, or the action of daemons, or genii on their bodies, or in them. Such beings were believed univerſally to exiſt; for even Democritus, if I miſtake not, is ſaid to have admitted them. But they were believed to be material, tho ſpiritual and inviſible; and whether Plato thought them all good and beneficent or no, the general opinion, and that even of the latter Platonicians, held that ſome were good, and ſome bad, that there were pure and impure ſpirits. Their cotemporaries, the Chriſtian fathers,

fathers, affirmed that these spirits were all of the latter sort. They attributed the whole secret of oracles rather to the malice of the devil, than to the knavery of the priests. I have read in BASNAGE *, I think, that ORIGIN and CHRYSOSTOM represented the priestess sitting on a tripod over the sacred vent, with her legs wide open to receive the spirit, and that some pretended the oracles were delivered through this honorable channel. Nay, that judicious person, the martyr JUSTIN, scrupled not to assure the world, that these devils had carnal enjoyment of girls and boys too, in the very act of inspiration. The general effect of inspiration was madness and fury. Divine madness and divine fury they were called, and the persons, thus inspired, uttered their vaticinations in fits that made the body swell, and become distorted by convulsive motions. In this state, and when they were quite out of their senses, they were consulted by men who thought themselves in theirs, who were often the greatest, and in public opinion the wisest of mankind. TULLY † asks on what authority we are to believe that the madman sees what the wiseman does not see, and that he who loses human sense acquires divine? His brother might have referred him for an answer to the works of his admired philosopher, to that passage in the Phaedrus particularly where PLATO recommends, so highly, that divine fury which exerts itself in vaticination, mystery, poetry and love, and where he gives the preference over all other wisdom to that which divine fury infuses.

Now nothing could resemble more a heathen than a jewish vaticination, and no wonder is there, that it should be so. Egypt and the east were the great schools of such philosophy

* Antiq. Judaiques. † Quid vero habet auctoritatis furor iste, quem divinum vocatis, ut quae sapiens non videat, ea videat insanus, et is, qui humanos sensus amiserit, divinos assecutus sit? De Div. l. 2.

phy and theology as I have mentioned. They abounded with ſeers of viſions and dreamers of dreams, with prophets and diviners, with wizards and cunning men, with theurgic as well as natural magic, and all the occult ſciences. The Greeks borrowed from hence almoſt all the knowledge, real and imaginary, that they had; and ſo did the Jews too, as ſome divines have had the candor to confeſs, whilſt the crowd of them affect to maintain the contrary againſt irreſiſtible probability, and would perſuade us that the whole heathen world was enlightened by the lamp of the tabernacle: as if any ſimilitude of opinions, cuſtoms, and rites, which is a good proof in general that the more modern learned of the more antient nation, was equally good to prove that the more antient learned of the more modern, the maſters of the ſlaves, and a people, that had an high opinion of themſelves, of a people whom they deſpiſed. But however this may have been, the Jews, according to the ſpirit of the moſaic ſyſtem, made the ſupreme Being more frequently an immediate actor in matters of inſpiration, as in all other matters, than the heathen did; tho they too employed the miniſtry of angels, whoſe names, at leaſt, they learned firſt from the Chaldaeans, if they did not come firſt acquainted with theſe ſpiritual beings among that people in their captivity.

This notion of an immediate action of God on the human mind became more common, and inſpiration more metaphyſical in the chriſtian ſchools. Some of the heathen philoſophers held opinions that led to this, and might have been improved, ſo as to derive all inſpiration immediately from the ſupreme Being in ſome extraordinary manner or other, which they would not have been at a loſs to repreſent, or rather to evade the neceſſity of repreſenting, by the help of figurative ſtile. Some of them aſſumed that the human

ſoul

ſoul was drawn out of the divine nature, or was tinctured by it, or had catched it's fire from it. I know not how to expreſs better thoſe ſtrange words, ſtrange I mean in this application, hauſti and delibati. They aſſumed further, that the divine mind pervaded and filled all things; and when they aſſumed thus much, it ſeemed eaſy to conclude, from this near relation of the divine and human mind, to an action of the former on the latter, " cognatione divinorum animorum " animos humanos commoveri *."

PLATO's trinity, as little intelligible as it was, might have been another aſſumption by which to account more particularly for this divine act of inſpiration. The ſecond perſon, God's intelligence, the word, made men: and what could be more conſequential, than to aſcribe all particular inſpirations to the third perſon, that univerſal ſpirit, that energy of God, which animates and governs the whole? No part of this could have ſhocked the opinions of thoſe philoſophical theiſts, who acknowledged not only a general providence, but particular providences. As little could it have been thought repugnant to that principle which ſeemed common to them all, that principle of reverence to the one, the father of Gods and men, whom they conceived to be beyond and before all exiſtence. They could conceive no being, nor manner of being, equal to the Supreme; but neither did the platonic trinity ſuppoſe that there was any ſuch: and they might have placed the ſource of inſpiration, according to this theology, much higher than obvious, viſible cauſes, and even than the ſuggeſtions of daemons and genii, without aſcribing it to the firſt mind, or admitting any mind equal to the firſt. They had the more reaſon to do this, and to place inſpiration, as it were, out of ſight, when the credit of oracles began

* TULLY de Div.

began to fail, and a groſs phyſical account of it would paſs no longer.

But that which heathen theologers could do, chriſtian theologers could not, after the Nicaean council at leaſt, whatever they did or might have done before it. They aſcribed inſpiration, indeed, to the Holy Ghoſt; but the three perſons of this trinity making one God only, they aſcribed inſpiration to an immediate act of the ſupreme Being, as the Jews had done before them, among whom this act, and the immediate preſence of the Deity were ſaid to be manifeſted often in a ſenſible manner. Something of this kind obtained at firſt among the chriſtians. Voices from heaven for inſtance, and the viſible deſcent of the Holy Ghoſt, would have made inſpiration, if theſe phaenomena had continued, as much an object of ſenſe in the chriſtian ſyſtem, as it had been ever in that of the Jews or of the heathen. But theſe phaenomena did not continue, and tho ſigns and wonders were ſaid to be wrought by perſons inſpired, inſpiration became inviſible, and the notion of it purely metaphyſical; leſs abſurd than former notions perhaps, but more remote too from human comprehenſion.

The conſequence of all this was, that the proof of inſpiration reſting on authority and opinion, it became very equivocal. Every ſect and every council pretended to it; and, whilſt they oppoſed and damned one another, what one ſide attributed to inſpirations of the Holy Ghoſt, the other attributed to ſuggeſtions of the devil; for in this ſyſtem the Holy Ghoſt, that is God himſelf, is the inſpirer and comforter, and the devil, an inferior, a created ſpirit, and yet a rival to the Father of all ſpirits, is the tempter and tormentor. How God acts on the human mind to inſpire and comfort,

and the devil to tempt, was then, and is ſtill a metaphyſical or theological ſecret. But the power of tormenting, which the devil exerciſed in thoſe days, was no ſecret at all. Legions of impure ſpirits were believed to take often poſſeſſion of the bodies of men, from whence nothing could drive them but aſperſions of holy water, and other forms of eccleſiaſtical conjuration, performed by prieſts, that is, by men on whom the impoſition of hands had conferred the Holy Ghoſt in a conſtant ſucceſſion from the apoſtles. This conjuration had been firſt taught by SOLOMON, as JOSEPHUS aſſerts in the eighth book of his antiquities, and it continued long in credit, for much the ſame reaſons that oracles and the arts of divination had done ſo formerly. It is kept in ſome uſe ſtill by the roman clergy, and our reformed clergy would not be ſorry perhaps to revive this pious practice.

WHILST ignorance and ſuperſtition reigned triumphantly, and the fantaſtical ideas and notions which they communicate, and which authority, education, and habit do in ſome ſort realize in the mind, ſpread and prevailed; men might be eaſily perſuaded that the ſpirit, or breath of God, which blew into the face of the firſt man, and made him a living creature *, might blow likewiſe on extraordinary occaſions, and in an extraordinary manner, into the faces of ſome of his poſterity, as into choſen veſſels. They might be eaſily perſuaded, that this breath was not only a principle of life to all, but an influencing, exciting, and enlightening principle to ſome. They might imagine without any great effort, that the effect of this occaſional breath was to fan into a flame the latent ſparks of a certain fire that had been kindled in the original con-

* Inſpiravit in faciem ejus ſpiraculum vitae, et factus eſt homo in animam viventem, are the words of MOSES.

conſtitution of man, and had been extinguiſhed by the fall. They might imagine, that they knew really what all this meant, and on ſuch reaſonings, which would have been none of the worſt they employed, they might have proved to themſelves and others the inſpiration of chriſtian ſaints, to whom ſublime myſterious truths were revealed, and of jewiſh prophets and ſeers, who foretold future events and recovered ſtolen goods; for even this, as low as it may ſeem, was a part of their employment, and one effect of their inſpiration.

But this reign is well nigh over; or, if it continues in ſome of theſe parts of the world, it triumphs univerſally in none. He who pretends to inſtruct now muſt know firſt, and expect, if he uſes any figure, to be called upon to explain his meaning; that is, to ſhew this meaning without the veil of any figure. Inſpiration was long underſtood in the literal ſenſe of the word, not only whilſt men imagined groſsly that it was the effect of a ſubterranean wind or vapor, but when they had ſpiritualized it a little, and fancied it a breath that came from above, or a ſpirit that deſcended on one prophet, and paſſed from one to another with ſenſible effects. Since it could be received no longer in the literal ſenſe, philoſophers and divines have given up the literal ſenſe, and kept the word that ſignified ſomething, to ſerve as a figure that ſignifies nothing, and that can be tranſlated into nothing but ſome other figure. Figures and types are indeed the ſtrongeſt entrenchments of metaphyſics and theology: and it is in them that the profeſſors of theſe reputed ſciences defend themſelves the beſt.

An hiſtory of inſpiration, like one of divination, would be a collection of ſuch extravagancies and abſurdities, as might be ſufficient to make our ſpecies forfeit the character of reaſonable creatures, if it did not ſhew at the ſame time that

that by a free uſe of their reaſon men have detected, one after another, moſt of the fallacies, the groſſeſt at leaſt, that had been impoſed on them by Heathens, Jews, and Chriſtians, for even of theſe it cannot be denied. The fautors of inſpiration are thus reduced to their laſt entrenchment; and having abandoned all their other poſts as untenable, they endeavor to defend this by not explaining what has been refuted as often as any explanation of it has been attempted. Your friend, ATTERBURY, who knew more of claſſical learning, and even of divinity, than he did of politics, tho he affected theſe the moſt, has ſometimes lamented that any explanations of the real preſence in the euchariſty had been given, and that the church had made any deciſions about it. As long as it was held an inexplicable myſtery, it was believed, he ſaid; but as ſoon as divines had been ſo unſkilful as to attempt to explain it, BERENGER's recantation ſignified nothing, and it has been a diſputed point ever ſince. If this be a right notion, as I incline to think it is, theſe two myſteries, that of the real preſence, and that of inſpiration, have had very different fates. The firſt ſet out a myſtery, and was piouſly believed, till attempts to explain it ſhewed that it implied contradiction. The other ſet out as a natural phaenomenon, and was ſo far from being thought a real myſtery, how much ſoever it might remain ſuch to the vulgar, that prophecy and divination, the effects of it, were thought attainable by purifications, purgations, and other phyſical methods, and that they became arts which were taught in the ſchools by the Heathens and the colleges of the Jews. But the notion of inſpiration has ended in myſtery where the other began: and this expedient, the only one that can ſupport it at all, would ſupport it effectually, if theſe ages reſembled a little better thoſe wherein the belief of the real preſence was firſt eſtabliſhed.

It may be ſaid, that an extraordinary action of God in the human mind, which the word inſpiration is now uſed to denote, is not more inconceivable than the ordinary action of mind on body, and of body on mind; and I confeſs that it is not. But yet the caſes are ſo widely different, that no argument can be drawn from one in favor of the other. It is impoſſible to doubt of an action which is an object of intuitive knowledge, and whereof we are conſcious every moment; and it is impertinent to deny the exiſtence of any phaenomenon merely becauſe we cannot account for it. But then this phaenomenon muſt be apparent, and the proof that it exiſts, or has exiſted, muſt be ſuch as no reaſonable man can refuſe to admit. Otherwiſe we ſhall be expoſed to make frequently the ridiculous figure that philoſophers have ſometimes made, when it has been diſcovered, after they had reaſoned long about a thing, that there was no ſuch thing. We muſt not aſſume for truth, what can be proved neither à priori, nor à poſteriori. A myſtery cannot be proved à priori, it would be no myſtery if it could: and inſpiration is become a myſtery, ſince all we know of it is, that it is an inexplicable action of the divine on the human mind. It would be ſilly, therefore, to aſſume it to be true, becauſe God can act myſteriouſly, that is, in ways unknown to us, on his creature man; for juſt ſo Asgyll did prove, or might have proved, that men do not die, but are tranſlated, becauſe God can tranſlate them. There is then no poſſibility of proving inſpiration à priori; and the proofs that are brought à poſteriori, for Chriſtian inſpiration, are not more deciſive to Chriſtians, than thoſe which the Stoicians brought in favour of vaticination and divination were to them, nor than thoſe which the Mahometans and the worſhippers of Foe bring of the ſame kind are to them.

This

THIS word inſpiration, about which I have ſaid ſo much more than I intended, belongs properly to you ſons of APOLLO; and to you it ſhould be of right reſtored. Whilſt you were at once poets, prophets, philoſophers, and divines, and went about from houſe to houſe ſinging, as the Methodiſts do preaching ſublime doctrines, the uſe of it might be a little confuſed: and what you aſſumed in the two firſt characters, you might aſcribe to yourſelves and others in the two laſt. But ſince they are become diſtinct profeſſions, as well as characters, and one of them, that of prophets, is extinct, inſpiration may have it's place and uſe in poetry; but no where elſe. If philoſophers and divines employ this word, which ſignifies a particular and determinate action, as a figure to ſignify ſome other action, they employ it improperly. It cannot ſerve to inform; but it may ſerve, and it actually does ſerve, to deceive. Our Quakers, our Methodiſts, and Enthuſiaſts of every ſort and in every religion, are confirmed, by the received uſe of this word, in the belief that the ſpirit of God deſcends upon them, is inſpired into them, excites and enlightens their minds, and enables them by it's powerful operation to utter all the extravagancies, which are in their opinion ſo many divine truths.

IT is the more reaſonable to guard againſt every thing of this kind; becauſe the hypotheſis of ſome of our fineſt modern writers on the ſubject of the human mind, tho they do not pretend directly to be inſpired, ſeem to renew and improve the reveries, or waking dreams of ancient philoſophers, in ſuch a manner as to lay again the foundations of ſuperſtition, by ſuppoſing an immediate and conſtant communication between the divine and the human natures. That MALEBRANCHE ſuppoſed ſuch a communication, is evident in all his writings: and his Chriſtian and metaphyſical meditations are nothing

leſs

leſs than a dialogue between the word and him. The conference was not held indeed in the terms and form of the dialogue; but the language he makes the word to hold in it, he affirms to be conformable to the anſwers which he thinks he received when he interrogated the word on the ſame ſubjects.

I HAVE ſometimes wondered that divines and metaphyſicians, who have borrowed ſo many fantaſtical notions from PLATO, have neglected one which they might have found in the apology of SOCRATES, and by which they might have accounted more probably, and more decently than they have done, for divine inſpirations, revelations, and communications. They might have learned there to diſtinguiſh between the aethereal and elementary body. We may compare the firſt to a ſhirt, ſince the ſame PLATO compares the ſecond in the phaedro to a ſuit of cloaths, and ſince it is worn under the other, "ſub "manifeſto hoc corpore latens." Now it was by this medium that SOCRATES was inſpired by his daemon, or guardian angel. He ſaw viſions, and he heard voices, but how? Not by his elementary, but by his aethereal ſenſes. Thus an inferior ſpirit, and not the ſupreme Being, is the immediate actor; and inſpiration is no longer an unmeaning figure of ſpeech. But this is not enough for metaphyſical divines. Our notions of humanity muſt be raiſed higher, even at the expence of debaſing (for as ſuch it appears to me) our notions of the divinity. God and man muſt be more intimately joined, tho by endeavoring ſo to join them, they renew, in ſome ſort, the groſſeſt abſurdities of paganiſm.

MANY inſtances might be produced of this ſort, and ſome very flagrant. I will content myſelf in this place with the mention of one. BAYLE obſerves, that the notion of ſeeing

all things in the infinite Being, which father MALEBRANCHE advanced on this aſſumption, that our ideas muſt be in God, becauſe they cannot be modifications of any created mind, differs little from the doctrine of DEMOCRITUS *, who taught, that the images of objects, which preſent themſelves to our ſenſes, are emanations of God, nay that they are God, and that the idea in our minds is God likewiſe. The obſervation is certainly juſt, and I need not enlarge upon it to ſhew you that it is ſo. Inſtead of that, I will aſk you whether the different hypotheſis of a philoſopher, whom you and I love and honor, has not ſome, tho a more remote reſemblance to the ſame doctrine? Both of them at leaſt have, in my opinion, one common tendency, that which I have juſt now mentioned. If I was perfectly perſuaded, as I am very much of the contrary, that we perceive all our ideas in the divine mind, I could account for all that is attributed to inſpiration by a figure, that would have a ſort of metaphyſical meaning. I could repreſent the ſoul as a mirror, and it has been ſo repreſented, I think, by ſome, and then ſuppoſe, that images received from the preſence of God to it, are reflected by it, which would be like the reflected light of the ſun, a ſecondary and fainter, but a divine illumination. Again, could I comprehend that viſual language in which "the author of na-" ture conſtantly ſpeaks to the eyes of all mankind;" I might be able perhaps to comprehend how God may ſpeak to prophets and apoſtles in viſions, or elſe I might deduce by analogy,

* The words of TULLY are theſe, "DEMOCRITUS, qui tum imagines earumque "circuitus in deorum numero refert: tum illam naturam quae imagines fundit ac "mittat: tum ſcientiam intelligentiamque." They will be better tranſlated thus. DEMOCRITUS who places among the gods not only the images of the objects that ſurround and ſtrike us, but that nature which pours forth and ſends theſe images to us and knowledge and intelligence. COTTA mentions the ſame notions afterwards, not in the ſame words as VELLEIUS, but to the ſame effect. TULLY de Nat Deor. l. 1.

logy, that as we think we ſee when we do not really ſee, but only receive ideas through the eye from an immediate action of God, ſo prophets and apoſtles might think that they employed the faculties of their own excited and illuminated minds, and ſignified their own thoughts by the words they pronounced, when they neither thought nor ſpoke, but when the breath of God articulated in their organs. I might be able to comprehend ſuch ſublime notions, and I ſhould be glad, no doubt, to find how happily theſe doctrines coincide with that antient opinion, that prophets prophecied often without knowing that they did ſo. But, I confeſs, that I comprehend as little our friend's hypotheſis as I do that of the father of the oratory; tho I comprehend very clearly how we may be ſaid in ſome ſort, and in ſome particular caſes, to learn to ſee; that is by the ordinary courſe of experience, and not by any divine agency.

SHALL I own it? I cannot be mortified at my want of comprehenſion in this caſe. When philoſophers employ clear and determinate ideas, ſuch as are real not fantaſtic, and when they reaſon on principles that are evidently true, inſtead of ſuch as are doubtful at beſt, I comprehend them without any extreme labor of mind. When they do otherwiſe, I miſpend no time in making unprofitable efforts to comprehend them. COTTA treats the notions of DEMOCRITUS that have been mentioned with the utmoſt contempt, and even VELLEIUS had entered into no refutation of them. BAYLE thinks a little genius could never form them, and that in order to form them, a man muſt comprehend the whole extent of power, which belongs to a nature capable of painting in our minds the images of objects. I will imitate in all ſimilar caſes the old academician, not the modern ſceptic,

who ſeems a dogmatiſt on this occaſion. I will follow no man out of the high road of plain common ſenſe. In that, the philoſopher may lead me to all real knowledge; for common ſenſe does not exclude uncommon diſcoveries in the ſearch of truth. But the philoſopher goes often out of this road, whilſt the illiterate, unthinking crowd of mankind cannot go far in it. Theſe are the two extremes in which men ſometimes meet. The difference conſiſts always in their acquiſitions and habits, and not always in their natural faculties. The reaſon of one is not cultivated like that of the other; but the imaginations of both may be apt to warm and tranſport them alike. Whilſt the philoſopher conſults his reaſon alone, he will be always far before the other. But if his imagination carries him away, there is a chance that they may meet, and the philoſopher with all his knowledge, and all his reaſon, may have not his own whimſies alone, but thoſe of the moſt vulgar underſtandings to ſupport.

SECT. VI.

HAVING dwelt thus long on one art of the mind that degenerates into artifice, it is time I ſhould proceed to another; and the art to be conſidered next, is that which was intended when I ſaid, that we are ſometimes obliged to pay in counters for want of ready money. What I mean by it is this. We are ſometimes obliged in philoſophical, as well as in common diſcourſe, to make uſe of words that have no determinate, nor indeed, properly, any ideas or notions at all annexed to them. I ſay, we are obliged to do ſo, in order to diſtinguiſh this caſe from that of metaphyſics and theology, which are almoſt wholly converſant, when they keep within their own bounds and go neither into phyſics nor ethics, about

words that have no intelligible meaning, words that have been invented to conceal ignorance, and to create an appearance of ſcience: whereas the words intended here, tho they have no ideas nor notions, properly ſpeaking, annexed to them, have however a meaning and an uſe, an intelligible meaning and a good uſe. Two of them I will produce as examples, and they ſhall be words that ſerve to denote unknown cauſes of known effects. They take their preciſion, like the names of ſubſtances, from ſenſible effects, and they refer either to an unknown real cauſe, or to the unknown principle of ſome apparent cauſe.

