





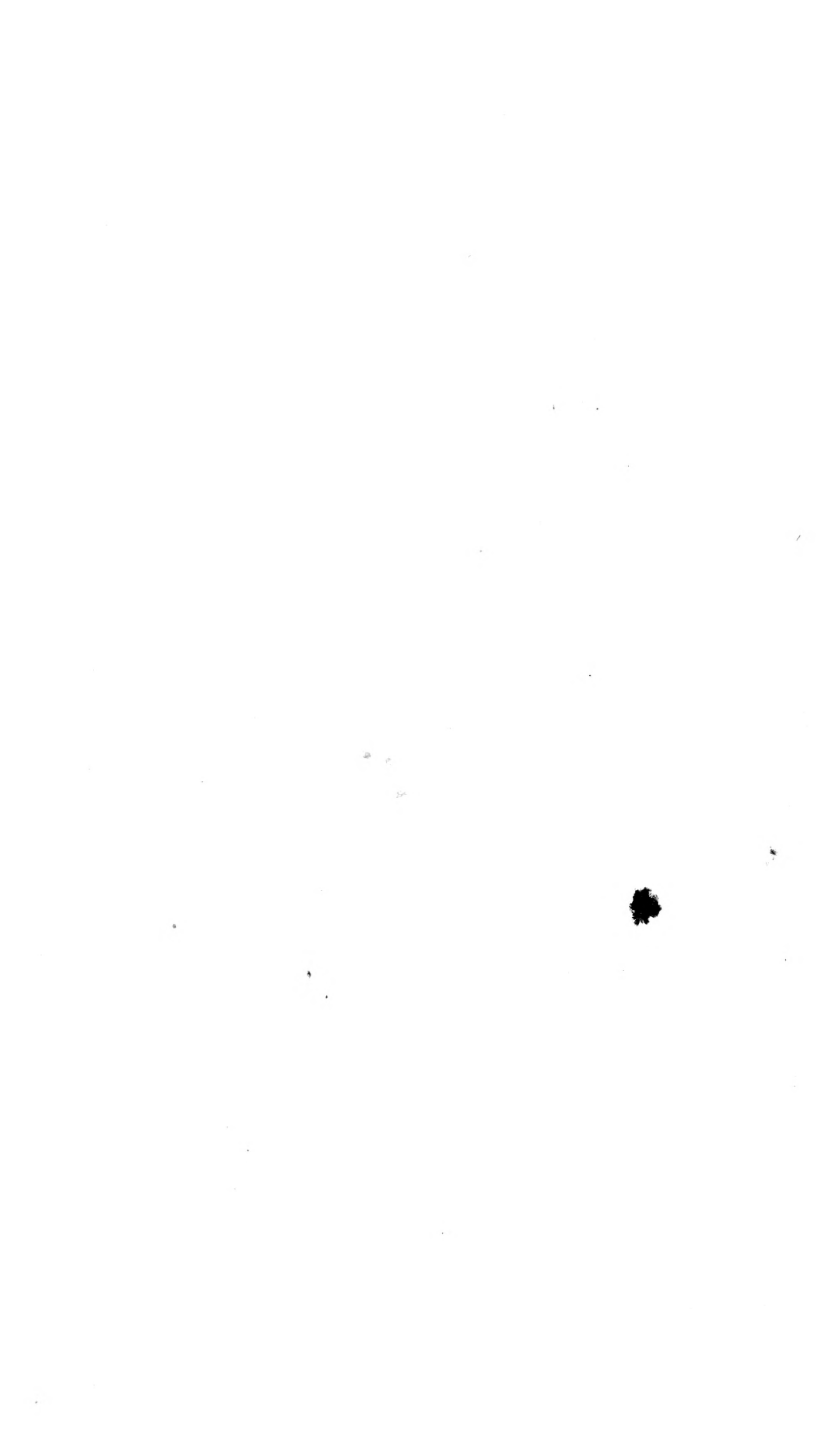
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S U P P L E M E N T
T O T H E
W O R K S
O F

JOHN HUTCHINSON, Esq;

B E I N G

An INDEX and EXPLANATION of all the
HEBREW WORDS cited in the Second Part
of his MOSES'S PRINCIPIA.

W I T H

ADDITIONAL REMARKS,

By the late Learned

ROBERT SPEARMAN, Esq;

Author of *An Enquiry after Philosophy and Theology*, and
of *Letters on the LXX.*

To this Work is prefixed,

Mr. HUTCHINSON'S LIFE,

Written by Mr. SPEARMAN.

L O N D O N :

Printed for W. FADEN, near Shoe-Lane, Fleet-Street,
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ADVERTISEMENT

TO THE

R E A D E R.

*T*HE following Index and Explanation of Hebrew Words, &c. was found among the Papers of the late truly learned and worthy Mr. Spearman, in a Manuscript all written with his own Hand, and as appears by a Note at the Beginning of it, originally designed for Publication. The Editor, to whom it was communicated by a Gentleman who had Mr. Spearman's Papers left to him by Will, thought it too curious and useful a Performance to be kept any longer private, and can do no less than recommend it as a good Illustration of the most difficult Part of Mr. Hutchinson's Writings: Though, at the same time, he does not think himself bound to embrace and defend every thing here advanced, either by Mr. Hutchinson or Mr. Spearman, and, in Justice to the Memory of the latter, must observe, that the Reader will find the Motion of the
the

ADVERTISEMENT, &c.

the Earth *more fully and satisfactorily explained, in his Enquiry after Philosophy and Theology, Ch. 2d and 4th, than it is here.*

The larger Figures in the Margin refer to the Pages of Mr. Hutchinſon's Moſes Principia, Part 2d, printed by Bettenham in 1727, to which the Editor has added in Parentheſes, the correspondent Pages of the 3d Edition, printed for Hodges in 1748.

J. P.

ERRATA.

| Page | Line | for | read. | Page | Line | for | read. |
|------|--------|-------|-------|------|-----------|---------|---------|
| 5 | 12 | in | when | 55 | pen. Note | Θορυβῶν | Φορυβῶν |
| 19 | 19 | כרף | ערף | 56 | 10 Note | πρωτα | πρωτη |
| 31 | 7 | Χαρις | Χαρις | — | 11 | Αρχαια | Αρχαια |
| 33 | 2 Note | when | ſince | 83 | 1 | נפת | נפת |
| 48 | 9 | in | tu | 105 | 1 | אלון | אלון |

THE
L I F E

OF

JOHN HUTCHINSON, Esq;

Written by Mr. SPEARMAN.

JOHN HUTCHINSON, an Author, whose writings have made no inconsiderable noise in the learned world, was born at *Spennythorn*, a small village, about a mile distant from *Midlam* in *Yorkshire*, *A. D.* 1674. His father, *Mr. J. Hutchinson*, was possessed of a little estate of 4*ol. per annum*, and determined to qualify his son for a Steward to some gentleman or nobleman. He had given him such school learning as the place afforded; and whilst he was considering whither to send him, in order for his further qualification, a gentleman happened to come into the neighbourhood, and wanting to board in some reputable family, was recommended to *Mr. Hutchinson* the father, who told him he should be welcome to his house, till such time as he could provide himself a place to his mind. As he found his guest to be both a sensible person, and a man of learning, he communicated to him his intentions concerning his son; and the gentleman who had taken a liking to the youth, agreed to instruct him in every branch of learning proper for the employment for which he was designed, upon condition the father would entertain him in his house, whilst he should think proper to stay in those parts, which he engaged himself not to leave until such time as he had completed his son's education. The father cheerfully agreed to the conditions,

[a]

and

and his gueſt faithfully diſcharged them on his part, not only inſtructing him in ſuch parts of the mathematics, as were more immediately connected with his deſtined employment, but in every uſeful branch of that noble ſcience, and at the ſame time furniſhed him with a competent knowledge of the celebrated writings of antiquity, and a fund of learning, which equally ſhewed the extenſive erudition of the maſter, and the comprehensive genius of the ſcholar. Who this perſon was to whom our author was indebted for his education is not known, not ſo much as even his real name, as far as we can learn. He induſtriouſly concealed every circumſtance relating to himſelf, and ſo effectually, that Mr. *Hutchinſon* himſelf, the father, tho' a very ſhrewd perſon, could never by any means make the diſcovery. But whoever, or whatever he was, he taught our author, as himſelf ſays, as much as he could ſee there was any uſe for either upon the earth, or in the heaven, without poiſoning him with any falſe notions fathered upon the Mathematics.

About the age of 19, *A. D.* 1693, our Author went to be Steward to Mr. *Bathurſt* of *Skutterſkelf* in *Yorkſhire*, and from thence to the Earl of *Scarborough*, who would gladly have engaged him in his ſervice, but his ambition to ſerve the Duke of *Somerſet* would not ſuffer him to continue there; and he frankly acquainted his Lordſhip with his intentions, and that he could ſtay with him no longer than a vacancy ſhould happen in the Duke's houſhold. It was not long before this fell out; and our young Steward ſoon diſtinguiſhed himſelf in ſuch a manner, as to gain the chief Stewardſhip, and the favour of that nobleman, who honoured him with greater marks of eſteem and condeſcenſion, than he ever was known to ſhew to perſons of his condition.

About the year 1700, Mr. *Hutchinſon* was called to *London* to manage a law ſuit of conſiderable conſequence, between his Grace of *Somerſet*, and the old Lord *Wharſton*; which he ſolicited ſo effectually, that it was concluded greatly to the ſatiſfaction and advantage of the Duke. During his attendance in town, he had an opportunity of gaining a proper knowledge of the world, and what was doing in it: And it was about this time he contracted an acquaintance and intimacy with the late Dr. *Woodward*, who was Phyſician to the Duke his maſter.

Between

Between 1702 and 1706, his business carried him into several parts of *England* and *Wales*, where he made many useful observations, which he published in a little pamphlet, entitled, *Observations made by J. H. mostly in the year 1706*. This is written in the most methodical manner of any of his works, and has very useful marginal annotations, which were made by Dr. *Woodward*.

Whilst he travelled from place to place, he employed himself in making that large and noble collection of Fossils, &c. which Dr. *Woodward* bequeathed to the University of *Cambridge*. The Doctor had no notion of Mr. *Hutchinson's* ability, in any other way than that of a Steward and a mineralist. Dr. *Woodward* consulted him about his private affairs (for he was not the best œconomist.) *Woodward* asked him to buy a coach horse for him, and sometimes honoured him so far as to preside at a consultation when his horses chanced to be out of order, which Mr. *Hutchinson* hath often with a great deal of humour, ridiculed to his intimates; for no one had more mother wit when he chose to exert it.

The Doctor used to correspond with Mr. *Hutchinson*, whilst he was abroad: In some of his letters, he wishes his horse might throw him now and then, lest he should make too much haste, and leave any anxious fossil behind him. In others he desires him to digest the fossils into classes, and to put in papers between each class or species, describing and ascertaining the class or species of each, before he packed them up, and sent them; and complains, that for want of this method, and the fossils being all jumbled together, without any such order, he was at a loss to distinguish one species from another, and unable to sort and place them in their proper classes in the catalogue. In one of his letters he tells him, that though a man possessed of mineral knowledge was every thing to him, yet this was not the case with others, and therefore, advises him not to set himself up above his superiors, and to talk of matters above his sphere; it seems he had then begun to throw out hints in conversation, against the Gravitarian system, which he ridicules in one of his pieces, with an humour not inferior to *Lucian*. And in all his letters, the Doctor treats Mr. *Hutchinson* in a very supercilious manner, and as a quite different person from what he afterwards found him to be.

The Natural History of the Earth, which the Doctor had published before he and Mr *Hutchinson* became acquainted, seems to have prejudiced our Author so much in his favour; and his collection of fossils was designed as materials for a work to prove the truth of the *Mosaic* account of the first formation of the earth at the creation; the reformation after the Deluge, and of the Deluge, to ocular demonstration. This the Doctor engaged to draw up, but seems never to have had any real intention of doing, only designing to make this a pretence to engage Mr. *Hutchinson* more earnestly in collecting mineral materials, and at the last of getting the whole collection into his possession. And the event justifies the suspicion. It does not appear that Mr. *Hutchinson* had any thoughts at that time of commencing author. His natural researches had afforded him an opportunity of discovering what were the real agents in nature, and that the scripture Philosophy was the only true Philosophy; and he was desirous his fellow creatures should reap the benefit of his discoveries, and be set right in a point of that consequence. And to this end, he chose to make use of the pen of one who had already given an approved specimen of his abilities in that way. But when he found that the Doctor was playing fast and loose with him, he was then resolved to wait no longer, but trust to his own pen, and exert that capacity, and those talents in the service of his heavenly Lord and Master, for which he had so eminently and successfully distinguished himself in the service of his earthly Lord and Master. Tho' he had great and daily reasons to suspect the sincerity of Dr. *Woodward's* intentions, yet he was unwilling for a long while, to give too much way to his suspicions; yet they put him upon his guard, and made him more and more earnest in his solicitations, for the performance of the Doctor's promise. The Doctor thus prest, in order to gain time, and quiet his clamours, was wont to shew him a large folio book, placed upon an upper shelf in his Study, in which he told him the desired work was begun, and was in some forwardness; but he did not care to shew it him till it was completed, or at least till he had revised what he had already wrote. This for the present silenced Mr. *Hutchinson's* solicitations, but not his suspicions; and he was determined to try if he could not some way or other get a peep into this same folio. To this purpose he used to visit
the

the Doctor at those hours in which it was most likely to find him in his study. The Doctor conscious of his own, or jealous of Mr. *Hutchinson's* intentions, betrayed an uneasiness at these ill-timed visits, kept a watchful eye upon Mr. *Hutchinson*, and was always wanting to get him out of his study. This served only to increase Mr. *Hutchinson's* suspicions, and his eagerness to make the wished-for discovery; but the extreme caution of the Doctor for some time baffled all his endeavours. At the last

*Quod optanti divum promittere nemo
Auderet, volvenda dies en attalit ultro.*

For one day whilst the Doctor and Mr. *Hutchinson* were together in the Study, a servant came hastily in with a message, upon which the Doctor went out in a hurry, and inadvertently left Mr. *Hutchinson* alone, who did not slip the opportunity, but immediately seized and opened the book, found only a few heads of Chapters, and such like, scattered up and down, which like *Æneas's* drowned Mariners, *apparent rari nantes in gurgite vasto*. This disappointment, tho' not quite unexpected, put our Author upon doing himself what he had in vain hoped for from others. And that he might be more at leisure to prosecute his studies, he begged leave of the Duke of *Somerset* to quit his service. The request at first piqued the pride of that nobleman, but when he was made to understand by Mr. *Hutchinson*, that he did not intend to serve any other master, and was told what were the real motives of his request, the Duke not only granted his suit, but made him his riding purveyor, (being at that time as we think, Master of the Horse to K. *George I.*) which place he enjoyed to the day of his death. As there is a good house in the little Meuse belonging to the Office of Purveyor, a fixed salary of 200*l.* per annum, and the place a kind of sine-cure, Mr. *Hutchinson's* situation and circumstances were quite agreeable to his mind, and he gave himself up entirely to a studious and sedentary life, which being so opposite to his former way of doing, by degrees weakened and broke his constitution, and at length laid the foundation of that disorder which carried him off. The Duke also gave him the presentation of the living of *Sutton* in *Suffex*, near his seat at *Petworth*, to which Mr. *Hutchinson* presented the Rev. Mr. *Julius Bate*, a gentleman well known to the learned world.

The LIFE of

In the year 1724, our Author published his *Moses's Principia*, part I. in which he ridiculed Dr. *Woodward's Natural History of the Earth*, and his account of the settlement of the several strata, shells, and nodules by the laws of gravity, which he tells him, every dirty impertinent collier could contradict and disprove by ocular demonstration. He also threw out some hints concerning what had passed between the Doctor and himself, and the Doctor's design of robbing him of his collection of fossils. There is so much humour runs thro' this piece, and another of his, called *A new account of the confusion of Tongues*, that it hath often been wondered that these two were not more taken notice of, merely for that vein of witty irony which they contain.

From this time to his death, he continued publishing a volume every year, or every other year, which with the manuscripts left behind, were published 1748, in twelve volumes octavo. An *Abstract* of his works was also published 1753.

Dr. *Woodward* did not take any notice of our Author's piece, as thinking himself secure, and proof against the attacks of a writer of so little note as Mr. *Hutchinson*. And he knew himself to be safe whilst gravity stood its ground, which from the number and interest of its allies, he thought was in no danger of being knocked on the head, as was the champion of the *Philistines* by a naked youth with a nodule. He therefore resolved to abide by gravity and his first performance, and refused either to draw up and publish the observations which by agreement he had engaged to do; or to return the collection of fossils. Upon this Mr. *Hutchinson* had recourse to Law, and a Bill in Chancery was accordingly drawn, but whether filed we are not certain. The Doctor in the mean time made his will, whereby he left the Collection to the University of *Cambridge*, of which the Duke of *Somerset* was Chancellor, and this perhaps might prevent Mr. *Hutchinson* from carrying matters to extremities. However the Doctor's death, which happened in 1728, put an entire stop to all proceedings of that kind, and our Author, as himself complains in one of his Books, was bereft in a manner not to be mentioned, of those observations, and those collections, and even of the credit of being the collector, and both are now lost for want of being reduced into order,

der, and applied, and the papers which still remained in his hands relating to these subjects were rendered useless. Though a work to prove the truth of the Deluge and reformation of the earth, as recorded by *Moses* from the exuvia of animals, vegetables, and other things preserved or found every where in the bowels, as well as near the surface of the earth, might have been of great service, and perhaps the means to convince those whom no other evidence would convince; yet his literary acquaintance look upon the breach between Dr. *Woodward* and him as a very happy event; because had the Doctor fulfilled his engagements, Mr. *Hutchinson* might have stopped there, and not have extended his researches to the lengths he has done, and thereby deprived the world of writings which they deem invaluable. The former friends of Mr. *Hutchinson*, who were well acquainted with the interest he had with the Duke, his capacity for business, and the opportunities which were in his power of making the most of his talents, were greatly surpris'd at his quitting so many advantages of acquiring a large fortune, not only by leaving his old place, but neglecting to make the most of his new one; and an old crony of his meeting with him one day, very warmly remonstrated with him upon the occasion; to whom Mr. *Hutchinson* made this reply, "Sir, I know the value of money as well as you, and how far it will carry one: thus far, and no farther. I therefore want something that will carry me beyond this line, this utmost bound of money and I trust I have now chosen that which will." His friend gave him no answer, but dropped his hand, which till then he had held in his own, and like the lawyer in the gospel, went away grievously dissatisfied.

In 1727, our Author published the second part of *Moses's Principia*, which contains the sum and substance of the principles of the Scripture Philosophy; and which with the first part, is the only Philosophical tract he published in his life-time.

As Sir *Isaac Newton* made a vacuum and gravity the principles of his Philosophy, our Author on the contrary asserts, that a Plenum and the Air are the principles of the Scripture Philosophy. The Air he supposes to exist in three conditions, fire, light, and spirit. The light and spirit are the finer and grosser parts of the air in motion:

From

From the Earth to the Sun the air is finer and finer till it becomes pure light near the confines of the Sun, and fire in the orb of the Sun, or solar focus. From the Earth towards the circumference of this system, in which he includes the fixed Stars, the Air becomes grosser and grosser until it becomes torpid and stagnant, in which condition it is at the utmost verge of this system; from whence the idea or expression of *outer darkness*, and *blackness of darkness*, used in the New Testament seems to be taken. The Sun which he places in the center is the active vivifying agent, which by melting the spirit or grosser parts of the air into atoms, or finer parts, or æther, and issuing them out in light, sets the machine forward, and keeps it a going: for the light is pressed out by the influx of spirit, and the spirit is pressed in by the influx of light; and so the whole matter of the heavens or air is perpetually changing conditions, and circulating.

This doctrine of light and spirit is in the main so like what Sir *Isaac Newton* says in his *Queries* of his *Ætherial Medium*, that grows denser and denser from the Sun to Saturn, and beyond (which he makes the *cause of gravity and motion*, and which is as contradictory to a vacuum and the vis inertæ, as Mr. *Hutchinson's* light and spirit can be) that our Author's account might at least lay claim to the same indulgence with Sir *Isaac's* of passing for philosophical questions worthy of further examination. Sir *Isaac Newton* informs us, that he builds his Philosophy upon appearances: Now if these be a sufficient ground work for such a superstructure, Mr. *Hutchinson* had infinitely more and better opportunities of judging by appearances than the other. His converse and frequent business underground, afforded him a series of opportunities, as himself tells us, of making observations on the several various actions of the Air, in its three conditions of Fire, Light, and Spirit; of remarking what these agents have done in the reformation of the earth after the deluge, and what they do in the settled course of nature; and of considering the disposition and situation of the parts of the earth, and of the several species of things in it; of making observations and experiments on the operations of fire, and its effects upon, and with various substances; of making observations upon light and spirit in all the various conditions and situations, or places where they happen naturally to be;

and

and of remarking the various effects they have upon various subjects; of making observations upon water, in all the situations, motions, and courses it took at the reformation of the earth, and since naturally has taken or takes; and by these means of coming at the knowledge of what things were AGENTS, and the manner of their agency; which were PATIENTS, and the manner in which they were acted upon; which were CAUSES, which EFFECTS. This method of judging from appearances, in such a course of experiments, must be acknowledged to be far superior to any of those upon which Sir *Isaac Newton* built his Gravitation System, and his doctrine of light and colours. In the one case, the appearances were those of nature, made and exhibited by herself; in the other, many of them were such as can, or do scarce ever happen in nature. The swinging of a pendulum, (the Palladium of Gravity) has not perhaps a parallel case in nature. The extracting or seperating the light from the spirit, by a prism, or refracting the light by bubbles, have not a parallel case, except it be in the rainbow, and such like. The experiments made with the load-stone, talc, or amber, arise from the texture of these bodies, which is different from that of most other bodies, and the bodies of themselves are only found in masses of small sizes. The other experiments of the effects produced by spirit or light, upon mixing small parcels of extracted fluids or substances, are such as scarce one of them every happened, or will happen in nature. Justice, to the person whose life we are writing, obliges us to make this remark, which we hope can give no just cause of offence to any one.

In the introduction to the second part of *Moses's Principia*, mentioned above, Mr. *Hutchinson* hinted that the idea of the *Trinity* was to be taken from the three grand agents in the system of nature, *Fire, Light and Spirit*, which are three conditions of one and the same substance, and wonderfully answer in a typical or symbolical manner to the three persons of one and the same essence. This struck the late celebrated Dr. *Samuel Clarke* so forcibly, that he sent a gentleman to Mr. *Hutchinson*, with compliments upon the performance, but that there was one proposition which he hoped was not true, and desired a conference with him about it. Mr. *Hutchinson* sent him word by the gentleman, that the book had been a work of much

labour and time, and when he had considered it longer, it would be soon enough then to talk of a conference. The Doctor sent again that he understood the substance of the book, but only wanted to confer about that proposition. Mr. *Hutchinson* sent for answer, that he intended shortly to explain that hint, and prove it fully. The Doctor not satisfied with this, still continued his solicitations for a conference, which Mr. *Hutchinson* as constantly refused; but let him know, that if he pleased to write any thing against that proposition, he would soon convince him of it, and withal, that he had been too forward in writing upon subjects which he had not duly considered. Dr *Clarke* died May 17, 1729.

Some time in the year 1712, Mr. *Hutchinson* completed a machine of the watch kind, for the discovery of the Longitude at Sea. It was referred to Sir *Isaac Newton*, and other persons qualified, to consider and examine pretensions of that kind, and was by them approved; and Mr. *Hutchinson* even obtained testimonials under their hands, of the perfection and usefulness of his machine. But when application was to be made to parliament, he was some way or other dropped by those who had promised to support his pretensions: Nettled with the disappointment, he seems to have laid aside this, and several other things of that sort, and to have destroyed all his papers concerning them. Two of these watches were found after his decease, the one put together, the other not, but no papers or notes relative to them were to be met with, any more than the manuscript map of the world, which the late Mr. *Whiston* in his *Longitude and Latitude*, mentions in these words; “ I have also very lately been shewn by Mr. *Hutchinson*, a very curious and inquisitive person, a copy of a manuscript Map of the World, made about eighty years ago, taken by himself from the original, wherein the variation is reduced to a theory, much like that which Dr. *Halley* has since proposed, and in general exactly agreeing to his observations.—But with this advantage, that therein the northern pole of the internal loadstone is much better stated than it is by Dr. *Halley*. —Its place then being, according to this unknown very curious and sagacious author, about the meridian, &c. which antient, and authentic determination of its place, I desire my reader particularly to observe.”

This

This method of discovering the Longitude, proposed by Mr. *Hutchinson*, is allowed by the best judges to be the easiest to understand and practise of all others; requiring no depth of astronomy, no nicety in observations and calculations, and so is even to the common sailors the most practicable. For if a watch could be exactly kept to an even motion, and so shew the hour at any one certain place at land, a comparison of the time known by that watch, with the apparent time at the ship, known by the sun or stars, or another watch regulated by them, would discover the Longitude from the place to which that first watch was adjudged in time, and by allowing 15 degrees of the equator to an hour, may be found in degrees also. And Mr. *Hutchinson* had so contrived, and framed the springs, wheels, and pivets, &c. of his watches, as not in any considerable degree to be influenced by heat, cold, moisture and drought, and also to be capable of that degree of exactness, which is requisite to answer the purpose. And it is the opinion of those who know most of this affair, that a machine of the watch kind, bids the fairest of any method for the discovery of the Longitude.

Mr. *Hutchinson* had been accustomed every year to take a month's refreshment or so in the country, near London, but the year he died he denied himself this benefit, and sat close at his studies, during the sultry months of *June* and *July*, in order to prepare the second part of the data of christianity for the press against the winter; and had even neglected his constant exercise of riding in *Hyde-park*. But at length one day mounting his horse, the beast pampered by the mistaken kindness of his keeper, and not having been ridden for some time by his master, was so fretful and unruly, that Mr. *Hutchinson* had some difficulty to keep his seat, which however he did, but the irregular fallies of the horse, and the sudden jerks given to his body by them, occasioned an overflowing of the gall, which confined him to his bed, and put a period to his life in about 16 days time. Upon the Saturday after the accident, Mr. *Frazer*, of *St. Martin's-Lane*, who was his apothecary, advised him to send for Dr. *Mead*; but unluckily the Doctor was gone to *Windsor*, however his son-in-law (Sir *Edward Wilmot*, Bart.) came immediately, and prescribed bleeding, but Mr. *Hutchinson*, contrary to the earnest solicitations of the friends he had then with him, chose to defer it till he

should

should see Dr. *Mead*. On the Monday following, the Doctor waited upon Mr. *Hutchinson*, blamed him for not being bled, but told him he would soon send him to *Moses*; (meaning to his studies, two of his books being entitled *Moses's Principia*) to which Mr. *Hutchinson* taking it in the other sense, answered in a muttering tone, for his voice was affected by his illness, *I believe Doctor you will*. In a day or two after this, he seemed to be in a fair way of recovery, and was able to converse about his literary affairs, with his favourite, Mr. *Julius Bate*, who upon being made acquainted with Mr. *Hutchinson's* illness, came with all haste from his living in *Suffex*, to attend him. But this bright gleam was of short continuance, for an intimate friend of his who lived at a little distance from *London*, coming to town in the middle of the week following to see him, found him in a very weak and dangerous way, sitting in the room, which he made his study, and seeming as if he had been busy among his papers. He had sent Mr. *Bate* out, and was alone. He told this gentleman, Dr. *Mead* had used him ill; that he had forbid his attendance, and called in another physician, (Dr. *Pellet* we think) he much wished he could live to give more evidence, but there is enough, says he, to a literary friend, raising his voice, if you and the rest of you be not deficient on your parts. He recommended Mr. *Julius Bate* to this gentleman's friendship, with a strict charge not to suffer his labours to become useless by their neglect. When he left Mr. *Hutchinson*, which was at the door of his bed-chamber, to which he had prevailed upon him to retire, Mr. *Hutchinson* taking his hand said, *Farewell, you will see me no more*.