Our ignorance of cauſes, our curioſity, and the extravagant opinions of philoſophers about them, are equally great. I ſhall not enter on that ſubject here at leaſt. Something however muſt be ſaid about the notion of cauſe, in order to ſhew the reaſon, and even neceſſity of employing ſuch words as I have mentioned, and to introduce what I propoſe to ſay concerning the uſe and abuſe of them. Neglecting, therefore, all the abſtract notions that are entertained about cauſe, the nice and trifling diſtinctions between the cauſe and the ſufficient reaſon of any thing, and the other diſtinctions, as well as diviſions, and ſubdiviſions that have been made, and that ſerve, for the moſt part, to no other purpoſe than to perplex us in a labyrinth of words, let us content ourſelves to underſtand when we ſpeak of cauſe in general, "That, by the immediate, or remote, the phyſical, or moral virtue whereof any thing is what it is, or any thing is done as it is done."

The ſupreme Being is the firſt, and, ſtrictly, the ſole efficient cauſe. But as we know nothing of his manner of being, ſo we know nothing of his manner of cauſing. In your Homer's machinery the gods are perpetually actors, but the poet

poet neither employs them ſo much, nor more impoperly, nor more unworthily than philoſophers and divines have preſumed to employ the Deity. Let us think with greater reverence of God, and whilſt we acknowledge him to be the firſt, let us not imagine him to be the immediate cauſe of every phenomenon and every thing that happens. Through how many mediums, if I may ſay ſo, may not the rays of divine efficacy paſs before they arrive at us! Far be it from me to neglect or to diſcourage the contemplation of the firſt efficient cauſe who ſhines ſo gloriouſly in all his works. But let us adore him in the contemplation of his works, and of the order of ſecond cauſes by which the ſyſtem of them is maintained, and carried on. Second cauſes cannot be reckoned in a ſtrict philoſophical ſenſe efficient, when they are conſidered relatively to the whole extent of being, at the head of which is God. But as they have a communicated efficiency in ſuch degrees, of ſuch kinds, and under ſuch directions as it is communicated to them by infinite wiſdom and power, they appear efficient when they are conſidered relatively to us, and to our ſyſtem: and ſince all our knowledge is in truth relative to theſe, we may be well content to admit ideas that are ſo too, and that reach no further. Theſe are our limits, and where our experimental knowledge of ſecond cauſes ſtops, there our phyſical enquiries ſhould ſtop. All beyond is metaphyſical jargon; for at what point ſoever we leave phyſics for metaphyſics, we fall of courſe into jargon. The antients generally ſet out in it. The moderns too often conclude in it.

The firſt example I ſhall produce of words that ſerve to denote unknown cauſes of known effects, ſhall be the word chance. Every event that happens in the courſe of human affairs, how contingent ſoever it may ſeem, has a real and peculiar cauſe. But when theſe cauſes are too remote, or too complicated, to be eaſily or at all diſcerned by us, we call the event

contingent, and the cauſe chance. Thus we endeavor to ſupply our want of ideas, to think with leſs confuſion, to diſcourſe more intelligibly, and to make up the ſum with counters which we cannot make up with money. But in this kind of payment there has been much abuſe, and much deceit. Superſtition attempted to make theſe counters paſs for real money; and, inſtead of keeping the word chance to ſignify in it's application nothing more than this, that the cauſe of an event was unkown, to make it paſs for an actual cauſe and a poſitive Being. Superſtition imperſonated it under the name of fortune: and this chimerical divinity was ſuppoſed to direct arbitrarily all the events whoſe cauſes were not apparent, or which exceeded in good or ill the expectations of men. The heathens accounted by it for paſt events, conſulted it about future, and referred themſelves to it in doubtful caſes.

It is ſtrange that ſuch ſuperſtitions, inſtead of being confined to the heathen world, ſhould have been as prevalent among God's choſen people, both Jews and Chriſtians, and ſhould be ſcarce exploded at this hour. It is ſtranger ſtill that a recourſe to the deciſion of chance ſhould be expreſsly commanded in the Old Teſtament, and occaſionlly countenanced in the New, even on ſo important an occaſion as the election of an apoſtle in the place of Judas Iscariot. Yet ſo it is, and from hence we may believe it happened that ſome even of the moſt puerile and abſurd appeals to chance, if one can be more ſo than another, were long preſerved among chriſtians, and by them applied moſt profanely and cruelly. Many different ſortes or chances were conſulted by the heathen. Thoſe of Praeneſte, where Fortune had a temple adorned with moſaic work by Sylla, who truſted much to the goddeſs, and took the name of Foelix, on account of his ſucceſs which he aſcribed to her, were extremely famous. I do not remember how theſe conſultations

ſultations were made; but thoſe that had the names of Sortes Homericae, and Sortes Virgilianae, were made by dipping at random on ſome paſſage in the poems of HOMER and VIRGIL, and the ſuperſtition was ſure to be confirmed whenever, as it could not but happen often, future events ſeemed in any degree to have been figured in theſe paſſages. An odd inſtance of this which is preſerved in a tradition derived, I think, from Mr. COWLEY, I may mention as I go along. This poet and ſome other perſons, attached to CHARLES the firſt, were with him in the iſle of WIGHT, where CROMWELL kept him in priſon till he brought him to the block. Their amuſement, for it could be nothing more, was to try the Sortes Virgilianae; and in trying them it is reported, that the unfortunate prince dipped on thoſe terrible imprecations that DIDO makes againſt AENEAS and his poſterity, in the fourth book of the Aeneid.

I SAID that theſe ſuperſtitious uſages have been applied profanely and cruelly, by Chriſtians: and I was in the right to ſay ſo. What could be more profane than the practice of opening the ſacred books, in order to take from the firſt paſſage that occurred a prognoſtic of events, and to degrade them to the ſame ſilly uſe that the Heathens made of their poems? What could be more cruel than the cuſtom of deciding cauſes criminal and civil too, by duels, which was introduced by the barbarous northern nations; and was, notwithſtanding the declarations of ſome popes againſt it, ſo far approved by the church, that it was followed on many occaſions in eccleſiaſtical controverſies, and that it was accompanied on all occaſions with much eccleſiaſtical ceremony, even ſo far that a prieſt bleſſed in the field the weapons of the champions? This trial, like that of paſſing blindfold over red-hot plough-ſhares, and others, were appeals to chance as to a judge: and both theſe appeals, and the conſultations of chance about future events, were

were founded on a theological axiom invented to excuſe them on one hand, and to create more reverence for them on the other, that God preſides over chance, and directs it by interpoſitions of his providence; ſo that to interrogate chance was to interrogate God, and the deciſions of chance were the deciſions of God.

To apply the word chance in this manner, was abſurd enough. But what ſhall we ſay of thoſe philoſophers who aſcribed the creation of the world to chance. Superſtition perverted this innocent art of the mind: and a word, that ſignified no determinate cauſe at all, was made to ſignify a ſuperior Being who governs the affairs of the world, and to whoſe agency thoſe events were to be aſcribed that could not be accounted for otherwiſe. Philoſophy, the philoſophy of men who affected to put ſuperſtition under their feet, and to account by phyſical reſearches for all the phaenomena, attributed the original of all things to chance. By this proceeding the Epicureans did not endeavour to ſcreen their ignorance, but they pretended to ſhew their knowledge of cauſes. They erected chance into a firſt phyſical cauſe, and derived the production of the univerſe from it. They aſſumed a chaos of innumerable heterogeneous particles, endowed with eſſential activity, and with whatever elſe was neceſſary for their purpoſe, like the declination of theſe atoms; after which they concluded that ſuch a number of entities in perpetual motion and action one on another, muſt paſs ſooner or later through all poſſible combinations. From hence they concluded again, that the formation of the world was cauſed by a certain concourſe, or combination of atoms, without the unneceſſary help of a directing mind; and that this concourſe being fortuitous, the world was made by chance. But enough has

has been ſaid of the uſe and abuſe of this word. It is time to ſpeak of thoſe that have been made of the word force.

SINCE even ALCIPHRON the minute philoſopher could frame no preciſe idea of force, though he "ſhut his eyes to aſſiſt "his meditation," it might well be aſked how it comes to paſs, that there are ſo many refined ſubtilties and nice diſtinctions about this ſame force? Ingenious and learned men might have employed their time much better moſt certainly, than they have done about "ſubtil abſtracts, ſpiritual quinteſſences, "un certo che and un non ſo che." I am ſorry to have this proof the more of the folly and affectation of philoſophers. But I am not at all at a loſs to account for them, nor to ſhew from whence the difference ariſes between theſe viſionaries, and thoſe great men who have diſcourſed rationally about force. The difference ariſes plainly from hence. The former have abuſed this art of the mind, and ſuppoſed, or reaſoned as if they ſuppoſed, that this word ſignified what common ſenſe never meaned to ſignify by it. The others have not turned art into artifice in this manner, but have reaſoned about force as about the unknown cauſe of ſenſible effects, or the unknown cauſality of apparent cauſes. It may ſeem ſtrange perhaps to our firſt thoughts, that men ſhould talk ſenſe, for it will never ſeem ſtrange that they ſhould talk nonſenſe, about ſomething whereof they have no ideas. But the reaſon why they do ſo in the inſtance before us, will appear to our ſecond thoughts extremely plain. That it may appear ſo the more, and that we may ſhew the better how induſtrious the mind is to help it's natural infirmities by art in the conceptions and expreſſions of things, let me add a few reflections to what has been already obſerved.

WITH-

WITHOUT meaning what thoſe philoſophers meaned who ſcreened ſo much ignorance behind the notions they endeavored to eſtabliſh of occult qualities and occult cauſes, we may ſay that the cauſality of apparent cauſes, and therefore the firſt efficient cauſes in the order of ſecond cauſes will be always occult, whatever hypotheſis or ſyſtem we follow. The peripatetics and ſchoolmen imagined the qualities of ſubſtances, as they were and are ſtill called, and which are ſuppoſed to excite ideas immediately by their immediate action on our organs, and mediately by their action on other bodies, to be real entities derived from ſubſtantial forms, inherent in ſubſtances ſome how or other; but diſtinct from them, and added to them. Modern philoſophers, more intelligibly and more conformably to experience, have baniſhed all theſe notions of qualities diſtinct from body, and have taught us that the action of body on body is produced excluſively of them by the inward conſtitution of body itſelf, and is varied according to the divers conſtitutions of the bodies that are at any time paſſive, and the different ſtates they are in. This opinion leads us on to obſerve the mechaniſm of body, the laws of motion, and whatever elſe makes any part of phyſical enquiry. The other is founded in abſtract general notions, which the knowledge of particulars had little ſhare in framing, and points up to the chimeras of imagination. But ſtill, even the beſt of them ſtops ſhort of the real eſſences of ſubſtances, ſhews us more cauſes, but ſhews us as little the principles of their cauſality.

ALTHO the ſyſtem of philoſophy be in this reſpect totally changed, yet the mind has found it convenient to preſerve the notion of ſenſible qualities. They were thought real, and referred to ſubſtances as inherent ſpecifically in them.

They are conceived now to be qualities by imputation only, and refer to the manner in which our ſenſes are affected. We cannot ſay with ſtrict propriety, this clock has ſeveral ſenſible qualities, though it marks the days of the month to our ſight alone, and the hours and the minutes to our eyes and to our ears. We know that there are no ſuch diſtinct qualities in the clock, and that all theſe effects are produced by one ſpring, governed and producing effects according to it's own temper, according to laws and directions reſulting from the ſtructure of the whole machine, and according to the texture and ſtate of the organs of thoſe to whom it is viſible, or audible. Juſt ſo we cannot ſay with ſtrict propriety, that ſnow is cold by a cold quality, any more than white by a white quality; or that fire is hot by a hot quality. They excite ideas that we diſtinguiſh and mark by theſe words; but they contain nothing in them that reſembles theſe ideas. By the perceptions we have of theſe ideas, we mark, under the name of qualities, the divers effects of the unknown eſſences of ſubſtances.

This modern expedient (for the mind invents expedients as faſt as it finds the want of them in the improvement, or more eaſy improvement of knowledge) is the more reaſonably employed on another account. Though there are no ſuch diſtinct ſpecific qualities in bodies as were aſſumed by philoſophers, yet the particles which compoſe bodies are often heterogeneous, as they appear by ſure experiments; among other inſtances in that of light, and in the production of colors. Now this heterogeneity, which is thought to conſiſt in the different ſizes of the particles and which may conſiſt in other differences undiſcoverable by us, continuing the ſame, and each kind acting and being acted upon according to it's kind, this amounts in ſome manner to a notion of qualities contained in bodies; and being ſo conceived, the mind knows no more in-

deed of the real conſtitutions of bodies than it knew before, but proceeds in this hypothetical manner a little better and with greater clearneſs and preciſion in the purſuit of phyſical enquiries. Theſe enquiries thus aſſiſted enable us to analyze the component particles of bodies in their effects, and to diſcover in them too ſome general laws by which the action of theſe component particles ſeparately and collectively is directed. This is ſome knowledge, and has the appearance of being greater than it is. But there is ſomething ſtill behind, concerning which we cannot boaſt even the leaſt appearance of knowledge. Body acts on body by contact and pulſion. This is certain, though it be not ſo certain that body can act no other way, as philoſophers generally aſſume. But even this pulſion is cauſed by motion, as motion is cauſed by pulſion: ſo that we get thus into a circle, and may go eternally round in the dark, without being nearer to diſcover what it is that puts mobility, that eſſential property of matter or body, into action, unleſs we ſuppoſe that the motion impreſſed originally continues ſtill without any diminution. Who can doubt that there is attraction or gravitation and repulſion in body, as well as pulſion? Who can withold his admiration from thoſe diſcoveries that modern philoſophy has made concerning the laws of motion, the properties of bodies that become apparent by them, and the actions of bodies on bodies that follow according to them? But who can or will ever be able to ſay what the ſprings of corporeal nature are, without which there could be neither action nor motion? What is that ſpring, for inſtance, which emits from the body of the ſun innumerable particles of light, that make their paſſage of fifty millions of miles to our earth in ſeven minutes of time, or thereabouts, with a velocity inconceivable though demonſtrated? Well may the cauſe be incomprehenſible, when the effect paſſes comprehenſion.

HERE now the word force, of which we are to ſpeak, comes into play, and ſerves as a ſign of the unknown cauſes of the phaenomena, both of nature and of art; for effects are produced in the works of art by an imitation of thoſe of nature, whereof the cauſes are unknown even to the artificer. When we employ the word alone, it is of very vague ſignification, and imports nothing more than ſome determining power intellectual or corporeal. But the mind takes two methods to give it greater preciſion, when that is neceſſary. We annex it ſometimes to words which ſignify that whereof we would, on ſuch occaſions, denote the power in general to produce effects in phyſics, in mechanics, in ethics; and thus we ſay the force of wind, the force of a mill, or the force of habit. We annex at other times to it words that, referring to particular known effects, ſerve to fix on every occaſion the meaning of it; juſt as we annex the words hot or cold, to ſignify certain ſuppoſed qualities of body, and as intelligibly at leaſt as we uſe the names of ſubſtances. Thus we ſpeak of attractive, repelling, impelling force, of the force of gravitation, of coheſion, and even of inactivity. Our NEWTON, who has opened, by the help of theſe ſure guides experiment and geometry, ſo large a field of knowledge and enquiry to preſent and future philoſophers concerning the greateſt and the leaſt phaenomena of nature, was far from pretending to determine the efficient cauſe of his attraction, or what that force is which makes bodies, and every particle of body, mutually tend to one another, and thereby give us an idea of attracting according to what has been taken notice of already. He diſtinguiſhed ſo carefully between the particular attractions of the ſchools, and his meaning in the uſe of this word, that nothing could be more deſpicable than the ignorance or malice of thoſe who would have confounded them, and have made him an aſſerter

of occult qualities, who diſcovered the moſt univerſal and the leaſt occult quality, if I may have leave to call it ſo for once, that ever was, ſince it intercedes the whole corporeal ſyſtem. To this, and to the ſeveral kinds of it, he referred all the phaenomena that cannot be accounted for by impulſe, and they are many, though many of thoſe which were aſcribed to a ſort of attraction by the antients are on better foundations aſcribed to impulſe by the moderns. But neither for the cauſe of impulſe, nor of attraction, nor of any action of body even the moſt ſenſible, can philoſophy account. They, therefore, who uſe the word force as the ſign of an unknown cauſe, whilſt they apply themſelves ſolely to diſcover the laws by which this cauſe acts, and the effects it produces, make a proper uſe of the word. They who affect to talk in any other manner, either phyſical or metaphyſical, about force, abuſe the word moſt impertinently, and pervert into artifice a very uſeful art of the mind.

But this is not the only method by which this art of the mind is perverted. It degenerates into artifice likewiſe, by the uſe which they make of it, who invent words to point out cauſes, they ſuppoſe unknown, of effects whoſe real cauſes are known. In the former method men are led into error, by affecting knowledge; in this, by affecting ignorance. Whatever force is, it is the cauſe of effects that are known, but cannot be aſcribed to any cauſe that is known. In this the propriety of the word conſiſts; for if they could be aſcribed to any cauſe known and denominated, it would be improper, and the uſe of it could only ſerve to miſlead. But there may be more than error, there may be fraud in this caſe; for, to borrow an image from the application of the word chance, the fair gameſter who ſhould ſee a raffle of ſixes thrown ſeveral times together might aſcribe it to chance, that is, to an unknown

known cauſe, very properly; but the ſharper, who had loaded the dice, or who knew that they were loaded, would aſcribe it to chance fraudulently as well as improperly.

I COULD wiſh that ALCIPHRON and LYSICLES had made this obſervation to EUPHRANOR, and had applied it to ſhew him why they admitted the word force, and rejected the word grace. The taſk would not have been hard, ſince it would not have been hard to ſhew him real cauſes ſufficiently known, and ſufficiently marked by words, of the effects aſcribed by him to a cauſe ſuppoſed unknown, and marked by a diſtinct word appropriated to this purpoſe. They might have ſhewn theſe cauſes to be the influence of a religious education, a warm head, and a warmer heart; hope, fear, grief, joy, ſtrong paſſions turned by prejudice and habit to devotion, devotion itſelf nurſing it's own principles, the effect in it's turn becoming a cauſe uniform and conſtant, or redoubling it's force on the leaſt failure, in acts of attrition, contrition, mortification and repentance. They might have proved not only by probable reaſons, but by indubitable facts, the ſufficiency of theſe and other known cauſes to produce all the effects commonly aſcribed to grace, even the moſt aſtoniſhing that ever appeared in ſaints, confeſſors, or martyrs. Nay they might have ſhewn that effects more aſtoniſhing, and many of them better vouched than moſt of theſe, have been and are ſtill daily produced in men, whom it would be blaſphemous to repute under the divine influence. ALCIPHRON might have illuſtrated this argument in his ſerious character, by quoting the ſaints, confeſſors, and martyrs of idolatry and hereſy; and LYSICLES in his gayer character, by quoting thoſe of atheiſm, and of the moſt abominable vices as well as the moſt indifferent cuſtoms, of paederaſty for inſtance and of long beards.

I AM thinking what EUPHRANOR would have replied to the minute philoſophers, and can diſcover no reply worthy of that ſolidity and that candor which render him equally admirable and amiable. He might have ſaid indeed that he was miſunderſtood by them, that the parity he inſiſted on was not meant to "conſiſt in a proof of grace, as well as force from "the effects; that it was only meant to anſwer an objection "againſt the doctrine of grace, ſuppoſing it proved from "revelation, and not to prove it's exiſtence; that therefore if "the parity was ſufficient to prove the poſſibility of believ-"ing grace without an idea of it, the objection they had made "was anſwered, and he aimed at no more." But I think that, as minute philoſophers as I am willing to allow ALCIPHRON and LYSICLES to have been, they would have maintained very eaſily the pertinence of their objection, and the inſufficiency of EUPHRANOR's anſwer.

THEY might have ſaid, there is not even the parity you now ſuppoſe between force and grace. Our objection againſt the latter did, in effect, anticipate your reply: and if we allowed your reply to be a good one, it would neither ſtrengthen your cauſe, nor weaken ours. The parity between force and grace, which you confine now to a poſſibility of believing one as well as the other, is not ſufficient; becauſe it is not real. The poſſibility of believing force is nothing more than the poſſibility of believing that every effect has a cauſe, tho the cauſe be unknown to us, and the propriety of the word conſiſts in the application of it to no other cauſe. The diſparity and impropriety do not ariſe from our having no idea of grace, for it is true that we have none of force; but they ariſe from hence, that there is not the ſame poſſibility of believing a cauſe whereof we have no idea, and which cannot be

be aſcertained by its effects, as there is of believing one whereof we have no idea indeed, but which may be aſcertained by it's effects. You aſſume grace as a cauſe of one particular kind, an immediate influence of God on the mind, and you apply it to effects that may have cauſes of ſeveral kinds. Should a word be vented to ſignify a moral cauſe of effects purely phyſical, or a phyſical cauſe of effects purely moral, you would laugh at the invention, and you would be in the right. But is it a jot leſs ridiculous to aſſign a particular cauſe, either natural or ſupernatural, of effects that may be produced by any or all of theſe, and to think to ſave the abſurdity by ſaying, that the word invented to denote this cauſe has no idea attached to it, no more than that of force?

The uſe of the word force can have no equivocal conſequence, the uſe of the word grace may. The teſtimony, nay the conviction of men that they felt the influence of this unknown cauſe, would not take off the equivocation. How ſhould it, after all the examples that may be brought from daily experience? A real enthuſiaſt doubts no more of his perceptions of the operations of grace informing his mind and determining his will, than he doubts of his perceptions of the action of outward objects on his ſenſes, and perhaps leſs.

Another thing, which I imagine that the minute philoſophers would have ſaid to Euphranor, is this. Since the parity you endeavor to eſtabliſh between force and grace cannot be ſo eſtabliſhed as to anſwer your purpoſe on any principles of reaſon; it remains, that the notion of grace cannot be received, nor the word employed on any other authority, than that of implicit faith in the revelation by which you ſuppoſe the exiſtence of grace proved. That authority obliges us to believe an action or an influence of God on his elect, the man-

ner of which no human idea can reach. But on what authority, EUPHRANOR, do you anſwer our "objection againſt "the doctrine of grace, by ſuppoſing it proved by revela- "tion?" If you have proved this fact, that the chriſtian revelation, in which the doctrine of grace is contained, was made by God to mankind, as all facts and eſpecially one of this importance ought to be proved, for every other kind of proof proves nothing, we will agree, tho there be not the ſame reaſon for admitting grace as for admitting force, that both are to be received alike. Our objection was inſufficient, but your anſwer then was unneceſſary; for ſurely nothing can be more unneceſſary, than to go about to eſtabliſh on probable arguments what is already eſtabliſhed on demonſtration: and the real exiſtence of grace has been already demonſtrated, if the truth of the revelation, in every part of it, has been ſo; ſince no propoſition can be more demonſtrated than this, that a doctrine taught by infinite wiſdom and truth is a true doctrine. If you have not proved this fact, and we think you have ſcarce attempted it by the proper proofs, your argument is a pure ſophiſm. When we urge that the doctrine of grace, or any other chriſtian doctrine, is inconceivable, or that it is pregnant with abſurd conſequences, and therefore unworthy of God; this is urged in ſtrictneſs, ex abundantiâ, for we do not give up the fundamental point, which is, that the authenticity of your ſcriptures, in the whole and in every part of them, and the truth by conſequence of your revelation, has not been yet proved. When you ſuppoſe the contrary, therefore, in diſputing with us, you beg the queſtion about a principle, in order to confirm a conſequence. Thus it ſeems to me, that the diſpute between EUPHRANOR and the minute philoſophers would have ended. What I have ſaid upon it can be ſcarce called a digreſſion; ſince this compariſon of force and grace ſerves admirably

mirably well to exemplify what has been ſaid concerning the art and artifice of the mind in the proper and improper uſe of words, to which no determinate ideas are annexed.

SECT. VII.

MANY other arts there are by which the human mind endeavors to help itſelf in the acquiſition and communication of knowledge. Some of them are as liable to abuſe as theſe which have been mentioned, and all of them are abuſed more or leſs, to the production and propagation of error; for I preſume, from what I have the means of obſerving, that this would be found true, on a ſtrict examination, even in the applications of geometrical knowledge. But it is time I ſhould put an end to this eſſay, that becomes a treatiſe in bulk at leaſt, if not in matter nor method. That I may not conclude too abruptly however, even for ſuch a rambling eſſay; it is neceſſary I ſhould proceed to diſtinguiſh, in a few more inſtances, between real and imaginary knowledge, the natural powers and the arts, the arts and the artifices of the human mind: and if theſe inſtances ſhould lead me further than I intend, you will pleaſe to aſcribe this prolixity to my love of truth, and to my deſire of giving you all the ſatisfaction I can.

I WILL obſerve, therefore, that as the ſagacity of the mind has invented various arts whereby to improve the other faculties and even itſelf, and to carry their united forces a little further than the immediate leſſons of nature carry them; ſo the affections of the mind have not only turned theſe arts frequently into artifice, an example or two of which we have ſeen, but have gone further. They have not only ſlid imperceptibly, but have plunged openly into artifice; and phi-

loſophers, thoſe that I intend here, ſeem to acquire knowledge only as a neceſſary ſtep to error: when they have done this, when they have loſt ſight of the former, they grow ſo fond of the latter, that they eſteem it no longer an human, but raiſe it, by an imaginary apotheoſis, up to a divine ſcience; which is, of all others the moſt pernicious artifice of the mind, according to my lord BACON, and according to truth. "Peſſima res eſt errorum apotheoſis, et pro peſte intellectûs "habenda eſt ſi vanis accedat veneratio."

ARE theſe lovers of wiſdom, theſe ſearchers of truth, you may well aſk, nothing better than venders of falſe wares, venders of hypothetical ſyſtems at beſt, and often of ſuch as are entirely fantaſtical? I fear that they are: and that the only excuſe to be made for them is, that they ſometimes deceive themſelves firſt. They put me in mind of a paſſage in PLUTARCH, who compares the ſtoics to ſhips that ſet out under auſpicious names, the SUCCESS or the SWIFTSURE for inſtance, and who are beaten by tempeſts in their voyage or caſt away. The great miſchief is, that the implicit paſſenger ſhares the fate of the unwary mariner. In ſhort, ſo it is: the moſt irrational of all proceedings paſs for the utmoſt efforts of human reaſon; and that philoſophy, which pretends to teach us the ſublimeſt truths, ſerves only to amuſe mankind in a middle or low region between truth and error, knowledge and ignorance.

LET us now reſume the diviſion of our ideas into ſuch as are natural and ſuch as are artificial. Thoſe of the firſt ſort are ſuch as God appointed them to be, and are, therefore, real human ideas. Thoſe of the ſecond are framed by the mind, ſometimes under the direction of judgment, and ſometimes under the prevalent influence of imagination, and

and are accordingly ſometimes real and ſometimes fantaſtic. Real ideas are defined, by Mr. Locke, to be "ſuch as have a "foundation in nature, a conformity with the real Being and "exiſtence of things, or with their architypes. Fantaſtical ideas then are ſuch as have not this foundation, nor this conformity. Now this definition requires a little commentary to make it more clear, and more exact too, if I miſtake not, in one part of it at leaſt.

Our ſimple ideas are all real, whether they be ideas of the primary or of the ſecondary qualities of bodies, as ſome philoſophers ſpeak: or, as I had rather ſay, whether they be ſuch as all body excites in us, like thoſe of extenſion, ſolidity, figure, diviſibility and mobility; or whether they be ſuch as particular bodies excite in us, like thoſe of colors, ſounds, ſmells, taſtes, and the whole tribe of tangible qualities. But in our complex ideas of ſubſtances, the caſe is not the ſame. They muſt be real as long as they are conformable to the combinations of ſimple ideas that exiſt in the ſubſtances which cauſe them. But they are liable to become fantaſtical, becauſe it is in the power of the mind to form them without any regard to exiſtence, and becauſe their reality neither is nor can be founded in any thing but real exiſtence actual or paſt. The reaſon of this, which Mr. Locke gives where he treats of the reality of human knowledge, is ſo obvious that a very little reflection muſt ſuggeſt it to every thinking man, in the preſent ſtate of philoſophy. The real conſtitutions of ſubſtances being entirely unknown, it is as impoſſible we ſhould know which of the powers that cauſe our ſimple ideas can coexiſt, and which cannot, any other way than by experience, as it is that we ſhould know what theſe powers are. Whenever we frame ideas, therefore, of ſubſtances, without being authorized by exiſtence, theſe complex ideas muſt needs be

fantaſtical; ſince they are compoſed of ſimple ideas proceeding from powers whoſe co-exiſtence is, for aught we know, impoſſible. As obvious and as deciſive as this reaſon is, it has not hindered men from exerciſing, even on ſubſtances, the power by which they boaſt themſelves able to frame ideas of what may exiſt, as well as of what does exiſt, or has exiſted. Thus PLATO and others, both before and ſince his time, have peopled inviſible worlds with ſo much poetical licence, that one is tempted to think of him, who ſeems to have been above the lowneſs of ſuperſtition, that he was very little in earneſt, and meaned rather to amuſe than inſtruct an age wherein the marvelous was ſure to pleaſe.

IT is the abuſe and miſapplication of this power, that has opened an inexhauſtible ſource of fantaſtical ideas and notions, which have been the bane of philoſophy, and have infected almoſt every branch of ſcience. The proofs are innumerable; and the inſtances that may be produced are liable neither to objection nor evaſion among men who join candor with knowledge; two qualifications that are inſeparable from the love of truth; that promote one another in the diſcovery of it; that ſhould always go together, and ſcarce ever do ſo. Fantaſtical ideas and notions of every conceivable kind, and even of ſubſtances immortal and mortal, celeſtial and infernal, divine and human, or amphibious beings that partake of the two natures, ſtare us in the face whenever we look into the hiſtories, traditions and philoſophical remains that are come down to us from the remoteſt antiquity. The ſame phaenomena appear in all thoſe of the intervening ages: and to ſay the truth, ſcience, or rather that which paſſed for ſcience, in many of theſe, was compoſed of little elſe. In theſe latter ages, even ſince the reſurrection of letters, ſince the improvement of philoſophy and of human reaſon, ſeveral ideas and notions

notions that were principles of imaginary knowledge to the antients have been preſerved in eſteem and veneration: as if that, which had no foundation in nature three thouſand years ago, could have acquired it ſince, and ideas which were fantaſtical in their minds could ripen into reality in ours. They are not the leſs fantaſtical neither for having been purged of ſome circumſtantial abſurdities, and rendered a little more plauſible by ſoftenings and refinements. It muſt be confeſſed, that how deficient ſoever the antient philoſophers might be in real, they left ſcarce any thing new to be invented in imaginary ſcience. But they left much to be improved: and this taſk ſeveral of the moderns have executed moſt ſucceſsfully. We may ſay of fantaſtical ideas, in general, what TULLY ſays of one kind of them, that of prognoſtications by dreams, at the cloſe of his treatiſe on divination; that the ſolicitude and fear they cauſe would have fallen into contempt, if philoſophers, who ſeemed to be perfect maſters of reaſon, had not taken upon them to be protectors of dreams.

BUT theſe general reflections would be more ſeaſonable after ſome that are more particular, and that remain to be made. As far as we have gone, we have ſeen our way, I think, very clearly: and the diſtinction between real and fantaſtical ideas of ſubſtances is ſo well eſtabliſhed, that they cannot be eaſily confounded. The diſtinction agrees with one part of Mr. LOCKE's definition; and is founded in the ſame reaſon. But there is another part of this definition, which ſeems too inaccurately expreſſed in the chapter of real and fantaſtical ideas, and quite untrue, as well as a little inconſiſtent with what he advances elſewhere, according to the explanation of it in the chapter of the reality of knowledge. In the definition it is ſaid, that our ideas are real when they have a conformity with their architypes. In the explanation it is ſaid, that "all our "complex ideas, except thoſe of ſubſtances, being architypes

" of the mind's own making, not intended to be copies of " any thing, nor referred to the exiſtence of any thing, as to " their originals, cannot want any conformity neceſſary to " real knowledge." Conformity with what? With themſelves? That meaning is too abſurd to be ſuppoſed. With other ideas of what exiſts, or has exiſted? That cannot be intended neither; for theſe ideas are " not copies of any thing, " nor refer to the exiſtence of any thing as to their originals." It remains, therefore, that we underſtand no conformity whatſoever neceſſary to make theſe ideas real, when it is ſaid that they want not any that is neceſſary to make them ſo. Now this propoſition I think abſolutely untrue. There is a conformity, in the ſtrict ſenſe of the word, tho of another kind, as neceſſary to make theſe ideas real, as the conformity proper to our ideas of ſubſtances is neceſſary to make them real: and all the complex ideas here ſpoken of are real or fantaſtic, as they have or have not this conformity. Thus it will appear, if we do not ſuffer the word architype to perplex our thoughts. If all our complex ideas, except thoſe of ſubſtances, are architypes, they muſt be applicable, and properly and really applicable, to ſomething; for it is at leaſt as fantaſtical to frame an architype applicable, to nothing that is really typified by it as to frame the idea of a ſubſtance that can be referred to no real exiſtence as to the architype of it. When architypes are made by nature, they determine our ideas, as God, the author of nature, has appointed that they ſhould be determined: and the knowledge we acquire by them is real knowledge for us and to all human purpoſes, whether theſe ideas do really reſemble their architypes or not; according to what has been inculcated already, and perhaps more than once. But when complex ideas and notions are framed by the mind to ſerve as architypes in it, they muſt be framed with a conformity to the ſame nature that determines the others, or they will

be fantaſtical and produce no knowledge, or ſuch as is fantaſtical like themſelves. I do not ſay that they muſt be framed ſo as to contain nothing which implies contradiction. They have been ſo framed, indeed, as to imply it on many occaſions, by antient and modern ſages and ſaints. But we will ſuppoſe, that they are ſo no longer: and on that ſuppoſition we ſay, that even this is not ſufficient, and that all theſe ideas muſt have a cloſer conformity than that of bare poſſibility to what we know of the exiſtence of things corporeal or intellectual. Univerſal poſſibility is the range of divine particular actuality, paſſed or preſent, and that in a very confined ſyſtem of human intellect.

The ideas we ſpeak of, it is ſaid, are neither "intended to "be copies of any thing, nor referred to the exiſtence of any "thing as to their originals." If this was abſolutely true, all ſuch ideas would be architypes in a ſtrict ſenſe, and could be conceived no otherwiſe. But it is not abſolutely true. It is rather a definition of fantaſtical, than of real, ideas. Our moſt complex ideas and notions which combine in the greateſt variety, modes and relations, as well as ſimple ideas, are often copies; they are often referred to exiſtences, to particular exiſtences, as to their originals: and when they are not ſo, when they are put together in the mind, as the mind never perceived them put together in exiſtence, tho this may be ſaid to be done "by the free choice of the mind, and "without conſidering any connection they have in nature," yet are they not, when they are real, quite arbitrary, nor quite void of reference to exiſtence. Mr. Locke ſhall prove this for me. He ſays, that one of the ways by which we get theſe complex ideas of mixed modes is experience and obſervation of things themſelves. In all theſe inſtances then, the complex idea is derived from exiſtence, and is a copy firſt, tho

tho it becomes an architype afterwards. It is ſo in the example he brings, in that of ſeeing two men wreſtle. It is ſo in a multitude of others, in all thoſe that are real and of real uſe. Murder is as old as human race, and theft as property. Shall we believe that men were lawgivers and moraliſts, before they were ſpectators of the actions of one another? Invention is another of the ways he mentions, in which, by a voluntary act of the mind, ſeveral ſimple ideas are put together in it, and the architype precedes exiſtence. But even in theſe caſes, the combinations of ideas, aſcribed to the invention of the mind, are ſuggeſted to it by other combinations, as it would be eaſy to ſhew in the example brought of printing: and tho the mind cannot be ſaid to copy, when it has no particular exiſtence in view, yet muſt it be allowed to imitate, when it has in view not only it's ſimple ideas, but divers combinations of them, derived immediately or remotely from what exiſts or has exiſted in the ſyſtem of nature: and theſe it has in view always when the complex ideas and notions we frame are not purely fantaſtical. Thoſe of parricide and ſacrilege were framed perhaps by ſome men, for they were not by all, before either of theſe crimes had been committed; and ſo they might, without doing much honor to the boaſted power of knowing à priori and independently of exiſtence. The relation of father and ſon is added to the complex idea of murder in one: and as ſoon as one order of men and their property came to be reputed ſacred, it required no ſuperior intelligence to foreſee that they might be robbed as well as other men. But the mathematician never ſaw a circle mathematically true, ſuch as he deſcribes, and whoſe properties he conſiders: neither did TULLY ever ſee ſuch an image of virtue as he propoſes, and whoſe principles and effects are explained in his offices. Be it ſo. But the mathematician, who conſiders the properties of a circle, a ſquare, or a rectangle, had obſerved the various

rious terminations of extenſion before he turned mathematician, and the moraliſt had obſerved, wherein the good and evil of ſociety conſiſts, and had framed, on what he obſerved, ideas and notions concerning virtue and vice, and the perfection of human nature before he writ of ethics. The ideas and notions of both, to be productive of real knowledge, muſt be derived from exiſtence, and referred back again to it.

According to Mr. Locke, our knowledge "concerning "theſe ideas is real, and reaches things themſelves; becauſe "we intend things no farther, than as they are conformable to "our ideas." Theſe ideas then, to be real, muſt reach things themſelves; that is, they muſt be rightly abſtracted from things that exiſt, and they muſt be applied to things, no farther than things are conformable to them. This now coincides enough with the opinion I advance. Our ideas are fantaſtic, and our knowledge imaginary, when the former are framed without a ſufficient conformity to exiſtence, and when they are applied to things to which they are not applicable; for as ideas and notions may be void of all reality in themſelves, ſo may they become fantaſtical by a fantaſtical application.

The miſtake about theſe complex ideas carries much reſemblance to that which Mr. Locke expoſes ſo juſtly about maxims or axioms. Theſe have been reputed the principles of ſcience, whereas they are in truth the reſult of it, when they are evident; and cannot paſs therefore with any propriety for the praecognita and praeconceſſa, for which they have been vended in the ſchools. Juſt ſo the complex ideas we ſpeak of are called architypes; and men infatuate one another enough to imagine that there is a ſuperior intellectual region, as it were, a region of ideas that are the principles of general ſcientifical knowledge, from whence particular knowledge is to be deduced, and

by which it is to be controuled. Whereas in truth all our ideas and notions are fantaſtical, as all our maxims are falſe, when they are not founded in particular knowledge: when they are carried further than evidence, the criterion of truth, accompanies them; and above all, when they are repugnant, as philoſophical and theological ideas and notions frequently are, to this very evidence and to our knowledge of things as they exiſt.

SOMETHING has been ſaid concerning ideas and notions in a former part of this eſſay, that may ſeem to render what is here ſaid about ſuch as are fantaſtical the leſs neceſſary. But having occaſion to ſpeak of theſe, I chuſe rather to run the riſque of repetition (uſefully I hope to the great end of fixing the bounds of real knowledge) than not to bring into a fuller view this intellectual artifice, which has ſerved to build up ſo much imaginary knowledge, at the expence of neglecting the other, and of corrupting it in all it's parts. It was by the means of fantaſtical ideas and notions that chemiſtry was turned into alchymy; aſtronomy into judicial aſtrology; phyſics, by which I underſtand the contemplation of mind as well as body, into theurgic and natural magic; and the religion of nature into various ſyſtems of plain, but almoſt blaſphemous, doctrines of abſurd myſteries and ſuperſtitious rites. All theſe effects proceeded from the vain philoſophy of men more intent to imagine what may be, than to obſerve what is: and if we add to theſe ſuch as have proceeded from fantaſtical notions of abſtraction, upon which the tedious and impertinent ſubtilties of ontology are founded, we ſhall have before us very nearly the ſum of all that learned error into which men have fallen by reaſoning on fantaſtical ideas and notions in ſearch of real: as if it was below the majeſty of the human mind to ſeek for reality and truth out of itſelf: and as if our ſenſes

were given us only to excite our intellect, and not to inform it by experiment and obſervation.

The principal occaſions, on which the mind exerciſes the artifice ſpoken of in framing ideas that are fantaſtical, may be reduced to theſe three. Philoſophers invent hypothetical ideas and notions in order to erect on them ſuch ſyſtems as cannot be erected on real ideas and notions, that is on ideas and notions that have a known foundation in nature. They treat of ideas and notions that are incomplete and inadequate, as if they were complete and adequate. They dogmatize on obſcure and confuſed ideas and notions, as if they were clear and diſtinct. Let us produce in this eſſay one example at leaſt of the firſt. Your patience and mine too may be worn out by that time: and the examples omitted now may be taken up at ſome other.

SECT. VIII.

I might have reckoned hypotheſes among thoſe arts of the mind that degenerate into artifice; for ſuch they have been often. The greateſt part of ancient philoſophy, almoſt all except ethics, was nothing elſe: and to mention no other among the moderns, Des Cartes had much to anſwer for of this kind. His great reputation put hypotheſes into faſhion; and natural philoſophy became a ſort of phyſical romance. But this manner of impoſing imaginary for real knowledge is over, whilſt one more abſurd remains in credit; and, whilſt naturaliſts can ſlide no longer from art into artifice without being detected, metaphyſicians ſet out in artifice, and they ſucceed. An hypotheſis in phyſics can make it's way now no faſter nor no further than experience countenances and ſupports it. But in metaphyſics it is otherwiſe. Their hypotheſes ſtand alone:

they ſtand in the place of experimental knowledge, are not ſo much as deduced from it by a fair analogy, but are made independently of, and frequently in direct contradiction to it.