On the Sunday following, *August 28, 1737*, in the morning, he departed this life, aged 63. Thus died this memorable person, unnoticed even in the news-papers, except by an information to the public, that the place was become vacant by his death. To borrow the words of an old acquaintance of his, "Without considering him as an Author, " few persons deserved better of mankind than he did. " If superior talents for business, and indefatigable ear- " nestness in prosecuting it,—If the nicest address, joined " with the strictest probity, of which he gave many shining " instances, in conducting the suit between the Duke his " master, and the old Lord *Wharton*,—If these be qualifi-
" cation

“ cations which merit any regard, few had a larger share
 “ of them than Mr. *Hutchinson*. If the collection of fossils
 “ left by Dr. *Woodward* to the University of *Cambridge*
 “ be of any value, of any service, or deserve the notice of
 “ that learned body, let them remember, that they owe
 “ the whole to the abilities and industry of Mr. *Hutchin-*
 “ *son*. And perhaps had a due regard been paid to his ma-
 “ chine, mentioned above, the world would also have
 “ been indebted to him for the discovery of the Longitude.

“ *Fas sit ut hos spargam flores, animamque Sepulti*

“ *Itis sabbam accumullem donis, et fungar inani*

“ *Munere.*” —————

A report has lately been industriously propagated, that Mr. *Hutchinson* recanted the publication of his writings to the late Dr. *Mead* a little before his death. How improbable such a report seems to be, appears from what has been related above, of the conference which one of his friends had with him, not four days before he died, and some days after the Doctor had been dismissed by him as a physician. Mr. *Hutchinson* would never have been so solicitous about the publication of the papers left behind him, had he, as this report would insinuate, repented of those already published in his life-time. This person is living, and ready to testify the truth of what is here related. The following letter, written by the Reverend Mr. *Julius Bate*, to a friend, with his leave to publish it, may serve as a refutation of this report.

“ *Dear Sir,*

“ I am greatly surpris'd at a story a Lady it seems pro-
 “ pagates at *Epsom*, that Mr. *Rowe* told her, that Dr. *Mead*
 “ told him, that Mr. *Hutchinson* apprehended his writings
 “ would do mischief, and that upon his death-bed he re-
 “ canted the publication of them. The Doctor is dead,
 “ but Mr. *Rowe*, I hope living, and by what I could judge
 “ when I had the pleasure of being introduced to him by
 “ you, a man of great worth and merit, and if he will
 “ justify the Lady's story, it must then lie upon the de-
 “ ceased Dr. *Mead*; to whom, I am firmly convinced, as I
 “ can be of any negative, that no such words were spoken
 “ by Mr. *Hutchinson*, or any thing tending that way. I
 “ was with Mr. *Hutchinson*, all the illness that rob-
 “ bed us of that invaluable life, and am positive Dr.

“ *Mead*

“ *Mead* was never with him, but when I was by, and it
 “ was but a few hours day or night that I was from him.
 “ *Mr. Hutchinson* had not been long ill, when he took a
 “ disgust to *Dr. Mead*, and forbad his farther attendance,
 “ which the Doctor much wondered at, and seemed
 “ greatly to resent. *Lucas*, myself, and somebody else,
 “ I forget who, were standing by the bed-side one day,
 “ when *Dr. Mead* came in, and I believe it was the last
 “ time he was up stairs. *Mr. Hutchinson*, says the
 “ Doctor, among other things, *I cannot help looking upon*
 “ *you as one of the old Prophets, with his Disciples standing*
 “ *about him with concern and attention in their faces, catch-*
 “ *ing up the golden words as they drop, or to that effect.—*
 “ Doctor, says *Mr. Hutchinson*, *If I am a Prophet, what*
 “ *are you? I have given you such evidence,—look to it before*
 “ *it is too late.* I well remember the compliment above,
 “ and it is hardly to be supposed, that *Dr. Mead* meant to
 “ call him a false prophet, who no doubt believed in the
 “ prophets, and would not make so bad a compliment to
 “ his patient, as calling him a false one; nor did *Mr.*
 “ *Hutchinson* acknowledge himself a false one, as now
 “ is said. I am very positive as to the purport of the
 “ words above, and the silence it struck the Doctor into.
 “ His sentiments and *Mr. Hutchinson’s* in religion were
 “ widely different, but I cannot think that the Doctor
 “ could out of resentment, or any other motive, sling out
 “ such a story, and therefore much question the Lady’s
 “ having *Mr. Rowe’s* authority; whom I should believe
 “ that Doctor *Mead* told him so, if he says it. But that
 “ *Mr. Hutchinson* ever said any such thing to the Doctor,
 “ I as firmly disbelieve, and know to be false, as any
 “ negative of that nature can be known to be so.
 “ You may shew this to whom you please, and I think
 “ the above confutes the story, for the Doctor would
 “ hardly have complimented *Mr. Hutchinson* with being a
 “ Prophet, had he acknowledged himself a Deceiver.

I am, &c.

Arundel, Jan. 20, 1759.

JULIUS BATE.

The Works of Mr. HUTCHINSON are as follow:

- Vol. I. *Moses's Principia*, Part I. containing an account of the dissolution and reformation of the Earth, with an Essay to shew, that the Air was the rival set up against God, and that a great part of the Bible was to set men right in that point.
- Vol. II. *Moses's Principia*, Part II. being an account of the natural Agents which perform the Operations of Nature, viz The Air; or Fire, Light, and Spirit.
- Vol. III. *Moses's sine Principia*, or the meaning of the names and titles of God, with an introduction to shew the Nature of the Fall, of Paradise, and of the Body and Soul.
- Vol. IV. *The confusion of Tongues, and Trinity of the Gentiles*; being an account of the Origin of Idolatry, Confusion of Languages, and thereby loss of Natural Philosophy in the Heathen world, which is preserved in the Bible.
- Vol. V. *Power essential and mechanical*; or what power belongs to God, and what to his creatures, in which the design of Sir Isaac Newton, and Dr. Samuel Clarke is laid open.
- Vol. VI. *Glory & Gravity*, or Glory essential; and the Cherubim explained.
- Vol. VII. *The Hebrew writings perfect*; being a detection of the forgeries of the Jews, and an Explanation of the various ways in which it pleased God to exhibit himself and the Covenant of Grace to Men.
- Vol. VIII. Containing *The Religion of Satan*, or Natural Religion; and the data in Christianity, Part I. which are shewn to be the only proofs Reason can exercise itself upon.
- Vol. IX. *The Data in Christianity*, Part II.
- Vol. X. *The Human Frame*; or the Agents that circulate the Blood explained.
- Vol. XI. *Glory Mechanical*, or the Agents of Nature, and the manner of their Agency explained, in Confirmation of the *Principia*, with a *Treatise on the Columns of the Temple*, to shew that the System was represented there, and its Mechanical Powers reclaimed to God.
- Vol. XII. *A Collection of several Tracts*. On the Instincts in the several orders of Creatures. On Mining. Observations on things under-ground.

A N
I N D E X
OF ALL THE
H E B R E W W O R D S
Cited in the
Second Part of *Moses' Principia*.

C H A P. I.

בְּרָא
T
O
create, that is, to produce something out of nothing, or to cause something to exist, which did not exist before, or before was not in Being. It is the first production; but what is first produced is not said in the word. When it is applied (as here Genesis i. 1.) to the heavens and the earth, to the heavens when they had no light, to the earth when it was without form and void, it can mean nothing but giving this substance existence; so must imply simple and absolute creation, or production of the matter in atoms from nothing. The heathens supposed the atoms of things pre-existing in the Chaos, and only brought out and formed in the creation ascribed to their Gods: and as the design of this Revelation was to rectify men's notions in natural as well as spiritual things, it would not have answered that end, if בְּרָא had not signified and expressed creating Something out of Nothing: Men might still have doubted whether Matter was created or not, whether it was not eternal, &c: And this Account of Moses would not have differed from the heathen account of the creation by their Gods, unless the first production of the Chaos be taken in, since, as observed above, they allowed Creation in the sense of making this World from pre-
P. 2, 3.

B existing

existing atoms. As God created several species of matter, the word ברא is applied to *whales*, and every living creature formed out of matter in the water, and to man; because the atoms of the Matter which creatures are made of, are neither atoms of the heavens, nor of the earth, nor of the water; but עפר מן האדמה, *vegetable matter*, which is dispersed throughout air, earth, and water, as many experiments put past dispute: So the word ברא is as necessary and as properly applied, as *Ver. 1.* to the Heavens and the Earth. As a participle בורא is used for *concreting the atoms into grains*, as Isa. xlv. 7, 18. xlii. 5. Amos iv. 13. because the act of *creation* was joined with that action, when the Spirit of God moved, or was made the instrument of impulse upon the faces of the waters. And as, when a new action is to be performed, there it something done which never was before; this word may with as strict propriety be applied to *an action that was never done before*, as to a *substance which never existed before*; as Numb. xvi. 29, 30. Exod. xxxiv. 10. Isa. lv. 7, 8. Psal. li. 10. Jer. xxxi. 22. As *concreting*, or bringing the Atoms together is part of the idea of what we call *creation*, or the meaning of the word ברא, then with the 'jod it is very properly used, Gen. xli. 2. בריאת בשר *Fat*, or *full of flesh*; the effects of the atoms of grains, or earth, *adhering together*, when distributed in the blood through the body.—There is a Temple to the *Power* that brought forth the Matter or atoms to *augment*, or from seeds to *form* plants and creatures, mentioned 1 Chron. iv. 31. and called בית-בראית *the Temple of the Creators*. This the heathens made an attribute of the שמים *Heavens*, not in the first sense of ברא, *to create from nothing*, which they endeavoured to evade,

by

by their ridiculous *Theogonia, eternal Chaos, fortuitous concourse of atoms*, and such like, but in the sense of **נִרְבָּה** to *augment* or *make fat*, by producing the atoms from among those of earth and water, and applying them to things or creatures in miniature, in seeds, whilst growing or when grown; and this the heavens *did* and *do*. And to prevent any acknowledgment to the Heavens, and set men right, was that noble history of the *creation* and *formation* written, which though true to the conviction of all mankind, no *antient wise man ever found out*. God, there, tells you, He created the heavens and earth in atoms, that they were so far from acting upon other things, that they were themselves inactive.— He tells you, step by step, how he begun and supported motion by his own power, and by that Motion enabled them to separate the earth from the waters, form the other globes, &c. till he had framed and disposed the parts so that they were fit to go by themselves and support Motion in other things;—That he formed the vegetables of proper matter, and in proper manner, before they were put into the earth; so as each might renew and multiply their species; and made the fishes and fowls of the matter out of the waters; and the beasts, and lastly Man, of matter out of the earth, with proper provisions, powers of multiplying, &c.—And all this, without any assistance or help from the *Heavens*: And after all, he made a cession of the government of his works to *them* his *Legates*.

נִרְבָּה to *fill*, be *full*, it signifies an absolute *Plenum*. The Idea is given Gen. xxi. 19.—xxiv. 16. *filled the Bottle with Water*. And as Motion is consistent with this *Plenum*, so is it with the aerial *Plenum*.

Chap. I.

33, 34.

ⲓⲟⲓ To *pour out* or *upon*, to *found*. It is spoken of the matter of the heavens or air, whose parts are a dry, subtile fluid, which God has poured one upon another, and by that means filled the universe so full that it cannot admit a vacuum in the modern sense of the word. *Orpheus* attributes this to *Juno*, the aerial or celestial goddess of the Greeks, (who, by the epithet of λευκαλενος Ηΐη, given her by *Homer*, is the mixture of *Light* and *Spirit* of which the air is composed.)

Κοινωνεῖς γὰρ ἅπασιν κεκραμένη περὶ σεμνῶς.
 Πάντων γὰρ κρατέεις μένη, πάνθεσσι τ' ἀνασσεις, *
 Ἡερίοις ῥοῖζοισι τινασσομένη κατὰ χεῦμα.

“Communicas enim cum omnibus (rebus) com-
 “mixtus pulchre (vel castè). Sola enim omni-
 “potens es, et omnibus imperas, aeriis fluctibus
 “agitata per *fusionem* [Univerfam.]”

N.B. The Chaldee uses ⲓⲟⲓ for the *atoms*, *elements*, or *first principles* of things.

This fluid mixture, by the adverse motion of the light pushing towards the circumference, and of the spirit or air pushing towards the centre with immense force, produces a continual circulation, and thereby forms a general expansion or firmament of the whole air. *

The above-cited Poet also touches this in the the following verses, where, treating of the heavens or air, he says,

————— ῥόμβε διναισιν ὀδεύων,
 Ὀυράνιος χθόνιος τε φύλάξ, πάντων περιεβλήθεις.

“Tur-

* The inspired Writers of the New Testament seem to have copied the usage of the Hebrew ⲓⲟⲓ in the Greek phrase καταβληη κοσμε. Καταβᾶλω is *dejicio*, to throw, or cast down, as when seed is cast down, or poured upon the ground, so answers to ⲓⲟⲓ founding, pouring down atom upon atom till the whole was built up. So Heb. xi. 11. *By faith Sarah herself received Δυναμιν ability.* (or what you please to call it) αἰε καταβλητην σπριματος for the dejection of seed. The ground
 must

“ Turbinis (tui) vertiginibus incedens, cœlorum Chap. I.
 “ ac terræ custos, omnibus (rebus) circum-
 “ jectus.”

To this belongs

הוּג or הוּג (whence our English word *Cog* or *Keg*, 44.
 a *roundish* wooden vessel) a *sphere*, a *circle*, *ambit* ;
circumference or *round* of an orb ; the *course* of
 the celestial orbs ; the *circuit* or *sphere* of the
 heavens or air. Also an *car-ring*, a *lamb* ; the
 first, on account of its *orbicular* figure, the second,
 for its *leaping* or *skipping motion*, or its being used
 in a *yearling*, were made symbols of this. Also
 a *festival* or *holy-day* set apart to attribute the
 creation of the substance, the formation of the
 globe of the earth into a machine, and all its me-
 chanical powers and motions to Jehovah the
 great Author of all the *operations* and *revolutions*
 in nature. See Job xxvi. 10. (where it is used for
 that first *circular motion* of the spirit which com-
 menced before the formation of the terrestrial
 globe) and Prov. viii. 27. Isa. xl. 22. †

תבל that *fluid*, *moveable*, *mixture*, composed of the 45.
 matter or substance of the air or heavens, and fill-
 ing the universe. See Job xxxiv. 13. Jer. x. 12.
 and Psal. lxxxix. 12. Thine are the heavens, and
 thine also is the earth, תבל the *sphere*, and its
 fulness—Thou יסדתם didst *found* them.

צבה

must first be made fit εις καταβολην σπειρατος, or the sower
 sows in vain ; and the microcosm is built up atom upon atom,
 and grain upon grain, in like manner as the macrocosm. The
Latin verb fundo, in its two conjugations, signifies *to pour out*,
 and *to found*, or *lay the foundation*, &c.

† Job xxii. 14. ——— He walketh upon הוּג the *circumfe-*
rence of the heavens or air ——— xxvi. 10. He has establish-
 ed, or described הוּג a *sphere* over the surface of the wa-
 ters. — Prov. viii. 27. when he established *the sphere* (הוּג)
 over the surface of abyss, *i. e.* when he formed the chaos
 into

Chap. I. צבה to *swell*, be *turgid*. The word primarily expresses the force and action of the expansion. Also a *goat*, a turgid lascivious animal continually *inflating* itself, and thence made a symbol of this action of the expansion of the heavens or air.

51:

54.

שמים The *Names*, i. e. the *heavens*. It is derived either from שם *Name*,* because the Heavens are the *substitutes*, *types*, *emblems* or *representatives* of the Godhead, the Deity; the ονοματα τα σχηματινα, as it were; or else from the verb שם to *place*, *dispose*, *regulate*, *put*, *order*, so *rule*, &c. because the fluid of the air, the heavens contain in them all material beings, of which they are the *placers*, *disposers*, or *orderers*, and also really do *rule* over the course of nature. Job xxxviii. 33. Jer. xliv. 17, 18, 19. So by regular derivation signifies and expresses the *use* the heavens were made for. When this word is used for the heavens or airs as they were first created, it signifies *desolation*, &c. when for the same as framed afterwards, and compacted into a machine, *stupendous*, *admiration*, &c. Trin. Gent. p. 2, 19, 30.

This word שמים is the plural number, and masculine gender: *plural*, because of the *Trinity* of agents in it, (viz.) *fire*, *light*, and *spirit*; and *masculine*, by way of *eminence* or *dignity*, these agents being *vice-roys*, and, under God, performing all the operations of nature. That the שמים the heavens really do *rule* over the course of na-

into a sphere or spherical figure. Isa. xl. 22.— He that sitteth upon ארץ the *sphere* of the earth, i. e. the sphere of its annual course.

* The epithet of *Samia* to *Juno*, who is the *air*, may, perhaps, come from שמים *Samim* or *Semim*, the Heavens or Air.

ture the sacred Scriptures in many places declare, Chap. I. as in Job xxxviii. 33. "Knowest thou the ordinances of שמים the heavens, didst thou set the dominion thereof over the earth?" Jer. xxxiii. 25. "Have not I appointed the ordinances of שמים the heavens or air, and of the earth?" —xliv. 18. & seq. "Since we have left off to burn incense to מלכת השמים the power of the heavens, we have wanted all things." —Psal. lxxxix. 30. "The days of the שמים the heavens or air." For it is by means of the air that the luminaries rule in the day, &c. These texts imply that the שמים have the dominion over the earth, that God invested them with this delegated dominion, and that the Jews knew, and attributed the power or rule to the air, but, *judging by appearances*, imagined it was *inherent*, and independent, so set it up for God, and worshipped it. As the heavens are the instrument which is obedient to God, and with which he *handles* and operates upon matter, שממית a deflection of שש or שש is properly applied as a name of the spider, Prov. xxx. 28. "which taketh hold with her hands." —So שומים Numb. xi. 5. is the name for onions; the onion being the emblem of the שמים the heavens. And a most perfect and exact one it is: For let the root and top of the head represent the two poles, and cut it transverse or diagonally, and you will find it divided into the same number of spheres including each other, counting from the sun or center to the circumference, as they knew the courses of the orbs divided this fluid system into; and so the divisions represented the courses of those orbs. *Lucian* says,* the Pelusians in Egypt worshipped onions.

* *Lucian*, p. 700. Περὶ ἁριστοῦ καὶ ἀριστοῦ Θεοῦ.

Chap. I. **שמש** The *Name* or *Substance*, or *Light* receding.

54.

It is a compound of **ש** name and **מש** to recede; and is that matter which, going out or receding from the solar focus or atth in a flux of light, hits or strikes against the earth and the rest of the planets and stars, and is thence reflected back in straight lines, and makes what we call *day light*, *star-light*, *moon-light* or *moon-shine*, &c. As this is God's great agent in disposing and directing material motion, and its effects, the word in the neighbouring languages, as Chaldee, Arabic, &c. signifies also a *minister*, *chief servant*, so is used for *ministring*, *cohabitation*, and *coition*: hence the heathens had a temple to this matter of the heavens, mentioned Numb. xxxiii. 49. Jos. xii. 3. —xiii. 20. Ezek. xxv. 9. called בית־הישמות, and בית־הישנת, and בית־הישמות differently terminated, according as the natives of each place expressed their notions of its power.

56. **שם** The *name*, *place*, *there*, as there is no *place* void of *air* in one or other of its three conditions of *fire*, *light*, or *spirit*.—It is, by way of eminence applied to the heavens, as chief in name; for agency and government in all created matter; and thence taken by the heathens, when they had made the heavens their God, for *that false* God; and after reclaimed by the true God, and joined with *his*, *my*, *Jehovah*, *Christ*, or put absolutely without any other designation for *Christ*, *God*, &c. For an image of the heavens, Gen. xi. 4 *

81: **בין** To *prepare*, *fit*, *form*, *compose*, *compact*, *make firm*, &c. Whence comes the noun **מבין** the *machine* of the material heavens; and as these material heavens are made a type and emblem of

* From **שם**, pronounced as *sem*, comes from the Greek *μαζ*, *Σημειον*; and *Σημαντι*.

the immaterial heavens, the place of God's residence, this word is also used for it, 1 Kings viii. Chap. I. 39, 49, &c. The Rabbis used this word, written מִכִּין, for *Solomon's temple*. Indeed the parts of the tabernacle and temple were to represent, among other things, the parts and power of the *machine* of the heavens, emblematically. The reason of the name is fetched from the act itself of the heavens; for as soon as they were prepared, and fitted up, and framed into a machine, all other things by their agency and ministry were immediately prepared, and framed, and placed into their proper places and functions. Hence our English word *machine*, and the Latin *machina*, &c. Hence the adverb מִכִּין, *so, rightly*, i. e. whatever is *contrived* and *framed* aptly, and according to a plan, mechanically; or as the north-country word more closely to the Hebrew expresses it, *canny, cannily*, i. e. aptly, fitly. Hence the heathen God מִכִּין, *πεμψαν* and *ραιψαν*. Acts vii. 45. from Amos v. 26. the *mechanism of the whole heavens*. Hence מִכִּין one of the pillars set up to support the representation of the spheres in *Solomon's temple*. And as this temple and the tabernacle of *Moses* were to imitate the heavens as far as possible in miniature, they were to be set up, without any alteration of the materials, upon the spot, and without stroke or noise of ax or hammer there; the fit sorts and quantities of matter being before procured, provided and fitted, each part for its proper use, and brought near to the place of use; as God created the materials of which this world was made, and placed them in such order, sort and quantity, that the agents, when set to work, might, by their natural mechanism, form them into the *νοσμες* we see them.

Chap. I. **כֵּל** To *perfect, complete*, i. e. to make capable of performing what it was designed for, &c. whence **כֵּל** a *vase, machine, instrument* of any kind; hence **כֹּל** *all, every*, &c. and the Greek *κηλον*, plur. *κηλα*, used by Homer, *Iliad* I. v. 53, 383. XII. v. 280. Hymn on Apollo, v. 444. *arms, &c.* of any sort.

95, 100.
(96, 102.) **לֵאדָּ** To *send upon a message, or errand, to dispute, legate, &c.* whence **מֵלֵאךְ** *one sent, a messenger, deputy, minister, &c.* and **מְלֵאכָה** a *work, deputatation, or material legate*; something framed to be subservient to other uses, the **לֵאדָּ** of the **מֵלֵאךְ** put in execution, performed, &c. It is principally spoken of the heavens or air, the great instrument and means of all the operations in nature; whose parts God has so disposed that they may *do his work*, be his *material legate* or *vicegerent* in the *economy* of the universe: namely, he made them **לַעֲשׂוֹת** *to work*, that is, to carry on all *his* operations in nature, from the first formation of things to their final dissolution, Gen. ii. 3. — It is used for *Salomon's temple*, and the tabernacle made by *Moses*, 2 Chron. viii. 16. and Exod. xl. 33.

צְבָה (from **צָבָה** to *inflate, swell, blow up, and so expand*, p. 6.) and so used for the *host of material powers*, i. e. the *force of the expansion*. Hence the worshippers of these powers were called *Zabii* or *Sabai*. And hence God, as Creator of these powers, claims the title of **LORD OF HOSTS**.

P. 100,
(101.) **נִדָּ** A *trcop.* It expresses the manner in which God's three great agents and ministers, the *fire, light, and spirit*, exert their strength and power, &c. in forming the expansion or firmament, and keeping it in that condition by their joint action; and thence have their particular effects and operations

rations upon matter. These were considered and worshipped by the heathens and apostate Jews under different expressive names, as the *Plas-*
mator, Supporter, Projector, &c. and each had its respective temple: thence perhaps the heavens had the appellation of *names, Shemim*, in the masculine gender, given them by way of eminence, and used by the heathens for these powers as independent, but by believers as the *types* or *names* of personality in Jehovah, the creator and former of *these powers*. The celestial orbs are included in this word, which are ranked in order in the air, properly furnished with every thing requisite, with all military stores to supply these troops, and invested with powers to regulate, discipline, keep them in order, and make them do their duty. Hence גדי a *kid*, a young *goat*, as it was an emblem of this power, and גדות the *banks* of a river: Any thing which contains and directs the course of water is called in the north a *goat*. Hence perhaps our English word *gad*, to ramble, move freely to and fro, here and there, as the light and spirit do. And I strongly suspect our word *God* has no better original; we derive it from the Persian גודא *Goda*, and the Arabic גוד *God* or *Gud*; and we know from Scripture that גו was the *God* of the heathens, and the apostate Jews, Isa. lxxv. 11. and if so, the affected corruption of this word *God*, when we say *e' Gad*, by *Gad* may be the true pronunciation. These powers of the air are sometimes called אלהים, Θεοι, *Gods*, sometimes מלאכים, Ἄγγελοι, *Angels*, or ministering spirits; according to the different sentiments of the people who used the words; and these are properly the כרובים and שרפים of the Old Testament, which indeed are made use of to represent the

Chap. I.

Eternal Three, who thence take the names of **Cherubim*, and *Seraphim*, as they do of *light*, and *spirit*, Psal. ciii. 20. God's מלאכיו his Angels, are explained by צבאות his Hosts, and מעשיו works, and these are his material legates, Psal. civ. 4. And the actions of the heavens are all reclaimed to God as *his* actions, as *He* formed and appointed their operations, —as *voice*, *sound*, *breath*, *light*, *power*, *strength*, *hands*, &c. not but that these in other respects, are also proper attributes of the Son of God, and as such claimed by him in the New Testament.

112,
(113)

רכב To *ride*, or be *carried*, a *rider*, *eques*, *auriga*, *charioteer*, *driver*. Whence מרכב a *machine* to be *drawn* or *driven*, a *cart*, a *chariot* to carry, without regard to number of wheels or persons. It is principally to be understood of the celestial chariot of the firmament or expansion formed to carry and give motion to all other things. For the grains of air or spirit with the *Shemosh*, &c. are God's drivers—The firmament or expansion his wings, the matter of the heavens and the orbs, &c. his machine, chariot, &c. the whole frame of nature being at his nod or beck, both as to action and passion: And so both the powers of these agents, and the figures by which they were represented, are reclaimed from heathen abuse to him, as *wings* of *eagles*, *hawks*, heads of *ox*, *eagle*, *serpent*, *lion*, *chariot*, *charioteer*, *seraph*, *cherub*, &c.

* It appears from the 6th and 7th Volumes of *Mr. Hutchin-son's Works*, that he saw further into this Subject afterwards.
Editor.

C H A P. II.

Hitherto, in the words already explained, the threefold matter of the heavens or air, or rather the tri-une substance in its three conditions has been treated in a summary way. In the words hereafter to be explained, we shall treat of the separate parts, or the three conditions of the same aerial matter more particularly and minutely: And first, of the *air in motion*, or the *spirit*.

תה The word signifies, whatever is *unconsolidated*, which has nothing solid in it, so without form, but in a capacity of receiving any: not that the earth had no form at all (Gen. i. 2.) for then it would have been nothing; for every thing that exists is in some form or figure, but it means the *absence of adhesion and composition*, as the physicians use the word. The parts of the earth were not yet separated from the waters, nor compacted and consolidated. See Isa. v. 6. “I will make it **בתה** “into a waste or wilderness;” where **תה** is the root, and **ב** a prefix.

בהו *Void, empty, hollow*, as caverns and ruins, with nothing but air within them. See Isa. xxxiv. ii. where both words are used — “the line of **תהו** and stones of **בהו**,” in the same sense as here. See also Isa. vii. 19. and Lam. iv. 5.

Theodotion and *Aquila* render **תהו** by *Ουδεν*, and **בהו** by *Κενον*; and the Greeks, from the earliest times, denominated *Ουδεν* and *Κενον* their physical principles, which are none other but the **תהו** and **בהו** of *Moses*. This shews whence they had them: and hence we may understand what is meant by the *Vacuum* and *Inane* of *Lueretius*, &c. This is the *Bau*, or *Baut*, of *Sanchoniatho*.

There

There are many broken vestiges of the Mo-
saic account of the creation among the heathens.

Hesiod says,

Ἦτοι μὲν πρώτησι Χάος γενεῆ' αὐτὰρ ἔπειτα
Γαί' ευρυσερῆνος —

“First of all was the Chaos, and then the
“broad bottom'd earth.”

Euripides in *Menalippa*—

Ὡς Οὐρανὸς τε γαίᾳ τ' ἦν μορφή μιᾶ'
Ἐπεὶ δ' ἐχωρισθῆσαν ἀλλήλων δίχα
Τικῆσαι πάντῃα καὶ ζέδωκαν ἐν φάος.

“How the heaven and earth was in one form,
“which, after they were separated from each
“other, begot all things, and brought them
“into light.”

Aristophanes—

Χάος ἦν καὶ Νυξ Ἐρεβὸς τε μέλας πρόωτον καὶ
Γαῖα εὐρύς
Γῆ δ' ἔδ' Ἄηρ ἔδ' οὐρανὸς ἦν.

So others.

𐤇𐤏𐤏 * The word in a general sense expresses any
fluid matter. It is regularly declined from 𐤇𐤏 or
𐤏𐤏, which are but one root, and signify *turmultus*,
turba, and whatever else may come under the
idea of *multitude*, *tumult*, *disorder*; and it is
applied to a collection of waters, and as properly
used and applied to, as any word perhaps in the
Hebrew tongue. When *Moses* first used this
word, the earth was not formed, and it is by
him applied to the whole globe, which was as
yet only a fluid turbid mass; but after the earth
was formed, it is used for what remained fluid,

* The *Ἰανὺς* of the Heathens, the mixture of their Chaos.

namely,

namely, that vast collection of waters which lie Chap. II.
 hid in the great *hollow* or concavity in the bowels ~
 or *womb* of the earth, as Job xxxviii. 8. terms
 it, and which by way of eminence is called the
deep, and often distinguished by the title of the
great deep, as Gen. vii. 11. and Job distinguishes
 it from the sea, ch. xxviii. 14. and ch. xxxviii.
 30. calls the sea the face of the deep. This is
 the place from whence the rivers come, and
 whither they return again.†

𐤒𐤓𐤐 * to restrain, stop, retard; it implies the *restric-*
tion and *coercion* of that action of the air whence 119.
(20.)
 light

† Plato has described this place as if he had it from tra-
 dition.

Εἰς τὸ το χάσμα συρρέουσι πάντες οἱ ποταμοί, καὶ ἐκ τού-
 τῳ πάλιν πάντες ἐκρέουσι.

Placido at the end.

So Homer, Iliad XXI. 195.

————— *μὲγα σθένος ὠκεανῶ*

Ἐξ ἕπερ πάντες Πόταμοι καὶ πᾶσα θάλασσα
 Καὶ πᾶσαι Κεφαλαὶ καὶ ἀφρονήματα μακρὰ γένονιν.

* From 𐤒𐤓𐤐 *Husk*, may come the word *Husk*, as it is form-
 ed by the *restricition* and *stagnation* of the grosser parts of the
 pulse by the action of 𐤒𐤓𐤐; and also, as the *Husk* contains,
 restrains, and bounds the seed, as the 𐤒𐤓𐤐 did the *deep*, and
 as it now does this system at the verge or extremities. Night
 or Darkness was a Deity worshipped by the Heathens. *Aratus*
 calls her Ἀρχαία Νύξ, *Night the Chief*. *Hesiod* says, she had
 sacred rites paid to her, because she was the ancientest and first
 of the Gods. He makes her the daughter of Chaos, and
 mother of Æther, or Light, and Day. And *Orpheus* recites a
 hymn sung to her, with incense, and calls her the Mother of
 Gods and Men, and the *Genesis* of all things.

N.B. From hence it appears, that the LXX translation of
 Gen. i. 1. Ἐν ἀρχῇ ὁ Θεός, was a proper hint to the Heathens
 to reclaim them from their false worship: It was asserting the
 God of Heaven's superiority over all the Gods of the Heathens,
 and making him God of Gods, and Lord of Lords. And
 accordingly Christ claims this title, John viii. 25. when they
 asked

light is produced. The matter of the heavens or air, at its first creation, was in a state of stagnation, torpid, inactive, and at rest, and was therefore *darkness*, $\aleph\aleph$; and very descriptive it is of the air, before the spirit begun to *move*, or *that motion*, by the Almighty *Fiat*, produced light, Gen. i. 2, 3. In proportion as any thing now obstructs *that* action of the air which produces light, darkness in proportion ensues.

123.
(125)

$\aleph\aleph$ To *coagulate, congeal, condense, concrete, storken,* or *bring to a consistency.* Hence $\aleph\aleph$ a *consistent*

asked him who he was, and answers $\tau\eta\nu\ \alpha\epsilon\chi\eta\nu\ \epsilon\iota\ \tau\iota\ \nu\ \lambda\alpha\lambda\omega\ \epsilon\mu\iota\nu$. And this was then so well understood, that *many believed in him.* (ver. 30.)

The Egyptians also worshipped DARKNESS.—They said, it was the *First Principle*, or *Materia Prima*;—Its sacred rites were performed in subterraneous caverns, which they called Sacred Cisterns —They thrice invoked it by the name of *Incomprehensible Darkness*, the $\Theta\epsilon\omicron\varsigma\ \xi\mu\lambda\acute{o}\varsigma\phi\theta$, the *triform God*, infolded within three separate receptacles— and affirmed that *darkness* was at first cast over every thing.

It is easy, I think, to trace in these Heathen Remains, the broken vestiges of the tradition of the creation handed down by a lineal descent from the first parent of mankind, and which God was graciously pleased to record in writing by his servant *Moses*, to rectify the mistakes which had crept in by tradition.—“Darkness being the Genesis of all things, — the “Mother of Light and Day, — the First Principle cast over “every thing,” — tallies pretty well with the Mosaic account of the creation, and “darkness being upon the face of the deep,” — And when we consider that out of this darkness God commanded light to spring, and that the Heavens or Air were first $\aleph\aleph$, then $\aleph\aleph$, and then $\aleph\aleph$; this $\Theta\epsilon\omicron\varsigma\ \xi\mu\lambda\acute{o}\varsigma\phi\theta$, this TRIFORM GOD of the Egyptians will appear to be nothing but the *Triform Change* Darkness underwent, “when the Spirit of God “moved upon the face of the waters; and God said, let there be “light;” (Gen. i. 2, 3.) which they made a God of, to avoid acknowledging the Creation (for the Heathen world worshipped the Creature more than the Creator) and Moses, by letting us know that Darkness, *i. e.* the heaven or air in its inactive state, was created, stripped it of its imaginary divinity, and thereby gave unto God the honour due unto his name.

body,

body, any matter *coagulated, storkened, &c.*—Chap. II.
 קופאון *coagulation, snow congealed*; so daikrefs, }
 dark, thick, &c. as Zech. xiv. 6. יקרות יקפאון
 the *small parts of light shall be coagulated or storkened*,
 so become dark. The word principally relates
 to the matter of the heavens or air moving or
 blowing as spirit, which is itself coagulated and
 congealed air or atoms of light storkened, and
 which coagulates or congeals other bodies: *Job*
 calls this agent the *breath of El*, and makes *con-*
gelation the effect of its blowing, ch. xxxvii. 10.
 “By the breath of God *frost* is given, and the
 “water distended in cakes of ice.” So ch. x. 10.
 “like cheefe thou hast coagulated me (תחבאיני).”

קנאון *Concretion, ice, privation, or concretion of* }
light, that which produces concretion, and frost, }
and ice, &c.

עבה *Density, and so cloud or clouds, Exod. xix. 9:*
 2 Sam. xxxiii. 4. — xxii. 12. — 1 Kings xviii.
 45. — 1 Kings vii. 46. 2 Chron. iv. 17.

פלט *To roll in, or cover with dust, and ashes. It* } 125
is spoken of the dust, ashes, or atoms of the } (120.)
heavens or air, and describes the manner of the
growth or formation of a dense grain of air, as
Job xxxvii. 16. The atoms of light pressed out
from the sun by the expansive force of the fir-
ment, are rolled on to the circumference of
this system, and there formed into grains and
darkness, and solidity, in which condition the
outmost extremities of the heavens are said to be,
Job xx. 6. — xxii. 14. Isa. xiv. 14. And the
antient Jews and heathens say the same. Of this
*sort and kind was the *darkness* in Egypt, which,*
as Moses says, might be felt, (ויניש חושך) Exod.
x. 21, 22. and which seems to have chained them
down to their seats or places by what is said, ver.
23. and Wisdom, ch. xvii. 2, 16, 17. with one
 D *chain*



chain of darkness; this motion or irradiation of the light being in some degree suspended, the grains being formed so dense, that the units or atoms of the fluid of the air in motion from the light could not pass through them, and keep the parts divided. Of this sort, and from this cause, is the pressure we feel upon the back part of the hand laid upon the mouth of the *receiver*, as it is exhausted of the gross air: for as irradiation or opposite motions of the light and spirit cannot be but where there is a proper mixture of grains and atoms, or light and spirit, it must consequently be weakened, and abate its action, as the mixture is destroyed by taking away the grosser air, or grains; and as the irradiation weakens, the balance (or the spring of the air, as they call it) that is, the opposite or counter-pressure to *that* which presses upon the back-part of the hand is weakened, and so *that* pressure is felt, which while there was an equal mixture was not, and when that mixture is restored by letting in the gross air, is not felt. The *Egyptians* seem, by *Wisdom*, ch. xvii. ver. 10. to have been such *staunch philosophers* as to deny this *power* of the air, though they felt it on every side of them.

From this word the Philistines took their name פלשתים, and by *that* seem to have been worshippers of this *power* of the air; and upon this account their champion *Goliath*, גלית, the *circulator*, of Gath, גת, *torcular a torquendo*, a *press*, something that acts by circulation or turning round, both which names are taken from the *action by circulation* of the heavens or air) was slain by a stone from a sling, a round smooth nodule, worn so in the torrents; אבן, a concrete of a species of grains concreted and kept together by the same action of the air which they worshipped, and had their name from; and so *Davida* tells the *Philistine*, that he came in the name

of Jehovah, עֲבָאֹת, of those powers which they worshipped for *Elahim*, and by which he, Goliath, had defied and reproached the Elahim of Israel. Chap. II.

טרה *with great labour to support an incumbrance, or incumbent weight.* It is spoken of the masses of coagulated air impelled or driven from the circumference of the heavens, and forced in strait lines into the solar focus or athah, where they are, not without great force, dissolved, and sent out thence on every side in rays of light. Job xxxvii. 11. Cant. vi. 9. 126. (128.)

עלט *Darkness, cloud, caliginous, the evening twilight.* In Arabic it signifies to be *coagulated, congealed, condensed, thickened, or made thick, made fat, &c.* קבל Chaldee is *Darkness, &c.* and in the *Targum Onkelos*, Gen. xv. 12. is put for the Hebrew השך. This word is compounded of על *super*, and לוט *involvere, to over-cast, obnubilare, &c.* 127. (128.)

ערבלי *Darkness, caliginous, from ערה to distil, deflow, fall down drop by drop.* Also the neck, because through the hind-part of it the marrow from the brain distils into the spine of the back, and moistens the bones, in the same manner as the dew from heaven descends and refreshes things below. Bending the neck, and so bowing the head forward, is an abridgment of casting the head to the ground, is a sign of worship and subjection, and breaking or cutting off the neck, is letting the head, fall or casting it to the ground: Hence its signification of *subversion, to decollate, or behead, to cut the throat, to destroy*; and so this word as a verb is well rendered to *distil, for doctrine, and for dew*, Deut. xxxii. 2. — xxxiii. 28. And as a noun plural, ערפלים, for these *nebulae, distillations of the airs (the grains)* or small masses, which are continually cast down, and *distilling* from the

circumference of the heavens to the orb of the sun, and in their way upon the dark side of the earth: Isa. v. 30.

75 *Straitness, coarctation.* It is primarily spoken of the grains of air storkened and condensed by compressure, and thence of other things suffering the same kind of compressure by the same agent, though in different degrees.

128.
(129.)

77 *Obscurity, blackness,* that is, the ἠζόρη τῆ σνότης, that *blackness of darkness* mentioned by the apostle Jude, ver. 13. which is the effect of 75 *the strong compressure*, such as is the condition of the grains at the verge of this system; the τῶ σνότος τὸ ἐξώτερον, the outer darkness, from whence the idea is taken of the place of future punishment, Matth. xxii. 13.—xxv. 30. where the wicked will be at as great distance from the presence and light of the faces of God, as these grains are from the irradiation of the sun, the material divinity.

(130.)

77 *Cold,* another conditional name; the effect of the presence of those grains, which being too large to pervade the pores, and thin mixed fluids, and so keep them in motion, by means of their size compress and fix them, and so produce cold and frost. When frost is excessive, these grains will be driven in with such violence as to split and tear alunder trees, and parts of rocks, stones, &c. (Instances whereof we had in the great frost 1740-1.) and also to rot the fingers, toes, &c. of persons exposed long to its violence; whence the Latin phrase *frigus urit*, and the use of the word *frigo*, and Greek φρυττω, φρύγω, to *parch, fry, &c.* From this Hebrew word comes the Greek Κρυος, *rigor, frigus, hard, stiff, cold, &c.*

There is a clear description of the places from whence these grains which produce cold come,

Job

Job xxxvii. 9. וּמִמּוֹרִים קָרָה. — The root is *Chap. II.*
 זר זור זרה to *shake, dissipate, compress, express by*
compression, so to alienate, disperse, scatter, break
to pieces. מוֹר expression, alienation, declination.
 זרה a circle, circumference, crown, &c ventilators, &c.
 זרר and זרא, Chaldee and Arabic, to decline, recede, divert, diverge: Arab. inward and outward. This word (מֹרִים) is a name of situation, condition, &c. and answers all these general descriptions or usages of the word, [Root] though seemingly different. — These grains come from the most distant places, so *strangers.* — They are driven to the center, and by the compressure of those successively following, are *broken and dissolved* in the action of fire at the center, *expressed and dispersed* alternately to the *circumference* coagulated there; so *inward* to the center, and *outward* from the center; which motion the pointed radii of a *crown* represented; the one sort pointing *inward*, the other *outward*; so by this motion they are *ventilators, &c.* and so they are from the places, whither the light of which they are formed, is continually dispersed in the most extensive sense every way, and to the furthest distances, and the widest dispersions. — They are from the *periphery, circumference, or circle*, and from the places of *circulations, revolutions, or returnings*, and so agree to the most minute circumstances. And this explains Job xxxviii. 32. where this word is used: “Canst thou bring forth (מֹרֹת) the densities in their proper time?”

129.
(131.)

אפלי Darkness thick and gross. This word expresses an effect in its kind greater and stronger than השך: For it signifies the concretion of grains of air or spirit bound up in the closest, densest manner.

131.
(132.)

manner. It is joined with חשך, Exod. x. 22. ויהי חשך-אפלה. It was the חשך made it dark, but the אפלה that made the darkness to be felt. It is used, Job x. 22. "the land (עפתה) of thick darkness (כמו-אפל) as whence the grains descend; of the shadow of death, where there is no סורים rows or intermixtures of light; but darkness as whence the grains descend, [וחפע (כמו-אפל)]." Job makes this a picture or image of the state of Death; and a fine one it is. And the *Book of Wisdom*, Chap. xvii. 21. makes the Egyptian darkness "an image of that darkness which should afterward receive them." עפתה is the place at or near the verge of this system from whence the concreted grains of air begin their motion, and direct their flight to the solar fire; אפל is the same concreted air as falling down to the center, and pressing, compressing, and driving all it meets with before it. We must distinguish between the *land of darkness* mentioned here, and the *outer darkness* τὸ σκοτὸς ἔξωτερον of the N. T. The first is within the irradiating power whence the grains return; the second is without it, beyond the fixed stars where it does not reach, but the grains make one solid concrete: So the one is the type of the state of death, the other of that where there shall be weeping and gnashing of teeth. Job xxviii. 3. calls this כלי-חבלית the covering over all, אבן אפל the stone darkness. And this is *Lucretius's* *Mania mundi*. It is also joined with נרה and דהה, Isa. viii. 22. Jer. xxiii. 12. words of impulse. (If דה be not the root of both, the נ prefixed and ה dropt in Isaiah, and the נ dropt and ה affixed in Jeremiah, &c.) When these grains are in the air in any quantity, we say it is thick, heavy weather, and feel an heaviness or weight upon our bodies. The word is used for a lump or mass, or grains of any other matter, beside air,

air, concreted or bound up very close or hard Chap. II. together, as Exod. ix. 32. “ For the grains of wheat formed too hard (for it was near ripe) to be hurt, as the tender barley, which was only in the ear. The Heathens used words to the point in hand even as low down as Cicero, who has *Crassus* and *Concretus Aer. Spissus*, thick, slow, *Spisso*, to make thick, thicken, the effect of a slow languid degree of motion, are used to the same purpose: *Æther spissus*, *Caligo spissa*, *Grandine spissa glomeratur corpus*, *Nubes spissa*; Ovid; *spissa regio*, close soil, *Coilumella*; *Umbræ spissæ nobis*, Virgil. And Ovid has a remarkable description of Air being *spissated*, or *condensed*, or *concreted fire*; and *fire* being *attenuated air*; *Metamorph. B. xv. V. 247.*

*In superos aer tenuissimus, emicat ignes,
Inde retro redeunt; idemque retexitur ordo.
Ignis enim densum spissatus in aëra transit*.*

Hence,

* *Lucretius* talks the same language, calling the *Spirit dense, gross, concreted air*, and the *Light bright, lucid air*, making their difference to consist in the texture of their parts, the one being large, the other small, and for that reason causing different sensations, the one of darkness, the other the sensation of light. *Lib. iv. Ver. 338.*

- “ E tenebris autem quæ sunt in luce tuemur,
- “ Propterea, quia cum proprior * *caliginis aër*
- “ *Ater* init oculos prior, & possedit apertos:
- “ Insequitur candens confestim *Lucidus Aër*,
- “ Qui quasi purgat eos, ac nigras discutit umbras
- “ *Aeris illius: Nam multis partibus hic est*
- “ *Mobilior, multisque minutior, Et magis pollens.*
- “ Qui simul atque vias oculorum luce replevit,
- “ Atque patefecit, quas ante obsederat *Ater*:
- “ Continuo rerum simulacra adaperata sequuntur
- “ Quæ sita sunt in luce, *laccessuntque* ut videamus,
- “ Quod cont a facere in tenebris a luce nequimus;
- “ Propterea, quia posterior *Caliginis Aër*
- “ *Crassior* insequitur qui cuncta foramina complet;

“ *Obsidetque*

* אֶרֶץ-חֹלֶם.

Hence, perhaps, comes the English word *apple*, which, in the general signification, is any fruit of the *hard round* kind; and the northern word *appley*, which is applied to a *lump* or *clod* of any matter, particularly *round coals*.

“ *Obfiditque vias oculorum, ne simulacra*
“ *Possunt ullarum rerum coniecta moveri.*”

i. e. “ If we are placed in the dark, we see objects that are placed in the light; because, tho’ the *concreted dark air*, which is nearer, first enters, and takes possession of the open eyes, the *bright lucid air* immediately follows, and dissipates the black shades of that air: For *this lucid air is by many degrees more active, subtle and penetrating*. This, as soon as it has filled the passages with light, and *opened* those pores that the dark air had *stopped* before, the images of things conveyed in the light immediately follow, and strike upon the eye, and move the sight. But, if we are placed in the light, we cannot discover objects in the dark; because a flux of *dark and thicker air* follows the bright and thinner, which is nearest the eye, and *stops up* all the pores, and so *choaks up* all the passages of the eyes, that the images of things cannot be moved or received into them.”

He likewise talks of light being pressed out from the sun successively, atom impelling atom: *As Ver. 186. Lib. iv.*

—————“ *Solis lux & vapor ejus,*
“ *Propterea quia sunt e primis facta minutis:*
“ *Quæ quasi trudentur, perque Aeris intervallum*
“ *Non dubitant transire, sequenti concita plaga,*
“ *Suppeditatur enim confestim lumine lumen,*
“ *Et quasi protelo simulatur fulgure fulgur.*”

i. e. “ The rays and vapour of the sun, because they are composed of the minutest seeds or atoms, are easily *impelled forward* through the intermediate air, [*i. e.* thro’ the returning spirit] *the following urging or pressing on the part that went before*: For one beam of light is instantly suppld by another, and *every ray is pressed on by another behind*.” — And though they would rather a *Vacuum* upon him, it is plain he meant nothing by that word but *Rarior Aer*; For what can be more decisive for a *Plenum* than these lines:

“ *Et quasi multa brevi spatio submittere debet*
“ *Lumina sol, ut perpetuo sint omnia plena.*”

“ The sun ought to emit many rays in an instant, *that there may be kept up perpetually an absolute Plenum.*”

And I am inclined to suspect, by the by, that Chap. II.
 the Latin word *malum*, for the apple, had its name from the *evil* consequences which the eating the forbidden fruit brought into the world. }
 —But this belongs not to this place.

אבן a name of condition, of the same idea, for 131, 2.
an heap or mass of any species of atoms or small (132, 3.)
 grains made *concrete by compressure*, and adhering strongly in a lump; and because atoms or grains of *stone* (for most sorts of them were first formed into grains or sands) are generally in that condition, and they most common, the word is applied singly to a piece of any of the common sorts of *stone*; when to any peculiar sort, the name of the species, or of the use or value, is added: It is likewise applied to any *concrete*, as of *metal, water, air or fire*, with the addition of the name of the species of atoms so concentered. Deut. viii. 9. Jos. x. 11. 1 Sam. xxv. 37. Job xxviii. 2. xli. 15. xxxvii. 30. Isa. xxvii. 9. xxx. 30. Ezek. xxviii. 14. Zach. iv. 10. Exod. i. 16. Jer. xviii. 3. And it is joined with the preceding word **אפל**, Job xxviii. 3. **אבן אפל**.

התח or **תח** *Impulse*, to *impel, move by impulse*; 133.
 the act of driving in the grains and driving out the (134.)
 atoms to and from the center and circumference, and *è contra*. No mention of *gravity or attraction*, or any *properties* in matter, but every thing is attributed to the *impulsive force* of the *all-compressing* and *all-compelling* expansion, which according to the different sorts and sizes, and quantity, &c. of the atoms of which bodies are composed, acts upon them in giving each its proper gravity, and place, keeping it there, or taking it up, or setting it down; and when any body is put into motion, by a foreign force, continuing that motion, by pressing in behind, till by

Chap. II. that means the resistance, which the fluid gives before, becomes greater than the pressure behind.

134. צר, צור, and צרר,* this word in different forms expresses the thing by the condition, and in general signifies to *environ*, and *bind* any parcel of things or matter by implication, *close* by *compression*. Hence צרר צור a *stone*, a *binding*, or *ligature* †; a *calculus*, a *scruple*; stones being used for weights.—Hence יצר, to *form*, *frame*, *fashion*, *work*, &c. and in clay, potters-earth, or wax, namely, to *impress* a certain new form or figure upon any matter, and to preserve that form so *impress'd*.—Orpheus attributes this to his *Apollo*, whom he calls

Πανα Θεον δικέρωτ' ἀνέμων συρίγμα θίεντα
Παντὸς ἔχουσα κόσμος σφραγίδα τυπωμένη.

*Pana, Deus bicornem, ventorum sibilos jaculantem
Omnis habentem mundi sigillum imprimens & in-*
formans.

Hence also צר, of which before, p. 20. And, צר^י *Straitness*, as it were *pressure*, and *coarctation*, primarily spoke of the air, the heavens, or expansion, and thence, secondarily, of any other *agent* that has power to compress, &c. Hence stones and rocks derive their *cohesion* and *hardness*. Hence also the idea is carried down to

* From this attribute *Egypt* had its name מצרים, as also had *Mizrim* the son of *Ham*. *Egypt* was not called *Mizraim* from *Mizraim* the second son of *Ham*, but *both* took the name from this attribute of the air. And hence we shall have one view of the propriety of the miracle of making this *power of the air*, bind them all with one chain of darkness. Exod. x. 21, 22, 23. *Wisd* xvii. 17.

† Job xxix. 6. צור is used for an oil-press — וצור יצוק, עמדי ככלי-ישמן, and the *press* poured me out rivers of oil.

other

other things under *compressure* or *straitness*. See Chap. II. Zeph. i. 15. Isa. v. 30.—xxx. 6. Psal. cxvi. 3. —xcv. 5. Isa. xliii. 10. Job xxvi. 8.—xxxviii. 9. Prov. xxx. 4.—xxvi. 8. Amos ix. 9. 2 Sam. xvii. 13.

צוּ To *blow*, *drive*, or *press together*, to *adhere*, *make adhere*, &c. It is understood of the *act* of *expansion*, which *impels*, or makes *subside* or *settle* every thing in nature, according as each is *impelled* or *subsides*. Hence——

צוּי *Effusion*, to *pour out* or *upon*, spoken primarily of the pouring out of the grains of air in the manner as is done from the circumference to the center, where they are melted into *dust* עֶפֶר, pressed outward by the succeeding grains, so reformed and made adhere in grains again, as is beautifully described Job xxxviii. 37, 38. by the comparison of a foundry, where the ore-dust is melted into lumps of what size you please. Hence it signifies any thing *poured out*, *melted*, *founded*, *cast*, or *fusible*, &c. and thence as an adjective, *strong*, *robust*, *firm*, *hard*, &c. and also to *set* or *lay down*.——If we consider that carrying down oil, or &c. till something stops it, is the same action, and performed by the same agent as carries down melted brass, till something stop it, and makes the parts adhere, and become strong, hard, &c. and if into a mould, or &c. figures it; and also is the same action and agent as fixes the parts of stone together, or carries the parts of stone so fixed downward, till something stop it; then we shall see that the word does but signify *one sort of action*, though that *one action* has different effects upon different sorts of atoms, or upon each same sort of atoms in different conditions, as solid, or fluid, &c. and the seemingly different usages or significations of the word will

be hereby reconciled, as Gen. xxviii. 18. Exod. xxxvi. 36. Job xli. 14, 15. Jos. vii. 23. 1 Sam. xiv. 4. 2 Sam. xv. 24. Job xxix. 6.—xxxvii. 18. This is the *agent* that by compression makes adhere not only grains of air, or solid parts of, but the whole earth. By *this* the atoms of stone, and those of metals in the water, after the dissolution of the flood, were, by *compression*, driven to each other, and so formed into grains before they settled: by *this* the atoms of *metal*, after dissolution in spirits, are formed into grains: by this the atoms of *salt*, in water, are formed into grains: by this the atoms of water, in the atmosphere of air, are formed into grains: by this the atoms of *spirits* are formed into grains: by this the atoms of *air* are form'd into grains, and at such sizes respectively as the compressure of this fluid gets comparatively sufficient hold of them, each is pressed down, or moved by the continual contact, and material impulse, during its whole course, according to stated rules, with the matter and impulse remaining upon it when stopped. These grains of air are formed near the verge or circumference of the heavens, and each, when formed of sufficient size, is pressed down in a straight line to the center of the sun, and some of them in their course to the earth, &c. and are called נבלי, *Nebulæ*: of which hereafter.— But as the few words which follow, though very different from, are sometimes confounded with the preceding ones, we must distinguish and separate them. As,

1st. נשא to lift, carry up, or upwards. Whence
 143. נשאים vapours carried up into our atmosphere
 (144.) from the abyis, the womb or storehouse, from whence they issue in.