They who plead for hypotheſes urge, not very unreaſonably, that they may be of ſome uſe in the inveſtigation of truth, whilſt they are employed; and that they may ſerve to the ſame purpoſe, even when they are diſcovered to be falſe and are laid aſide: as men who have miſſed their way give ſome inſtruction to others to find it. Beſides which they do not ſo much as pretend that any hypotheſis ought to be maintained, if a ſingle phaenomenon ſtands in direct oppoſition to it. I do not agree to this plea in the whole, but to the latter part of it entirely. By that, the criterion of hypotheſes is eſtabliſhed by the favorers of them: we take it as they give it; and this criterion in the phyſical world is real actual exiſtence. The Copernican ſyſtem, itſelf, ſtands on no other bottom. The Newtonian ſyſtem of attraction ſtands on the ſame: and this bottom is grown ſo broad and ſo firm, that neither the jokes of foreign wits, nor the cavils of foreign philoſophers, can ſhake it as far as ſenſible bodies and ſenſible diſtances are concerned. But at the ſame time they who preſume to ſuppoſe it equally certain where inſenſible bodies, the minima naturae, and inſenſible diſtances, are concerned, as ſome of our country men have done, preſume too much; this application of it not having been yet enough confirmed: and they have been accordingly juſtly cenſured for raiſing too haſtily an hypotheſis into a ſyſtem. With ſuch precautions and under ſuch reſtrictions, hypotheſes can do no hurt, nor ſerve to propagate error. But then it is ſurely a ridiculous ſcene to obſerve how confidently ſome metaphyſical philoſophers, who ſhew themſelves extremely ſcrupulous about ſuch hypotheſes as I have mentioned, either admit on the authority of others,

or

or publiſh on their own, not barely as hypotheſes but as demonſtrations, the wildeſt notions imaginable; notions that are founded in nothing known nor knowable, and that can be tried, therefore, by no criterion whatever.

I HAVE ſpoken of phyſics and metaphyſics ſometimes in the uſual ſtile; but I am far from altering the opinion I have already owned, and cannot, therefore, acquieſce to the pretenſions of thoſe who, under the umbrage of a ſuppoſed ſcience that conſiders general natures, eſſences, being in the abſtract, and ſpirit or immaterial ſubſtance, would place themſelves in a rank of philoſophical precedence above thoſe who conſider corporeal nature in the ſeveral phaenomena, and would controul, what they neglect, particular experimental knowledge. As to the ontoſophiſts, they are the lineal deſcendants of the ſchoolmen; and they deal like their progenitors in little elſe than hard words and ſuch abſtract ideas and notions, as render our knowledge neither more diſtinct nor more extenſive, but ſerve to perplex it and to invelope in their obſcurity what is in itſelf very plain. I ſhall neglect them therefore, as the reſt even of the learned world appears to do. The example I am to produce, under this head of hypothetical ideas and notions, ſhall be taken from thoſe philoſophers who uſurp and appropriate to themſelves, as if it were their peculiar province, the doctrine of ſpirits and ſpiritual things; whereas pneumatics taken in this ſenſe, if they are any thing, are as truly objects of phyſics, as pneumatics, taken in a more proper ſenſe, for that branch of natural philoſophy whoſe object is the air we breathe. This diſtinction, however, has been eſtabliſhed; and by the help of it, whilſt naturaliſts are not at liberty to make hypotheſes that are not founded in ſome degree of experimental knowledge, and that are not liable to be controuled by it in all their parts and in all their pro-

progreſs, metaphyſicians are left at liberty to frame as many fantaſtical ſyſtems as they pleaſe on ideas and notions purely hypothetical, without any regard to this foundation, or this controul, as we obſerved juſt now.

As ſoon as men began to reflect on their own nature, and on that of all the bodies which ſurrounded them, they could not fail to obſerve ſolidity, extenſion, figure, diviſibility, and mobility, the moſt apparent properties of body or matter. As little could they fail to obſerve the operations of their own minds, in which they had the perceptions of theſe ideas, and to frame ideas of thought, and of the ſeveral modes of thinking, particularly of that which has the power of beginning motion. None of theſe ideas were contained in their ideas of body, nor neceſſarily connected with them: and that of a power to begin motion, which they obſerved to be in the whole animal kind, and which they knew conſciouſly to be the effect of thought, muſt ſtrike them as a ſuperior property to that of mobility, with which they had occaſion to compare it every inſtant. Taking it for granted then, that they knew, as ſoon as they began to philoſophize, all the perceivable properties of matter, they concluded, that ſuch things as could not be accounted for by theſe, were to be accounted for by the properties of ſome unperceivable or unperceived matter, or elſe by the properties of ſome other ſubſtance. The firſt aſſumption was that of the moſt antient philoſophers: the other was made much later, at leaſt it was much later that extended and non-extended ſubſtance were plainly contra-diſtinguiſhed.

Thus the diſtinction of body and ſoul came to be made and eſtabliſhed among almoſt all the philoſophers. It would be tedious even to run over the confuſed notions that were entertained

certained about soul. It was fire; but a divine fire to some: it was air to others: a fifth element to others, "quintam "quandam naturam*," and therefore ARISTOTLE called it by a new name entelekia, to signify a certain continued and perpetual motion. "Sic ipsum animum entelekian appellat no-"vo nomine, quasi quandam continuatam motionem et pe-"rennem†." In a word, it was something, they knew not what, which they thought fit to call breath or spirit, for a reason obvious enough: and the notion of it answered philosophical purposes, in metaphysics, just as well as that of occult qualities answered them in physics. A vast profusion of souls followed. They were created by the exorbitant power of hypothesis as fast and as often as they were wanted. There was an universal soul common to the whole system of corporeal being, or a soul of the world; for the world was, in the imagination of some of the antients, a great animal, and consisted, like the animals it contains, of a body and a soul. There were particular souls for celestial and terrestrial bodies, a soul of the sun, a soul of every star and planet, a vegetative soul for plants, a sensitive soul for other animals; and for man there was an ample provision of three, of the two last and of a rational soul, which was a participation of the Divine mind, or an emanation from it, or an infusion out of it.

IF we descend from those times to our own, we shall find the same hypothesis maintained with a little less confusion of opinions, in more precise and uniform terms at least, but still as unintelligibly as ever. SPINOZA, indeed, acknowledged but one substance, and that matter; as absurdly as others have acknowledged but one substance, and that spirit. On the principle of the former, the vegetative, the sensitive,

* Tusc. quaest. † Ibid.

ſitive, and even the rational ſoul can be nothing elſe than matter differently fermented and ſubtilized in ſyſtems of it differently organized; for which opinion whatever is ſaid, ſhould be ſaid, and might be ſaid, without admitting the principle of SPINOZA in it's full extent; without ſuppoſing God a material being, from whence the moſt abſurd conſequences would follow, and without denying his exiſtence, which would imply, if that be poſſible, more. But the general run of opinion aſſumes the ſoul to be a ſpiritual ſubſtance, and a ſpiritual ſubſtance to be unextended, indiviſible, and therefore immortal. Now this aſſumption helps the hypotheſis ſo little, that the extravagancies fancy builds on it are as great, and the difficulties oppoſed to it perhaps greater, than when the ſoul was deemed material by ſome Chriſtian, as well as Pagan philoſophers; for that it was ſo your learned friends will I am ſure confeſs. Many notions, extravagant and fantaſtical to the utmoſt, might be cited. Can there be any thing more extravagant, or that implies contradiction more groſly than to divide this indiviſible ſubſtance, like the myſtic divines, who had a precedent for it in that myſtic philoſopher PLATO, into an upper and lower part? The good madmen mean well, no doubt: but there is reaſon to ſuſpect that, among their diſciples, the lower part of the ſoul and the body are much defiled by imagination and ſenſation too, whilſt the purity of the upper part, where the underſtanding and the will reſide, preſerves the conſcience in a moſt heavenly tranquility.

SHOULD you object to this inſtance of extravagant opinions, built on the hypotheſis of the ſoul conſidered as a ſimple unextended being united to the body, becauſe it is taken from thoſe of madmen who are capable of framing the moſt extravagant and falſeſt notions on the moſt reaſonable and evident principles; let us lay aſide all other inſtances, and produce as

the moſt extravagant of all that wherein every man who deals in theology mad or ſober concurs; that opinion for the ſake of which this hypotheſis of the ſoul was invented, and which is as little reconcileable to the wiſdom of God and to the moral ideas of juſtice and goodneſs, as thought is to all the properties that we know of matter. The human ſoul then, which participates of the divine nature by emanation, by infuſion, or by ſome other incomprehenſible act, on account of which alone we are ſaid to be made after the image of God, is confined to the human body, and is diffuſed through the whole to inform and to govern; or has a principal reſidence, like the ſeat of empire, in the pineal gland, or in that part of the brain where I have read that there is a ſort of nervous juice, the ſource of animal ſpirits, of a moſt fragrant ſmell; and which puts me in mind of the perfume that the inſpiring divinity ſpread in the temples where oracles were delivered to the Pagans. Whilſt the ſoul is thus immerſed in matter, the luſtre of it is obſcured by this removal from it's divine original. The force and energy of it is clogged, nay it ſeems ſince the fall to contract an inclination to corporeity, and to aſſimilate in ſome ſort with this inferior nature, as if they were homogeneous. Our firſt parents received from ſenſible objects, after their fall, ſuch ſtrong impreſſions and ſuch deep traces in their brains, "de ſi grands veſtiges, et des traces ſi profondes*," that they may well have communicated theſe to the brains of all their deſcendants. Now the thoughts of the ſoul being neceſſarily conformable to the traces that are in the brain, it is you ſee demonſtrated moſt metaphyſically, that in this reſpect the ſoul is dependent on the body, and it's thoughts and inclinations on the thoughts and inclinations of thoſe who begot the body it inhabits in a perpetual gradation of generations down from ADAM and EVE. Thus the ſoul, that ſpiritual monarch of the human ſyſtem, is

* MALB. l. 2. c. 7.

ſubject not only to a limitation of power, but to a determination to govern ill. The ſoul does not remain long indeed in this ſtate, becauſe the ſyſtem it governs is ſoon diſſolved by death. But the ſhort time it remains in it, decides of it's ſtate for eternity. It ſeems to be delivered from the body, and to be reſtored to the full force of it's nature and to the free exerciſe of it's powers, in order only to ſuffer, for the moſt part, during an eternity, for what it did in the government of the body when it enjoyed neither during a moment. As ſoon as philoſophers and divines are able to reconcile all this to their ideas of the wiſdom, juſtice and goodneſs of God, the hypotheſis will be no longer neceſſary, at leaſt to the former; ſince they will not find it at all more difficult to reconcile thought to their ideas of the properties of matter.

The taſk would be endleſs, and I ſhall neither give myſelf nor you the trouble to enumerate more of the fantaſtical ideas, notions and opinions, that have been raiſed on this hypotheſis of a ſimple immaterial active being, which underſtands and wills, or by which we are made able to underſtand and will. I make this diſtinction, becauſe philoſophers who ſet out from the ſame goal take very different ways in the purſuit of ideas equally fantaſtical. Some of them baniſh out of the whole extent of Being every thing, except ideas and ſpirit whereof we can have no idea, and which is only known by conſciouſneſs. Nothing in heaven nor earth, none of thoſe bodies which we repute to be ſenſible objects have any exiſtence out of ſome mind or other. They may exiſt eternally, and be always actually preſent in an eternal ſpirit; but they have beſides this no exiſtence, except one that is occaſionally communicated. They exiſt in created ſpirits, when they are perceived; and they ceaſe to exiſt, when they are not perceived there. Other philoſophers again declare the exiſtence of body hard to be

be proved; whilſt that of ſpirit, under this notion of it, needs no proof according to them. They pretend to have a knowledge of immaterial ſpirit that excludes all doubt, and they aſſume hypothetically that there is ſuch an entity as body, which is the very reverſe, I preſume, of the moſt evident dictates of common ſenſe. But however, on this bold aſſumption that there is ſuch a being as body, they proceed to account for the union of the ſoul with body on one hand, and with God on the other; and ſo multiplying hypothetical ideas one on another, they open a fantaſtical ſcene of ſcience wherein every man's imagination (for every man has the ſame right to imagine) is his ſole guide, and wherein it is plain from their extravagant writings that they have, and from the nature of the thing that they can have, no other guide.

Des Cartes, who might not ſo much as dream perhaps that philoſophers would ſet themſelves in good earneſt to baniſh body out of the univerſe and the univerſe with it, affirmed two ſubſtances, one whoſe eſſence is extenſion, and to which all the modifications of extenſion belong, and one whoſe eſſence is thought, and to which all the modifications of thinking belong. Now both theſe definitions are ſo evidently falſe that every man may know them to be ſo who conſiders them without philoſophical prejudice, of all prejudices the ſtrongeſt. How ſtrong it is, appears in this very inſtance; for when Des Cartes affirmed extenſion alone to be the eſſence of body, he was led by his philoſophical prejudices to affirm an identical propoſition and to beg a queſtion. He affirmed that body is body, for he ſuppoſed the plenum. It is true we cannot ſeparate body in our ideas from extenſion, neither can we conceive body excluſively of ſolidity. But we can ſeparate extenſion from ſolidity in our ideas; and therefore, as Mr. Locke obſerves, if it be a good

argument " that ſpirit is different from body, becauſe think-
" ing includes not the idea of extenſion in it, ſpace or ex-
" tenſion alone is not body, becauſe it includes not the idea
" of ſolidity in it." In ſhort, they are ſo evidently diſtinct ideas that he who confounds them in words muſt diſcern their difference in his underſtanding, whether he will or no. The difference is ſo evident, that if the plenum was admitted, and pure ſpace rejected, yet ſtill the definition of the Carteſians would be imperfect; for the eſſence of body, throughout this imaginary plenum, could not be extenſion alone. Solidity could not be baniſhed out of it, but extenſion would continue to include ſolidity, as ſolidity is allowed to include extenſion; and extenſion and ſolidity would be two diſtinct ideas, but two eſſential properties of the ſame ſubſtance ſtill.

The definition of thinking ſubſtance is not truer than this of extended ſubſtance, and the falſity of it is obvious to conſtant experience. That we live, and move, and think according to certain human modes of thinking, and that there muſt be ſomething in the conſtitution of our ſyſtem of being beyond the known properties of matter to produce ſuch phaenomena as theſe, are undeniable truths. But here certainty ends. What that ſomething is we know not, and ſurely it is time we ſhould be convinced that we cannot know it. Thankfulneſs and modeſty would become us better than philoſophical and theological aſſurance: thankfulneſs, when we look up to the great Author of all natures for raiſing ours either in kind or in degree above that of any other animal; and modeſty, when we look down on ourſelves to avow our ignorance. Inſtead of this, vanity and preſumption determine philoſophers to conclude, that ſince they cannot account for the phaenomena of the mind, by what they know very ſuperficially of

ſolid extended ſubſtance, this mind muſt be ſome other ſubſtance. On this foundation they reaſon admirably well à priori, and prove with much plauſibility that this mind, this ſoul, this ſpirit, is not material and is immortal. In the ſame manner they proceed, and well they may, to prove any thing that metaphyſics and theology want to have proved. But this foundation is an aſſumption that cannot ſtand an examination à poſteriori, and that if it could ſtand it would carry us but one ſtep forward in knowledge; for if nothing which is an object of real knowledge could be oppoſed to the immateriality and immortality of this ſubſtance, the inſuperable difficulty of accounting for the action of mind on body, and of body on mind, that are reciprocally and in their turns both active and paſſive, would ſtop our philoſophical enquiries. The divine alone would have made a ſtep ſufficient for his purpoſe. Thus do the reputed maſters of human reaſon advance propoſitions as demonſtrated truths, which have not even the merit of a tolerable hypotheſis. But it is not enough to affirm like them. I muſt prove what I ſay, by appealing to that criterion of truth, from which there lies no appeal, to clear and determinate ideas duly abſtracted from the phaenomena of nature, and to an intuitive knowledge of their agreement or diſagreement. Now this, I think, it will not be hard to do.

I DO not pretend to deny the poſſible exiſtence of ſpiritual, that is, according to the preſent notion, of immaterial beings. I have no more right to deny that there are ſuch, than the perſons juſt mentioned have to affirm it. God alone, the Author of all beings, knows how many different kinds of ſubſtances, how many various ſorts of beings his omnipotent will has made to exiſt. But this I ſay, that we have not the ſame proof of the exiſtence of unextended and ſpiritual, as

as we have of extended and ſolid ſubſtance. We have not the ſame proof, becauſe we have not the ſame knowledge on which to ground any. We gueſs probably, if you pleaſe, from what we obſerve of our own minds that one exiſts; but we know as certainly, as God has given us the means of knowing outward objects, that the other exiſts. The ideas we receive by reflection are in this caſe and in this reſpect equivocal, they do not reach up to the apparent nature of the ſubſtance that cauſes them. But the ideas we receive from ſenſation are not ſo; they do reach up to the apparent nature of the ſubſtance that cauſes them. The former do not ſo much as conſtitute what Mr. Locke calls a nominal eſſence: the latter do. There are many queſtions to be aſked, no doubt, concerning body, which it is impoſſible to anſwer, as well as concerning ſpirit; becauſe we are made incapable of knowing the real eſſence of any ſubſtance: and if there was no other difference, we might as well affirm the exiſtence of immaterial as of material ſubſtance. But there is another difference; and it is not enough to have hinted it, I muſt explain it.

Mr. Locke takes much pains to ſhew, that the notion of ſpirit involves no more difficulty nor obſcurity in it than that of body *: and yet I think I can make him prove the contrary for me, and ſhew againſt his own aſſertion, that we have "more and clearer primary ideas belonging to body "than we have belonging to immaterial ſpirit." Primary ideas are the ideas of ſuch qualities as exiſt always in the ſubſtance to which they belong, whether they are perceived or not. They are, therefore, eſſential to it, and productive, by their operations, of thoſe ſecondary qualities which may be ſaid only to exiſt in our perceptions of them. Of the firſt ſort are ſolidity and extenſion, to mention no others, the primary

* Eſſay, l. 2. c. 23.

primary qualities, and in our ideas the eſſence of matter of which we can frame no conception excluſively of them. Theſe notions I have taken from Mr. Locke, and they lead me to aſk what the primary ideas are of ſpirit or immaterial ſubſtance? The primary idea or the eſſence of it is thought; as body is the extended, this is the thinking ſubſtance, ſays Des Cartes. Thought then, actual thought, is the eſſence of the ſoul or ſpirit, and by conſequence ſo inſeparable from it that we cannot conceive the ſoul or ſpirit to exiſt ſeparately from, or excluſively of thought. But this I know to be untrue: and I may well own, ſince Locke has owned the ſame, that I have "one of thoſe dull ſouls that does not perceive itſelf "always to contemplate ideas." I diſtinguiſh very well between being aſleep and being awake. I continue to live but not to think during the ſoundeſt ſleep, and the faculties of my ſoul and body awake together. Thus evidently do I know, that thought is no more the eſſence of ſoul than motion of body: and if thought is not ſo, I aſk what is?

Body is capable of receiving and communicating motion by impulſe; but without ſolidity and extenſion it would be capable of neither. Thought, not being the eſſence of the ſoul, can be nothing but an action of it, and thus far anſwers motion in body. But what is it then which anſwers ſolidity and extenſion, and is the primary quality of ſpirit? Is it immateriality? Is it the negation of material eſſence? No man will, I preſume, give ſo ſilly an anſwer. At leaſt no man who does, muſt expect a reply. He who affirms, that there is in the compoſition of the human ſyſtem, a ſubſtance to which cogitability belongs, as well as a ſubſtance to which mobility belongs, muſt have ideas of the firſt of theſe ſubſtances prior in the order of nature to that of it's cogitability, as he has ideas of the ſecond prior in the ſame order to that of its mobility;

bility; or he muſt talk at random, and affirm what he does not know. His ſuppoſed diſtinct ſubſtance muſt ſink into nothing, or be confounded with the other; for it will coſt a reaſonable mind much leſs to aſſume, that a ſubſtance known by ſome of it's properties may have others that are unknown, and may be capable, in various ſyſtems, of operations quite inconceivable by us, according to the deſigns of infinite wiſdom, than to aſſume that there is a ſubſtance concerning which men do not pretend to know what it is, but merely what it is not.

It may be ſaid, Locke has ſaid it, that we know no more of the ſolid than of the thinking thing, nor how we are extended than how we think. But the compariſon is improper, and unfair. It is improper, becauſe it compares the operation of an aſſumed ſubſtance with the known properties of a real ſubſtance. It is unfair, becauſe it ſlides over and evades the objection that we have not a poſitive idea of any one primary property of ſpirit, or at leaſt that if cogitability be ſuch a primary quality, this definition of the ſoul is no better than that of a moveable ſubſtance would be, if it was given as the full definition of body. But beſides, though the coheſion of the ſolid particles of body be not ſufficiently accounted for by the preſſure of the air, or of any ambient fluid, and tho that ſeeming property of matter, which is called for want of a better name attraction, be not yet perhaps enough eſtabliſhed; yet we have a very clear idea of coheſion in it's effects, by which inſenſible atoms are ſo united and held together, that the bodies they compoſe become ſenſible to us, and give us the ideas of ſolidity and extenſion. Have we any knowledge proportionable to this, as imperfect as it is, of ſoul under the notion of an immaterial ſpirit? It cannot be ſaid that we have. Upon the whole, therefore, we may conclude without preſumption

tion againſt two of the greateſt men of their age, againſt DES CARTES, that thinking is not the eſſence of the ſoul; and againſt LOCKE, that a ſolid extended ſubſtance is not quite ſo hard to be conceived as a thinking immaterial one.