2d. קיטור Steam, fume, vapour, smoke, &c. (a general word for smoke or vapour of any kind) and these

these when they fall down upon the earth are called Chap. II.

1. מטר *Rain.*
2. ברר *Hail.*
3. שלג *Snow.*
4. ענן *Clouds.* Whence it signifies an *angur*, or *cloud-monger*, who predicts futurities by the countenance of the clouds.

Return we now to the matter of the heavens or air; to which belong

נבל To *flow, defluxion*, &c. to which corresponds 145.
 בעל, בל, בול That which has the *power of moving itself*, and making others *move* or *act*, as *lord, husband*, or an *officer* among men who has the *command, a general*, &c. in inanimate things, it is the *agent that moves* and *acts* upon other things, and by its *agency and force* makes them *move* or *act*. There are *three parts* or *conditions* of the heavens or air, which have this *power**, not of themselves, but *mechanically*, by investiture from God.

1. חמה The *solar fire.*
2. שמש The *rays irradiating* from the *solar fire.*
3. בעל, בל, בול, *Air, spirit, wind*; that is, according to the *Heathen, or Gentile theology*, *Belus, Jupiter*, &c. of which first, and the root is

בלל To *confound, mix, dash*, &c. The *mixture* or *mixer*; because the *spirit*, of which, under this name or attribute, we now treat, mixes itself 146.

* So בעל שלשה the *ruler in three*, 2 Kings iv. 42. and 2 Kings vii. 2. שליט is used for some *great officer*, or, &c.

An INDEX to

in its revolutions continually with the light. Of this attribute under the name of φύσεως, *nature* sings the most antient of poets, *Orpheus* ;

Εὐάνθεια πλοκή, φίλῖα, πολύμικτε——

“ Benè florens, *plicatura*, amica, *multum-mixta*.

A-kin to this word is

147. ערה to *shed*, *pour out*, *profuse*, &c. Whence

יערים *pourings-down*, or *pourers-down*, &c.——
spoken of the *grains of air* or *spirit*, which are poured down from the circumference towards the sun, the center ; and in a spiritual sense, to the effusion of the *Holy Ghost*, the *Spirit of God*, Isa. xxxii. 15. In respect of this *pouring* of the heavens were the libations, *pourings out*, or down of the drink-offerings of the heathens, after claimed by God.

150. רוח * to *respire*, *dilate*, *refrigerate*, or *refresh*: thence *spirit*, *wind*, &c. It is spoke of the matter of the heavens or air in motion inward toward the sun, which in its way *respire*s, *moves*, *dilates*,

* From רוח comes ריח *vapor*, *odor*, ὄσμη, *that* which the *spirit* carries to the nose, and which gives the sensation of *smell*. It is applied Job xiv. 8, to the fine corpuscles of vegetable matter contained in water as their vehicle, which the action of the רוח spirit, with the light, carries up into seed or plants for its formation and augment, מרחק מים יפוח “ By means of the “ *reek* of water it (viz. the tree) will germinate.” So to the fine fume which arises from fire, and gives a smell, as Dan. iii. 27. ריח נור “ The *reek* of fire had not left its *marks* or testi-
“ *mony* upon them” [לא ערת בהן] Our word *reek* comes from hence, which we apply to the vapor, or fume, or steam, which the air carries up from *fire*, wet cloths, or heated liquors and such like ; as also the word *rokey*: as for instance, we call a *rokey day*, when the *reek* or *steam*, which the expansion (i. e. the spirit and light in joint action) raises from the abyss, hangs in the air, and is not carried high enough, thinned and dispersed.

and by that means becomes the instrument of Chap. II.
 compression to every thing, and principally of }
 vegetative motion, to plants, and respiration to
 animals. The Poet above-cited gives this attri-
 bute to his *Juno* (Gr. Ἥρα , Heb. הרה).

$\Psi\upsilon\chi\omicron\lambda\acute{o}\phi\epsilon\upsilon\varsigma$ $\acute{\alpha}\upsilon\rho\alpha\varsigma$ $\Theta\upsilon\eta\lambda\omicron\iota\varsigma$ $\pi\alpha\rho\acute{\epsilon}\chi\epsilon\sigma\alpha$ $\pi\rho\omicron\sigma\acute{\eta}\nu\epsilon\iota\varsigma$
 $\chi\omega\rho\iota\tau\grave{\alpha}$ $\gamma\acute{\alpha}\rho$ $\sigma\epsilon\theta\epsilon\nu$ $\omicron\upsilon\delta\acute{\epsilon}\nu$ $\omicron\lambda\omega\varsigma$ $\zeta\omega\acute{\eta}\varsigma$ $\phi\acute{\upsilon}\sigma\iota\nu$ $\acute{\epsilon}\gamma\nu\omega$.

S /

“ *Animas-nutrientes auras mortalibus præbens be-
 nignas,*

“ *Sine te nam nihil omnino vite naturam novit.*”

This matter, by its first agitation or motion, was
 itself compressed into grains or micæ, and so
 became *spirit*.

רחב The *dilatation* as it were of a thing. It signi- 151:
 fies any sort of space, or the very dimension itself (152.)
 of matter, be it in loose atoms or grains, or in
 body, or so much *place* as matter, or any body,
 fluid, or solid, dry or moist, occupies, takes up,
 or possesses; for there is no *place* without some-
 thing *placed*, which constitutes the *place*. The
 word is merely relative; and therefore where
 there is *nothing* to be *dilated*, or *expatiated*, there
 is no *dilatation*, nor any *space*: and if matter was
 annihilated, as some love to talk, *space* would
 be annihilated therewith.—From this *attribute*
 of the air, the harlot רחב *Rahab* had her name; Jof. ii.
 and it is not unlikely that her prostitution was a 1, &c.

תכו to *calculate*, *weigh*, *compute*, or *sum up* by 152.
numbers; so *direct*, *order*, *machine*, &c. The
 word is compounded of תכה to *conjoin*, and כון
cannily, *cunningly*, *proportionably to its office*, or
fitly. It refers to the joint action of the *light* and
spirit, disposing and regulating every thing by
weight,

Chap. II. *weight, and measure, and number, whence arises that δύσμος, that beautiful frame of nature which we behold. Psal. lxxv. 4. it is applied to proportioning the mixture, and so force of the בְּלִימָה the light and spirit, on which the earth is said to hang, Job xxvi. 7. and which are also called its pillars, so that it should not move faster or slower, further off, or nearer to the sun than is proper for the good of the whole: And thence it is carried up in a spiritual sense to Christ, the due mixture, temperament and proportion of whose righteousness, merits and mediation, have all along borne up the pillars of the earth, and mitigated the weakness and wickedness of the inhabitants thereof, and prevented the immediate and daily execution of divine justice.*

154. מִשְׁקָלִי it is the *instrument or cause* of that action, commonly called *gravity*, — *that which weighs, sorts, &c.* This is attributed to the spirit, Job xxviii. 25. though it is the light that acts upon the solid particles or internal substance of bodies, and is the *gravitor*; yet, by the greater hold the compression of the airs or expansion has upon the grains, the parts of the spirit, than upon the atoms or parts of light; one part successively impels another, and the whole is both *agent and patient*. Among the heathens, *wings* of birds were the symbols of *this power*, which were also ordered to be graved in the Tabernacle and Temple, to reclaim it as God's agent, and creature.

(162. (164) מִתְּחִלָּה to *move backward and forward, flutter, hover, move by incubation, i. e. first itself, and then other things.* By this word is expressed that agitation of the air which begun the first motion, and from which light was struck out, and whence the other acts of formation were effected. It is only

only thrice used, Gen. i. 2. Deut. xxxii. 11. Chap. II.
Jer. xxiii. 9. To this refer

נָרַח to bind around, swaddle, Rabbin. to ventilate, 163.
purge, Arab. to anoint: all from נָרַח the spirit. (165.)
For the spirit descending in grains from the cir- used only
cumference, by their sizes binds and compresses, twice. Isa.
and so becomes נָרַח an instrument of compres- xxxviii.
sure and motion; whence it also acquires other 21.
names from its different situations, conditions, Lev. xxi.
or offices; as 20.

עֲרַפֵּל when these grains fall down from the peri-
phery of the heavens or airs, by which darkness
is made. See p. 19.

עָבַן when they bind the fluid mixture or body
without power of moving it, &c. And

נָרַח respiring and dilating, when they were made
an instrument to move it. See p. 30. This is
a word of office, and always implies action in
it; a mover, impeller, spiritually an inspirer; and
whether applied to the material or immaterial spi-
rit, implies it in action, in his office performing
his part; which will explain Acts xix. 2.*

נָחַם

* Acts xix. 1, 2. St. Paul, finding certain disciples at *Ephesus*, asked them if they had received the Holy Ghost when they believed? To which they reply, 'Αλλ', οὐδὲ εἰ πνεῦμα ἅγιον ἔσται, ἠκούσαμεν; which we translate, "We have not so much as heard whether there be any Holy Ghost," as if the words related to the existence of that Person in the Trinity. But that they do not, is evident from the context; for they tell Paul they were baptized unto John's baptism, and John at his baptism told his disciples, that he which should come after him, (i. e. Christ) should baptize them with the Holy Ghost (and with fire) as is recorded by all the four Evangelists. They could not then say, they had not then heard whether there was any Holy Ghost. The same expression occurs John vii. 39. ἔμπροσθεν γὰρ ἢ πνεῦμα ἅγιον—which we translate right enough—"For the Holy Ghost was not yet given," because that Jesus was not yet glorified. And this was the case; *Ephesus* was at

since

Chap. II. נפח to *blow, refresh, blow in, &c.* It chiefly and principally relates to and expresses the action of the spirit *blowing* into the sun's orb by the compression of the expansion, and in its passage moving the earth and other orbs. Hence נפוח a *bellows, a sufflatory*, through which the spirit is admitted and emitted. And

בית-תפוח a Temple dedicated to *this sufflatory* power of the air among the heathens. And

נפח some *bird*, the symbol of the same power among the Chaldeans. And also

תפוח the fruit of, and the tree of *good and evil*, which in the plan of the garden of *Eden* represented *this power*, and with which, by eating of it, we expected to be inflated, inspired, &c.

To this may be referred the verbs

a great distance from Jerusalem, and these disciples had only heard *John's* baptism, that the law was typical, and that he who should fulfil all was now appearing, but had not heard that *Christ* had performed his part, had suffered, been raised up, taken into the essence, and re-united to the glory, so glorified as John vii. 39. much less had they heard that the Holy Spirit was now performing his grand part, acting wonders in a spiritual sense, as his type, the material spirit did at the formation, and reformation of the earth. Had the translators taken the same liberty as above, John vii. 39. and rendered the words—“we have not so much as heard whether the Holy Ghost be yet given,” this would have been near the sense: but the expression can only be cleared by considering that נוח, (for which πνευμα is put) is the *mover, impeller, &c.* and when applied to that person in Jehovah, supposes him in action in his office, performing his part. And saying, *he was not* by that name, or *the Holy Spirit yet was not*, is saying he was not yet executing his part in the œconomy of the covenant. The translators seem to have understood the passage in this sense, because they refer in the margin to Acts viii. 16. where 'tis said that the Holy Ghost had not yet fallen on any of them, and to 1 Sam. iii. 7. where it is mentioned that *Samuel* did not yet know the Lord, neither was the word of the Lord yet revealed to him.

נפח in the Ethiopic tongue, to *blow the trumpet*, Chap.III.
 or *horn*, or some *wind-instrument*, with which 172.
 this attribute of *power* was perhaps worshipped.

נפח to *breathe, draw the breath*: whence vocal
 music might be used in this service; and

פנה to *diffuse, odour, fragrancy, yield or send out a
 favour, perfume, &c.* as it signifies in the Arabic:
 whence *this power* might also be worshipped by
 burning *perfumes*, and those services required by
 God of the Jews.

C H A P. III.

IN the last chapter we have treated more
 particularly of the *air* or *spirit*. In this, the
 words which next follow for the most part relate
 to and concern *that other* state or condition of the
 heavens, or aerial matter, which is opposite to
 the spirit, and which we call *Light*. The chief
 name of this condition of the heavens is שמש,
 the *rays from the sun*, of which we have sufficiently
 treated above.

אור * *light, splendor, illumination, irradiation, &c.* 175.
 it is the participle present of אר, applied to a (177.)
 river,

* From אור is derived the Greek ἄρ, ἑρως, ἑρωςία. Hence
 UR of the Chaldees had its name, which was dedicated to the
 LIGHT, and where that rebellious service seems to have been
 at a great height; upon which account *Abraham* was comman-
 ded by God to leave the place, Gen. xii. 1, &c.—xv. 7. Acts
 vii. 3. Heb. xi. 8.

There is a remarkable passage in *Lucian* relative to the forma-
 tion of Light, and its operation in forming the world, which
 wonderfully tallies with the *Mosaic* account. It is this—*Bour-
 det's Lucian, Paris 1615.* B.

river, Amos viii. 8. and expresses *flowing*, which, when spoken of the air, implies all those benefits which

Ερασις—Μόιον ἡμῖν σὺ, Δαΐμων ἑράνιε καιρίως παρέστηθι, Φιλίας ἐυγνώμων, ἐιβροφάντα μυστηρίων Ἔρας ἕκκακὸν νήπιον ὅποῖα ζωγράφων παίζησι χῆρες, ἀλλ' ἢ ἡ πρωτόσπορος ἐγενήσεν ἀρχῆ. τέλειον ἔυδου ταχέσινα. Σὺ γὰρ ἐξ ἀφανῶς καὶ κεχυμένης ἀμορφίας τὸ πᾶν ἐμάρφωσας. ὡσπερ ἔν ὄντι κόσμῳ, τὰφον τινα κοινόν, ἀφειῶν χάος, ἐκείνο μὲν ἐς ἐσχάτην ταρτάρου μυχὸς ἐφυγάδευσας, ἔιδα ὡς ἀληθῶς.

Σιδῆραι τε πύλαι καὶ χάλκεος ὄδος

Ὅπως ὑπ' ἀρρήκτου δεδὲν φρενῶς, τῆς ἔμπαλιν

Ὅδῃ ἐίργηται λαμπρῶ δὲ φάτι τὴν ἀμαυρᾶν

Νυκτὶ πείσας, παύς ἀψυχῶν τε καὶ ψυχῶν ἔχουλος

Ἐγένεθ' ἀμυγρῶς.

“Do thou only seasonably assist us, Ethereal Demon, thou patron
“of friendship, and priest of mysteries, LOVE. Not such a
“mischievous little urchin as the painters childishly draw thee,
“but such as the first principle, the great seminary of all things
“produced thee, perfect as soon as made. Thou formed it the
“universe from its confused and formless state. And after se-
“parating and dispersing the circumfused chaos, in which the
“whole world, as in one common sepulchre, lay buried; thou
“drovest it to the utmost confines of Tartarus,

“Where iron gates and bars of solid brass

“In durance irrefragible confine

“And its return prohibit. Thou the beams

“Of radiant light, expanding o'er the face

“Subfused of squallid night, of animate

“And things inanimate becam'it the great

“Opificer.”

Here is *Light* under the title of *Love*, produced by the $\pi\rho\omega\tau\alpha$ the *Principium*, perfect at once, forming and polishing the mundane frame, disentangling and dissipating the chaos, and driving the grains, *i. e.* Darknes-, to the extremities of this system, fixing and storkening them there.

Here we may observe, (1.) that the original tradition must have been very strong and universal, that could so happily escape from the wreck of truth, amidst the rocks of vulgar errors and poetic fables, down to *Lucian's* time. And, (2.) that they then knew that the Poets, &c. had disguised and mangled the original tradition by imagination and allegories. The Phœnician doctrine of *Mofchus* is, that after the chaos, the plastic spirit of the universe brought the atoms together by Love, (*i. e.* Light.) $\eta\rho\acute{\alpha}\sigma\eta\tau\epsilon\tau\omega\pi\nu\mu\alpha\tau\omega\nu\iota\delta\iota\omega\nu\acute{\alpha}\rho\chi\omega\nu.$

which proceed from light, because these benefits Chap.III.
arise from its *flowing*.

𐤆𐤍𐤏 the 𐤏 prefixed, which makes it an instru-
ment to *give light*, or *from which* light is actually
at that present time *flowing*. Chaldee.

𐤆𐤍𐤏

The Author of the *Argonautica* has a passage relative to this,
“ We will first sing an hymn upon the antient chaos; how the
“ heavens, the sea, and the earth, were formed out of it. We
“ will sing likewise *that eternal, wise, and self-perfect Love*,
“ (*i. e.* Light) which reduced this chaos into order.” *

* Πρεσβύτατός τε, κὴ ἀύλοτιλῆ πολὺμήτιν Ἐρωΐα.

I shall here add a passage from the *Argonautics* relating to the
formation, supposed to be sung by *Orpheus*, l. i. v. 496.

ἀνθε κὴ Ὀρφεύς
Λαίῳ ἀνασχόμενος κίθαριν πειραζεν αἰδοῦς.
Ἡΐδεν δ' ὡς γαῖα κὴ ἕρανός ἠδὲ θάλασσα
Τὸ πρὶν ἐπ' ἀλλήλοισι μὴ συναρηρότα μορφήν
Νείκεος ἐξ ὀλοοῦ διέκριθεν ἀμφὶς ἕκαστα.
Ἴδ' ὡς ἐμπεδον αἶεν, ἐν αἰθέρι τεκμαρ εἴχουσιν
Ἄγρᾳ σελήνην τε κὴ ἥλιον κελευβοί.
Οὐρα τ' ὡς ἀνατείλει (ὡς πόλιαι κελადόντες
Αὐτῆσι νυμφῆσι, κὴ ἔρπετα παντ' ἐγενοῖο.

So *Virgil's Silenus*, *Ecl. 6. v. 31.*

- “ Namque canebat uti magnum per Inane coacta
- “ Semina terrarumque animæque marisque fuissent,
- “ Et liquidi simul ignis: ut his exordia primis
- “ Omnia, & ipse tener mundi concreverit orbis.
- “ Tum durare Solum, et discludere Nerea Ponto
- “ Cæperit, et rerum paullatim fumere formas.
- “ Jamque novum ut terræ stupeant lucescere solem;
- “ Altius atque cadant submotis nubibus imbres:
- “ Incipiant Silvæ cum primum surgere: cumque
- “ Rara per ignotos errent animalia montes.”

N.B. In verse 2d, *animæ* is put for *Aeris*, *Ætheris*, or *Cæli*,
because *air*, or *æther*, the matter of the heavens is the *ani-*
ma of all animals. See *Lucretius*, l. 6. v. 129, 193. and
l. 3. where he makes *calor*, *air*, *ventus*, his *anima*.

Virgil is supposed to have copied these Greek lines. —

ἔρατῆ δ' ὅτι ἰσπέλο φωνῆ
Κραίνου ἀθανάτους τε Θεῶν, κὴ γαῖαν ἐρέμην
Ὡς τὰ πρῶτα γένετο, κὴ ὡς λαχρε μοῖραν ἕσπετος, &c.

That

Chap. III. **אֵר** whence *air*, and *aer*, and *Aer*, *clear*, *bright* *air* or *weather*, the condition the air is in by the action of the sun, which makes it flow or fluent.

176. (178.) **אֵר** *small, attenuated light, so clear, bright, and so precious, honourable, glorious, &c.* Whence the Greek *αἶψα*, *Iliad* V. v. 347. 416. the *blood* which flowed from *Venus* and *Mars*, upon being wounded, which were no other but these *Powers* of the *air* empersonated and embodied, *i. e.* turned into persons, and clothed with bodies. To this refer the Chaldee **אֵר**, *light, swimming on the surface.*

182. (83.) **אֵר** to *subsist*, or *be subsisted, sustain*, or *be sustained, support*, or *be supported*; or *to support, to sustain, or make subsist*; whether spoken of *persons, powers, force, office, service, actions, pressures, motions, forms, strength, hardness, &c.* It implies a power within or without to continue the subject in the same *condition*, whether *that* be of *rest* or *motion*, but no fixed local station. As a noun, it signifies a *supporter, a pillar, &c.* as the pillar of the cloud, and of the fire, which was not a *standing* but *moving support*. This is the word by which the translators have fastened that error on the sacred Scriptures of making the earth stand still, and being fixed upon pillars. The column of rays of light between the sun and

That by *Εως* is meant *Light* or *Fire*, is plain from the *Scholiast* on the passage above of the *Argonautics*, where speaking of the systems of the philosophers, he says,

Τρίτον δὲ ἔρωτα γεγονέναι καθ' ἡσίοτον, ἕνα τὸ πῦρ παραστήσει
Πυρῶδες ἔσται γὰρ πᾶσι ἔως.

How wonderfully these accounts agree with the Mosaic history of the formation, I need not mention: and they all are derived from one common tradition.

earth,

earth, and the column of spirit on its opposite Chap. III. hemisphere, are called its pillars, supporters, or } sustainers, upon which God has placed the globe, between which it moves, and is moved by them; by that vibrative motion or trembling (visible through telescopes) described Job ix. 6.—See Ch. xxvi. 11. As these embrace the earth on every side, and compress it with great force, they are called, 1 Sam. ii. 8.

צוק the *compressors* of the earth, from צוק, p. 27. 190.
 The antients divided the pressure of the air into (192.) columns, thence called the pillars of the world, of the earth, &c. as above; but they were not *fixed*, but *movable* ones. And the heathens represented this pressure by pillars in their temples. See Judg. xvi. 26, 29. Esther i. 6. They had also *high* towers, and temples to the heavens, places for observations, and perhaps for sacrifices, called Judg. ix. 46.

צריח *exaltation*, namely, of the rays of light expressed from the solar fire, and thence on every side sent out to the circumference of this system. 191.
 From these pillars of the heavens, as they are called, Job xxvi. 11. which are the same as the supporters of the earth, the pillars which both Hannah and Job speak of, 1 Sam. ii. 8. Job ix. 6. the fable of *Atlas* supporting the heavens on his shoulders took its rise*. His name is derived from תלה to *hang*, *suspend* upon a support, and with the א prefixed אהלל *Atlah* the *supporter*; and Job xxvi. 7. the earth is said תלה

* There is so remarkable a passage in the *Opuscula Mythologica* relative to this that I cannot omit it.

Ατλας—αταλαιπωρος αποδιδοντα τα κατα της εμπεριεχομενης εν αυτω λογος γιγνομενα, η ουτω τον θρανον βασταζοντα, εχειν δε κινεας μακρας τας των φοιχειων δυναμεις, Καθ' ας τα μεν ανωφερη, τα δε κατωφρη ιστιν, υπο τετων γαρ διακρατισσαι την γην. — *Phurnutus de Atlante*, p. 202. Dutch Edit.

Chap. III.



to be hung on בלימה, compounded of בל the *spirit*, and ימה the column of light, which makes יום day. The chief symbol of this power was

195.
(196.)

תנור the *palm* or *date tree*, *sub pondere crescens*, which is not broke or bent, but grows under any weight.

ערב the *fallow* or mixed-coloured *willow tree*; the symbol of the mixture of the *light* with the *spirit*. The signification of the word is *mixture*, to *mix*, &c. Whence the *evening*, when and where that mixture of light and spirit takes place. The *woof*, from the threads being shot, one this way and the other that way. Also *sweet*, &c. as Jer. xxxi. 26.* that sensation in general arising from a due temperament and just mixture; any excess producing sensations, which we distinguish by other names, as *bitter*, &c. From this attribute the *Arabians* took their name †. Thence the punishment of the *mixture* of insects to Egypt for worshipping this power; and thence the Jews were forbid *mixtures*. Refer hither

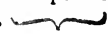
כפת some condition of the heavens mentioned Job xxxvi. 32. ‡ The *curvity* of the circumference, which, as the hand does a ball, takes or catches the atoms of light, and so concretes them by circumpression. *Boughs* of palm and other trees, as symbols of this *power*, and what it

* Jer. xxxi. 36. "Upon this I awaked and beheld, and my sleep was ערבה *sweet* unto me." The idea is preserved here: *sweet sleep* being the effect of a due *mixture* and temperature of the human frame.

† From ערב perhaps comes Ἐρεβος, *Erebus*. And also the Greek verb ἀραεῖω, and the noun ἀραβος, an *hollovv mixed sound*. Homer—ἀραεῖσθε δὲ τευχῆς ἐπ' αὐτῶν. Iliad δ. 504. &c.—ἀραβος ἐστὶν ἀπὸ τοῦ ἀραεῖν ὡς ἐπὶ τῶν ἀραβῶν. Il. x. 375.

‡ על-כפיים כסה-אור.

repre-

represented, were carried in their hands at one Chap.III. of the Jewish festivals, Levit. xxiii. 40. Neh.  viii. 15.

ברל to divide, separate, exchange, take from one 229. and give to the other, a segment, separation, ex- (231.) change, namely, that which was made between the Light, and Spirit, by the opposite motion of the atoms, and grains, which produced an expansion, that a compression, and that a division between the light and between the darkness, Gen. i. 4. * This was making an alteration, shifting places between them, bringing them by turns to the condition and place of each other, and was performed by the immediate power of God at first; since by these agents, the light inward at the center, and darkness outward at the circumference, interchangeably shift their situations: the matter is the same, the matter or substance of the heavens or air, but the condition is changed by the transposition. To this the next word has some relation.

תרפים *dividers, distributors, idols, figures*, repre- 232. sentatives of this alternative power and condi- (234.) tion of the heavens or air. † The antient Poet *Orpheus*, in his Hymn to Night, thus sings of this attribute :

* “ The Jews light a lamp upon the evening of the exit of
“ the Sabbath, to divide the day from the night, and the pro-
“ fane days of the week from the holy Sabbath; and this they
“ call **נר הבהלה**, the lamp or light of division, or separation.”
The original of this custom was, probably, symbolical of this
first division between the light and the darkness made by God,
Gen. i. 4.

Buxtorf, in his Chald. and Talmud. Lexicon, says, from Rabbi *Simon* in his Logic, that **ברל** is that which distinguishes and discriminates one thing from another.

† In *Medr. Schern.* fol. 58. 4. the word **תרפים**, *Terephim*, is explained by **ברולקי**, *dividers*, that is, images which prophesy, that is, divide or separate truth from falsehood.

Ἰμ-

Ἡμετέλης, χθονία, ἢ δ' ἑραυία παλιν αὐτῇ
Ἐγκυκλια——

Ἡ φάος ἐκπέμπεις ὑπὸ νέρτερα, καὶ πάλιν φευγεις
Ἐἰς αἰδην

- “ Semiperfecta, terrestris, & cœlestis iterum
“ eadem circularis——
“ Quæ lucem emittis ad infra, atque iterum
“ ipsa fugis ad orbem.”