BUT LOCKE, much leſs dogmatical than DES CARTES, how far ſoever he favored the reigning opinion, or thought it neceſſary for him to keep meaſures with thoſe who ſupport it, was far from aſſerting the immateriality of the ſoul. He found inducements of probability to this and to the contrary opinion, certainty of demonſtration for neither *. When he is to ſhew that our knowledge is narrower and more confined than our ideas, he brings the inſtance of theſe two, of matter and thinking, and of the impoſſibility of knowing by the contemplation of them, or by any other way, except by revelation, whether that which thinks in us be not material. He ſees "no contradiction in it, that the firſt eternal thinking Being ſhould, if he pleaſed, give to certain ſyſtems of created ſenſeleſs matter, put together as he thinks fit, ſome degrees of ſenſe, perception and thought." He endeavors to guard againſt theological choler, by urging "that the great ends of morality and religion are well enough ſecured without philoſophical proofs of the ſoul's immateriality, ſince it is evident that he who made us——ſenſible, intelligent beings can," and he adds, "will reſtore us to the like ſtate of ſenſibility in another world." But all this precaution could not ſave him from the joint attacks of philoſophers and of divines, not very orthodox on other points. They † have inſiſted, ſince thought is not the eſſence of matter, nor an attribute of matter neither, in as much as it

* Eſſay, l. 4. c. 3. † LEIBNITZ, WOOLLASTON, &c.

it does not flow neceſſarily from that eſſence, it cannot have been communicated nor ſuperadded even by omnipotence to any ſyſtem of matter; becauſe eſſences are unchangeable, and attributes uncommunicable; ſo that matter cannot be made to think. The moment any ſyſtem begins to think, it ceaſes to be material: and that which was matter becomes a ſubſtance of another kind. In fine, that it is nonſenſe to aſſert that God "can * ſupperadd a faculty of thinking "to incogitativity, of acting freely to neceſſity, and ſo on †."

It

* Rel. of Nat. delineated, §. 9.

† Since it has been obſerved on this occaſion, in how trifling a manner the pretended maſters of abſtract reaſoning ſubject the reality of things to words; it may not be be improper to obſerve another fallacy that runs through all their diſcourſes, concerning the thinking ſubſtance.

When we know with certainty that any being exiſts, many doubts may be raiſed, we may endeavor to ſolve them by hypotheſes, and we may endeavor it in vain: but ſtill they will be no more than difficulties to the ſolution of which our knowledge does not extend. The known truth will remain unſhaken. On the other hand, when we aſſume on probable arguments that any being exiſts, the doubts and difficulties that ariſe are real objections; becauſe they are probable arguments oppoſed to probable arguments, and the whole being hypotheſis, the whole may be ſhaken.

Theists demonſtrate the exiſtence of one ſupreme, infinite, all-perfect Being. Atheiſts cavil; and, tho they cannot unravel the demonſtration, they oppoſe doubts and difficulties, as if probable arguments, ſuppoſing theſe to be ſuch, could prevail againſt demonſtration Their proceeding is abſurd: and reaſon is evidently on the ſide of the theiſt. But now, are they, who aſſert a diſtinct thinking ſubſtance united in the human ſyſtem, to a material unthinking ſubſtance, in the caſe of the theiſts? Are they who deny this, in the caſe of the atheiſts? Certainly not. The former, except a few who are in the height of a metaphyſical delirium, do not pretend that they can demonſtrate by reaſon what they maintain, and yet they argue as if they had made this demonſtration. This is the fallacy I mean: and I need not go far to ſeek an inſtance of it, ſince I find one in the Religion of Nature delineated, that follows the paſſage I have quoted.

This ſolemn author then, in his third argument for the immortality of the ſoul, drops the queſtion, whether it be immaterial or not, on which he had pronounced ſo dogmatically a few pages before, and aſks, only by way of objection, "whe-"ther that ſoul, be it what it will, which ceaſes to think when the body is not

"fitly

It is hard to ſay, whether in theſe and other common-place reaſonings on the ſame ſubject there is more preſumption, or trifling

" fitly diſpoſed, can think at all when the body is quite diſſolved ?" Now to this queſtion he propoſes to give an anſwer, of which he ſpeaks modeſtly and diffidently, and yet preſumes it may be turned " even into an argument for the im-" mortality of the ſoul."

THIS anſwer comes out to be nothing better than a ſtring of ſuppoſitions. He, who ſays that the power of thinking is a faculty ſuperadded by the Creator to certain ſyſtems of matter in various degrees and proportions, aſſumes indeed, but he aſſumes conformably to the phaenomena. He, who ſays that thought is the eſſence of a diſtinct ſubſtance united to certain ſyſtems of matter, becauſe he cannot conceive how matter can be made capable of thinking even by omnipotence, aſſumes without any ſupport from the phaenomena, nay even in an apparent contradiction to them. Every inſtance, therefore, of this contradiction is a good argument in favor of the former, and againſt the latter opinion. No matter. The pneumatic philoſopher proceeds as if his firſt propoſition was proved, and he had only a few difficulties to remove rather than objections to refute, as if his doctrine wanted only to be explained. He explains it no more, than he invented it, on the foundation of that which actually is, but on what he thinks may be; and ſo he may argue on, if he finds men idle enough to diſpute much with him, as long as his imagination can ſupply fantaſtic ideas and notions.

THE very queſtion whether the " ſoul, which ceaſes to think when the body " is not fitly diſpoſed, can think at all when the body is quite diſſolved," ſuppoſes that there is a ſoul, that is, a diſtinct ſubſtance united to it, tho this neither has been, nor can be proved. The anſwer ſets out by ſuppoſing that this diſtinct ſubſtance is a limited being, limited, obſtructed, clogged by the body. Even here we might interrupt this licentious maker of hypotheſes, and inſiſt that it is not congruous to reaſon to aſſume that a ſubſtance, which is immaterial according to him, which has none above it except the ſubſtance of God himſelf according to St. AUSTIN, and by which we are made after the image of God according to all thoſe who maintain the ſame doctrine, for he muſt not be ſuffered to ſlide over any of his, or their extravagant aſſertions—is limited, obſtructed, clogged by that material ſubſtance by which we are allied to the beaſts of the field, and made after the image of other animals.

BUT to paſs by this, the ſoul then is " limited, it's activity and faculties being " more obſtructed and clogged at one time than another, and moſt of all in ſleep, " or a deliquium." The eyes, the two windows of it's priſon, are ſhut, and the nerves which receive the impreſſions of outward objects, and convey ſenſations to the ſoul, are benumbed. This branch of knowledge is cut off, therefore, in ſuch circumſtances, and thought cannot be exerciſed on objects that do not preſent themſelves to the ſoul. But why then is it not exerciſed on the ideas and

trifling and playing with words in a ſolemn dogmatical tone. They amount to no more than this. We metaphyſicians and ontoſophiſts

notions that the ſoul is poſſeſſed of already, in the contemplation of which it has no need of ſenſe; ſo much otherwiſe, that detached from ſenſe, and wrapped in pure intellect, the ſoul meditates, and reaſons with greater intenſeneſs and clearneſs about theſe abſtract ideas and notions?

If you aſk this queſtion, you will be anſwered by other ſuppoſitions. You will be told that the uſe of words is neceſſary even in abſtract meditation, that this ſilent language depends on memory, and that memory depends on certain tracks which are made on the brain. You will be told that theſe tracks are the characters of that book wherein the ſoul muſt read to think in this manner; and that when the characters are overcaſt by vapors, or any other way darkened, the ſoul can read them no more till the cloud is diſpelled. You may object that thinking cannot be, on this hypotheſis, the eſſence of the ſoul, or that the ſoul muſt ceaſe to be what it is every time we fall into ſound ſleep, or faint entirely into a deliquium, and return to be what it was before, every time we awake or come out of the deliquium; which differs little from aſſuming a perpetual creation of ſouls every twenty-four hours at leaſt. There is ſomething ſo very ridiculous in this notion, that I ſhould be aſhamed to mention it, if it did not follow neceſſarily that of a ſubſtance whoſe eſſence is thought and who does not always think, and if it was not of uſe to ſhew in every inſtance, as it occurs, the monſtrous abſurdities in which the reaſonings of theſe metaphyſicians are apt to terminate.

The metaphyſician we have to deal with here ſcreens himſelf from the imputation of this abſurdity, as well as he can by a change of terms. He aſſerts only that the ſoul preſerves a capacity of thinking "even in thoſe circumſtances in "which it thinks no more than if the body was deſtroyed:" And from hence he aſſumes, that "it may, and will preſerve this capacity when the body is de-"ſtroyed, cut to pieces, or mouldered to duſt." He aſſerts the firſt on the evidence of the phaenomena. He aſſumes the laſt without any poſſible evidence from them, nay with a ſtrong preſumption derived from them againſt him. Whilſt we are alive we preſerve the capacity of thinking, I ſhould rather call it the faculty; juſt as we preſerve the faculty of moving and other faculties plainly corporeal, ſubject alike to many impediments and many infirmities of the body in which the faculty of thinking has the largeſt ſhare, as it might be ſhewn in various inſtances, in that of madneſs particularly. When we are dead, all theſe faculties are dead with us: and the ſole difference that we make in our judgments of the one and the other ariſes from hence, that we imagine the capacity or faculty of thinking to belong to a ſubſtance diſtinct from the body, concerning which the phaenomena can ſhew us nothing after death; and concerning which by conſequence metaphyſicians and divines think themſelves at liberty to ſay whatever they pleaſe. You would ſmile, if you heard any one ſay, that the man who has preſerved the fa-

ontoſophiſts have fixed the eſſence of matter. It can be no other than it is repreſented in our abſtract ideas, thoſe eternal natures

culty of walking, after having loſt and recovered frequently the uſe of his legs, will for this reaſon walk eternally. But you hearken very gravely when you hear another ſay, on as little knowledge, that he will think eternally; becauſe he has preſerved the capacity of thinking, after loſing it in the whole or in part on ſo many occaſions.

How much ſoever we may deem the thinking and unthinking ſubſtance to be diſtinct in nature, ſtill it will be true that theſe aſſumed ſouls were given to inform bodies, and thereby complete the human ſyſtem. The ſyſtem would be too imperfect to anſwer any conceivable purpoſe of making it, if either of them was wanting. Without thinking, the body would be unable to begin motion, and to perform many neceſſary corporeal operations. Without a body, the ſoul would be unable to acquire the firſt elements of knowledge, the materials of thought. In ſhort, neither of them could exiſt, and act in a ſtate of total ſeparation from the other. Wollaston was ſo ſenſible of this, that he ſuppoſes it, and in order to maintain that the ſoul does not ceaſe to exiſt when the body does, notwithſtanding this admiſſion, he retails to his readers an old trite chimera of the Platonic philoſophy, which has been mentioned above. He aſſumes, that the ſoul has another body beſides this which periſhes. "Some fine vehicle that dwells with it in the "brain, and goes off with it at death." This innermoſt body, which may be compared to the ſhirt of the ſoul, receives impreſſions from the outward body, which may be compared to it's great coat: and as thoſe impreſſions of ſenſible objects are communicated to the ſhirt, ſo the ſhirt communicates them to the ſoul, who ſits enveloped in it in the brain. On the other ſide reciprocally, the ſoul being thus put into motion produces motion in the "contiguous ſpirits and nerves "by moving it's own vehicle, and ſo moves the body." When the great coat is worn out, or deſtroyed by any accident, the ſoul flies in it's ſhirt away into the open fields of heaven, and thus undreſſed as it were, the impreſſions that were made mediately by the nerves are made immediately on it: thus it becomes, "as "it were, all eye to viſible objects, and all ear to audible, and ſo on."

I might have explained this hypotheſis further, with Mr. Wollaston's help, but my patience would not ſerve me; tho he thinks it contains nothing impoſſible, and therefore nothing but what may be. Many things are, he ſays very truly, by ways which we do not, nor can underſtand. But then this plea is not to be admitted in every caſe alike; for if it was, it would go a great way to ſcreen the falſe theories which philoſophers are apt to frame both in phyſics and metaphyſics. A primum mobile, an element of fire, were names invented to ſignify things which have no exiſtence; and ſuch was the word ſoul, perhaps, in philoſophical conſideration, if we take it not for a faculty ſuperadded to the human corporeal ſyſtem, but for a diſtinct ſubſtance united to it, and cooperating with it. But metaphyſical

natures independent of God himſelf. If you ſuppoſe it modified or mixed in any ſyſtem, ſo as to be no longer inert and ſenſeleſs, it is no longer conformable to our ideas: it is therefore no longer matter, ſuch as it came out of the region of poſſibility into that of actuality; it is another ſubſtance, and muſt be called by another name. God cannot make our ideas of incogitativity to be ideas of thinking, nor our ideas of neceſſity to be ideas of acting freely. To ſuch reaſoners it would be, I think, ſufficient to ſay; learn that human knowledge is derived from exiſtence: and that to be real, it muſt be conformable to things as they exiſt. Conform your ideas, therefore, to them, and pretend no longer to controul or to determine particular exiſtence by abſtract notions. As long as matter is ſenſeleſs and inert, it is not a thinking ſubſtance, nor ought to be called ſo. But when, in any ſyſtem of it, the eſſential

metaphyſical figments impoſe longer than phyſical; becauſe there is more room for WOLLASTON's plea, and becauſe hypotheſes may be heaped on hypotheſes with leſs controul in one, than in the other.

I MIGHT add, that this figment of a ſoul, if it be a figment, received ſtrength from the ſuperſtitious theology of the heathens. Nothing can confirm and conſecrate notions, however erroneous, ſo much: and this philoſophical notion was incorporated into theology from the firſt. Legiſlators and magiſtrates, poets and prieſts, as well as philoſophers, enforced it with all their authority: and the event has been a proof of this great truth, that "the underſtanding is as ſubject to the "impreſſions of fancy, as to thoſe of vulgar notions *."

I MIGHT obſerve further how little it became WOLLASTON, who would not believe that thinking is a faculty added by the Creator to certain ſyſtems of matter; becauſe he could not reconcile this opinion to his idea of matter, tho this opinion is conformable to all the phaenomena of the mind; how little, I ſay, it became him, and muſt become any other man who reaſons in the ſame way, to urge in defence of all his hypotheſes and paradoxes, that many things are by ways which we cannot underſtand,

BUT I will detain you no longer about ſuch diſcourſe as would convince you, if you heard it at MONROE's, that the philoſopher who held it was a patient of the doctor, not yet perfectly reſtored to his ſenſes.

* BACON.

eſſential properties, extenſion, ſolidity, &c. are maintained, that ſyſtem is material ſtill, though it become a ſenſitive plant, a reaſoning elephant, or a refining metaphyſician. It would be nonſenſe to aſſert, what no man does aſſert, that the idea of incogitativity can be the idea of thinking; but it is nonſenſe, and ſomething worſe than nonſenſe, to aſſert what you aſſert, that God cannot give the faculty of thinking, a faculty in the principle of it entirely unknown to you, to ſyſtems of matter whoſe eſſential properties are ſolidity, extenſion, &c. not incogitativity. This term of negation can be no more the eſſence of matter than that other immateriality can be the eſſence of ſpirit. Our ideas of ſolidity and extenſion do not include the idea of thought, neither do they include that of motion; but they exclude neither: and the arguments you draw from the diviſibility of matter againſt it's cogitability, which you deny, might be not ill employed againſt it's mobility which you admit, as I ſuppoſe.

SECT. IX.

It has been ſaid, that this boaſted ſcience about ſoul or ſpirit has not the merit even of a good hypotheſis, tho it pretends to be demonſtrated. You may perhaps begin to think ſo. But in order to be the more convinced of this, it may not be time miſpent to reflect, before we leave the ſubject, on the ſole means we have of acquiring any knowledge of this kind, and to conſider how far theſe means can carry us in the enquiry.

That all our knowledge of corporeal ſubſtance muſt be founded in the experience we have of our own, and in the experiments and obſervations we are able to make on other bodies,

dies, will not be denied in the preſent ſtate of philoſophy. As little can it be denied, that all our knowledge of ſoul or ſpirit muſt be founded, to be real, on what every man may know by intuition of his own ſoul or ſpirit; for we cannot contemplate other ſouls, as we can other bodies. Hypotheſes may be made about either, but they muſt be made in both caſes under the ſame reſtrictions. When they are deſigned only to amuſe the mind with a ſort of analogical appearance of probability, and pretend to be nothing more than phyſical and metaphyſical romances, they are ſurely very innocent, and employ our time better at leaſt than moſt of our other amuſements do: and yet even then they muſt contain nothing that is abſolutely repugnant to the phaenomena. But when they take a more ſerious air, when they pretend to be founded in ſome knowledge and to lead to more; and, above all, when they pretend to be not ſo much hypotheſes, as demonſtrated ſyſtems; it is not enough that they be barely reconcileable to the phaenomena. The phaenomena muſt confirm them; or they muſt be rejected, on what authority ſoever they come recommended. Authority has been extended very far in theology and philoſophy from the time when theſe names were firſt aſſumed, and perhaps long before. PLATO having ſpoke in that Pythagorical rhapſody, the Timaeus, about the viſible gods, the gods made to be ſeen, "qui tales geniti ſunt ut cer-"nantur," that is, the celeſtial phaenomena, he proceeds to ſpeak of Daemons, that is, of inviſible ſpiritual natures: but of theſe he confeſſes himſelf unable to ſpeak on the ſtrength of his parts, or on his own knowledge; for which reaſon he has recourſe to tradition, and to the authority of the antients, who were born of gods, and knew their parents extremely well. "Priſcis itaque viris in hac re credendum eſt, qui diis geniti "parentes ſuos optimè noverint." Theſe men we muſt believe, he ſays, tho the things they have delivered down be not

not confirmed by concluſive nor even by probable reaſons. " Licet nec neceſſariis nec veriſimilibus rationibus eorum ora- " tio confirmetur." On ſuch reſpectable authority did the divine PLATO vend, to his own and to future ages, all the myſterious nonſenſe that PYTHAGORAS and he had imported from the Egyptian and Eaſtern ſchools of theology and philoſophy. But if this might be borne in a theology that pretends to be revealed, and ought to be ſubmitted to in one that proves itſelf to be ſo, it is intolerable in philoſophy; for in all the parts of that, in the very firſt, in natural theology, human reaſon, that is common ſenſe, is the ſole judge; and the greateſt doctor has no more right to impoſe his authority on me, than I have to impoſe mine on him. I do this juſtice therefore to PLATO; I do not believe he was in earneſt, when he ſet the example: tho I believe that many great divines and metaphyſicians have been in earneſt, when they have followed it.

IF men had conſulted the phaenomena of their own minds alone, which can alone afford us any means of acquiring knowledge of ſpirit or thinking ſubſtance, inſtead of hearkening to ſuch idle traditions, and raiſing chimaeras of their own upon thoſe of other men; if they had proceeded in the analytic method from particulars to generals, as far and no farther than the former juſtified the latter; it ſeems to me that they could ſcarce have imagined the ſubſtance of ſoul abſolutely diſtinct from that of body; nor have created an habitual reverence for an opinion ſo ill founded in appearances. They have purſued another method, which has brought them, after two or three thouſand years, to this paradoxical dilemma; they muſt either maintain the hypotheſis of two diſtinct ſubſtances, and explain in ſome tolerable manner, which they have not yet done, the union and mutual action on one another

other of unextended and extended beings; or they muſt deny the abſolute exiſtence of any thing extrinſical to the mind, and maintain that God did nothing more, when he created the world, than give a relative exiſtence to things; that is, make objects perceptible to his creatures which had exiſted eternally in the divine, and acquired then a new exiſtence in the human mind, but had no other; that he created finite ſpirits, in ſhort nothing elſe, ſpirits to perceive, but nothing to be perceived, except his eternal ideas; that there is no material world, but that the intellectual world is made perceivable by us, according to an order that God has eſtabliſhed. Was I obliged by the terrors of an inquiſition to embrace one of theſe two hypotheſes, I confeſs freely that I would embrace the laſt, ſtrange as it is, as the leaſt inconceivable in itſelf, and the moſt convenient in it's conſequences. But the method taken to frame them revolts me againſt both.

THIS method we find recommended very emphatically in ſeveral places, and on ſeveral occaſions, in the works of PLATO: and I chuſe to give it you, or at leaſt ſome general notion of it, according to the expoſition of MARSILIUS FICINUS*, his beſt interpreter and commentator. Firſt then, of bodies there are ſeveral ſorts, aethereal, that is, celeſtial; aereal, ſuch as ghoſts wear; and terreſtrial, ſuch as we wear during our lives. We cannot have experimental knowledge of the two former; and experiment and obſervation are not proper means of arriving at knowledge even of the latter. Corporeal objects dim the ſight of the ſoul: to know them we muſt look off from them, and muſt not expect to diſcover any truth concerning them, unleſs we have recourſe to the ideas of things. "Niſi ad ideas confugiamus." Of ſouls in the next place, it is extremely hard to know the ſubſtance

* MARSIL. FIC. argum. Phae. & alibi.