These *Teraphim* in a spiritual sense are called the *healers*, the idea being preserved; for healing is only a proper and due separation of the juices, &c. the noxious from the alimentary; health being a due temperament, or constitution of the several parts whereof an animal is composed both in respect of quantity and quality, and this in respect of the mind as well as of the body.

251. (254.) **ΠΙΔ** a *substitute*, one thing had in exchange for another; which of days is the *next*, in traffic the *price* for the goods, &c. and which therefore were called by the same name. To this refers
252. (254.) **ΠΙΔ** which explains the manner of this exchange of one day for the next. The word signifies to *turn towards*, *turn about*, so *turn*, or *bring a new face to view*, &c. and is often used for the dark side of the earth being by little and little turned into the light, whence it shews the earth to be revolved, or circulated, as Deut. xxiii. 11. Exod. xiv. 27. Psal. xc. 9. Jer. vi. 4. Judg. xix. 9. Job xii. 22. Amos v. 8.
253. (250.) **ΠΙΔ** to *blow*, *blow in*, &c. used for the impulse of the spirit turning the earth; which, by blowing into the *evening edge* of the cap of light, turns *that* from, and the *other* towards the sun continually, and thereby compleats

pleats the revolution; so the evening was, and the morning was the first day, and every succeeding day. To this belongs

Chap. III.

נשף the *action of impulse by blowing against, the blast of the spirit*, which, as above, by means of the light directing its motion, circulates the earth. Its signification as a verb is to *blow, blow against, blow strongly, impel, turn or drive round, or circumrotate*. The *snoring owl*, which draws in, and blows out the spirit or air with a great force and noise, is its symbol, and so bears the same name. The instruments of this action are called

כרובים *carriage; vehicles*, namely of the air, by which and upon which the globe of the earth is alternately carried from the evening and from the morning, and so by making days goes forward in its progressive motion, Psal. lxxv. 9. 254 (250.)

בית-הגולה the *temple of revolution*, or of the *revolver*. An house dedicated to this operation of the heavens or air, Jos. xv. 6.—xviii. 19. The name is a compound of **הגג**, to *circumgyrate*, a circle, or **הגג**, to *move in a circle*, and *within a circle*; and **גול** to *exult, leap, dance, trip it on the light, fantastic toe*, as *Milton* expresses it; to express the joy of the mind by outward gestures of the body; as turning round, and such like; or **גלה**, used 1 Sam. ix. 15. to *turn round, move in a circle*, as **גלה און**, a philosophical expression for the air in sound traversing the circles of the ear. Whence 255, 257. (257, 259.)

גלגל a *sphere*. To this refer the word **הג** (p. 5.) which in Arabic is used for the *celebration of the festival of Mecca*, also a *year*, also a *bracelet*, an *ear-ring*, any *circular thing*, &c. which were symbols

bols of this power: and also the Syriac לָּוֹךְ , to go round, go about, to circuit, a circuit, to project, an eclipse, &c. This attribute in a God is to make something go round, or in a circle, and so make it turn round in its going, and is principally meant of the earth. One of the services paid to it by the heathens was dancing in circles, and each turning round in their circularly progressive motion*. So in the Hebrew לָּוֹךְ is a feast, or festival, where this service was reclaimed, and paid to Jehovah the creator and former of these powers, Exod. v. 1.—xii. 14.—xiii. 6. xxiii. 14. The *lamb*, a *yearling*, was a representative of this power, and was called לָּוֹךְ ,

* *Homer* has two beautiful descriptions of this manner of dancing, *Iliad* Σ . v. 491, and 593.

V. 491. Ἐν τῇ μὲν γὰρ Γαμοὶ τ' ἔσαν εἰλαπινναὶ τε
 Νυμφῶν δ' ἐκ θαλαμῶν, δαΐδων ὑπολαμπομενάων,
 Ἠγμένον αἶα ἀγυ. Πολυὸν δ' ὕμνευαί τε σφραεῖ.
 Κῆροι δ' ὄρχηστῆρες ἐδίνεον, ἐν δ' ἀρα τᾶσιν
 Ἀθλοὶ, φορμιγγες τε βύβη ἐχόν· αἱ δὲ γυναῖκες
 Ἰσάμεναι θάυμαζον ἐπὶ προθύροισιν ἐκαστῇ.

V. 593. Εἶδα μὲν γὰρ θεοὶ καὶ παρθένοι ἀλφειοβοῖαι
 Ὀρχευντ'. ἀλλήλων ἐπὶ καρπῷ χεῖρας ἐχοῖλες.
 Τῶν δ' αἱ μὲν λεπτάς θόνας ἐχόν· οἱ δὲ χιτῶνας
 Βίατο εὐνήτες, ἦχα σιλβοῖας ελαίῳ.
 Καὶ ῥ' αὖ μὲν κάλας στεφανίας ἐχόν, οἱ δὲ μαχαιρᾶς
 Εἶχον χρυσεῖας ἐξ ἀργυρέων τελεμώνων.
 Οἱ δ' ὅτε μὲν θρέξασκον ἐπισταμένοισι ποδῶσσι
 Πρὸς μάλ', ὡς ὅτε τις τροχὸν ἀρμένον ἐν παλαμῶσιν
 Ἐξομένῳ κεραμεὺς πειρήσεται, αἰκε δέησιν.
 Ἀλλοτε δ' αὖ θρέξασκον ἐπιγίγχα ἀλλήλοισιν.
 Πόλλ' δ' ἡμεροεῖα χόρον περισσάθ' ὀμίλῳ
 Τετπομένοισι· δοῖω δὲ κυδίστηθε κατ' αὐθῆς
 Μολπῆς ἐξαρχοῖλες ἐδίνεον κατὰ μεσσηῖς.

I have given the description at length, because, besides the particular for which it is cited, it contains other antient customs, as the use of torches or lamps at marriages—musical instruments and singing, sacrifices, &c.—the use of oil—crowns or garlands, &c.

which

which by offering it to Jehovah, was an acknowledgment that he was master of this power, Exod. xxiii. 18. Psal. cxviii. 27. And the *lamb*, among other things, being, by the name אג, made the type of Christ, proves that he was Lord of the same powers, so Jehovah: and I make no doubt but in this feast, in their *circumcisions*, they had a regard to that happy *revolution* when the *Sun of righteousness* should arise with healing in his wings, that *Lamb of God*, which taketh away the sins of the world: an event certain, though *then* future.

C H A P. IV.

A Further description of the Expansion of the Heavens or air, called the *firmament*, made by the mutual conflict of the light with the spirit; the one pushing inward to the sun, the center, the other pushing outward from the sun, towards the circumference.

אקע to *expand, distend, diffuse, fill, thin, &c. fluids*, and to *compress, drive together, keep firmly together*, and *establish* solids. And with the י *Jod* in the third order, as in 260.
to 264.)

אקיע it expresses the effect this action has upon the air or one substance of the heavens, which by the motion of its different parts at the same time, the atoms outwards, the grains inward, the atoms pressing in among the grains, the grains among the atoms, produces a general *expansion* and *compression* upon the whole machine and

and all its parts*. The word is applied to a plate of ductile metal hammered, to wings expanded, or such things, which is extending one

* Dr. Edmund Dickinson's *Physica vetus & vera*, p. 233.
 " Scio quidem cœlum hoc inferius (quod secundum esse judi-
 " cunt Hebræi) a LXX interpretibus historiæ Mosaicæ vocari
 " στερεωμα, id est, firmamentum, non autem quia solidum esse
 " censeant; sed quoniam hæc inferiora ab illo firmari crede-
 " bant. Rakiab certe non tantum expandere sed et firmare sig-
 " nificat. Et non Assyrii tantum (qui primi fuerunt Astroonomi)
 " sed & veteres Hebræi Græcique philosophi, simul & Latini
 " cuncta hæc inferiora vi cœlestium constringi ac firmari dixe-
 " runt: nec immerito quidem, nam quamvis hæc immensa pars
 " universi, quam philosophus noster (Moses) expansum vocat,
 " tenuis sit & mollis, ac quasi dissoluta natura, res omnes atia-
 " men, quas ambit, & dilatativo suo complexu stringit, quo-
 " dam modo firmat. Quocircà LXX sapientes qui non expansio-
 " nis habitum ac constitutionem tantum, quantum vires ejus &
 " admirandos effectus respiciebant, scite & sapienter illam fir-
 " mamentum nominarunt." — "I know that this lower heaven
 " (which the Jews take to be the second) is by the LXX interpre-
 " ters called στερεωμα, that is firmament, not because they thought
 " it solid, but because they believed that things below were made
 " firm and solid by it. For Rakiab is not only to expand, but
 " also to make firm and consolidate. And not only the Assy-
 " rians (who were the first astronomers) but also the antient
 " Hebrew and Greek philosophers, together with the Latin,
 " asserted, that all things below were compressed and kept to-
 " gether by the stress of the heavens. Nor indeed without
 " reason; for though this immense part of the universe which
 " our philosopher (Moses) calls the *Expanse*, be a thin, soft,
 " diffused fluid, yet does it some way or other give a firmness
 " to every thing it surrounds, and constrains by its springy
 " embrace. Wherefore the LXX seniors, who had not so much
 " respect to the habit and constitution of the expansion, as to
 " its force and wonderful effects, skilfully and wisely called it
 " the firmament."

Job (chap. xxxvii. 18.) describes the firmament to be firm or strong, as a molten speculum; for the *specula* of the ancients, as also of the Hebrews in *Moses's* time, were a mixture of metals and minerals, as brass or orichalcum, &c. which adhere strongly by compression. See *Exod.* xxxviii. 8. And perhaps *Homer*, when he calls the heavens *πελυχαλλον*, and *χαλκωδες Δω*, may mean no more than the expansive and compressive force of the air.—But if we understand him literally, we see whence the mistake took its rise.

edge one way, and the other, the other way, Chap IV. and gives the idea. The consequence of this Expansion is described in the next word:

שחק to *move to*, to *strike against*, and so *beat to powder*. The action, a *conflict*, *contest*, *strife* between two parties in motion, (by the *expansive force* as above) and of course towards each other, and so opposite ways. The agents, the matter of the heavens or air, which from their action, and the manner of it, are called

267,
to
269:
(267, 274)

שחקים the *conflictors*, *contesters*, *strugglers*, *ethers*, acceding and receding, and so making an universal *struggle* and *stress*.

And because these *agents* by this *conflict* produce rain, dew, (**בין הארץ**, Gen. ii. 6.) which they *force*, or *raise*, from the abyss; (called the *blessing ברכת* of the deep that lieth beneath, Gen. xlix. 25. Compare Deut. xxxiii. 13.) and which are the means of vegetation and fruitfulness; upon that account they have the attribute of

אמן or **אמון** a *nurse*, *steward*, *guardian*, *provider*, and thence *true*, *faithful*, &c. the action whence it has its name; is that of a nurse carrying an infant in her arms and bosom, as Numb. xi. 12. which is the very thing these *agents*, the **שחקים**, do to the earth, which they carry in their arms, between the opposite columns of light and spirit, and nurse and suckle with the precious things of the *Shemesh*, the moon, the heavens, the dew, and the deep. But these offices are not taken from the *nurse*, and applied to the **שחקים**, but from them to the nurses, guardians, stewards, for they are appointed such in chief, and are foster-providers to all created things, and so to the children of God in this system,

268-9.
(272, 3)

true

system, *true* and *faithful* to their trust. But as they are God's creatures and instruments, what they do is truly and eminently *his*, and to be attributed to *him*, whom we are to look upon, believe in, and rely upon, as the real, great dispenser of these blessings. *Orpheus* gives this attribute to his goddess *Nature*,

Πάντων μὲν σὺ πατὴρ, μήτηρ, τροφὸς ἡδὲ τιθνηὸς.

tu

“Omnium enim in pater, mater, nutrix atque
“altrix.”

A-kin to this is the word

270. {274} קָוַץ sometimes read for קָוַץ of which above; its signification is to *play*, *laugh*, &c. namely, from the kind of *conflict* up and down, with which the body is moved in the act of *laughing*. From this word the patriarch *Isaac* took his name; and in the idolatry of the molten calf, the Israelites are said, *Exod.* xxxii. 6. to sit down to eat and drink, and rise up to קָוַץ *play*, as this play was in commemoration of the joint action of the light and spirit, which the heathens called *risus cœlorum*, the *laughter* or *play* of the heavens; in which sense we use the word *play*, when any thing swings or *plays* freely forward and backward. And among the Rabbins קָוַץ יוֹם, a *play-day*, is put for a *festival*, or *holy-day*; that is, a day in honour of, or sacred to the *conflictors*, *strugglers**. The Chaldee and Arabic use of this word is

* We, at this day, call the scenical representation of any thing, by action and words, a **PLAY**. Originally it was all *action*: “*Post effert animi motus interprete lingua*; afterwards “these actions were interpreted by speech.” Our pantomimes are of the first sort; and shew, that the motions of the mind, and the characters may be marked and distinguished by proper gestures and motions of the body, as well as by words. *Horace* gives the preference to the first, and says, *De Arte Poetica*, l. 180.

“*Segnius*

is to *skinc, lighten, clouds, light; lightening, splendor*. Two serpents twisted round a rod, such as *Mercury's caduceus*, were the emblem of the complicated action of the light and spirit (expressed by this word and שִׁהָק above) which are in a continual *struggle* to take place of each other. And two serpents knit together in the middle were called *Hercules's knot*, as *Hercules* was Ἡρακλῆος κλεος, the *glory or splendor of the air*, i. e. the *air* or spirit illuminated, or mixed with *light*.

עָשָׂה. The first time the word is used is, Gen. i. 7. for *making the firmament*, וַיַּעַשׂ אֱלֹהִים אֶת הַרְקִיעַ, and it signifies *making, framing, giving a power of moving mechanically, &c.* and this *making* is the root of all material and mechanical *making*. It is used for *constituting* *Moses* and *Aaron king and priest*, where the same idea is retained: for as *Moses* was not *king*, nor *Aaron*, and the men (1 Kings xii. 31.) *priests*, till they were *made*, though they existed as *men* before; so the matter of the heavens or air was not an *expansion* or *firmament*, though it existed as *matter*, till God, by the steps there mentioned, *made* the pre-existing atoms capable of *expanding, compressing, and acting mechanically, &c.* So, v. 16. God *made* (עָשָׂה) *two great lights*. (Heb. אֶת־שְׁנֵי הַמְּאֹרֹת הַגְּדֹלִים)

262.
(266.)

“ Segnius irritant animum demissa per aures,
“ Quam quæ sunt oculis subjecta fidelibus.”

(viz.) — that “ what comes in by the ears strikes the mind less
“ forcibly than what is represented to the eyes.”

——If so, the philosophy and religion of the antients might be preserved by hieroglyphicks, and such sort of plays and games; and the bare mention that such hieroglyphicks were set up, and such plays or scenical actions performed, when recorded in such an emphatical and ideal language as the Hebrew is, where the idea in the original word, or root, leads you to what the thing is, might explain their meaning as well as a circumlocution; and then the Mosaic ritual, which is Christianity drawn in hieroglyphicks, might be a proper school-master to bring them unto Christ.

Chap. IV.

Whether you take the words as translated, or as Mr. H. renders them, a *secondary mark*, or *candlestick*, the *great ones*, meaning the *moon* and *planets*, the verb $\eta\psi\epsilon$, will still imply that the matter was not capable of being *lights*, or a *candlestick to hold lights*, till the action implied in $\eta\psi\epsilon$ made it so. And if we carefully consider the idea in this word, and from it construe the Greek verb $\Pi\sigma\iota\omega$, *facio*, it will ascertain the usage of *that* word in the New Testament, and free those texts, where it occurs, from the idle criticisms of men *classically* learned only.

272.
(276.)

\aleph the force of the pressure of the heavens or air in the act of $\aleph\eta\psi$, the *confessors*, *confessing*: the interpolation or *irradiation* of the light and spirit; so, as a preposition, it is *to*, and *from*, as the *irradiation* is interposed *to* and *from* the sun the center; and as this *irradiation* keeps things at proper distances, the word \aleph signifies the adverb of prohibition *NE*, to *keep at its distance*: so a *ram*, (*aries*) as the symbol of this operation; and also *another animal*, which the translations call an *hart* or *stag**, the same perhaps as the *Scarabæus*, because for *Scarabæus* in the Hebrew, the Chaldee puts *cervus volans*, the *stag-fly*. From the same origin is

274.
(278.)

$\aleph\eta\psi$ the *morning-star*, the *day-break*, because then the *irradiation* begins to exert itself by *breaking* into the spirit, &c.

This word in the *Canticles* is used symbolically for Christ, the true and real *irradiator*, the true *morning-star*, and *sun* of righteousness. See the claims under \aleph , Exod. xv. 11. Psal. xxix. 1.—lxxxix. 6. Job xxxviii. 7, &c.

* The *stag* was offered as a sacrifice in most other countries instead of the *ram*. The word is used for a *door-post*, and plural masculine $\aleph\eta\psi$, Job xli. 16. for I know not what.

Hence

Hence the Greek word ἥλιος, which the Sep-
tuagint translation hath put for the שמיים, *hea-*
vens or *air*, אור the *light*, חמה and חרם the *solar*
athih, and *fire*, and שמש the *Shemesh* or rays of
light flowing from the solar fire every way; be-
cause the thing there treated of, comprehends
the expansion and its several parts: אל is ren-
dered also Οὐρανός, Isa. xiv. 13. and the worship
to this power was continued or renewed by *Jeroboam's*
golden calves, for which they are re-
proached, Jer. xlviii. 13. and Amos iv. 4. and v.
5. as it was by the molten calf in the wilderness,
Exod. xxxii.

עֵץ-עֵבֶת complicated wood; trees wattled, or
plaited, or twisted, as *espaliers*, perhaps, repre-
senting the *interweaving* or mixing of the light
and the spirit, and their *complicated* action, Ezek.
vi. 13. we have אלה עבתה, under which they
offered ריח ניחה, *reek*, or favour of *rest*, by which,
perhaps, they aimed at *that complicated one*, who
was to give *rest* and atonement to all mankind*.

צֶעַעֵצ circuiting circuits, circutions, that is, intimately
and continually revolving, making circles
within circles, &c. 279.
(279.)

כר and כרכר revolution, and *revolution of revolu-*
tions, what the French call *tour tour*: and sym-
bolically a *wheel*, a *saddle*, or other horse-fur-
niture, as rings, chains, collars, and other such
like ornaments, put *round about* their horses
necks, representing the rotation of the heavenly
machine, and circulation of the orbs; also a
weaver's shuttle, which, by its motion in weav-
ing, is an apt representative of the *darting in*

* Christ, when upon earth, says, "Come unto me, all ye
" that labour and are heavy laden, and I will give you *rest*."
Matth. xi. 28.

Chap IV. and out of the rays of light and spirit which weave the *aerial web*, the *firmament* or *expansion*.

Hence also

287. כּוּר a furnace, a measure, a circuit, a going in and
(292.) coming out, ingress and egress, as we say, a pasture, i. e. circuits to feed upon; a captain, leader, or general of forces, namely, going out and coming in upon their circuits, extremely to the purpose, as symbolical of the matter of the heavens going out, and returning upon its revolutions, its circuits at the extremities, to the center: also symbolically, *dux gregis*, a leader of the flock, a ram pushing and butting with his head and horns: also a warlike instrument, called a *battering ram*; and, * Isa. lxvi. 20. a *machine*, which by turning round goes forward.—So *dancing in circles*, as 2 Sam. vi. 14, 16, * thence *lauding, praising, &c.*

* 2 Sam. vi. 14, 16. the word is used for *David's dancing* before the ark—“And *David* כּוּר כּוּר, skipped or capered, like a goat,” says *Pagninus's Interlineary Version*, ἀνακροβόμενος and ἐκτρέμενος, says the LXX. The root is כּוּר, and signifies to keep such a round as sheep do in large pastures—or pedlars who stroll about in trade—or soldiers who patrol upon the guard or watch, or as they do who dig a well, grave, or such like. It signifies also a *bushel*, and *furnace*, from their round shape; or a *furnace*, perhaps, from the fire being *reverberatory*, as in those in which they purify gold. Here the root is doubled, and expresses dancing in rays or circles, now springing forward, now bounding back, like the *σφοδρῆ* and *ἀνίσσοφρῆ* of the antients, now turning round, and bounding and springing from the ground in that manner which is so remarkable in the lamb and deer, which requires great strength and activity, and which is so much admired at this day in our stage-dancers. The occasion was great and solemn. *David* had newly ascended the throne, to which he was raised by God's special appointment.—He had obtained a signal victory over the *Philistines*, the worshippers of the power of the air, who had formerly conquered the *Israelites*, carried away the Ark, and 'tis likely praised their God the Air by this service of dancing: and he was now bringing back the Ark of the *Elahim* in triumph, whose name is called by the name of *Jehovah of Hosts*, who inhabiteth the Cherubim. What more p eper

&c. from the manner and gesture as *above*. All ^{Chap. IV.} which have a community and conformity of ideas,

per than to praise Jehovah in the dance, and attribute and reclaim to him the powers of the air, which these airtators thought inherent, and essential, and eternal, and therefore a God.—By *David's Answer to Michal*, it looks as if *Sau* had lost the crown and kingdom, for neglecting, among other things, to pay this Service to Jehovah: For we know from Scripture that his heart was not perfect with God, as his successor's was. And the same reason might make his daughter offended with it, because her heart was not right with God: Had it been so, she would, like *Miriam*, the sister of *Aaron*, and *Jephthah's* daughter, and as the matrons of *Jerusalem* met *Sau*, have went out to meet *David*, with her maidens, with minstrels, and joined the choir to praise Jehovah in the dance and song. But her proud heart could not brook to see the king of *Israel* divest himself of his royal robes and dignity, and instead of entering in triumph in the midst of the acclamations of his people, to have the Ark ride triumphant, and himself an humble attendant, in the humble dress of a Levite, dancing and playing, among his servants, to Jehovah.

The translation of *Michal's* reproach, *ver. 20.* has given occasion to much profane ribaldry — “How glorious was the king of *Israel* to-day, who *uncovered* himself to-day in the eyes of the handmaids of his servants, as one of the vain fellows *shamelessly uncovereth himself.*” Whence it has been concluded, that *David* danced naked, except a linnen sash tied about his waist; though the text says, he had on an ephod, a garment which came down below the knee, which the LXX render *σολά*, a long *Median* vestment. The word rendered *uncovered*, is *גלגל*, which is to *turn round, circulate*, and the phrase *גלגלת נגלות* rendered *shamelessly uncovered*, may be applicable to the turns and rounds of the dance: as if she had said, “Thou hast acted a noble part to day, in *jigging* among the handmaids thy servants, as *jigging jiggs*, one of the *והרקיבם* vain fellows *, or idolaters.” For idolatry and idolaters are often called in Scripture. See 2 Kings xvii. 15. His answer is, that it was before or to the faces of Jehovah he danced, *attributing* to him thereby the *power* and the *glory*, who chose him before her father and all his house, to appoint him ruler over the people of Jehovah, over *Israel*, &c.

The ingenious and learned Author of the *Life of David*, thinks the 24th Psalm was sung in this procession; the king beginning the concert with *ver. 1.* “The earth is Jehovah's, and all that is therein, the compass of the world, and they that

* The LXX has it, as one of *δρακονισται* the dancers.

ideas, and are symbols of the same thing, the *irradiation*, and thence *expansion* of the heavens
or

“ dwell therein, for he has founded it upon the seas, and made
“ chined it upon the floods.”—Be this as it may, his dancing
was attributing to Jehovah by actions, what this does by words.
The procession seems to be described, Psal. lxxviii. 25. “ They
“ have seen thy goings, O *Elabim* the goings of *El*, my king,
“ in the sanctuary; the singers went before [*David* at their
“ head] the players upon instruments after, in the midst of the
“ damsels playing with timbrels, then the princes of Judah and
“ their councils or congregations.” And I concur with the
author, that there is great reason to believe the procession was
made on the *Feast of Tabernacles*, because *Solomon* afterwards
removed the Ark into the Temple in that Feast. *Dancing* was
an instituted ceremonial of that festival, as appears from Deut.
xvi. 14. “ Thou shalt rejoice in thy dance;” which is the pre-
cept given for the observation of it: And *David*’s dancing may
be particularly recorded as a signal instance of his humility and
piety, in thus descending from his royal character and dress, in
honour of his God and King. And if we raise our thoughts yet
higher, and consider *David* as knowing what the Feast of Ta-
bernacles and the Ark emblemated, *viz.* the Divine Logos being
in the fulness of time to be *made Flesh*, John i. 14. and to *taber-
nacle* with us, as the Ark and Cherubim, the pledge and assu-
rance of that future event, did with them; then he had, in this
scene, a glimpse of Christ’s triumphant entry into *Jerusalem* in
this feast; the true design of which the people acknowledged
by cutting down branches of palm and other emblematical trees,
going out to meet him, “ and crying *Hosanna* to the Son of
“ *David*, blessed is the king of *Israel* that cometh in the name
“ *Jehovah*, *Hosanna* in the highest.” Well might the *typical*
David rejoice in the prospect, though distant, of the benefits the
real David was to procure for him, and all the *Israel* of God,
when after swallowing up death and sin in victory, he was to
ascend into heaven, of which the holy of holies was the figure,
and sit down for ever at the right-hand of God. And in what
extacy must he sing—“ Lift up your heads, O ye gates, and be
“ ye lift up ye everlasting doors, and the king of glory shall
“ come in.”

Heb. ix.
24.

I have met with a passage in the *Bibliotheca veterum patrum*,
relative to this subject, which deserves transcribing “ Res
“ enim quæ sunt sæculo, sunt exemplaria constitutionis superne
“ *Jerusalem*, ubi in sancta sanctorum introiit præcursor Chris-
“ tus, quem prius descripsit ac præfiguravit arca templum in-
“ gressa, quando chorum duxit et saltavit in typum Christum
“ *David*

or air. This the antients represented by Chap. IV:
wings of birds, or images with wings, }
 and

“ *David* exultans. Quoniam quæ perierat ratione prædita hominis arcæ, in qua in primis repositum fuerat Dei testamentum, est inventa & liberata a malignis alienigenis qui eam redegerant in captivitatem.”

There is evidence enough to prove that *dancing* was a religious rite both to *Jew* and *Gentile*; the one giving glory thereby to God for his creation and formation, the other recognizing by it the heavens or air as eternal, and their mechanical powers as essential. For, beside the instances above of *Miriam*, of *Jephthah's* daughter, and the matrons of *Jerusalem*, the service paid to the *golden calf* was of this sort; and 1 Sam. xxx. 16. the *Amalekites*, after the spoiling of *Ziklag*, celebrated their victory, and doubtless praised their Gods, in the same manner, and by the same service, as the idolatrous *Israelites* did to the calf; they sat down to eat and drink, and rose up to play—for the text says, ‘They were spread abroad upon all the earth, eating, and drinking, and דָּנְצוּ dancing.—In the Psalms the children of *Israel* are directed to attribute radiation to Jehovah in the *Dance*, with all instruments of music, as *David* is here recorded to have done. Dancing was one of the chief ceremonies of all their festivals, whence the *Hebrew* word for Feast or Festival is דָּנָה a dance. The Feast to Jehovah in *Shiloh* was celebrated yearly by* dancing, Judg. xxi. 20. And the women of *Israel* met *Judith* and made a dance for her †. Heathen records speak full to the antiquity and religion of this practice. *Homer* and *Hesiod* make a chorus of dancers the ornament of the shields of *Achilles* and *Hercules*. The *Thessalians*, as *Lucian* reports, called their rulers dance-leaders.