ſtance in this life, becauſe we perceive it "ſub corporeâ ſpecie," under a corporeal appearance, and are apt to think in a corporeal manner. The ſureſt way therefore to comprehend it, is to proceed by moral purgation, and metaphyſical abſtraction. "Ideoque tutiſſimam rationem ad animam comprehen-" dendam eſſe tum moralem purgationem tum metaphyſi-" cam abſtractionem." And if all this will not do, ſome revelation is neceſſary, "opus eſt divino quodam verbo." One would think however, that it ſhould do; ſince by intenſeneſs of meditation a philoſopher may abſtract himſelf from his ſenſes and his imagination, according to PLATO, and employ his mind wholly about incorporeal natures and ideas to which it becomes united by this abſtraction; and ſince in this ſtate he alone has wiſdom and knowledge, tho being as it were out of himſelf, "extra ſe poſitus," he is laughed at by the vulgar as a madman. You ſmile perhaps; but reflect a little on the ſyſtems (ſo we will call them civilly for once) of ſome modern philoſophers about body as well as ſpirit, on their method of reaſoning and on the dogmatical language they hold upon ſubjects the moſt remote from human apprehenſion; and you will not think that I do them any wrong in comparing their manner of philoſophiſing with that of the founder of the academy, his myſterious maſters the Egyptians, or his enthuſiaſtical ſcholars the latter Platoniſts. Let us then leave thoſe, who think themſelves able to arrive at ſuperior knowledge by ſome ſuch methods as theſe, to be happy in their own imaginations, and let us rather pity than blame them, when they treat our real tho imperfect knowledge as a chimaera, and the chimaeras of their own brains as real knowledge. But then let theſe purged, theſe purified, theſe illuminated ſpirits, who have a conſtant communication by ideas with the ſupreme ſpirit, allow us, who have none of theſe advantages, nor any conception that they have them, to

purſue quietly the acquiſition of a little human knowledge by human means.

We have clear and determinate ideas of what we call body by ſenſation, and of what we call ſpirit by reflection: or to avoid cavil as much as may be, without giving up common ſenſe, we have ſuch ideas by ſenſation as the various powers of that ſubſtance, called body, are ordained to produce in us, and we have ſuch ideas by reflection as the inward operations of that which we call ſpirit, be it ſubſtance or faculty, excite in us. We are able to contemplate theſe ideas naked, if I may ſay ſo, and ſtripped of the dreſs of words. How far then does the contemplation of theſe ideas carry us towards knowledge, or how high do we riſe by it in the ſcale of probability? That is the only queſtion which a reaſonable man, who is content to know, as God has made him capable of knowing, will aſk. The anſwer muſt be to this effect. Philoſophers talk of matter and ſpirit, as if they had a thorough acquaintance with both, when in truth they know nothing of either beyond a few phaenomena inſufficient to frame any hypotheſis. The atomical ſyſtem, which Leucippus took perhaps from other philoſophers, which Democritus took from Leucippus to improve it, and which Epicurus took from Democritus to corrupt it, has been revived with great reaſon. But yet we muſt not talk of matter as if we knew it in theſe firſt elements or principles of it, and abſtractedly from all the forms under which we perceive it. Theſe original particles, in which the nature of it conſiſts, and on which the conſtitution of it under all it's forms depends, are far beyond the reach of any analyſe we can make, of any knowledge we can acquire. Whether theſe particles be uniform and homogeneous, or whether they be of different kinds, different even in ſubſtance as well as in ſize, figure, and other circumſtances

or

or accidents, is as much unknown to the proudeſt dogmatiſt, as to you or to me. Nay, whether many of theſe original particles may not be endued with active principles, ſuch, for inſtance, as cauſe fermentation in ſome and coheſion in all bodies, is a point that none of them can determine: and yet one need not ſcruple to ſay, that the affirmative may be aſſumed on better grounds than their hypotheſes are, notwithſtanding the repeated din of inert, ſenſeleſs, ſtupid, paſſive, and ſimilar epithets, which they ring in our ears whenever they ſpeak of body or matter. Their whole diſcourſe, when they go beyond a few apparent properties, whereof we are fitted to have ideas, and which have been already diſcovered, is one continued petition of principle, and grows as nauſeous tho not ſo mortal as the crambe of JUVENAL.

BODY or matter is compounded and wrought into various ſyſtems before it becomes ſenſible to us. We behold ſome that are indeed inert, ſenſeleſs, ſtupid and in appearance merely paſſive. But we behold others that have vegetative life, juices and ſpirits that circulate and ferment in them, by which they are nouriſhed and by which they grow. They have not the power of beginning motion, but motion which is renewed in them after it has entirely ceaſed, and both by cauſes as material as themſelves, continues in them, and they live, and move, and propagate their ſpecies; till their frame is diſſolved by age or ſickneſs, or ſome external violence. We behold others again that have animal life, and that go from reſt to motion and from motion to reſt, independently of any outward cauſe that determines ſuch effects by a phyſical neceſſity in this caſe, as we obſerve to be done in the former. We diſcover, by the help of microſcopes, an immenſe variety of theſe animal ſyſtems. Where they begin, God alone their Creator and ours can tell: and it would be

be as impertinent to aſk this queſtion, as it is to demand what " the degree of fineneſs, or the alteration in the ſituation of it's " parts, is, at which matter may begin to find itſelf alive and " cogitative *?" They who defend ſo ill their own hypotheſes would do well to be leſs dogmatical and ſupercilious when they attack thoſe that ſeem probable to other men. Whereever theſe animal ſyſtems begin, their beginning and the principles of their compoſition are alike unknown. All we know is that they are, and all we ſuppoſe is that they are material beings to which no Carteſian nor any philoſopher, who does not deny the exiſtence of body, will, I preſume, object.

As theſe animal ſyſtems come to be more and more ſenſible to us, and as our means and opportunities of obſerving them encreaſe, we diſcover in them, and according to their different ſpecies, or even among individuals of the ſame ſpecies, in ſome more, in others fewer, of the ſame appearances, that denote a power of thinking in us from the loweſt conceivable degrees of it, up to ſuch as are not far, if at all remote, from thoſe in which ſome men enjoy it. I ſay ſome men, becauſe I think it indiſputable that the diſtance between the intellectual faculties of different men is often greater than that between the ſame faculties in ſome men and ſome other animals.

If now we are to form a general concluſion from all theſe concurrent phaenomena, without any further reaſoning about them than ſuch as they juſtify, what muſt it be? It muſt be plainly this, that there is in the whole animal kind one intellectual ſpring common to every ſpecies, but vaſtly diſtinguiſhed in it's effects; that tho it appears to be the ſame ſpring in all, yet it ſeems to be differently tempered, and to have more

* Rel. of nat. delin. §. 9.

elaſticity and force in ſome and leſs in others; and that beſides this, the apparent difference in the conſtitutions and organizations of animals, ſeems to account for the different determinations of it's motion, and the ſurpriſing variety of it's effects. If the plain man who has formed theſe general concluſions, on particular obſervations and experiments, ſhould be aſked the trite queſtion, whether he conceives that matter, however figured or moved, ſubtilized or fermented, can be pleaſure or pain, deſire or averſion? To anſwer truly, I think, he muſt anſwer that he cannot conceive matter to be any of theſe, nor even how a ſyſtem of matter becomes capable of having any ideas, affections or paſſions, any more than he can conceive how a multitude of other phaenomena can be as he perceives evidently that they are. But that he has puſhed his enquiry as far as the true means of enquiry are open, that is, as far as the phaenomena can guide him; that he cannot draw any other concluſion from them than this, that all animal ſyſtems are material; and that he muſt content himſelf with this, unleſs ſome other can be drawn from the ſame phaenomena.

The philoſopher is not ſo content. If phyſics will not ſerve his purpoſe, metaphyſics and theology ſhall. "Ad ideas "confugiendum eſt;" and ſince the particular phaenomena of the whole animal ſyſtem lead to a concluſion he diſlikes, he reſolves not to be determined by them, but to reaſon, without regard to them, from his own abſtract ideas; and from theſe he draws a concluſion as inconceivable as that which he rejects. The plain man owns himſelf unable to explain how material ſyſtems think, tho their phaenomena are ſo many poſitive proofs that oblige him to conclude they have this power. The philoſopher decides negatively on ſuch proofs as his abſtract ideas of matter furniſh to him, that no ſyſtem of matter thinks, that omnipotence cannot any way

way communicate to it the faculty of thinking, and positively that whatever thinks is a simple being, immaterial, indissoluble, and therefore immortal. The plain man has recourse once more to the phaenomena, and objects that we must be reduced, if we receive this hypothesis, to assert that other animals besides men have immaterial and immortal souls; or, that no other animal, besides man, has the faculty of thinking. The immaterialist is far from contending for the first: and the materialist cannot admit the latter, in opposition to the phaenomena; in opposition to which no hypothesis is admissible.

There seem to be but three ways to get rid of this objection. Each of them has been tried, and each of them is a different hypothesis. By one, this knot and a multitude of others are cut asunder very easily; for it consists in asserting roundly that there is no such thing as material systems, nor matter, nor any existence out of mind eternal or created, as we have mentioned already. All observations of the phaenomena which suppose such an existence, are therefore deceptions according to this scheme: and it would be ridiculous to attempt proving that other animals, besides men, think, to one who denies that these animals exist, or even that he and the man who should dispute with him exist, in the sense in which existence is universally understood.

As these philosophers take body from men, there are others who not only take thought from the rest of the animal kind, but reduce them to the state of automates or machines. Whether Des Cartes advanced this paradox in good earnest, and really doubted whether other animals had a power of thinking or not, it is impossible to determine. That he should be in earnest it is hard to conceive; since any reasons of doubt

which he might have in this caſe would have been reaſons of doubt in the caſe of other men, who may give more, but cannot give more evident ſigns of thought, than their fellow-creatures. But we may perſuade ourſelves very eaſily, that MALEBRANCHE maintained the ſame paradox in very good earneſt; ſince it has a nearer and a more favorable relation to his own whimſies, and to ſome theological tenets, than is commonly obſerved. Thus the ſame thing which happens to liars happens often to men who ſeek the truth very ſincerely; but imagine too lightly that they have found it when they have only made an hypotheſis, and that they know things as they are when they only gueſs how they may be. One hypotheſis wants another to ſupport it, that a third, and ſo on, till philoſophy grows to be what it has always been, an aggregate of motley ſyſtems, partly real and partly fantaſtical.

THESE two paradoxes have not maintained much credit in the world. Men continue to be perſuaded that there are mountains and rivers, and trees and animals: and I apprehend that this vulgar notion will continue to prevail. Juſt ſo they believe ſtill that there is ſome difference between the pariſh clock and the town bull; that the ſhepherd's dog perceives and wills, as really as the ſhepherd himſelf; and that the philoſopher's horſe knows the way to his ſtable, as well as the philoſopher knows the way to his ſtudy. They will not be ſufficient, therefore, to remove the plain man's objection, and recourſe muſt be had to the third hypotheſis which compounds matters a little, and is a little more plauſible in appearance, but in reality leſs defenſible than that of DES CARTES: one ſtands in direct oppoſition to the phaenomena, but the other contradicts itſelf. The hypotheſis I mean, is that which aſſumes a rational ſoul in man alone, and a ſenſitive ſoul alone in all other animals.

He who ſhould have read all that has been written on this ſubject, from Aristotle down to the author of the praeeſtabliſhed harmony, and who ſhould have meditated ever ſo long on theſe writings, would find it a very hard taſk to give a full, and an impracticable one to give an intelligible account of what he had found there; ſo confuſed, ſo obſcure is this labyrinth of hypotheſes. I ſhall not ſet my foot far into it; for philoſophers, according to their uſual practice, have reaſoned and diſputed in this caſe to no other purpoſe than to render diffuſe and intricate what lies in the narroweſt compaſs, and has really no difficulty in it, if we know where to ſtop.

In order to avoid that paradox, which ſome at leaſt of the Stoicians held, and which Gomez Pereyra and Des Cartes renewed in the ſixteenth and ſeventeenth centuries; and to maintain at the ſame time the ſuperiority of the human nature, not only in degree but in kind too, this notion of a ſenſitive ſoul has been advanced, or rather continued and enforced; for it deſcends to us from the ſame ſprings from which ſo many other abſurdities have flowed. The diſtinction between ſouls and images of ſouls, "animae et animarum ſimulacra," might lead to it. But there are other paſſages in Plato that favor it more directly. Aristotle ſpoke leſs figuratively and more clearly on the ſubject, for he beſtowed ſenſation, memory, and the paſſions on other animals, and reaſon on man excluſively. On this principle the ſchoolmen and all the peripateticians have proceeded, and it is at this hour the reigning opinion among ſound divines. There cannot be however a more unſound doctrine, if extreme abſurdity can render it ſo; for either they who maintain it ſuppoſe the ſenſitive ſoul to be a middle being between body and ſpirit, or they do not. If they ſuppoſe it ſo, they ſuppoſe it to be neither

extended

extended nor unextended, neither material nor immaterial, and we have no idea of any other ſubſtance. If they do not ſuppoſe it to be ſo, they affirm, without knowing it, what they mean to deny; for they muſt admit (unleſs philoſophers have a right to contradict the inward as well as the outward phaenomena, and intuitive as well as ſenſitive knowledge) that the power of thinking, that very power whereof we are conſcious, is as neceſſary to the perception of the ſlighteſt ſenſation as it is to geometrical reaſoning. There is no conceivable difference in the faculty or power: the ſole difference ariſes from the degree in which it is, or can be exerted. It has been aſked, will you deny the power of God to create a ſubſtance capable of ſenſation only, and not of reaſon? No man living has higher notions of the divine omnipotence, nor carries them further than I do. An argument fairly drawn from the power of God will determine me at any time and on any occaſion; tho it does not determine theſe men who inſiſt ſo much upon it, when they hope to make it ſerve their purpoſe by an unfair application of it. I am perſuaded that God can make material ſyſtems capable of thought, not only becauſe I muſt renounce one of the kinds of knowledge that he has given me, and the firſt tho not the principal in the order of knowing, or admit that he has done ſo: but becauſe the original principles and many of the properties of matter being alike unknown to me, he has not ſhewn me that it implies any contradiction to aſſert a material thinking ſubſtance. This now, which implies no contradiction, except it be with their precarious hypothetical ideas, theſe great aſſerters of the divine power deny. But at the ſame time they draw another argument unfairly from this very power, by aſſigning it as the cauſe of an effect which does manifeſtly imply contradiction. It implies contradiction manifeſtly, to ſay that a ſubſtance capable of thought by it's nature, in one degree or inſtance, is by it's nature incapable of it in another.

God may limit the exercise of this power, no doubt, in his creatures variously, according to their different organizations, or to the imperceptible differences that there may be in the atoms that compose their bodies, or by other causes absolutely inconceivable. This happens to other animals: it happens to men, and the largest understanding is limited in the exercise of it's mental faculties. But a nature capable of sensation, that is of perception, that is of thought (to say nothing of spontaneous motion, of memory, nor of the passions) cannot be incapable of another mode of thinking, any more than finite extension can be capable of one figure alone, or a piece of wax that receives the impression of one seal cannot receive that of another.

We may apply very justly to those who have maintained the doctrine of sensitive and rational souls, and to those who have made new hypotheses concerning them, as well as concerning the apparent reciprocal action of body and mind, what Bacon says of the Greek philosophers, "impetu tantum intellectûs usi sunt, regulam non adhibuerunt; sed omnia in meditatione acri et mentis volutatione et agitatione perpetuâ posuerunt." It must be confessed that some of the moderns have been guilty of this as well as the antients, and, I think, with less excuse; because experimental philosophy has been more in use, and the means of acquiring knowledge of this kind have been more common in our days. Notwithstanding this, we have seen men of the greatest name neglect sometimes entirely, at their first setting out to enquire into the nature of things spiritual or corporeal, an exact and sufficient observation of the phaenomena; and still oftener, contenting themselves with a transient view of particulars, hurry on to general knowledge according to the natural propensity of the human mind, without having this rule, if I may

may ſay ſo, in their hands; or elſe bending it to their abſtract notions, inſtead of ſquaring theſe ſcrupulouſly by it. It ſeems that the great author himſelf, whoſe cenſure I have juſt quoted, does ſomething of this kind in his fourth book of the augmentation of ſcience, where he makes a diſtinction between rational and ſenſitive ſouls. The latter he affirms to be a material ſubſtance, "planè ſubſtantia corporea cenſenda eſt," without perceiving that this cannot be, unleſs matter can be made capable of thinking. This ſoul he aſſigns to brutes, according to the received notion. According to the ſame, he ſuppoſes the rational to be a ſuperior ſoul in men, without perceiving that the ſuppoſition of theſe two ſouls is as abſurd, as that of an upper and lower part in the ſame ſimple and indiviſible being. He concludes by hinting that the ſenſitive ſoul in man may be conſidered as confounded with and loſt in the rational, "ipſa anima rationalis et ſpiritus potius appellatione quam animae indigitari poſſit," without perceiving that we may juſt as well confound the rational with the ſenſitive, as the ſenſitive with the rational ſoul, and that if nothing can think which is material, that which thinks in other animals muſt be immaterial; or if any thing can think which is material, that there is no pretence to conclude that which thinks in man to be immaterial. I am afraid, therefore, that the inquiſition which he recommends in this place, and which ſeemed to him to be almoſt wanting, "quaſi deſiderari videtur," muſt have been purſued on his principles under the influence, not of one, but of all the four kinds of falſe ideas and notions the "idola tribûs, ſpecûs, "fori, et theatri," which he has named, not without ſome of the affectation prevalent in his age; and which muſt in all ages, render it hard for truth to enter into the mind, and be apt to diſturb the progreſs of it when it is there.

This hypotheſis, and the others of freſher invention, are like the armed men of Cadmus; they kill one another: not one ſurvives the reſt. Affectation of ſuperior genius and knowledge has decoyed men, no doubt, into theſe ſcenes of fantaſtical ideas and notions: but it muſt be confeſſed, that they have been forced into them likewiſe, in ſome degree, both by intereſt, another intereſt than that of truth, and by invincible prejudice. There are certain opinions fixed by authority; an authority that deſerved no reſpect in it's original, and that could never have impoſed by itſelf, but one that cuſtom renders ſacred, and that acquires by ſubſequent authorities, and by circumſtances foreign to it, an importance, in the whole, or in part, which nothing elſe could have communicated to it. My lord Bacon himſelf obſerves to this purpoſe, and he might have applied the obſervation to himſelf on this and other occaſions, that the greateſt genii have ſuffered violence in all ages; whilſt out of regard to their own characters they have ſubmitted to the judgment of their age, and of the populace: ſo that time, like a river, has brought down light and tumid error, whilſt ſolid and weighty truth is ſunk to the bottom and is dived for by few. Thus the notions that prevail about ſoul, ſpiritual ſubſtance and ſpiritual operations and things, took their riſe in ſchools where ſuch doctrines were taught as men would be ſent to Bedlam for teaching at this day. Their inward doctrine, for they had two, might be more reaſonable, perhaps, but we cannot wonder if that which was taught to a few, and which the few kept ſecret, was ſoon loſt; whilſt the outward doctrine, which was taught to whole nations, and glared with ſymbols, allegories and parables, or philoſophical fables, was preſerved. Some of theſe doctrines are come down to us: and it is probable that they have loſt nothing of their primitive extravagance in the

the writings of PLATO, through which they have been conveyed principally; ſince there never was a more wild or leſs conſiſtent author in proſe or verſe.

IN the confuſion of fantaſtical ideas and notions which the introduction of the Platonic philoſophy into chriſtianity occaſioned or increaſed, as I ſhall ſhew at large hereafter and on more occaſions than one, that of a material ſoul ſeems to have prevailed at firſt; at leaſt it is certain that the moſt zealous writers for chriſtianity maintained it, or ſuppoſed it. The notion, however, of it's immateriality, was ſoon and more generally eſtabliſhed. PLATO, their great maſter in metaphyſical pneumatics, gave them in his vague and figurative manner of writing ſufficient foundation for either of theſe opinions: and the laſt ſeemed the moſt favorable to that of the immortality of the ſoul. From that time to this, whoever attacks one is ſuppoſed to attack the other, and is clamored againſt, accordingly, by every one who affects a ſtrict orthodoxy, without obſerving, or perhaps tho he does obſerve, that the opinion of the ſoul's immateriality adds no ſtrength to that of it's immortality; nay, that by reſting it too much on the former, they weaken the latter, and build on a principle which they can never make intelligible, when they might aſſume another very intelligible and quite ſufficient for their purpoſe. Now theſe opinions being thus united, their union being confirmed, by the authority of the whole chriſtian church, and the belief of it inculcated by the proceſs of education, the ideas of immateriality and immortality become ſo intimately aſſociated in the minds of men, that many can no longer ſeparate them when they commence philoſophers; and that thoſe, who ſee that if immateriality may be ſaid to imply immortality, it will not follow that immortality, in this caſe, implies neceſſarily immateriality, chuſe rather to keep terms with error than paſs

for heterodox. Thus prejudice and intereſt conſpire to put philoſophers under a neceſſity of maintaining that the ſoul is an immaterial being, and, in order to maintain it, of inventing the moſt extravagant hypotheſes. When they have once agreed that twice two make five, they may well aſſert that twice four make ten.

The plain man, a much better philoſopher in the true ſenſe of the word, keeps out of this confuſion; for he puſhes his enquiries no further than the phaenomena lead him, nor preſumes to affirm any propoſition which is not ſuggeſted and confirmed by them. They do not lead him far in his enquiries about ſpirit, but they lead him ſurely. Corporeal nature affords men a fund of knowledge, ſuch as it is, which they can never exhauſt. We acquire our firſt ideas from thence, and by induſtry and experiment it is in our power to acquire more and to improve this kind of knowledge daily. How much it is ſo appears in the vaſt improvements that have been made ſince experimental philoſophy has been cultivated. The plain man will be apt to aſk why a proportionable improvement has not been made in that knowledge which is called metaphyſical? And I think he will give himſelf this plain anſwer, that men have in one caſe means in their power that are proportioned to their ends in ſome degree, and that they have them not in the other in any degree, tho they proceed fantaſtically as if they had. That there are corporeal natures we have ſenſitive knowledge. That there are ſpiritual natures, diſtinct from all theſe, we have no knowledge at all. We only infer that there are ſuch, becauſe we know that we think, and are not able to conceive how material ſyſtems can think. We are conſcious of certain modes of thinking, of certain faculties and operations of what we call mind, and of certain inward emotions which we aſcribe to the mind

and which we call affections and paſſions. This is ſome degree of knowledge, no doubt, and it might be improved to conduct better our underſtandings and our lives too. But then the principles of it, the mental phaenomena, are few; and, beyond thoſe that are obvious to immediate reflection, there are none to be diſcovered. There are neither microſcopes nor teleſcopes to aſſiſt our inward ſight, and neither geometry nor algebra can be of any real uſe in this part of natural philoſophy: whereas, in the other, the vaſt ſcene of corporeal nature, which will never be quite opened, is always opening to human induſtry. We diſcover frequently new phaenomena, or we correct and improve our former obſervations: and every ſtep of this kind is an advancement of ſcience. Theſe reflections may ſerve to explain how it has come to paſs that philoſophers have made ſuch a mighty progreſs in the knowledge of corporeal nature, even within little more than a century; whereas their knowledge of ſpiritual nature is no greater now than it was three thouſand years ago, and than it will be three thouſand years hence, if the generations of men continue ſo long.

Men were conſcious, ever ſince their race exiſted, that there is an active thinking principle in their compoſition: and the firſt reflection they made, as ſoon as they began to reflect on what paſſes within them, could not fail to be this, that there is a mutual influence of body on mind which ſhews itſelf firſt, and of mind on body which appears a little later. With this knowledge men of common ſenſe have contented themſelves in all ages; whilſt philoſophers, thoſe men of uncommon ſenſe, have filled their own heads and the heads of all who have hearkened to them, in every age, with fantaſtical ideas and notions, on which they have erected hypotheſes repugnant to one another as well as to the phaenomena.

It would be aſtoniſhing, if it was not ſo common, to ſee men advance hypotheſes ſometimes with no regard, and often with very little, to thoſe phaenomena whereof we are able to acquire ſenſitive knowledge alone: but that they ſhould do the ſame thing in caſes, where every man has the ſame intuitive knowledge of the phaenomena, might be deemed impoſſible; and yet both are true. The diſtinction between ſenſitive and rational ſouls, and the immateriality of the latter, had been long eſtabliſhed: and the ſchoolmen, who ſpun their cobwebs of philoſophy as well as theology out of their own brains, had ſettled moſt accurately the bounds of each, when DES CARTES aroſe: a great genius ſurely. The French, a little like the Greeks, "qui ſua tantum mirantur," affect to ſpeak of him as if he had firſt diſpelled the miſts of antient philoſophy, and taught mankind both to enquire and to reaſon. But our VERULAM, as great a luminary as he, perhaps a greater, one more uſeful certainly in the advancement of knowledge, had appeared before him to diſpel theſe miſts and to put the clue of experiment into our hands; to deride contentious logic, and to diſtinguiſh, between fantaſtical and real, the knowledge men had, and the knowledge they wanted, in every branch of human ſcience. The Engliſh and the French ſun both had their ſpots: and if they diſpelled ſome miſts, they raiſed others. The great obligation we have to them is, that they ſet us in the way of diſcovering their errors, as they had diſcovered thoſe of other philoſophers.

DES CARTES ſaw what the ſchoolmen had not ſeen, that a ſenſitive ſoul capable of all the functions and endued with all the faculties that they or their maſter ARISTOTLE allowed to belong to it, muſt be capable of thinking by it's nature, and therefore in every reſpect as well as theſe; and that all their diſtinctions were without differences, and mere arbitrary

ſup-

ſuppoſitions. If he had ſtopped here, he had defeated them and not expoſed himſelf to be defeated in his turn. But it did not become the majeſty of his philoſophy to leave any thing unaccounted for, how deeply ſoever hid, to ſpeak like PLINY, in the majeſty of nature. He therefore aſſumed two ſubſtances, the extended and the thinking ſubſtance. But as ſoon as he had done ſo, two difficulties preſented themſelves; one ariſing from the preciſe definition he had given of the ſoul, more obviouſly at leaſt, if not more ſtrongly, than from the vague notions of the peripateticians; and the other concerning the mutual action of mind on body, and of body on mind, ariſing as obviouſly and as ſtrongly from his as from the common hypotheſis, which were in effect, as to the rational ſoul, the ſame. DES CARTES, therefore, thought fit to make two other aſſumptions; one, that ſince beaſts muſt either not think at all, or have ſouls like men, whoſe eſſence is thought, they ſhould have no ſouls at all, but be reduced to be material automates. Such he made them: and ſuch they continue among his diſciples, as far as it is neceſſary they ſhould be ſuch to make his ſyſtem conſiſtent with that of chriſtian divines. It is, in truth, more favorable to them than their own; for beſides other abſurdities that attend the notion of a ſenſitive ſoul, the perpetual creation and annihilation of ſo many ſouls, as all the animals and inſects of the world require, was a conſequence that formed an objection the more againſt the notion. DES CARTES ſweeped all theſe ſouls away at once, and the objection with them. The other aſſumption that this philoſopher made, by the plenitude of his power in hypotheſis, was this; that ſince he had eſtabliſhed an heterogeneity between the ſoul and the body, more abſolute than that which there ſeemed to be whilſt a ſenſitive ſoul was placed like a mid-

dle being between them, and ſince their mutual operations on one another became conſequently more inconceivable than ever, this reciprocal action ſhould be no longer admitted, however conſcious of it men might imagine themſelves to be. Volition, for inſtance, is made by this Carteſian hypotheſis the occaſional, not the efficient, cauſe of the motion of body: and the impreſſion of an outward object on our organs is made the occaſional, not the efficient, cauſe of the ſenſation that our minds perceive. God is the ſole efficient cauſe in all theſe caſes. He acts directly and immediately according to the laws on which he has eſtabliſhed this ſtrange union between ſoul and body. A ſtrange union it muſt needs be! and one would be tempted almoſt to think, that it is indifferent whether the ſoul reſides in the body it is ſuppoſed to inform, or any where elſe; ſince, united as they are, there is no immediate intercourſe between them, nor any other than that which is carried on mediately by the ſupreme Being, who is every where preſent, and may therefore be determined to act by a mind on a body, and by a body on a mind, how remote ſoever from one another. If we ſpeak with the vulgar, with whom it is more reaſonable to ſpeak and to think too, than with philoſophers, on ſome occaſions, we muſt ſay that the death of PYRRHUS was the effect of a tile falling caſually on his head. But if we ſpeak with the Carteſians; we muſt ſay that the paſſing of PYRRHUS before the old woman's window was the occaſion which determined God to make her ſee him; that on this ſecond occaſion, the ſight of him, God impreſſed a ſentiment of anger and vengeance on the old woman's ſoul; that on this third occaſion, the ſentiment of anger in the old woman's ſoul, God moved her arm to throw the tile; and that on this fourth occaſion, the falling of the tile, God broke the ſkull of this fighting king of EPIRUS. This extravagant hypotheſis would provoke laughter, if it

it did not provoke horror, as I think it must in the mind of every sincere theist *.

The makers of hypotheses have not stopped here. Leibnitz arose after Des Cartes, and if the second did not equal the first in real, he outdid him and every other philosopher in fantastical knowledge. He rejected the old opinion, that the soul and body are so constituted and so united by God as to influence and to act really on one another. He rejected that of

* Since there are those who dogmatize boldly about God's manner of being, and of knowing, it is no wonder that there should be those who dogmatize also about his manner of causing, and about the oeconomy of his providence in the government of the world. When they assume particular providences, the instances they bring are often ridiculous: when they speak in general of occasional causes, the instances of these, which force themselves upon the mind, must needs raise horror in every man who believes a God. These doctrines are impertinent in their origin, and abominable in their consequences. If Des Cartes had not made, on his clear and distinct ideas, and his lively inward sentiment, such definitions as could not be reconciled to the universal experience of mankind, he would have been under no difficulty, except that of owning his ignorance, in a case wherein every other philosopher was not less ignorant than he. But rather than not make a new hypothesis without a sufficient regard to the phaenomena first, and rather than not maintain it even against them afterwards, the supreme being was brought down, "sicut Deus in machinâ," to deliver this puzzled philosopher out of the perplexity wherein he had involved himself. I would not think of God at all, tho he ought to be always present to our thoughts; I would refuse to acknowledge and adore him in the contemplation of his works, tho I do it from the bottom of my heart, much sooner than I would look on him as the immediate efficient cause of every sensation of human minds and every action of human bodies. Shall I believe that it is God who impresses those frantic sentiments of devotion, which an Indian idolater feels on the sight of his idol, and who determines the body of this wretch, on the occasion of these sentiments, to fall under the wheels of the processional car, and be crushed to death? Shall I believe that it is God who moves the arm of a parricide when he plunges a dagger into his father's heart, or that of some low rogue when he picks a pocket? The consequences are horrible: and an hypothesis that should lead to them, even less directly than this of Des Cartes does, would deserve to be rejected with the utmost indignation. Many of the most extravagant opinions entertained by the Heathen were capable of being reconciled to an awful sense of the monarchy of a supreme Being. Such opinions as these cannot be so: and Christian philosophers and divines have done more to debase our notions of this Being, than all the doctors of polytheism.

of the French philoſopher likewiſe, which has been juſt mentioned. He did not proſtitute the divine agency by making God the immediate efficient cauſe of every effect that body ſeems to have on mind and mind on body, as they happen in the human ſyſtem. But he employed the divine power and wiſdom in another manner, and once for all as it were. According to him, every ſoul has a certain ſeries of perceptions, deſires, volitions, &c. Every body a certain ſeries of motions that are determined by the mechanical diſpoſitions of the machine, combined with the various impreſſions of outward objects that may be made on it. I do not enter into the difference he makes between the human ſyſtem, and the general animal ſyſtem in which he ſuppoſes that the ſame ſouls have been united to the ſame organized bodies from the creation, and that theſe animals do not, properly ſpeaking, die. In the reſpect in which I quote this wonderful hypotheſis here, the caſe of all theſe ſyſtems is the ſame. In every one of them the ſoul and body do not correſpond becauſe they are united, but they are united becauſe they correſponded by a praeeſtabliſhed harmony antecedent to their union, and in which LEIBNITZ found, no doubt, that ſufficient reaſon, which is in all caſes the reaſon that the hypotheſis requires. Soul and body are united like two tallies that fitted one another before their union; but with this difference, which makes the metaphyſical caſe the ſtronger, they were ſo fitted ſeparately and independantly of one another. BOUNCE felt pain when ſhe was kicked, if BOUNCE was ever kicked: and ſo ſhe would have felt it, if ſhe had had no body at all in the ſame moment. A fair day invited you to walk in your garden; BOUNCE galloped after you: and ſo you both would have done, if you had had no ſouls at all. This hypotheſis gives me no horror: and every time it comes into my thoughts, I laugh as if I was at a puppet ſhew.

THAT

THAT of father MALEBRANCHE muſt not be forgot in this place. It ſtands between the other two in one reſpect: it is neither ſo horrible as the firſt, nor ſo comical as the laſt. But it is I think the ſtrongeſt inſtance that can be produced of a fine genius wrought up to a degree of madneſs by metaphyſical ſpeculation and hypothetical enthuſiaſm, unleſs the African biſhop St. AUSTIN may be compared with him. MALEBRANCHE then ſpecifies certain manners in which we may have ideas of outward objects, the firſt of which is agreeable to the phaenomena and to the common notion derived from them, and the laſt of which is his own wild hypotheſis. He even ventures to aſſert that there is no other manner in which we can have ideas of theſe objects. The aſſertion is a bold one; ſince it aſſumes that God cannot ordain any ſyſtem of body and mind which we cannot comprehend. On this foundation he proceeds to ſhew how inſufficient all the other ways are of accounting for theſe ideas, and to introduce his own. If I was to enter into a detail of particulars it would be eaſy to ſhew, with the help of Mr. LOCKE's examination, and even without this help, that the hypotheſis conſiſts of little elſe than words that have abſolutely no meaning, than figurative expreſſions that cannot be applied to his ſubject without the utmoſt abſurdity, than inconſiſtencies and palpable contradictions. But I believe this will appear to be no unjuſt charge, even by the very little I ſhall ſay. His hypotheſis in ſhort is this. We cannot perceive any thing that is not intimately united to our ſouls. Our ſouls are unextended beings in this place, tho in another he ſays they have extenſion, a narrow one indeed; but narrow or broad it is ſtill extenſion. Now there being no proportion between the ſoul and material things, theſe cannot be united to it, nor conſequently be perceived by it. Our ſouls are indeed united to our bodies; but there is a manner of

union neceſſary to perception, and another not ſo, neither of which is explained. God, who is a ſubſtance and the only intelligible ſubſtance, is intimately united to our ſouls by his preſence. He is the place of ſpirits, as ſpace is in one ſenſe the place of bodies: and ſince he muſt have in himſelf the ideas of all the beings he has created (for without theſe ideas, that is, without our manner of knowing this philoſopher preſumes to affirm that he could not have created them) we may ſee theſe ideas in God, as he is pleaſed to ſhew them to us: but the good father having no where explained how God ſhews them to us, he leaves us in the ſame ignorance in which he found us. It has been obſerved that this hypotheſis bears ſome reſemblance to that of DEMOCRITUS, who aſſumed that our ideas are God. One idea, that which we have of God, is, I am ſure, by this hypotheſis, God himſelf; ſince it is affirmed that this idea is uncreated. The words are worth quoting.— "On "ne peut pas concevoir que l'idée d'un être infiniment par-"fait, qui eſt celle que nous avons de Dieu, ſoit quelque "choſe de crée." I might mention a multitude of other notions quite unintelligible or repugnant to our cleareſt ideas and moſt certain experience; ſuch as theſe, for inſtance, that we have the idea of infinite before we have the idea of finite, and that we think of all being before we think of any particular being; but I have ſaid enough to ſhew that altho this writer has deſtroyed the intentional ſpecies of the peripatetics (for he dwells chiefly on our ideas of ſight yet he has left it juſt as poſſible, and vaſtly more probable, that God has ordained certain ideas in the mind to be excited by certain motions of body, in a manner incomprehenſible by us, than that we ſee theſe ideas in his ſubſtance in a manner alike incomprehenſible.

I IMAGINE that the plain man is by this time pleaſed to ſee common ſenſe force men back, after a tedious round of philo-

ſophical rambles, to the very point from which he has never ſtirred; for ſo it muſt do unleſs we renounce this gift of God, in favor of human authority. The authority may be great; but the greater it is the more ſtrongly do theſe examples of error ſhew how little the greateſt, how abſurd the wiſeſt, how ignorant the moſt learned of men become, when they preſume to puſh beyond the bounds that God has ſet to human enquiries. There is ſo much warning given, the high road to knowledge is ſo direct, and the bounds of it are ſo ſtrongly marked, that they who go out of this road in the vain hope of paſſing them by a ſhorter way, as well as they who do not ſtop when they are conducted no longer by the phaenomena, but hope that metaphyſics can carry them forward when phyſics cannot, are inexcuſable.

FONTENELLE, in the elogy he made of NEWTON before the French Academy, compares DES CARTES with him. He ſays that "DES CARTES, taking a bold flight, meaned to place himſelf at the ſource of all things, and to make himſelf maſter of the firſt principles of them by ſome clear and fundamental ideas, that he might have nothing more to do than to deſcend from thence down to the phaenomena of nature as to neceſſary conſequences. He ſays that the other, more timid or more modeſt, ſet out leaning on the phaenomena, that he might by their means remount to the unknown principles of things, which he reſolved to admit whatever the chain of conſequences ſhewed them to be. One, ſays he, ſets out from what he underſtands clearly, to find the cauſe of what he ſees. The other ſets out from what he ſees, to diſcover the cauſe, be it plain or obſcure. He concludes by ſaying that the evident principles of one do not always lead him to the phaenomena ſuch as they are, and the phaenomena do not always lead the other to principles evident enough."

" enough." I have quoted this paſſage at length; becauſe, as much perplexed as it is by an artful abuſe of words, it will ſerve much better to ſet in a full light the truth I would inculcate, than to conſtitute an equality of merit in natural philoſophy between DES CARTES and NEWTON. I will make, therefore, a ſhort commentary on it. The deſign of the former, as it is here repreſented, was not a bold flight, but an extravagant undertaking. It is honor enough to the latter, that he made greater advances towards the firſt principles of things than any of thoſe who went before him: and this would have been honor enough for DES CARTES too, if he could have acquired it. This philoſopher might have clear ideas; for ideas that are falſe may be very clear perceptions in the mind, and eſpecially in the mind of one who reaſoned on a certain lively inward ſentiment of evidence, as well as on ideas really clear and diſtinct. But fundamental ideas, if there be any meaning in the word, he could have none, or none that were ſufficient in the method he purſued. Many of thoſe he employed to make himſelf maſter of the firſt principles of things could be only hypothetical, ſince he did not frame them on the phaenomena, nor connect them by the phaenomena, according to NEWTON's method; which was not timid, but wiſe as well as modeſt. What an immenſe diſtance was there between any thing he could underſtand clearly in his method, and the cauſes of what he ſaw? And how could the intermediate ideas be framed? Nay, how does it appear that he underſtood clearly the things which he is ſaid to have underſtood ſo, and from which he ſet out, when he took extenſion alone to conſtitute the eſſence of matter, and thought alone that of ſoul? Is it not plain that his evident principles were aſſumed, as they often are, purely for the ſake of what was to follow? DES CARTES might in his method invent, as he did, whatever principles imagination ſuggeſted to him, and with the oſtentatious appearance

of a compleat ſyſtem ſhew us an univerſe of his own, not of God's making. NEWTON reſolved to invent none; for he reſolved to admit ſuch only as he ſhould be led to diſcover by a chain of conſequences that carried him up to them, imperfectly perhaps but ſurely; ſuch as God made them to be, not ſuch as he gueſſed they might be. The one might and did fall into error. The other could only fall ſhort of the knowledge he ſought. He fell ſhort of it. Like COLUMBUS, he diſcovered a new world: and like him, he left the diſcovery to be purſued by others. Our knowledge of nature can ſo little be complete, that the very appearance of a complete ſyſtem is a reaſon perhaps to ſuſpect it of being etched out by fancy. Let us ſuppoſe a philoſopher to ariſe and to purſue the diſcoveries of NEWTON with equal ſucceſs. Let us ſuppoſe that, by dint of experiment and geometry, he confirms the doctrine of attraction or gravitation not as a property, not as an attribute of matter if you will, but barely as a new phaenomenon, and that he diſcovers a new kind of pulſion or ſome other phyſical cauſe of it. Attraction, which gives us now the idea of a cauſe, and which may be, notwithſtanding all the ſilly abſtract reaſoning to the contrary, a real property of matter, will give us then the idea of an effect, as this new cauſe muſt do in it's turn as ſoon as ſome further cauſe is diſcovered; and as that further cauſe muſt do likewiſe as ſoon as ſome other ſtill more remote is brought into light. Thus we ſhall be always ſeeking, and always to ſeek. But is this to recal the occult qualities of the ſchools? FONTENELLE makes himſelf, not NEWTON, ridiculous, when he does more than inſinuate this reproach in the ſame elogy. If NEWTON's philoſophy had terminated, like that of the ſcholaſtics, in occult qualities, it would not have riſen in reputation as faſt as it was underſtood: and if that of DES CARTES had not been too often, like theirs, merely hypothe-

tical and extravagantly ſo, it had not been demoliſhed on ſo many ſides as faſt as it was examined.

But I return to obſerve, that the compariſon between theſe two methods is to be applied to our reſearches about ſpiritual as well as corporeal nature, and to confirm what I have ſaid concerning them. When I conſider how little knowledge the phaenomena give us of one, and that we are not able to go by their help a ſtep beyond the firſt appearances, whilſt we extend our knowledge of the other wider and carry it higher in the order of cauſes; I am ready to think that God, who leaves us in many caſes to collect his will, as he has made us able to collect it, from his works, ſhews manifeſtly in this caſe how repugnant it is to the deſigns of his all-wiſe providence that we ſhould attempt to acquire knowledge of ſoul or ſpirit, and how conformable it is to theſe deſigns that we ſhould employ our induſtry and penetration to acquire knowledge of body, terreſtrial and celeſtial; in order to promote in general the advantages of human life, and thoſe particularly that reſult from an adoration of the ſupreme Being in a contemplation of his works.