Athenæus, l. 14. 628. cites a verse of *Socrates*.

Οἱ δὲ χοροὶς κάλλιστα Θεῶς τιμῶσιν, ἄριστοι

Ἐν πολέμῳ. —————

“ Who in the chorus honour best the Gods,

“ Are best in battle.”

This shews that Dancing was a religious rite, and looked upon as acceptable to the Gods.

Pindar calls *Apollo* Ὀρχηστὰ ἀγλαίας αἰάσσων, The Dancer, King of Light.

Homer, in his *Hymn* to *Apollo*, represents him as playing and dancing to the sound of his lyre in these lines.

Φρόνη' ἐν χείρεσσιν ἔχων χάριν κιθάριζε,

Καλὰ κ' ὑψι βιβάς. —————

* δῶκε,

† See *Judith* xv. 12, 13.

“ Graceful

Chap. VI.

and by the *heads*, &c. of their other symbols ;
by *chariots*, called, chariots of the *Shemosh*, or
Light ;

“ Graceful sustain and strike the founding lyre,
“ More graceful now, and lusty in thy gait.”

Upon which Dr. *Delayne* says, one would imagine the Poet had beheld *David* in the procession.

Xenophon informs us, that *Cyrus*, a little before his death, led the dance in a religious procession. *Cyropæd.* l. 8.

And *Lucian* has a treatise upon Dancing, from whence I shall cite two remarkable passages. — *Bourdelot's Lucian*, Paris 1615. p. 502. A. ΠΕΡΙ ΟΡΧΗΣΕΩΣ.

— Ἄλλ' ὅτι γε τ' ἀληθὲς αἶα Ὀρχήσεσθ'· περί γενεαλογεῖνες, ἅμα τῇ πράτῃ γέσσει τῶν ἕλων φαίεν ἄν σοι καὶ ὄρχησιν ἀναφῦναι, τῷ Ἀρχόνῳ ἐκεῖνο Ἐραὶ σιναναφανείσαν. Ἡ γὰρ χορεία τῶν ἀστέρων, καὶ ἡ πρὸς τὸς ἀπλανῆς τῶν πλανήτων συμλοχὴ, καὶ εὐρυθρῶ αὐτῶν κοινωνία, καὶ εὐλακῶ ἀρμονία, τῆς προλογόνε ὄρχήσεσθ'· δειγμάτια ἐστὶ.

Here we have an account ‘ of dancing being coeval with the ‘ first formation of the universe, and the great God *Loque*, i. e. ‘ (*Light*) and that the harmonic chorus of the stars was its origi- ‘ nal.’

B. V.
p. 620.

Milton seems to have copied this in the following lines of *Paradise Lost*, which may serve as a translation of the above quotation.

“ Mystical dance, which yonder starry sphere
“ Of planets, and of fix'd, in all her wheels
“ Resembles nearest ; mazes intricate,
“ Eccentric intervolv'd, yet regular
“ Then most, when most irregular they seem.”

P. 505.

Ἰνδοὶ, ἐπειδὴν ἔωθεν ἀναστάντες, προσέχωνται τὸν ἥλιον, ἐκ ἄσπερ ἡμεῖς, τὴν χεῖρα κύσαντες, ἠγήμεσθα ἐπὶ τὴν ἡμῶν ἐκαστὴν ἐκαστὴν πρὸς τὴν ἀνατολὴν σάβας, Ὀρχήσει τὸν ἥλιον ἀσπάζονται, σχημα- τίζουσι ἑαυτοὺς σίωπῃ, καὶ μιμημένοι τὴν χορείαν τοῦ Θεοῦ. Καὶ τοῦτ' ἐστὶν Ἰνδῶν καὶ εὐχη, καὶ χοροὶ, καὶ Θυσία. Διὸ δὲ τέτοις ἰδέσθαι τὸν Θεὸν δις, καὶ ἀρχαίης, καὶ θυμῆς τῆς ἡμέρας. Αἰθίοπες δὲ γε, καὶ πολέ- μωντες σὺν ὀρχήσει αὐτὸ θεῶσι. Καὶ ἐκ ἂν ἀφίη τὸ εἶλθ' αἰθίοψ ἀνῆρ εἰ μὴ πρότερον ὀρχησάμετο, καὶ τῷ σχήματι ἀπειθήσει, καὶ προσεφύβησει τῇ Ὀρχήσει τὸν πολέμιον.

“ The *Indians*, as soon as they rise, which is early in the
“ morning, worship the Sun, not as we, who, after having * kil-

* See Job xxxi. 27.

Light; by *wheels*, and such like; to shew that Chap.IV. the earth, and the celestial orbs were *revolved* and *carried* in their progressive motion by the force of this operation. All which, both the operation itself, and its symbols, God reclaimed to himself by the structure and furniture, and apparatus of the Tabernacle and Temple.

כרכב *Riding, or being carried in a circle.* For it is a compound of כר, of which above, and רכב *to ride, agitate, carry;* to which corresponds ἀσπόμενος, *agitated, impelled by the Holy Ghost,* 2. Pet. i. 21. Hence 290.

בית מרכבת *the Temple of the power that carries the orbs, represented by a chariot drawn by horses,* 2 Kings xxiii. 11. whence the chariot of the sun, and *Apollo* driving it, &c. To this refer 292. (291.)

רב or רבב a *jaculator, Impeller, to dart, impel, disperse, a shower:* whence also a *multitude, many, excellent, or skilled in any workmanship or art;* also *magnitude, &c.* It is primarily and properly spoken essentially of the *Divine Persons.* Secondly, improperly and symbolically of the

“kissed the hand, think we have finished our devotion, but, standing towards the east, they salute the Sun with *dancing*, forming themselves in silence to imitate the *dance* of that God (*i. e.* the Vibration of Light). And this to them is prayer, chorus, and sacrifice: with which twice every day, at the rising and setting sun they placate this Deity. The *Ethiopians* also use *dancing* when they go to battle: and there is not a man among them will let fly his arrow before he has *danced* †, and in shew threatened and pre-terrified his enemy by *dancing.*”

And here we may adore the providence of God, in permitting the custom of *dancing* to remain, when its symbolical use was lost, that thence evidence might arise that it was once symbolical.

† No more will the modern Hottentots, who are perhaps descended from the *Itiopians.* See *Koelen's* Present State of the *Cape, &c.* Editor.

- Chap. IV. *triune substance of the heavens or air, the great, powerful, and all-efficient agent in nature. Hence the compound name, (the Caph being prefixed)*
293. **כַּרְבַּ** as a great one, or the representative or similitude of the Great One; by which name in the plural, **כַּרְבִּים** is primarily and in chief expressed the *cherubic* figure of the *Triune Deity*: But as the heathens, by the same name and figure, expressed the heavens in their trinity of condition, *fire, light, and spirit*, which were not framed to be worshipped, but to declare the glory of God; upon this account God puts in his claim, and is represented by his prophets as presiding over the heavens, the cherubim, and all the particular hosts, as Psal. xviii. 11. 2 Sam. xxii. 11. “ He rode **כַּרְבַּ** upon a *cherub* **כַּרְבִּיב**, “ and did fly; He came flying upon the wings “ of the wind. Psal. civ. 3. — Who maketh “ the *clouds* **עֲבָיִם** his *chariots* **כַּרְבֵי**; who “ walketh upon the wings of the wind, &c.

C H A P. V.

SOME Effects and Operations of the Expansion, or firmament, expressed by other words.

נטה. This word is a consequence of the motion by expansion, implied in רקע, yet is put in distinction to it, and to the force exerted in it. It signifies to *decline, go any way, or every way, to go aside, or out of the way, and expand, spread, or extend itself every way it goes*: For as all is full, every atom is so infinitely pressed, that if less pressed, or less resisted on one side than on another, it is *driven in the weakest line*. This comprehends all our modern terms of *gravity, attraction, centripetal, centrifugal, lateral pressure, elasticity, and so forth*. Isa. xlii. 5. Jer. x. 12.—li. 15. Job ix. 8. Isa. xli. 22. Psal. civ. 2. Isa. li. 13. Zech. xii. 1. The *Latin* word *NUO* seems to come from this word נטה. 298.

יָסַד to *compress*, and so *found*, as the earth was founded by the airs extending themselves every way within and without the abyss, at the first formation, referred to in two of the texts above, Isa. li. 13. Zech. xii. 1. *extending* [נטה the word above] the heavens or air, and יָסַד founding the earth. Doing the first did the second. See Job xxxviii. 3. to 7. Psal. xxiv. 1, 2, &c.— See p. 4. 299. 301. (302,3.)

נוט as a noun, a *bearer, or pole, or staff*, to carry things upon between two men's shoulders. (303. 306.) As a verb, it implies to *remove by force contrary to the pressure of the expansion, or to what they call gravity*.

gravity; to *diminish* or *destroy* the adhesion of the parts, so that they may slip from, or be dissolved, and consequently by another force be carried against the force of compression, from one another. At the flood, in despite of this power of the pressure of the firmament, which they thought uncontrollable, God made the parts of the shell of the earth separate from the middle, this way and that way, as Psal. xcix. 1. and after that they were compressed together again, and are kept so. And this is what the texts mean, when they speak under this and other words of the round world's being made so fast that it cannot be moved, &c. as Psal. xciii. 1. — xcvi. 10. Perhaps our word *moth* comes from מוֹת.

313. (315.) מוֹת *to lift up, exalt, high, exalted, &c.* Hence *Roma, Rome*, had its name. Hence תְּרוּמָה

מוֹת *to take up, carry upwards, &c.*

רָמָה *to cast, project, &c.* and in honour of this power of the air.

בֵּית הָרָמָה *the temple of the projector, Jos. xiii. 27.* And in the Chaldaic termination

הֶרְמִיָּה *Hormis, Hermes, &c.* Also the region, from this attribute, called

הֶרְמִיָּה *Armenia.* Also

314. (315.) הֶרְמִיָּה *God, Lord, Rimmon, Hormis, by some the son of night.* Greek, Ἑρμης. There were many places in *Canaan*, and the parts adjacent, named from this attribute and word, and many temples and services to it, as Numb. xxxiii. 10. Neh. xi. 29. Jos. xv. 32. — xix. 13. Judg. xx. 45, 47. 1 Chron. vii 77. And the king of Syria (*Heb.* אֲרָם the *Aph* perhaps prefixed to רָמָה, מוֹת, or מוֹת) had a temple to this deity. See Amos iv. 3. where there seems to have been a temple

temple or high place to this power *. Kircher Chap. V. mentions a naked *Mercury* with a *dog's head*; in his right-hand a sphere, in his left a caduceus, standing upon a crocodile, encircled with two stars, having on his right-side *Ammon*, with a *ram's*, on his left *Serapis*, with a *bull's head*; and says, That these THREE Gods were called ADELPHI, Brothers, as being together, the chief tutelary Gods of *Egypt*.

N. B. As the *Bull* is the emblem of *fire*, the *Ram* must be here the hieroglyphic of *light*, and the *Dog*, of the *spirit*.

In the Chaldee we have

מִיְקָלִים *Marcolis*, for *Marcoris*, the ל put for the ג, after the Chaldee manner. It is the statue or idol of *Mercury*, which was made by erecting two great stones, one here, one there, and laying the third along over the two uprights, in such a manner that its two ends should touch and cover both the other stones. Such as these were also used for land-marks or boundaries, as was sometimes the figure of a *Mercury*, as commonly painted, with wings at his cap and feet. These they called *lapides terminales*, *term-stones*, or simply *termini*, *terms*: They had at last a God called *Terminus*, and *Terminalia*, *term-feasts*.—Are not all these things derived from this word, which, with a ת prefixed, sounds תֵּרֵם *term*? †

* The LXX. translate the latter part of Amos iv. 3. — ἀποξέψουσιν εἰς τὸ ὄρος τὸ Ῥομμᾶν.

† The times appointed for the judges to determine and settle differences and bounds between man and man.—And those set apart for exercises and degrees in the universities are hence called TERMS: One of which is called DETERMINING, (viz.) to DETERMINE, *Bachelor of Arts*. And they all fall under the idea of this attribute of the *Air*, which determines and settles all the differences and bounds in the natural œconomy, and gives degrees, &c. to every thing.

There

There was a religious rite and custom of *casting* or *projecting* stones into heaps, to these three stones above-mentioned, thereby attributing this power of *projection* the heavens: whence the Talmudists say, "that he who casts " a stone to *Marcolis*, is guilty of idolatry, because this action is his worship." And Rabbi *Solomon* says, "they worshipped him by casting " stones." And it is more than probable that those prodigious and remarkable monuments of ancient idolatry at this day remaining in *England*, called *Stone-henge*, and *Rolle-Rick-Stones*, and others of the same kind, were the works of our Pagan ancestors, in honour of this attribute of the heavens or air. And perhaps from hence God appointed idolatry to be punished by *stoning* by all the people, not only that the offender might suffer this kind of death, but that, from such numbers throwing at him, an heap might be raised as a monument of his crime, and a recognition of this attribute to God. To this refers

[315. **לגום** to cast or project stones. And sundry authors construe Prov. xxvi. 8. as relating to this custom: "As he that putteth, or slingeth, a stone " into **במרומה** the heap [namely of *Mercury*] " so is he that giveth honour to a fool." And indeed the parts of the comparison tally better this way than in our *English* translation: "He " that bindeth a stone in a sling," which seems to have no connection with the latter part of the proverb.

As this power in the air pushes, impels, and makes things fly upward and downward, and every way to express this, *Mercury* was painted with wings at his head and feet. There was a Temple to him under this attribute:

רָמָן or בֵּית רָמָן *the Temple of the projector or*
impeller, as mentioned above, 2 Kings v. 18.
 This was in *Syria*, which in *Hebrew* is אָרָם,
 and perhaps, as hinted above, had its name from
 this attribute. There were several places to which
 this attribute was joined, *Rama* רָמָה, in the tribe
 of *Judah*, was named from it, mentioned Jer.
 xxxi. 15. Eld. ii. 26. Neh. vii. 30.—xi.
 33. This was reclaimed to God by the same
 word, by the miracles in *Egypt*, where the *lift-*
ing up of *Moses's* rod, the emblem of irradiation,
 is expressed by this word, Exod. vii. 20, &c.—
 So 2 Kings ii. 13. so Psal. lvii. 6, 12. and lxviii.
 19. and 1 Sam. ii. 10. where the exaltation of
 Christ is predicted, and throughout the Psalms.
 The *Anakim*, and *Emim*, and *Horim* (עַנְקִים,
 and אַמִּים and הַהָרִים) seem to have been wor-
 shippers of this attribute, whence they had the
 name of עַם רָם, Deut. i. 28.—ii. 10, 21.—
 ix. 2. They sacrificed to these powers on high
 places, called, upon that account, by this name,
 הַרְמִים, הַהָרִים, Deut. xii. 2. as did also the
 apostate *Jews*, as appears from Ezek. xvi. 24,
 25, 39.—xx. 28. joined with בַּמֹּת, &c.—
 And Ezek. xvii. 22. & seq. Christ is predicted as
 a top-branch of הָאֵרֶץ הַרְמָה an high cedar, to be
 planted בְּהַר מְרוֹם in the mountain of the height
 of *Israel*. This attribute was also reclaimed, by
 sacrifices appointed to be brought to the Temple
 of God, called תְּרוּמֹת, rendered *heave-offerings*
 of their hand. This power had also for its sym-
 bol the *pomegranate*, called therefore by the same
 name. And upon this account, Exod. xxviii.
 33, &c. the *Jews* were ordered to make figures
 of the *pomegranate* in blue, purple, and scarlet,
 and hang them upon the skirts of *Aaron's* gar-
 ment. And 1 Kings vii. 18. they were ordered

Chap. V.



to be placed upon the columns, which were representatives of the columns of the light and spirit, and which supported the spheres, the symbols of the courses of the orbs: Some stone was one of its symbols, and called by the same name, which is rendered *Coral*, but perhaps is *that* from which *Mercury* is extracted.

N.B. Quick-silver, like the spirit, is formed into globules, or grains, which, by their size, compress, and become the instrument of weight and impulse: As the *spirit* is ground into *light* by the action of the solar fire, or here by friction, or otherwise; so *Mercury*, by chemical fire, friction, or such like means, is divided into the smallest particles, innumerable, and invisible even to the finest glasses; so that the least heat or action puts it into motion, as is evident from its ascent in glass tubes, as the thermometer, &c. and like light, it can pass easily into the smallest fibres and capillary tubes, and be incorporated or intimately mixed with any body or kind of matter: so that in these, and many more particulars which might be enumerated, it very aptly represents the *power of the air* under consideration.

We may refer hither the Chaldee

320. דחה to *impell, expell, propell, &c.*

(323.)
See p. 25. אידחה אבן a *stone impelled, or carried by impulse.*

דיחה, דיהוי *depulsion, propulsion, impulsion.*

דחית האויר *propulsion, or impulse of the air.*

And also

325.
(327.) יצק (of which above, p. 27.) to *pour out, put into fusion.* So Job xxviii. 2. אבן יצוק *molten stone, stone whose parts were dissolved and put into fusion*

fusion (at the deluge) driven together, and adhering by compression (at the reformation) by the expansive force of the firmament, in the same manner as the parts molten storken or adhere by the act of the same agent.

The compression of the earth between the two opposite columns of light and darkness is attributed to God (Jehovah) under this word, called *מִצְקֵי אֶרֶץ* *the compressors of the earth*. And hence among the Canaanites

בֵּית מִצְעָבָה *the temple of the compressor*, dedicated to this operation of the heavens or air. We may also refer hither

צֹר or *יֶצֶר* (of which above) *to compress*, and *keep bodies together compressed in their figures and forms*, &c. As a noun or name, it is an agent, the

plasmator, and *binder of the atoms*, so the *former*, and *preserver* of all *bodies, forms, textures*, and the *powers* in them: It is an *attribute* of the

heavens or air, the deity of the heathens, to which they had several temples, called *בֵּית צֹר* *the temple of the plasmator*, &c. as *Jos. xv. 58.* *2 Chron. xi. 7.* *Neh. iii. 16.* and *1 Macc. iv. 61.* *βαβυλώνα.*

This attribute gives name to a nation and people, *Psal. lxxxiii. 8.* whence *Syria* and the *Syrians* were named—to several places, *Jos. xix. 29.*

Isa. xxiii. 1. —to several persons, *Numb. xxv. 15.—xxx. 8.* *Jos. xiii. 21.* *1 Chron. viii. 30.*

—*ix. 36.* sometimes joined with other words, as *Numb. iii. 35.* *צֹר יֶצֶר.* *Numb. i. 6.* *צֹר יֶעֱרֵי.* A

cord, or what *binds* things, was one of its emblems, and so found in an ark of the heathens, with other emblems, as *rods* of their sacred trees, *wool* of their sacred rams, &c. as mentioned by

Dr. Spencer from *Clem. Alex. p. 754.* But the chief emblem was a *rock*, called *צֹר*, and which

this power of the air gives firmness and strength to, by *compressing* its constituent parts close, and keeping them *hard bound* together, so proper to protect those bound and fenced about with rocks, forts, walls, towers. This was a very high emblem, and had great regard paid to it, even to the last; being looked upon as an asy- lum or protection to those that sought it: As *Homer's Iliad* 22. v. 126. where *Hector*, upon the sight of *Achilles*, deliberates with himself what to do, whether he should go to him unarmed, and offer terms of peace, with large concessions, but checks himself with these words; "There
 " is no talking with *Achilles* ἀπὸ δρυὸς ἢ δ' ἀπὸ Πέ-
 " τρης, from an oak, or from a rock, as a young
 " man and a maiden converse together," that is, safely, without danger, hostilities being sus- pended. And there is an odd *Remain* of this custom subsisting yet in the North, where the colliers enter into an agreement or covenant among themselves, by laying their hands and spitting upon a great *stone*; and this they look upon as binding, as laying the hand upon the Bible, can be to their superiors: And in the *Isle of Man*, as I am informed, it is the custom to serve law-processes with a blue *stone* instead of a writ.

When this word is applied to God, it is translated *Rock*, though not always properly: for as the heathens attributed all power to the material agents, the *air*, not as his creature, agents or legates, but as uncreated, independent, and the *powers* not as mechanical, but essential; so the inspired writers were to attribute every thing, action, and power to God; and there- fore this word רֹקַח ought to be rendered, *what- ever thing*, or *action*, or *Ec.* is intended by the context to be reclaimed from this mechanical power

power of the air, or *what* its worshippers in imagination attributed to it; as Deut. xxxii. 4, 30, 31, 37. where it is applied to God as *creator, former, and plasmat*or of these powers, and whereby he reclaims the inherent power in his essence of performing any or all of the actions falsely attributed by the heathens to their *Gods, their Rocks*, as they called them, and of communicating it to these *agents* by mechanism, and from thence to walls, rocks, men, &c. or of suspending and withdrawing it, and so controuling their mechanism by a beck, a nod, or a word spoken at his command by God's ministers, as when he made the walls of Jericho, at the signal of a shout, to fall down flat—which was making the air, upon which its worshippers depended for the communicated firmness of their walls, by the small degree of motion given to it by the breath of their enemies, act against them, and demolish their bulwarks, their rock of defence. *Strength, deliverance, salvation*, is attributed to God, as the *author and giver*, under this word, in opposition to the mechanical and communicated or imaginary strength, &c. in the heavens the air. Jehovah is יְהוָה עִלְיֹנִים, the יְהוָה of Israel, and that *Rock* was Christ: upon this rock is the church built, and not upon *Peter*; for there is no *Rock* beside God. The *oak* and a *stone* was the emblem of the same *power*, and had reference to the covenant of grace: So this word יְהוָה has, and perhaps it may intimate that God was *bound* to do for the soul and body of man, both here and hereafter, whatever was implied in this word and its derivatives. “*Jo-*hua made a *covenant* with the people—and took a great *stone*, and set it up there under an *oak* that was by the *sanctuary* of *Jehovah*, and said unto the people, Behold, this *stone* shall

Chap. V.

Jof. vi. 20.

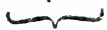
Iſa. xxvi.

1 Cor. x. 4.

Iſa. xli. 8.

Cha. xx'v. 25, 26, 27.

Chap. V.



B. 3.

See Corol.
Pafch. Co-
ron. p. 496.Deut. xxxii.
17, 18.

“ be a witness unto us : for it hath heard all the
 “ words of the Lord, which he spake unto us :
 “ it shall be there for a witness unto you, lest
 “ you deny your Elahim.” And there is an
 antient heathen testimony in *Livy* and *Dio*, of
 a speech of like nature made to an oak, calling
 it to witness — “ *Hæc sacrata *quercus* et quic-
 “ quid deorum est, audiant fædus a vobis rup-
 “ tum.” *Moses* upbraids the *Jews* with serving
strange Gods, these powers of the air, and forget-
 ting the אלהים that begat them. And *Jeremiah*,
 (chap. ii. 27.) reproaches them with saying to
 “ a stock (איל) thou art my father, and to a
 “ stone, thou hast brought me forth.” And
 from hence we may understand the reason why
Hesiod, in his *Theogony*, proposing to sing of the
 immortal Gods, makes mention of an oak and
 of a rock. Theog. v. 35.

Ἄλλὰ τίη μοι ταῦτα περὶ δρῦν ἢ περὶ πέτρην.

“ Sed quo mihi hæc circa *quercum* aut circa
Petrum.”

And also, whence the notion of men being born
 of oaks and rocks took its rise, by taking symbolical
 for real expressions; to which *Homer* seems
 to allude, *Odyssæy* 20. v. 163.

Οὐ γὰρ ἀπὸ δρυὸς ἔσσι παλαιφάτε, εἰδ' ἀπὸ πέτρης.

“ Non enim a quercu es olim dicto, neque a
petrâ.”

* So *Virg. Æn.* IX. v. 448. — *Capitale immobile Saxum.*

C H A P. VI.

THUS far of the LIGHT chiefly, either separately considered, or in conjunction, as mixed with the Spirit. We come now to treat of the FIRE at the orb of the Sun, the *Third* part or condition of the matter of the heavens or air, according to the order of Mr. *H's* disquisitions, but in the nature of things the *First*.

מֵאָרֶת a candlestick, chandelier, something to support, make, or hold light. It is not plural, but singular. But, like its symbol, the candlestick of gold in the Mosaic Tabernacle, it includes the six branches, the planets, which make parts of this candlestick, and receive their fluxes of light respectively from the action of fire in the orb of the sun, as the oil seems to have been conveyed by conduits in the branches of the golden candlestick from the center, which represented the orb of the sun, to lamps in the branches, which represented the planets*. But then it must be remembered, that this word מֵאָרֶת *marth* signifies only a candlestick, the frame of orbs, which had no fire in its constituent parts, no more than there is in a piece of iron, or a burning-glass, or in the golden candlestick before the lamps were placed in it and lighted. God supported the action of fire in the open air by his immediate power the first three days, as he afterwards did

354.
(356.)

* There is a Planetary described by *Valerius Flaccus*, Arg. 5. v. 416. which he makes serve as a lustre in the temple of *Phæbus*. See *Spence's Polymetis*, p. 180.

by miracle in the wilderness to reclaim this, and shew them that matter in this operation was not a God, but God's creature, and at his beck, to assist his servants and annoy his enemies; that there were no *properties* in solids to create and send forth light—that it was no part of the fuel; and that matter was not infinitely divisible, and infinitely extendible; nor that the orb of the sun could send out parts of its own body in light for ages, and yet that body be not a jot diminished, nor the spaces into which these parts of his body are thus every moment for ages sent, a jot the fuller, but continue, for all this, *empty space*, and a vacuum.—On the fourth day the expansion or firmament, by the Almighty Fiat, formed the matter of these orbs into *marth*, an *order* or *frame of orbs*, a *candlestick* with branches, knops, &c. and then the fire was placed and burned in the orb of the sun, whose substance was fitted to that purpose; so the *marth* became *לארת* for an *arth*, an *action of fire*; and as the light must necessarily flow in streams from the *arth*, being pressed out by the spirit coming in, and hit the earth, and illuminate it differently in different parts of its daily and annual rotation, by which it completes its orbit round the sun, so it was *למועדים* for *seasons*, *ולימים* and for *days*, *ושנים* and *years*: and as the end of those streams of light would necessarily stop against any solid body it met with in its journey, be diverted, and turned off in another direction; by this means the light from the *arth* of the sun reached the moon and stars, and from them was reflected; and so they became as in the 15th verse of *Gen.* chap. i.

מאורת *Maorth*, a *chandelier*, a *candlestick*. with the lamps lighted, so *giving light*. *Mar h*, as observed above, is only a *chandelier*, the frame
of

of orbs: *Maorth* is more, that chandelier *per-* Chap. VI
forming what it was made for, or sending out its
 lights; the ו *Vau* in the second order, according
 to the rules of Grammar, implying *action*. In
 like manner *Moses* uses מאר for the chandelier or
 golden candlestick before the lamps were lighted,
 and מאור after they were lighted, *Exod. xxv. 6.*
 לטאר שמן לטאר *oil for the use of the candl-stick*, *Numb.*
iv. 9. נורת המאור *the candlestick of the light,*
or the instrument for a flux of light. So ver. 16.
 שמן המאור *oil of or for the light, or for the instru-*
ment to send out light. So נורת, the *Mem* pre-
 fixed, is the word for the whole candlestick, and
 נרהי, without the *Mem*, is used for the branches.