It has been ſaid, it is a common-place topic, that Infidels, for ſuch is every one called by ſome men who does not ſubſcribe to all they advance even without proof, are deſirous to keep God at a diſtance from them, whereas they ought to conſider that it is in "him they live and move and have their "being." This charge cannot be laid juſtly againſt any man who believes a God; for a God without the attributes of an all-perfect Being cannot be the ſupreme Being, how inconſiſtently ſoever ſome of the antients might reaſon about the Divinity. For my own part, I am firmly perſuaded that there is a ſupreme Being, the fountain of all exiſtence, by the

efficacy of whoſe will the whole univerſe was made and is governed as well as preſerved; in a word, who is the firſt efficient cauſe of all things, and on whom all his creatures depend. But for this very reaſon, and becauſe I have this awful ſenſe of the ſupreme Being, I do not preſume to familiarize myſelf with him, as the men who bring this charge are apt to do. That he is the firſt efficient cauſe, I acknowledge; but I am on my guard againſt thoſe who preſume to penetrate further into the machinery of the univerſe, and the order of ſecond cauſes, than the phaenomena, that is, than his works, ſhed a light on their enquiries: or who are ſo bold as to deny the efficiency of ſecond cauſes, becauſe they are not able to account for them, and who employ the firſt cauſe on every occaſion, for whoſe action they are as little able to account. This is a common practice, and it has produced a ſort of profane and even blaſphemous enthuſiaſm in philoſophy. Des Cartes, Leibnitz, Malebranche, our friend perhaps, and all thoſe who not contented to know, what they may know in ſome degree, the things that are, make hypotheſes of what they can know in no degree, how and why theſe things are as they are; all theſe men, I ſay, have run into this practice, and have ſpread the enthuſiaſm.

Our enquiries into the nature of things and into their cauſes may be ſtopped in two different manners. They may be ſtopped or delayed by the difficulties that are in the way, or by the want of ſome of thoſe extraordinary genii that are ſent into the world, now and then, to penetrate into the ſecrets of nature, and to unfold them, as it were, by degrees. Few of theſe men ariſe. They are as rare as comets, or any of the leſs frequent phaenomena that they obſerve: and when one of them has made a certain progreſs, if he is not interrupted in it by death, it often happens that he ſtops in

in his philoſophical career, as if his ſtrength were ſpent. The courſe is long as well as difficult. Relays are neceſſary, if I may ſay ſo, to carry knowledge even to the human goal: and they are not always at hand. When enquiries are thus ſtopped, and yet the progreſs that has been made ſhews that which remains to be made, other men are encouraged to proceed: lucky incidents may happen to ſhorten their labor, and the intended diſcovery may ſeem to be only delayed. This is, I ſuppoſe, the caſe of the longitude: and we cannot doubt but that it is ſo of many other objects of philoſophical enquiry.

But our progreſs is abſolutely ſtopped, inſtead of being delayed only, in many more inſtances: and in theſe it is that all efforts are vain, and all induſtry for that reaſon impertinent. I will explain myſelf on this important point as clearly as I can. Beſides the general idea we have of an univerſal relation of cauſe and effect between the ſupreme Being and his works, all the phaenomena give us particular ideas of the ſame relation. It is evidently in the ſyſtem of divine wiſdom that they ſhould do ſo; and the uſe of it in all the affairs of human life is manifeſt. Every phaenomenon is a cauſe to us, when it is conſidered relatively to thoſe that appear to be the effects of it. Every phaenomenon is an effect to us, when it is conſidered relatively to thoſe that appear to be the cauſes of it. Thus God has willed that things ſhould be perceived by us: and if we could diſcover the whole chain up to the firſt effects of Almighty efficacy, ſuch they would appear, I preſume, to us. But humanity cannot ſoar ſo high, nor approach ſo near the throne of God; tho the ſieur De Fontenelle aſſures us, that Des Cartes took his firſt flight thither, at leaſt, ſince he directed it to the ſource and to the firſt principles of all being. As far as we can acquire ideas

of

of the phaenomena, and are able to compare them, and to proceed by induction from them, ſo far, and ſo far only, are we able to acquire the knowledge we are ſo fond of, the knowledge of cauſes, of corporeal cauſes, that I may keep to the uſual diſtinction, from the corporeal phaenomena, and of ſpiritual cauſes from the ſpiritual phaenomena. When we can acquire no more of theſe ideas we are at the end of our line of knowledge in either kind: and as this happens ſometimes after a long proceſs of enquiry, ſo it happens ſometimes at our firſt ſetting out.

But this is not all. As our diſcoveries of the phaenomena, by which we acquire ideas of ſecond cauſes, are thus variouſly limited, ſo there is another uniform and univerſal limitation of our knowledge concerning them. Whatever knowledge we acquire of apparent cauſes, we can acquire none of real cauſality, by which I mean neither mode nor modal entity, according to the jargon of the ſchools, but plainly that force, that power, that virtue whatever it be, by which one being acts on another, and becomes a cauſe. We may call this by different names, according to the different effects of it; but to know it in it's firſt principles, to know the nature of it, would be to know as God himſelf knows, and, therefore, this will be always unknown to us in cauſes that ſeem to be moſt under our inſpection, as well as in thoſe that are the moſt remote from it. This knowledge, however, is that which philoſophers mean to attain, or it is impoſſible to ſay what they mean in many caſes, and for want of which they employ ſo familiarly the firſt efficient cauſe on every turn. They are doubly ridiculous. They ſeek and pretend to diſcover cauſes when they only ſuppoſe phaenomena; and when they have diſcovered a real actual cauſe in it's effects by the phaenomena, they reject it becauſe they cannot conceive it's cauſality,

ſality, nor aſſign a ſufficient reaſon why and how it is as it is.

If all the objections to Newton's ſyſtem were anſwered; if the facts and calculations were over and over confirmed, a diſciple of Leibnitz would ſtill maintain that there was no ſufficient reaſon for attraction as an eſſential property, or as an attribute of matter: and that it could not, therefore, be admitted as a cauſe how much ſoever appearances might favor ſuch an opinion; ſince nothing muſt be admitted to exiſt unleſs philoſophers are able to ſhew the ſufficient reaſon of it's exiſtence, and to explain it's cauſality. Well might attraction be exploded by theſe philoſophers, ſince extenſion itſelf run ſome riſque, and had been certainly denied to be an eſſential property of matter, if Leibnitz had not diſcovered the ſufficient reaſon of it in non-extenſion. His monades in this ſyſtem may be called immaterial atoms, as properly as he calls ſouls immaterial automates in his ſyſtem of a pre-eſtabliſhed harmony: and his reaſoning in both will appear intelligible to none but his implicit diſciples; as his letter to the chemiſts who ſearched for the philoſopher's ſtone at Nuremberg, which procured him admiſſion into their ſociety, was intelligible to them, tho he did not underſtand it himſelf.

It will be agreed, I think, that, on the ſuppoſition I have made above, attraction would paſs, in every mind untouched by the delirium of metaphyſics, for a ſufficient cauſe; tho the ſufficient reaſon of it could not be given, nor the cauſality of it be explained. Now I would aſk whether the conſcious knowledge we have of the reciprocal action of body and mind be not founded in greater certainty than the knowledge we ſhould have of this conatus accedendi, this mutual tendency of body to body? It muſt be allowed to be ſo. I would aſk, therefore,

ſince

ſince he who ſhould deny in this caſe the attracting, gravitating power to be a property of matter would deſerve laughter inſtead of attention, as much as he did whilſt he doubted in the ſame manner of extenſion, till the ſagacious LEIBNITZ had found the ſufficient reaſon of it in non-extenſion, or rather in non-entity; I would aſk, I ſay, what he deſerves who denies the reciprocal action of mind and body, becauſe he knows no more than that there is ſuch an action, and becauſe he is unable to diſcover by what powers, and in what manner this action is produced?

IF we are conſcious that we think at all, we are conſcious that we perceive ideas, and that we will actions. We are conſcious, in one caſe, that the cauſe is without us, and the effect within us. We are equally conſcious, in the other, that the cauſe is within us, and that the effect paſſes without us. In one caſe, where we have only a ſenſitive knowledge of the cauſe, tho we have an intuitive knowledge of the effect, we may be deceived as to the former. The ſtick in the water may be ſtrait, tho we perceived it crooked: and the tower at a great diſtance from us may be ſquare, tho we perceived it round. I chuſe theſe trite examples which have been employed by all thoſe who would perſuade us to diſtruſt our ſenſes, thoſe inlets of all our knowledge, and which prove for me, on this occaſion, better than for them on the occaſion on which they urge them. We try our perceptions over and over again; we rectify by experience the deceptions to which they are liable: and all theſe perceptions, the falſe as well as the true, confirm the opinion, if it may be called merely an opinion, that they are cauſed immediately by outward objects acting on our organs, whether we will or no, in conſequence of particular principles or powers utterly unknown to us, and conformably to general laws, ſome of which we are able

to discover. In the other case, where we have intuitive knowledge of the cause, and only sensitive knowledge of the effect, either we have really no knowledge at all, and our whole system is a system of illusion, which it would be surely impious to assert; or we know that there is an immediate action or influence, which amounts to the same, of mind on body. No man in his senses ever doubted, and I am therefore persuaded that DES CARTES did not doubt, that volition, an act of the mind, determined the motion of his arms and legs whenever he moved them; tho the interest of his hypothesis, which concerns all these men much more than that of truth, obliged him to maintain the contrary, as it obliged him to advance the other paradox mentioned above concerning animal automates.

THUS have philosophers in all ages amused mankind with systems of imaginary knowledge, raised on fantastical ideas and notions, rather than confine themselves within the limits of real knowledge. Instead of fixing our opinions by evident truth, and giving the mind any solid foundation whereon to rest, they have involved us in doubts, and eternized dispute. Like NOCTAMBULES, they have staggered about, and jostled one another in their dreams. Since the torch of experimental philosophy has been lighted up, these hypothetical reasonings have been exploded, or else confined under certain conditions in all that relates to corporeal nature. But the abuse has continued in all that relates to spiritual nature: and modern philosophers, like tyrants driven out of one province, have made themselves amends, as it were, by exercising a more arbitrary power in another. The exercise of it in this deserves, however, to be restrained more than in the former. The spiritual nature of our souls, such as it is now conceived to be, such as authority, and among others that of a council, obliges that

it

it ſhould be taught, is an hypotheſis aſſumed on very precarious grounds, and in oppoſition to thoſe that are the grounds of every other allowable hypotheſis. How abſurd, therefore, is it in philoſophers to aſſume on an hypotheſis much more than they would venture to aſſume on real knowledge? How abſurd is it in the reſt of mankind to give any credit to them when they do ſo?

But there is a further objection to this proceeding drawn from the unavoidable conſequences of it, which ſhould render it odious to every man, who will not ſacrifice the integrity of theiſm to the artifice of minds fraught with vanity, and ſtimulated by curioſity. The notion, which theſe metaphyſical reaſoners have framed about the human ſoul or ſpirit, makes them ſlide eaſily and almoſt neceſſarily into that familiarity with the father of ſpirits which has been cenſured above, into concluſions little leſs, if at all leſs, than blaſphemous. Whilſt philoſophers talked of corporeal nature logically, that is, improperly, or on ſuppoſed principles of matter and motion, that is, ignorantly, they led themſelves and others into error, but not into ſuch error. Metaphyſicians and divines have this to anſwer for. Spirit is not certainly an univocal term, tho theſe men uſe it as ſuch. God is not a ſyſtem of matter; but he is not therefore a ſpirit, ſuch as we conceive ſpirits to be: he is not therefore united to our ſouls by an inconceivable preſence or union, nor even by any gradation of ſpirits up to him; for between him and the higheſt created being the diſtance muſt be ſtill infinite. Thus we ſhould think and ſpeak of God. But the men we have to do with here have accuſtomed themſelves to think in the ſame manner, and to ſpeak in the ſame ſtile, of the divine and human ſpirit, with no other difference than that of adding infinite to the one, and finite to the other. They

conceive them both to be alike immaterial beings, and ſubſtances too, as if they, or DES CARTES, who determined that there are but two ſubſtances, knew this any better than SPINOZA knew that there is but one, or than I, who believe there may be ſeveral, know how many, or what they are. It is no wonder that ſuch notions of a community, or union of ſpirits between God and man, ſhould encourage metaphyſicians and divines to draw the Deity down to their level, as their ſeveral hypotheſes require, whilſt they affect to raiſe themſelves up to his, if I may be allowed to uſe expreſſions which are no more than proper to ſignify their attempts. They do in effect ſpiritualize all the groſs conceptions of ignorant and ſuperſtitious men, that is, they ſay much the ſame things in a leſs intelligible manner: and the preſence of God, according to MALEBRANCHE, and according to MOSES, differs in little elſe. Beſides which, if we believe what they affirm, MALEBRANCHE had in the Word, or God's eternal reaſon, an inviſible, and the high prieſt of the Jews in the tabernacle a viſible Shecinah to interrogate.

AFTER all theſe reflections which I have thrown upon paper as they occurred to my thoughts, and as the frequent interruptions to which I am expoſed would give me leave, nay, after all thoſe which they ſuggeſt, or which a man of better parts, more knowledge, and more leiſure would be able to make, I doubt not but our plain man would be told that the hypotheſes which have been mentioned deſerve much reſpect, notwithſtanding all that has been ſaid againſt them, ſince they were intended to ſupport the opinion of the immateriality and immortality of the ſoul, and by conſequence of the rewards and puniſhments of a future ſtate, which are the great bonds that attach men to revealed religion. This he would be told, and he would be aſked whether he preſumes to deny the truth of

theſe doctrines in general, whatever he may think of ſome particular notions that philoſophers may have entertained concerning them? His anſwer might be to this effect, that it would be for the intereſt of theſe and ſeveral other doctrines to let them reſt on the authority of revelation; that to make them matter of philoſophical ſpeculation is to make them diſputable, and that to make them diſputable is to unfix them in the minds of men; ſince in the natural order of things revelation may confirm what philoſophy teaches; but philoſophy can give no confirmation, nor any further authority to what revelation has taught; and ſince, if it could do ſo in other caſes, it could not do it in theſe, where queſtions that have been controverted in all ages among philoſophers are concerned. He might add that, revelation a-part, he ſaw no poſitive nor determining proof of any of theſe doctrines; that all the phaenomena from our birth to our death ſeem repugnant to the immateriality and immortality of the ſoul, that he is forced to conclude with LUCRETIUS,

" ——————gigni pariter cum corpore, et unà
" Creſcere, ſentimus, pariterque ſeneſcere mentem."

that God had given him reaſon to diſtinguiſh and to judge, and external and internal ſenſe by which to perceive and to reflect; but that this very reaſon ſhewed him the abſurdity of embracing an opinion concerning body and mind which neither of theſe ſenſes ſupports; that how ſhort and imperfect ſoever the knowledge acquired by obſervation of the phaenomena might be, he was contented with it, becauſe it was knowledge acquired in God's way, that is, in the only way God has opened to our enquiries about the nature of things corporeal or ſpiritual: nay further, that if he could ſuſpect himſelf to be deceived in this way, he would be contented ſtill; he would

conclude

conclude on this and other occaſions that whether things appear to him as they are abſolutely, and ſuch as the ſupreme intelligence knows them to be, or not, they appear to him ſuch as it is fit for his nature that they ſhould appear to him. On this undoubted truth he would reſt his mind, inſtead of perplexing it about indeterminable queſtions, and of ſtruggling preſumptuouſly and vainly to know things otherwiſe than his nature and theirs admit that he ſhould know them.

On ſuch principles as theſe, tho he could not affirm, he would not deny, the immortality of the ſoul. What indeed ſhould tempt him to do ſo? In whatever world, in whatever ſtate he is, he knows that the ſame God governs. What then has he to fear in one more than in another? Nothing ſurely, if he thinks as he ought to think of the all-perfect Being. Such God is. Let us not therefore humanize him. Let us not meaſure his perfections by ours, much leſs let us aſcribe to him, as every ſyſtem of theology does, under the notion of goodneſs, what would be partiality, nor under the notion of juſtice what would be cruelty in man. Let us not preſume ſo much as to aſcribe our perfections to him, even according to the higheſt conceptions we are able to frame of them, tho we reject every imperfection conceivable by us, when it is imputed to him. "As "we muſt not imagine with the Anthropomorphites (it is "Malebranche* who ſpeaks well in this place, tho very in-"conſiſtently with what he ſays in others,) that God has the "human figure, becauſe it ſeems to us the moſt perfect; we "muſt not think neither that the mind of God has human "thoughts, nor that it is like to ours, becauſe we know no-"thing more perfect than our own minds." Such theology as this, and ſurely it is orthodox, makes our plain man to be flattered, not terrified, with any faint appearance of immortality

* Lib. 3. p. 2. c. 9.

lity in proſpect, like TULLY, SENECA, and other philoſophers, who ſaw no more grounds in any thing they knew of the nature of the ſoul for this expectation, than he ſees. He is ready to ſay of this immortality, what the auditor ſays in the firſt Tuſculan diſputation, "me verò delectat; idque primum "ita eſſe velim, deinde, etiamſi non ſit, mihi tamen perſua-"deri velim."

HE might very reaſonably aſk the metaphyſical divine for what reaſon he clogs the belief of the ſoul's immortality with that of it's immateriality ſince the former is ſufficient to anſwer all the ends of religion? The doctrine of future rewards and puniſhments (which is, no doubt, a great reſtraint on men, and which would be a greater, if it was not ſo ſcandalouſly abuſed by the ambition and avarice of prieſts) ſuppoſes the immortality of the ſoul only: and it is much more eaſy to make men conceive that it is immortal by the good pleaſure of God, tho material, than that it is an immaterial ſpirit, and immortal by the neceſſity of it's nature, as God is ſelf-exiſtent by the neceſſity of his. One may wonder that men, who have adopted ſo many of the whimſical notions which they found in PLATO, ſhould not have borrowed an hint that they might have found there, or that they rejected perhaps when they found it. The hint I mean is that of ſouls mortal by their nature, that is, material, but ſuch as ſhould never die. "So-"lubiles, ſed diſſolvendae nunquam." "Since you are gene-"rated, you are mortal, but you ſhall not die; for my will is "ſtrong enough to repair the defects of your nature," ſays the ſupreme Being to the younger gods, the gods born of gods in the Timaeus; and it is the leaſt abſurd thing PLATO makes him ſay or do on that occaſion. The neglect of this paſſage may be imputed to ſome theological purpoſes that ſeem to be better ſerved by the hypotheſis of immaterial ſouls, than by any

other. But the vanity of the human heart, which has been flattered by divines in all ages, was to be flattered on. What ſerved beſt to this purpoſe was taken from PLATO: and how it was improved we need look no further than the Tuſculan, juſt now quoted, to find. There TULLY, after a ridiculous panegyric on the human mind, which improved by philoſophy he thinks able to diſcover all things in heaven and on earth, all that exiſts, in it's beginning, progreſſion and end, runs a very profane parallel between the divine and human mind. If the firſt "be air or fire, ſuch is the laſt." If there be a fifth element, that new nature which "ARISTOTLE firſt introduced, "it muſt be common to both. Whatever has ſenſe, intelli-"gence, will, and the principles of life, is celeſtial and divine, "and therefore neceſſarily eternal." This is the nature of man: and "God himſelf cannot be conceived any other way," than by analogy to it. That we frame our conceptions of the divine intelligence as well as well as we can, by analogy to our own, is true. We have no other way of framing them. But it will not follow that his nature is analogous to ours, nor that ours is like his, "Mens ſoluta quaedam et libera, ſegregata ab omni "concretione mortali, omnia ſentiens et movens, ipſaque prae-"dita motu ſempiterno." Thus abſurdly however did the diſciples of PLATO flatter human nature: and, finding in the bible that we are made after the image of God, our divines have interpreted the paſſage according to theſe prejudices. They will not ſay directly, I ſuppoſe, that our ſouls are a portion of the divine eſſence, but what they ſay ſometimes means this or nothing, and what they ſay always is but little different from it. Strange vanity! as they aſſume themſelves to be expoſed to eternal damnation, and the reſt of mankind to be almoſt entirely damned, rather than not aſſume that their ſouls are immortal; ſo this immortality would not have charms ſufficient for them, if it was not aſſerted to be eſſential to the nature of their ſouls.

THUS,

THUS, I believe, our plain man would leave the matter: and thus I leave it too; having ſaid, I hope, enough to ſhew that the fondneſs philoſophers have to raiſe hypotheſes that cannot be raiſed on real ideas, ſuch as have a known foundation in nature, that is, a known conformity with exiſtence, is a principal occaſion on which the mind exerciſes it's artifice in framing ſuch ideas and notions as are merely fantaſtical. That the mind exerciſes the ſame ſeveral other ways, and in ſome leſs obviouſly than in this, as it has been hinted above, I know full well. But, enough having been ſaid to ſhew that human knowledge is imperfect and precarious in it's original, as well as ſlow and confined in it's progreſs, and by one great example, which may ſerve inſtar omnium, that they, who pretend to guide the reaſon of mankind and to improve human knowledge, do nothing better in matters of the firſt philoſophy, than ſubſtitute that which is imaginary in the place of that which is real, or in addition to it, in favor of their prejudices, their paſſions, and their intereſts; enough has been ſaid for an eſſay concerning the Nature, Extent, and Reality of Human Knowledge.

End of the THIRD VOLUME.