ממארת *the acting marth*, used *Levit. xiii. 51, 52.* 359-
 —xiv. 44. for the *action* or *burning heat* of the (361.)
 leprosy, rendered *corroding, fretting, persevering,*
 LXX. *εμμενος*, a *confirmed leprosy*, as we say;
 where the idea is preserved the same, for the
marth of the sun was to be a place where the fire
 or light was to burn, a *place of burning* issued
 out into several spots: so the word is properly,
 and conformably to the idea, applied to the leprosy
 when it is arrived at that height as to break out
 into spots, and to have made itself a *marth* or
place to act in. The first *Mem* may perhaps be a
 preposition, and *Lev. xiii. 52.* נדעת ממארת הוא
 may be construed a *leprosy from a marth, a station,*
or acting place, this; that is, it has got ground,
 or a stage to act in and diffuse itself from, all-
 around; which is calling it a confirmed leprosy,
 as the context makes it to be.

לאת-מאור הגדול *the acting substance of the greater*
or more powerful flux of light; that is, the flux of
 light from the *atkh* of the sun, which hits, strikes
 and acts upon the earth, and thereby has domi-
 nion

nion of the light hemisphere, called Day, so rules the day, and in the day, &c.

את-מאור הקטן *the acting substance of the lesser, minor, inferior flux of light*, that is, of the moon, not only as less in quantity, but as it has nothing of its own, but is put under the government of a major, receives its light, and so power and rule from the sun the great light. Psal. lxxiv. 16. this word מאור is put in opposition to שמש, — “Thou hast machined (הבינות) מאור ושמש.” This refers to the precept, Gen. i. 3. יהי אור ויהי אור, “*Let there be Aur, and there was Aur.*” And the machining of this operation, which produced at first a flux of light without the natural cause, is here attributed to God, as an Act precedent, and preparatory to the manner in which he infused these powers into the established machine*. So מאור is

* Dr. Dickenson, in his *Physica Vetus & Nova*, treating of the light which existed before the Sun, has these words, p. 213. *Quo bene considerato facile concipiamus lucis istius rationem, quam Moses triduo ante solem factum memorat: Ipse namque subtilissimorum corpusculorum celer & pernix motus, atque actio quæ suscitabat ignem; simul & eadem opera lucem fundebat. Quippe quia lux non est aliud (ut sentiunt optimi philosophi) nisi dispersus & attenuatus ignis: Quam Plato την τε πορθη-εξευσιον ignis effluxionem vel φλογα απορρευσσαν flammam effluentem vocat. Qualis erat illa quam primigeniam dicunt. Hanc igitur Empedocles (quem vetustissimæ traditiones illuminarunt) ηλιον αρχετοπον, i. e. solem originalem vocabat; ipsamque doctissimus & elegantissimus Nazianzenus αρχηιον φωτα, i. e. Lucem sine sole productam nuncupavit. The sense of which is, “That we may easily conceive the reason of that light which Moses mentions to have existed three days before the Sun; for the rapid and continued motion of the most subtile corpuscles, at the same time and by the same action that kindled fire, issued light: For light is nothing else, as the best philosophers agree, but dispersed and attenuated fire, which Plato calls the *effluxion of fire*. And such was this light, which they call primigenial. Empedocles from tradition calls it the *archetypal Sun*; and Nazianzer, *Light produced without the Sun*.*

is the *action, instrument, or means* of light, which Chap. VI existed before the שמש, now acts elsewhere in the streams of light from the stars, &c. which are called מאורי אור, and also forms those streams; and שמש is the whole stream or flux from the sun on every side to the extremities, and includes מאור; though it did not particularly or formally exist till after the light was conglobated, and the action of fire transferred to the globe of the sun.

נר is to *flow*—אור that which flows, light in general.—* מארת the candlestick or inactive frame—מארת the candle burning—מאור the result of spirit and fire acting on or in the מארת; which action, for the three first days, was supernaturally supported by the immediate finger of God, without the מארת, which was not made till the fourth day, when the action of fire was placed in it. So in Ezek. xxxii. 8. כל מאורי אור, all the *Mauri aur*, streams of light, are all the actions of light in the heavens, all the orbs on which the agents act, and from whence light is made

And cardinal *Cajetan* has a good note upon the 14th verse of the first chapter of *Genesis*. “The first day the light is considered by itself, without taking into consideration its division or diffusion into the bodies of the sun, moon, and stars. I say, its division or diffusion; because we are uncertain whether the stars are of themselves luminous, or receive their light from the Sun. On the fourth day the very same light is considered as divided, and conglobated into many distinct luminaries and stars.

* From the *Hebrew* מארת, perhaps comes the *English* word MART, an Emporium, whether merchandise is brought in from all parts, in order to be exchanged and sent out to all parts. And from מאור MAUR, may come the *Latin* MAURUS, and the *English* word MOOR. *Empedocles* calls the Sun ἄβυσσος μεγάλη, a great Collection or MART of fire. See *Laertius* in his Life.

to flow in streams to us. And so **מאור** is part of the **אור**, light in general; as are the waters, part of the sea, and hofts, part of the heavens, and light, part of **הכוכבים**; and as Pſal. cxlviii. 3. we meet with **הכוכבי אור**; and Ezek. xxxii. 7. “ the **ירח** ſhall not give her light. ” [**אור**]. And as it is no impropriety to ſay, the light of **ירח** *Irh*, though the **ירח** *Irh* is a ſtream of light; ſo the **ירח** and other lights may thus be called **מאורי אור**, as they are parts or ſtreams of **מאור**. To illuſtrate this by example, let the apparatus for electrical experiments, when all is in order for action, but not yet in action, be **מארת**, the *Mart* — when it is put in action, by the turning round of the glaſs-ſpheroid, &c. ’tis **מאורת** — each ſtream of irradiated air, or electrical virtue, as they call it, is **מאור**, which may be divided into the greater and leſſer *Maor*, and the principal or whole ſtream that comes immediately from the glaſs-ſpheroid, by which the chief of the experiments are performed, is the **שמש**, which enlightens and turns little glaſs-globes, and acts in miniature the part of its principal, the real *Shemesh*.

357. **נהר** *to flow, flow out, &c.* the condition of light
(359.) firſt and primarily; afterwards applied to water, which is kept fluid by the agency of the light. Thence

נור *fire or light.* And

358. **מנור** *an instrument for light to flow from, or to make*
(359.) *light flow.*

360. **ארת** or **את** *the very focus, or theca ſolis, the*
(362.) *solar mill, whether the grains are ſent to grind, and whence the ſpirit is ſent out in light, from ארת a ſtation (viz.) of fire or light.*

אָר and אָרָר execrated, execrable, execration, accursed; namely, from the fire at the orb of the sun, being the first object of false worship. This was the first crime; this was the cause of the fall, which brought the fire, the wrath of God upon man, which must have immediately consumed him, had not Christ become his Surety, to suffer it in his stead; so became accursed, a curse for us, אָרָר, and אֱלֹהִים. This was the fire stolen from heaven, which opened the * Box of Pandora. (פּוֹן-דּוֹר) Whence—

*Macies & nova febrium,
Terris incubuit cohors:*

* There is a remarkable passage in *Hesiod* concerning Pandora and her box, which, though more properly belonging to another place, I cannot help citing here.

Ἦριν μὲν γὰρ ζῶισκον ἐπὶ χθόσι φύλ' αἰθρῶπων
 Νόσφιν ἀτερ τε κακῶν, κ' ἀτερ χαλεποῖο πονοῖο,
 Νῆσων τ' ἀργαλέων, αἰτ' αἰθρᾶσι γῆρας ἔδωκαν.
 Αἴψα γὰρ ἐν κακοκτί βροτοὶ καταγῆρασκῆτιν.
 Ἀλλὰ γυνὴ χεῖρεσσι πίδαξ μεγά πωμ' ἀφίλεσα
 Ἐσχιδασ', ἀνδρῶπισι δ' ἐμῆσατο κίθια λυγρὰ.
 Μῆνθ δ' αὐτοῖσι Ἐλπίς ἐν ἀρρηκτοῖσι δομοῖσιν
 Ἐνδον ἐμίμνῃ, πίδαξ ὑπο χεῖρεσιν, εὐδὲ θυραζῆ
 Ἐξέπλη· προσθεν γὰρ ἐπέμβαλε πάμια πίδαοιο,
 Αἰγίοχῃ βελήσῃ Διὸς νεφέληγερεταο.

Hes. Erg. κ' Hc. l. 90.

Mankind, at first, a blissful earth enjoy'd,
 Of ev'ry ill, and ev'ry labour void:
 Sicknefs nor age annoy'd their happy years;
 But soon, alas! a sad reverse appears.
 For in a fatal hour, with her rash hand,
 The woman op'd the box, out rush'd a band
 Of ev'ry ill of life, with hasty pace,
 Dispersing misery o'er all her race.
 HOPE only did within the casket stay,
 The lid put down, before she wing'd her way.
 For thus the will of Jove did pre-ordain
 This cordial drop of comfort to detain.

Strip this of its allegorical dress, and what is it but an account of the fall, and the hope of deliverance from its consequences, by the promise of the Redeemer.

*Semotique prius tarda necessitas
Lethi corripuit gradum.*

HOR. Lib. I. Ode III. ver. 29, &c.

370, & seq. **התח** *to move, a mover, to bring, a bringer forth,* &c. The word is used to express force, strength, agility, the power of action in the person or thing of moving itself or other things, or in employing what is under its command, &c. And as in material things, this power is mostly or chiefly by the action of fire, hence

(372,
& seq.)

* **התח** *the a'ith, the fire acting in the orb of the sun.* This is the primary sense, the root, and thence 'tis branched out into lesser branches, as Job xii. 19. where 'tis used for *mighty men*; so for an *act*, whose employment was to bring or

* *Lucretius*, explaining how the Sun (which he makes no bigger than it appears) can send out such a profusion of light and heat, says, It is fed with supplies from all parts of the universe, which are collected in its body as into a spring, and flow from thence in streams of light and heat—and it has many dark and unseen stores of fire about it, which, though distinguished by no outward brightness, may yet increase the heat of its rays, &c. *Lib. 5. v. 502.*

*Illud item non est mirandum quâ ratione
Tantulus ille queat tantam se mittere lumen.
Quod mar a, ac terras omnes, calumque rigando
Compreat, & colida perfundat cuncta vapore.
Nam licet hinc mundi pars factum totius unum
Hæc fluum fontem scateret, atque erumpere flumen.
Ex omni mundo, quò sic elementa vapores
Und que conveniunt, & sic coniectus eorum
Conspuit, ex uno capite hic ut profinat ardor:
Nonne vides etiam quam late parsus aqua
Præta reget fons in erudum, campi que redundet?
Est etiam quæ que uti non magno solis ab igni
Aera percipiat colitis serworibus arar;
Quæ, rtonus ita si si forte, & idem aer
Ut queat accendi parvis ardoribus ignis. ———
Fest an & resta sit aliè lampade lucens
Pessideat nuntum cæcis serworibus igni
Circum se, nullo qui sit fulgere notatus.
At is rum ut tantum materiam exangeat ignem.*

carry things; so in Chaldee for a woman, a wife, Chap. VI. who brought forth, thence applied to that power which can bring to pass future events; retaining still the sameness of idea, and the favour and virtue of the root, from whence the strength and nourishment is drawn and communicated to all the branches. So

אֵת, the participle present, *something coming, a sign, or indication, or prognostic* of some future event, a mark, token, *symbolum*, &c.

אֵתָן Dan. iii. 17. is used for the *burning fire furnace*; and hence comes ΑΤΗΑΝΟΡ, a furnace, so called by the chemists: hence also the Greek εἶθω, to burn, Ἄθηρ, Æther, Αθῶς, Athos, a thunder-struck mountain, Ἀθηνῆ, Minerva, the daughter of Jupiter, which physically taken, is the fire springing out of the sun, and going thence in light*. Αττις, Αττις, Attis, the Sun, the celestial fire or light, the same as Osiris, and Adonis, Serapis, Mithras, Ammon, &c. whence in an ancient altar at Rome there is this inscription—

“Attique excelfo quem nihil orbe fugit.”

So καρποφόρος *frugifer attis*, φωσφόρος, *lucem proficiens atis*. Ἀτη, a goddess, or demon of misfortunes, wrath, fury; others make her beneficent. See Homer, Iliad xix. ver. 91, to 132. Hence also

אֵתָן *strong.* אֵתָתַיָא, Chald. and Αὐθεντία Greek, 380. *authority, power, dominion*: hence the seventh (383.)

* Agreeable to this, Virgil makes Sinon feign the wooden horse to be dedicated to Minerva or Athene, an horse being an emblem of the solar light: So two serpents, ἀγγιλοι φάειοι, destroy Laocoon and her sons, for the affront done to her, by throwing his spear and violating the sacred wood: And after this the serpents make their way to the tower of Athene, and lie at the feet of her image. See Virg. Æn. 2,

month

Chap. VI.

month of the *Jews* had its name **האֶתְנִים**. In the Arabic the word **אֶתְנָה** or **אֶתְנִי** signifies *coition*, and **אֶתְנָן** is a *furnace*, and *hearth* where *fire* is kindled and burning: also a *place* where any thing is *bred* or *formed*, as the *womb*, from the resemblance it has with a *furnace* as to its shape, &c.

275.
(378.)

* **שֶׁבַל**, whence *Cybele*: The word is a compound of **שֶׁבַע**, a *spark*, *flame*, *particle* of *fire*, and **בַּל** *mixture*, *spirit*, &c. so is the *mixture* of the *light* and *spirit*; and as this *mixture* **שֶׁבַל**, is the cause of all the operations of nature, hence *Cybele* is called the *Mother of the Gods*. Hither we may refer

270.
(372.)

בֵּית-לִבְאֹת the *house* or *temple* of *lions*; because the *lion* was the symbol of the *light* issuing from the *atbtb* of the *Sun*; whence under the name of the symbol, the thing signified (*viz.* the *solar* light and heat) was worshipped. Also **בֵּית-לֵבָב** the *temple* of the *heart*, i. e. the *Sun*; for they called the orb of the sun the *heart* of the *world*, not only upon account of its being placed in the middle of the universe, as the *heart* is in the middle of the *body*, and of its *pushing* out light to the extremities of this system, as the *heart* does blood to every part of the *body*, and by a continual circulation of the *light* and *spirit* keeps a going and preserves the *mundane* œconomy and frame, as the circulation of the *blood* and *fluids* does the *animal* frame, the *microcosm*; but also because they foolishly imagined that it was indued with the highest intelligence and wis-

* A MS. remark of Mr. H——— himself on this account of **שֶׁבַל** runs thus; * All that about **שֶׁבַל**, is a mistake of *Cassell*, and my composition is so too: 'tis but the channel "waters flow in." *Editor*.

dom, and able to communicate those gifts to its worshippers. Chap. VI.

יָקַר or יָקַד to *kindle, burn, melt, dissolve* the grains into atoms, so make a *Vacuum*; and hence indeed comes the word *Vacuum*, as well as the thing: For as the grains are melted to atoms, the compression of the expansion forces them to give way, or make room for more spirit, or any thing grosser, to come in, as if the place was void: And our philosophers will never find any other *Vacuum* but where this action of fire is, or where the small parts or atoms are interrupted by the other orbs; as the earth for instance, or where they are by other means separated from the spirit; and, in this case, the next grosser air or spirit *rushes* in, (as the word הָרַח founds) and drives any body in its way along with it; which effect is termed *gravity* and *traction*, but in reality is caused by the attenuation and pressure of the air; that is, by the impulse of the gross unattenuated air behind being greater than the resistance of the attenuated air before.

הָרַח *heat, the action of burning, fury, &c.* as a verb *to heat, make hot, burn, to copulate, conceive, &c.* Hence הָרַח the *action of fire at the orb of the sun*; and הָרַח and הַיָּמִים *sun-images**,
382.
(385.)

* *Heliodorus*, in the 9th book of his *Ethiopic History*, mentions such an *Usage* among the *Ethiopians*, whose heads were adorned with a kind of turban stuck round with arrows, some pointed inward and others outward, to represent rays. And *Vossius*, in his *Christian Physicology*, book 9. p. 268. says, that the Sun was figured in an human and juvenile form, having his head surrounded with rays; and cites *Ovid's Fable*, 1st. —

——— *Radis Hyperionæ circum.*
 Hyperion crown'd with rays.

See also *Ovid's Metamorph.* book 2. ver. 124.

up by its worshippers to represent the Sun, with arrows pointed outward, to express the efflux of the *light*, and others pointed inward, to signify the influx of the *spirit*: Also a *Solary*, an image of *Hammon*, or *Jove*, placed in an open place that receives the heat of the sun: Also the *Temple* of *Hammon*, which others call the solar or sun-furnace, *Heliccaminus*. Indeed *καμινος* and *caminus* may come from **כַּמִּין**, the **ן** being pronounced as *k*, and *c*; and the Greek and Latin termination *os*, and *us*, postfixed. See Isa. lvii. 5. Lev. xxvi. 30. 2 Chron. xiv. 4.—xxxiv. 4, 7. Isa. xvii. 8.—xxvii. 9. Ezek. vi. 4, 6.—Also a *ring-dove*, *pigeon*, *stock-dove*, its symbol. Hence

חַמֵּץ to ferment, leaven, from **חָם** to heat, and **מַיִם** dough, unleavened, pure meal and water.

יוֹנָה a dove, turtle, the symbol of the *spirit* returning into the solar orb; among the Assyrians and Babylonians, Hof. xi. 11.

צִיְהוֹב the golden brightness about the neck of turtles or pigeons, a symbol of the fire and light.

הַרְרַת הָרֵךְ to burn, &c. combustion, summer, with its derivatives, a Noun plural. Illustrious personages; heroes, whose robes and dress were *white*, the emblem of light, and ensign of royalty, Eccles. x. 17. Neh. iv. 19.—v. 7. Isa. xxxiv. 12. Neh. vi. 17. Also the *focus* or *bearth* where *fire* is burning: *to bake cakes upon the embers*.—Some animal supposed to be

Imposuitque comæ radios.

He put rays on his hair.

So ver. 40.

— *At genitor circum caput omne micantes*

Detosuit radios.

His father (Phœbus) put off the glittering rays of light which surrounded his head.

produced from a serpent and a toad—Some Chap.VI.
kind of *snake*; Arabic, *a serpent rolled up in a*
circle; a kind of *sparrow*. All which animals
are to be looked on as symbols of the *solar fire*.
Hence

בית החרון the *temple of the burner*.

חרון אף the *fiery visage*, i. e. the athth of the sun;
the *hot anger of God or Man*. The idea is taken
from the action of fire in the solar orb.

חרש another name for the *solar focus*, or *fire*;
written also חרש. See Jud. viii. 13. —xiv. 18. 389.
Job ix. 7. Jer. xix. 2. Deut. xxviii. 27. Job ii. (393.)
3, &c.

תזונת החרש the *similitude* or *figure of the solar*
fire; the *sun-image*, pictured with bright or
gilded rays or arrows pointed outward or from
the center of the sun, and dark rays pointed in-
ward or towards the center of the sun, which on
every side pass between one another; represent-
ing the fire at the center, or in the pores of the
orb. the *Spirit* coming in, in the dark rays, and
the light going out in the bright rays: these two
sorts of rays were the *Baal* and *Asteroth* of the
sacred Scriptures, the two chief powers, with the
addition of the host of heaven, which the natives
of *Canaan*, and the seduced *Israel*, are, in gross,
said to have served. A city was called *Tinnath-
Heres*, Judg. ii. 8. and simply *Tinnath*, Judg.
xiv. 1. So also

עיר החרש Isa. xix. 18. *Heliopolis*, the *city of*
the sun, which is called בית שמש *Bethshemesh*,
Jer. xliii. 13. where there is the temple of the
sun; and the *Egyptians* hold yearly conventions
in honour of the Sun, with sacrifices; the study
of astronomy flourishes, and there are schools
for all arts and sciences. According to *Plutarch*

- Chap. VI. in the life of *Artaxerxes*, the sun is called by the
 the *Persians* Κῆρος , כורש *Cyrus*, from this word
 חורש .
389. חורש a kind of bitter herb sacred to the sun, used
 (393.) formerly in the feast of the Passover, to ac-
 knowledge, by way of retribution, God the
 creator of the sun, and attribute all its operations
 and effects to him.
395. ללק to burn, consume; combustion, &c.
- (399.) קרה the same; and אקרה a precious bright stone or
 gem; a carbuncle. In Syriac, the crystalline hu-
 mour of the eye. Arabic, a flint from whence
 fire is struck.
- נסס to MASH, dissolve, melt, make liquid, fluid, thin,
 to clarify. Isa. lxi. 1. Exod. xvi. 21. LXX.
 τρυγω . In Chaldee, the stomach or maw of
 beasts, which liquifies, digests, consumes and
 concocts the meat.
- (400) שאף its signification is attraction of the air or spirit;
 to draw in the air, to anhelate, breathe, sup, sup up, and
 the like. It is an attribute of the solar focus, where
 the spirit is drawn in, as it were, by the violent
 action of the fire, melted and thrown out in fire
 and light, and thereby room made for more
 spirit to come in: this action of the fire seem-
 ing like one with open mouth gaping for air,
 to draw, and suck in the spirit. Not that the
 solar focus really attracts or sucks in the spirit; but
 only admits and receives it, pressed, and impelled
 in by the force of the expansion, or general stress
 of the firmament. Eccles. i. 5. the *Shemosh* at its
 station (*viz.* on each side of the equator to the
 tropics where it is constantly stationed) ישואף is
 continually yielding, giving way, for the spirit
 to move, push in, &c. Hither refer

ה נפח (of which above, p. 34. as an attribute) signifies *blowing* in general, to *blow, blow to, blow up, blow out, breathe*, and the like. Passive, *to be inflated, made boiling or fervent hot*. *Hiphil*, to *inspire, sufflate*. The same in Chal. Syr. Æthiöp. Arab.. Hence perhaps, Gr. πνέω, πνεύμα, and derivatives. Ezek. xxi. 31.—xxii. 20, 21. Job xx. 26.—xli. 9, 11. describing the Leviathan—“By his neesings a light doth shine [Heb. “תהלה אור] — out of his nostrils goes עשן a “*fume*, as out of דוד נפוח a *Fire when blown*.” Also

גד government, sovereignty. Chald. and Syr. to draw, applied to the *fire*; whence the idea of sovereignty is taken, as it is chief in rule in this system. Dan. vii. 10. נהר a stream רי of נגר fire נגר drawing. This in reality is the action of the expansion; but to those who judge by appearances, it and the like seem to be properties inherent in matter, as attraction of the Sun, &c. &c. &c.

רצץ its signification is *contrition, to break, dash together*, and so *in pieces, to break by collision*, Nah. ii. 5. “Like lightning רצצו they shall dash themselves to pieces.”

נשא signifies a *total consumption made by burning and breaking of the parts*; so, as a n un, a *flame, a burning, a fire, combustion, &c.* And because flame and fire, in the act of burning, is carried, and carries, upwards, hence it signifies *ascension*. (401.)

בער to *burn, fire, kindle, &c.* Isa. xliii. “The flame shall not תבער kindle upon thee.” 397- (401.)

פוז from נפץ its signification is *dispersion, or breaking, or tearing to pieces, to scatter, disperse, to shake, strike, dash, or break by collision, to pour out, shed, project*: It expresses *dispersion made by*

Chap. VI.

fraction of the parts. Chald. and Syr. the same as Heb. *dispersion, fraction, comminution, contrition.* Arab. to *shake, scatter, expel, project, pound, beat, or bray small*; so *diminish, lessen, impair, and destroy the adhesion of parts.* Job xxxvii. 11. “The serenity, pure fire at the orb of the sun, breaks to pieces, or dissolves the adhesion of the grains of air, *יפיץ ענן אורו*,” Job xxviii. 24. Psal. cxliv. 6.

(402.) נפק Chald. and Syr. to *go out, proceed.* Arab. to *make go, or force out, &c. to bring out, Æthiop. to cut to pieces, divide into parts.* Dan. vii. 10. “A stream of fire drawing and נפק going forth—

נתך its signification is *fusion, to pour out, found, distil, drop, melt, &c.* Nah. i. 6. “His anger נחכה is *peared out* like fire.” Hence Chald. *Images, formed of metals, melted by fire, and poured out.*

398.
(402.)

עף its signification is *instantaneous, vehement motion*; so to *fly, move quickly, swiftly, &c.* And hence its other significations of *complicated, rolled up.* Zech. v. 2, 1. which our translation renders *flying*, Job x. 22.—xi. 17. Prov. ii. 15. Isa. viii. 22.—ix. 7. Amos iv. 13. Ezek. xxxii. 10. where it is used for the motion of the grains of air, or spirit, or atoms of light. So Job iii. 9. xii. 9. Job xvi. 16. Psal. xi. 4. & *al.* used for *eye-lids, palpebræ*, from their vibratory motion, and the vibration they give to the air, like to the flying of a bird.

נבה altitude, to *be lifted up, elevated, &c.* Job v. 7. The sparks of fire (Heb. sons of burning) עף נבהרו *lift themselves up for flight.* Primarily spoke of the solar rays, which take their flight from the orb of the sun to every part of the circumference of this system. And indeed all these words

words are *attributes* of the solar athth or focus, where the *melting, fusion, contrition, disperston by fraction, emission, and elevation* of the *spirit* is performed. Ch.VII.

C H A P. VII.

THE words which follow, treat further concerning moving the earth.

שטה to *divert, turn aside, decline*. Whence **בית-השטה** *the temple of the declinator*: also some kind of tree the symbol of this power; which some call the *cedar*, others, the *resin* or *pitch-tree*, and others, the *cypress* or the *Arabian thorn*.

405:
(410.)

נועד-יעד to *appoint, an appointed time*. The primary sense of the word, as used Gen. i. 14. refers to the proper and fixed force of the expansion; which force arises from the quantity of spirit melted into light, and the quantity of light emitted; for according to this, a proper degree of impulse is given to each orb, its size and distance considered, and thereby their declinations, rotations, and progressions, are so proportioned in point of the velocity of their motion, and so of time, as best suit the necessities, uses, and welfare of the several animals and vegetables on the several quarters of the globe, at the respective seasons of the year: and as this settled force and operation of the expansion makes and regulates, so the word is used for, the *seasons*, the fixed and appointed periods of the revolutions of the earth, or moon, which are

NOW

Ch. VII.

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now properly called *times*: yet here it had an higher signification, because all vegetables and animals were framed to be operated upon with the intermediate light, and even the very vegetable matter, water, and so forth, which supplied them, was to be raised by this agent: nay, the whole quantity of the air, every body, and their distances, and every creature to a mite are proportioned to this operation. To this refer

406.  
(410.)

גבול, plur. גבולות which we render *borders*. Pſal. lxxiv. 17. “Thou haſt ſet all the *borders* [Heb. גבולות] of the earth; thou haſt made ſummer and winter [Heb. ſummer and winter haſt thou formed them.]” That theſe *borders* are not the utmoſt lines or parts of the ſurface of the earth, but the *airs* without it, is plain by comparing other places where the word is uſed, as Jer. v. 22. “I have placed the ſand for the גבול bound of the ſea.” Pſal. civ. 9. “Thou haſt ſet them גבול a *bound*, that they may not paſs, Ezek. xiv. 7. From the גבול border of the ſea.”—— Now, as the ſand is without the ſea, and the ſea without the land of Judea, ſo the גבולות *borders of the earth*, muſt be without the earth; that is, the different conditions, and motions of the matter of the heavens or air next the ſurface of the earth, they are the גבולות, the *borders*, as they call them, which God has framed into *ſummer, winter, ſpring, and autumn*, alternately.

398.  
(402.)

נפץ ſignifies that motion of *atoms* or *grains* in ſtrait lines where each one ſucceſſively impels that before it, expreſſed by the word *irradiate*: and this word is applicable to נפץ *grains of air* or *ſpirit* moving towards the ſolar fire, as well as to atoms of light moving from it. So Job x. 22. נפץ, and it *irradiates* נפץ *as grains of air* or *ſpirit*, that is, inward in lines from the cir-

cir-





circumference to the center or orb of the sun: Ch.VII:  
 and Job iii. 4. Let not נהרה the *light*, or *flux*,  
 or *stream of atoms* תופע irradiate upon it, that  
 is, as light moves outward in rays from the  
 center to the circumference. The heathens ap-  
 plied this sort of motion to their cherubim,  
 which were indeed the *light* and *spirit*; and upon  
 that account *Moses* and the Psalmist, by way of  
 claim, apply the word several times to God: as  
 Psal. lxxx. 2. & al. — “Thou that inhabitest  
 “ the cherubim תופיעה irradiate. Hence




הנג (of which above, p. 43.) the feast of *revolu-* 412.  
*tions*; and נזמי ear-rings, symbols of the same (116.)  
 act; namely, to attribute the powers which cause  
 the progression and rotation of the earth to Je-  
 hovah: As also

עגל a calf, a waggon, a chariot, &c. And

נועל a waggon-way, a cart-rut, or way worn by  
 carriages, an orbit. Syriac, to roll round, circu-  
 late; and Chald. a juggler, circulator. The calf  
 was an emblem of the solar fire, or rays of light,  
 emicantes, issuing forth in micæ, which make the  
 glory round about its orb; and the service paid  
 to it is expressed by the word צדק (of which  
 above, p. 48.) and which Bishop Walton, in his  
 Polyglot. vol. 1. p. 45. S. II. concerning the  
 idioms of the Hebrew tongue, says, “sometimes  
 “ signifies to worship idols, and to institute dan-  
 “ cing, and tripudia, a particular expressive sort  
 “ of dances in honour of them.” And the royal  
 Psalmist assures us, that by this action “they Psal. cvi.  
 “ changed their glory into the similitude of a calf 2e.  
 (Heb. ישור) that eateth hay.” Now Christ was  
 the glory of the people Israel; as Simeon, one of  
 their own nation, a just and devout man, and  
 who waited for the consolation of Israel, which he  
 saw

Ch. VII.  saw in *Christ*, testifies. Therefore the service paid to the molten image, the *calves*, or rather to the *thing signified*, the *glorious*, was due to *Christ* their *real glory*; and therefore the Mosaic ritual was instituted to commemorate, and καταγγέλλειν *show forth*, by types, *Christ*, until *he should come*, who upon that account was called *ὁ ἐρχόμενος*.

414.  *Æthiopic*, an *organ*, a *singer*, from *ἦν* to *sing* (419) *by responses, alternately, reciprocally*, as is used in choirs, in chanting the psalms: the original of which custom was, perhaps, to celebrate the *alternate* and *reciprocal* vibrations and irradiation of the *light* and *spirit*, which perform all the operations in the natural *œconomy*; apostates attributing it to the *creature*, believers to the *Creator* and to the spiritual *œconomy*, of which the natural was the type. Of this class is the next word.

 *to sing*, or *dance* (*tripudia*) to the *pipe*, *tymbril*, *systrum*, *drum*, or some such instrument. Also an *organ*, and with the *Mem*  prefixed, a *chorus* or *choir*. In the Chaldee  is a *reciprocal revolution*, a *reciprocation*, or *conversion*, such as the Greeks afterwards had, and called *Στροφή* and *Ἀντιστροφή* \*, which signification was taken from

\* The *Scholia* on *Hæphæstion* give this account — “The antients framed two larger stanzas and one less. The first of the large stanzas they called STROPHE, singing it on their Festivals at the altars of the Gods, and dancing at the same time. The second they called ANTISTROPHE, in which they inverted the dance. The lesser stanza they called EPODE, which they sung standing still. The STROPHE, as they say, denoted the Motion of the HIGHER SPHERE, the ANTISTROPHE that of the PLANETS, the EPODE the fixed station and repose of the earth.” So *Marius Victorinus*, an antient Grammarian — “The antients sung the praises of their Gods, which were in verse, going round their altars. The first circuit, which they made from the right, they call

from the manner of dancing, the *tripudiators* turning themselves round in their dancing, and returning reciprocally. In the *Samaritan version* it is used for *heaven* שמים, written הללה, Gen. i. 20, 28, 30.—ii. 4 —xi. 4. Deut. iv. 17. in which latter place we translate שמים *air*, which with 2 Sam. xxi. 10. Prov. xxx. 19. Eccl. x. 20. are the only places, in the many that occur, where we have done so. They make this word signify *heaven*, as the Greek κοῖλον, (which seems to be derived from it) from its *concavity*; but it may have its signification with as much propriety from the *reciprocation* of the *light* and *spirit*, which are the heavens, as to substance. The Poet calls *Rhea* or *Cybele*, that is, the *flux of light from the sun*, τυμπανοδραπον, *tympano strepentem*. And her priests are called GALLI, from גלל to *revolve*, &c. because the *courses* or *revolutions* of the light were celebrated in this manner. And thence it became usual to make use of *pipes*, *drums*, and vocal music in her rites, as it was paying a double service and acknowledgment to the *agents* which move the celestial orbs, to the *spirit* which impels, and to the *light* which directs the force, expressing the manner by dancing in circles. The office of these הגוללים, *Tibicines*, was by proper and apt musical instruments, songs, dances, &c. (which by the way is the original of *tragedy*, *comedy*, and all our *farces*, *interludes*, &c.) to celebrate, and by that means raise some idea and image of the *mixing* and *action* of the *light* and *spirit* in giving rotation to the earth and the other orbs, &c. And as this sort of *scenery* and *imagery*, at first revealed to

ed STROPHE; the return, which was made from the left, by which they completed the former round, they named ANTISTROPHE. Then the singers were wont to stand still before the Gods, and what followed they called EPODE.

the Patriarchs, for their instruction and practice, was afterwards abused by the heathen apostates, and by little and little quite depraved, and corrupted, by many gross additions and transgressions, God himself reclaimed them to himself and his service under the law.

## C H A P. VIII.

OF the Moon and Stars, &c. and how they borrow their Light from the Sun.

לָרַח to walk, travel, take a journey. Hence

יָרַח the Moon, a month; in Arabic, the new moon, by which time was measured. In Chaldee

424. אִירָח a traveller; and the menses, from their coming periodically: יְרִיחוֹ the moon's town.

דָּ דָּ הָלַךְ to walk. נִהְלַךְ a walking, a circuit, &c.— Benjamin's Itinerary, 23. Astron. the motion of the planets. We may refer hither

לָאָהֳלָה to pitch a tent. The Moon has her tent or tabernacle, but it is not pitched, as the Sun's, but itinerant, Job xxxi. 26. — יָרַח the moon יָקַר הַלֵּךְ walking in brightness. And chap. xxv. 5. Behold even to the moon, וְלֹא יֵאָהֵל, and it doth not pitch its tent.

425. עֲנָקִים worshippers of the power of the air, in carrying the orbs, &c. so called, from עֲנַק, a chain, collar, necklace, wreath, or turban, or some such ornament representing the power they worshipped. In Æthiopic the word is used Gen. xli. 42. for putting the golden chain about Joseph's neck; (which chain is in the Hebrew called רֶבֶר from רָב perhaps great, so the ensign of greatness) and 1 Kings xii. 14. for a yoke. Also a precious stone, a turtle, a ring-dove.

These

These *Anakim*, Numb. xiii. 34. are called in our translation *giants*, which answers to the Heb. הנפלים both here and in Gen. vi. 4. But in Num. they are called הנפילים, *those who make others fall, destroyers*, the sons of הנפלים the *fallen ones*: How beautifully descriptive is the distinction? — The Church called them *fallen ones*; they called themselves, *the makers of others fall*. And truly such giants the church of God has at all times been infested with: Men who, like *Nimrod*, are *mighty hunters* of the faces of *Jehovah*, and who are mighty active in filling up the wells of *living water*, which the true children of *Abraham* and his faith have digged: Men, who, tho' they have *moderation* and *toleration* so much in their mouths, have nothing in their hearts and hands, but how to pervert and destroy, by all means possible, the evidences of *Christianity*, and those who endeavour to keep and preserve them: “ who are of those that rebel against the light, they know not the ways thereof, nor abide in the paths thereof:” Job xxiv. 13. who are avowed enemies of *Christ* the true light, and his religion, and who give no quarter.

סֹהַרְוֵיִן little moons, a kind of ornament, so called from their resemblance of the moon. Judg. viii. 26. (425: (429.)

הַשְּׁהַרְנִים, rendered ornaments in our English; Interlin. of *Pagninus*, *Lunnæ*; and joined with הַעֲנֻקוֹת, chains about the necks of the camels, and other such like furniture, of which *Gideon* made an Ephod. These, and the like, were all symbols of the courses of the moon and planets, and emblemized their borrowed light from the sun.

u/r

נִימוּשֵׁלַת, Gen. i. 16. the means or instrument of rule, dominion, &c. spoken of the two streams of light; that from the greater and more powerful (433: (437.)

*Att* (אֲתָת) the Sun, to rule the day; and *that* from the lesser, and less powerful, the Moon, with those from the planets and stars, to rule the night. They were to rule upon the earth, in two equal divisions, exchanging and exchanged continually in every rotation, variable and varied by the seasons; and they were to have dominion and power, each in a different manner, to dilate, extend, and by the force of the spirit, to lead, and direct the march, or route, not only of the globes, but of every part, to the smallest atom of matter, and so to carry on their different dominion in fluids, vapours, vegetables, and animals, in the day, and in the night. The stream from the sun to the earth will rule by day; because the motion of that light is so much stronger than that from the moon and stars, that it, in a great measure, diverts their reflected streams. And the streams from the moon and stars will rule by night, because the earth interposed, interrupts the motion of the *Shemesh*, and hinders it from diverting the streams from the moon, planets, and stars. And though the motion of these streams is too weak to strike in any such degree as to give a sensible heat, yet may it be strong enough to hinder the grains of air in the night-time from adhering or sticking too suddenly, or too close and hard, and thereby prevent the fluids in animals, and sap in vegetables from thickening too much, and setting; with other uses conducive to the process of vegetation\*.

שֶׁשׁ

\* The LXX render אֲתָתָא, by *ἡς ἀρχαί τῆς ἡμέρας, ἢ τῆς νυκτός*. This shews that ἀρχή is *rule, dominion, &c.* not *beginning*. So Deut. xvii. 18. Isa. ix. 6, 7. And so it is used, Luke xx. 20. —“that so they might deliver him (Christ) τῇ ἀρχῇ ἢ τῇ ἐξουσίᾳ, unto the *power* and authority of the governor.” So chapter xii. verse 11. where these two words occur together, the *first* rendered *magistrates*, the *second powers*. So Gen. i. 1.

למשל signifies *similitude*, a *proverb*, *parable*, and *discourse*, as it is the picture or image of what we think: and *dominion*, *rule*, &c. A parable, or proverb, or discourse, is a picture drawn by words, so comes under the idea of *similis*, *similitude*. But how does its signification of *rule* tally with it? Thus, I think. Wherever the *rule* is, it is the *original* whence the *copy* is taken.

*Regis ad exemplum totus componitur orbis.*

(says the Poet)

“ The Ruler is the exemplar, the Subject the image, who assimilates to, and takes the form appointed him.”

לבר to *divide*, *cut off a segment*, Gen. i. 18. It is spoken of the segment taken from the night and given to the day on one side of the horizon, and of the segment taken from the day and given to the night on the other side of the horizon, on the east and west sides, or in the rotation of the earth, which is dividing between the day and between the night, and separating the light from the darkness: And also, at the same time

446:  
(450.)

of the LXX translation, ἐν ἀρχῇ ὁ Θεός, is the *supreme God*, the *God in the rule*, who has the *power*. The dispute between believers and apostates was, where, or in which essence the *power* was inherent. For in the contest between *Elijah*, a prophet of *Jehovah*, and the 450 priests of *Baal*, the test of all was, who was ὁ Θεός ἐν ἀρχῇ, as I may say, who had the power to command fire from heaven, and the issue proved *Jehovah*, ὁ Θεός ἐν ἀρχῇ. For where the *power* is, there is every other perfection, and that is the *God*. So John i. 1. ἐν ἀρχῇ ἦν ὁ λόγος, i. asserting the *Logos* to be a person of the ruling essence. So those from whom Christ according to the flesh was to descend, were each called Patriarchs (Πατριάρχης) *Father of the Ruling Essence*. So putting the hand under the thigh, or rather loin, of the Patriarchs, as of *Abraham*, *Israel*, was expressive of the hopes of the *promised Seed* springing from those persons. Gen. xxiv. 2. xlvii. 29. Αρχη is used in the singular number for *rule*, by *Thucydides*, *Plato*, *Aristotle*, and also plural, by *Lucian*.

there

there is a segment cut off and divided successively from the day and given to the night on the other side of the horizon, on the north and south sides, or in its declination, which makes the different length of days and nights in the respective seasons of the year.

The particular parts and names of the Celestial Luminaries are these.

- 1st. **הַמָּוֶה** the *Athth* at the orb of the Sun, (for the *Marth* is not visible for flame) fixed in the center of the universe.
- 2d. **שְׁמוֹשׁ** the *flux* or *stream*, or *rays*, from **הַמָּוֶה**, which, according to their revolutions, issue out and return.
- 3d. **לְבָנָה** the *Athth* of the moon (for its body is not seen for light, except in eclipses).
- 4th. **יָרֵחַ** the borrowed and reflected stream of light from the moon, **לְבָנָה**. This word is used plural, **יָרְחִים**, Deut. xxxiii. 13. "For the precious things put forth," by **יָרְחִים**, which proves it must be the streams of light from the moon, not the orb; that is but one, singular; not many, plural: and it is here most beautifully and properly applied, because these streams are varying and renewing every month.
- 5th. **רֵאשֵׁי כּוֹכָבִים** the *heads* or *orbs* of the *Stars*\* which we call *fixed*.

\* *Solomon* makes the same distinction in the allegorical or symbolical use of these words, Eccies. xii. 2. using **שְׁמוֹשׁ** and **אוֹר** for the greater light of the *understanding* and *imagination*, and **יָרֵחַ** and **כוֹכָבִים** for the lesser and reflected light of the memory, and other secondary faculties of the mind. — The verse runs thus: "while **הַשְּׁמוֹשׁ** the sun, or **הָאוֹר** the light, " or **הַיָּרֵחַ** the moon, or **הַכוֹכָבִים** the stars be not darkened: " which the learned *Dr. Smith*, in his *Portrait of Old Age*, thus explains; "before the *understanding* be darkened, the *imagination* weakened, and withhold its light, and those things that " were *fixed* in the memory fall from thence, and all the powers " of the mind be broken."



6th. גדלים the primary planets.

7th. ככבים and

8th. מזלות the fluxes from the stars and planets, which hit the earth, and each other.

אורים and נאורים streams of light from Sun or Moon, &c. used in general for lights, because the parts of light which reach and influence the earth and every thing there, from these two great streams, are included in their fluxes.

458.  
462.)

גדל great any way, be it in quantity, quality, time, duration, authority, magnificence, munificence, use, &c. An attribute of the Sun, as above.

קטן less, little, be it in quantity, quality, or use, &c.

The LXX render it by *σμηρυνος, ἐκ ἰκανός, parvus, non sufficiens*, also by *πρωχρῆς pauper, mendicus*, because he that hath nothing of his own, must beg or borrow of others that are richer than himself, and able to give or lend. It is an attribute of the moon, as above.

שרב violent heat, parching or SHRIVELLING heat.

464.  
(467.)

ערפים defluxions, or distillations (of light.) Isa. v. 30.

465.  
(468.)

קום station, subsistence, stability. spoken of the air in the fulness and pressure, and stress of the expansion, filling and compressing every thing in every place.

478.  
(482.)

מליהם, which may have relation to מליל in the sense of friction, and to מלא fulness: מלל signifies to speak \*, says Castell, in his Heptaglot Lex. but

\* מול, מולל, to cut down, cut off, chop, as the scythe cuts corn and grass. See Job xxiv. 24. the knife the fore-skin, and the jaws or chops, in speaking, cuts the air into distinct articulate sounds:

but among the antient Hebrews had the signification of *friction*. It retains this among the Rabbins, who explain it by the Latin words, *fricavit, confricavit, trivit, contudit*; and the same in the Chaldee. Prov. vi. 13. “winking with his eyes, מורל *speaking with his feet* :” which the Chaldee Targum and the Syriac Version render by תניס *terit pedibus suis* : And Buxtorf says, “per terere intelligitur gesticulatio triturae similis (a *jetting gate*) ad certi aiquid indicandum.” The LXX translate it by σημαίνει, *significat*. So the word here, Psal. xix. 4. may be taken in this sense, that מליהם *their frictions* (viz. of the light and spirit) without words, by their substance, vibratory motions, actions and effects, point out and shew the glory and workmanship of God to the extremities of the world.\*

חנף

sounds : so it signifies to *cut off*, or *destroy*, to *circumcise*, and to *speak*. And thus the heavens, by their motion up and down, like that of the jaws in speaking, send forth מליהם *their words* to the end of the world, *i. e.* from **one extremity** to the other.

\* Psal. xix. 3. בלי נשמע קולם — *their voice (sound) is not heard.*” The sense of the word קול in this place may be explained from its use. Eccles. xii. 4. בשפל קול הטחנה — “When the *sound* (or *voice*) of the grinding is low.” The *grinding*, is those operations in the animal œconomy, or microcosm, which turn the *food* into *chyle*, the *chyle* into *blood*, and the *blood* into *flesh*, &c. And the *sound* or *voice* of the grinding is *that* by which we know these operations are operating or doing their business, some natural symptoms significative of digestion, and all those indications that demonstrate that the works of nature proceed aright, and according to their primitive institution. So in the macrocosm, the *sound* or *voice* is *that* by which we know the œconomical operations are carried on regularly according to God’s institution, Gen. i. and his promise after the flood, Gen. viii. 22. namely, the succession of *seed-time* and *harvest*, and *cold* and *heat*, and *summer* and *winter*, and *day* and *night*. But the *sound* of what gives us these grateful vicissitudes is *not heard*, as it is in machines of man’s workmanship, as in *clocks*, *atches*, *fire-engines*, and such like.

**הַפֶּךְ** a *bride-chamber*, because it is the secret place of action between the bride and bridegroom. Chaldee. The *nuptial canopy*, which four Jews support with four poles, under which, as under a kind of heaven, the bridegroom and bride are consecrated and betrothed. It is primarily applied, as here, to the chamber of the **שְׂמֵשׁ**, that is, the **חַמָּה** or *solar focus*, above (p. 94) where he is consecrated, and made fit for his ministry; made *Light*, and fit to run his race; made beautiful, and adorned as the bride and bridegroom were then; and made strong as a *governor* **גְּבוּר** to march his circuits. So Judg. v. 31. As the **שְׂמֵשׁ** when he goeth forth in *his might*, **גְּבוּרָתוֹ**, the same word that is used above, ver. 6. for a *giant*, or *one made strong*, to run his race.

Ch. VIII.  
480.  
(48+)

**מִתְהַפֵּךְ בַּתְּהוֹלָתוֹ** *reverting reciprocally in its chorus's*, viz. of the matter of the air in its two conditions of *light* and *spirit*. Job xxxvii. 12. which *Macrobis* calls *conversio calorum*, the *conversion*, *revolution*, or *circulation* of the air.

498.  
(502.)

**עֶשְׂתֵּרֶת** *Astarte\**, *Venus multimammia*, *Venus with many breasts*, the emblem of fecundity. The word is

like. No: the *great*, and *little world*, are each so wonderfully contrived, that their œconomy gives no noise or disturbance, does not interfere with, and scarce comes under the cognizance of any of our senses.

\* This *Astarte* or *Astarte* was a Deity of the *Zidonians*:—*Solomon*, turned aside by his foreign mistresses, built a temple to her, 1 Kings xi. 5.—The *Philistines* had a temple to her, where they hung up in triumph the armour of *Saul*, after the battle of *Gilboa*, 2 Sam. xxxi. 10.—A city called by this name, was the metropolis of the kingdom of **עוֹז** *Oz* king of *Tafan*, who was of the remnant of the *Rephaim* (**רִפְאִיִּם**) *Jof.* xiii. 12, & al.—And there was a very ancient city called **עֶשְׂתֵּרֶת קְרִיִּים**, where *Chedarlaomer* (**כְּדַרְלֵעֶמֶר**) king of *Elam* (**עֵלָם**) slew the *Rephaim*, probably worshippers of this power.—

*Crn. B.* c. 42. fo. *Euchart* makes the *British* DRASTE the same with ASFARTE, by 738.

is compounded of עֶשֶׂת to *shine, send out rays, &c.* and תּוֹר to *explore, scrutinize, to go about and look round every way, a speculator, spy, watchman, commander: also a sheep, lamb, turtle, chain, bull or ox, a circle, an orb, French, Tour.* (*Plowing Βασποφρηδόν, an exact image of the light flowing out one way and returning the other in spirit.*) The *solar light or fire* was the *thing signified* by all these symbols, which *going its rounds perustrates every thing, &c.*

Hence the Chaldee word

אִיסְטְרוּבִיל, compounded of אִיסְתָּר, Greek Ἀστὴρ, *Aster, a star, light in irradiation,* and בִּיל from בַּל the *spirit*, with the ו between them. So is a descriptive name of the matter of both *light* and *spirit* in motion, a *vortex going and returning.*

נָטַע to *set or fix any thing in the ground,* which is effected by the *vortex of the light and spirit,* so often described above.

עֶשֶׂשׁ in *Buxtorf's Chaldee Lexicon,* is, a  *candle or lamp, a candle fixed in the middle of a lanthorn, a lamp burning from year to year.*

עֶשׂ is in Hebrew a *moth-worm.* And

עִישׁ, as a verb, is once used, Joel iii. or iv. 11. rendered by *conглоbo, erumpo, congreго;* the LXX.

by the transposition of D and T, which are letters of the same organ; but, I rather think that it comes from אֲדַרְשׁ אֲדָרָשׁ *ADRAS,* the א Aleph prefixed to the Root דָּרַשׁ, to *search, seek, make inquiry, &c.* which is an attribute of the *Light, the great Inquirer* of all things. From this Root the *Persian* monarchs took their name *DARIUS;* and that nation we know had *Light* eminently in esteem: *OROMASDES* was *Light,* their beneficent principle, and the *lion* its symbol. — There is an island, in the *Sinus Arabicus,* called *Aparte,* probably consecrated by the *Phenicians* to this Deity.

συναποίζω: though perhaps it had better be rendered by *contabesco*: As Ch. VIII.

עש is to *pine, consume, waste away*, Pfal. xxxi. 11.—vi. 8, &c. Whence

עש the *solar fire or lamp*, Job ix. 9. who maketh עש the *solar lamp*, כסיל, and כימה, &c. chap. xxxviii. 32.

כימה the *light*, whence כמה to *desire*, &c. Pfal. lxiii. 2. The kindly influence of the *light* and *heat* kindling *fire, love*, and the soft passions.

כסיל the *spirit*, the verb כסל is to be *foolish, infatuated; folly*, &c. also *hope, confidence, expectation*: The *ilia*, or *bowels*, *wind in the bowels*, the *iliac passion*. All which are the effects of the *spirit* or *wind*. Thus we call a *foolish person*, a *windy, empty, bladder-headed fellow*: and *hope, confidence, expectation*, are only effects of being *filled*, or *blown up* with some ideas, or notions, real or imaginary. The word

כסלו *Keslu* is used for the first *winter month*, answering our *November*, when the effects of the *spirit* or *grains* begin more sensibly to shew themselves. The words occur, Job xxxviii. 31. both together, and beautifully explain each other. “Canst thou bind the sweet influences of כימה the *light*, or loose the bands of כסיל the *spirit*,” (bound up in grains.) So Amos v. 8. “who maketh כימה the *light*, and כסיל the *spirit*, and turneth the shadow of death (*i. e.* the darkened hemisphere of the earth) into the morning, and darkeneth the day with night.” Making the *light* and the *spirit*, or as it is expressed, Gen. i. 4, 14, 18. *dividing* the *light* from the *darkness* produces the rotation and progression of the earth, &c. which, while the light is divided, or

made out of darkness, or the light and spirit continue to be reciprocally made, can, without a miracle, no more avoid proceeding and turning about, and dividing between the day and between the night, than, in a sufficient wind, a ship at sea with sails spread, can avoid being driven before the wind, and turning as it turns. The Talmudists give these words the same sense in the *Berachoth*, fol. 58. 2, “ If it was not for  
 “ the *heat* of *כימה*, the world could not subsist  
 “ for the *cold* of *בסיל*: and was it not for the  
 “ *cold* of *בסיל*, the world could not subsist for  
 “ the *heat* of *כימה*.” Which is saying that the spirit must be melted into light [*Cime*] at the center, and the light reformed into spirit [*Csil*] at the circumference, or the œconomy of nature would cease, and be at an end. So *Isai. xiii. 10.*  
 “ *כוכבי השמים* *th stars or fluxes of light* of  
 “ *השמים* *the heavens or air* *וכסיליהם* *and their spirits,*  
 “ i. e. *the influx of spirit to each of them* *לא*  
 “ *יהלל אורם* *shall not irradiate their light or stream*  
*which forms the star.*—The light of the stars can no more subsist without the influx of the spirit, than the fire at the sun can do; the action of the spirit being as necessary to blow and disperse the light from the planets and stars, as it is to keep in the solar fire, and dispense its light and heat to us: for though it is the light which is the thing irradiated, it is the influx of the spirit which presses it out, and *irradiates* it, without which it would stay where it was, and not reach us. And hence we may see the propriety of a flower being made the emblem of irradiation in the sacred Scripture, it being blown and split into rays like the light, and that by the same action, and instrument, namely, the spirit, as the light, is.

קַרְנֵי, whence *corono*, *corona*, a *crown*; and also, *cornu*, \* an *horn*: The verb is to *irradiate*, *vibrate*, *send out rays*, in the manner of *horns*. It is well express'd by the Latin *irradio*, and *promico*, darting forth *rays*, or *mice* of atoms or grains. It retains the same signification in the Chaldee, Syriac, and Arabic. The noun is an *horn*, *the thing irradiated*: the noun plural is used in Arabic for the *rays of the sun*.—Some kind of an *horned serpent*, some *long-legged insect*, like a *Scarabeus*, but a little larger, and a *Caryophyllum* or *Clove-July-flower*, are its emblems, and called by the same name.—The *Al-koran* has its name from this word; so is the *irradiator*, or *illuminator*.—The streams of light between the sun and the earth were called *rays* or *horns*, as were likewise the columns of the spirit, which on every side pass between the rays of light; and which in a sun-image were represented by dark rays pointed inward, as the light was by the bright or gilded rays pointed outward. And as the *power* of *horned* beasts is in their *horns*, the *horns* issuing out of the heads of beasts, were made the representatives of the *powers* of these *streams*, which from the aethers reach the earth, and exert their *powers* there. Upon this account the heathens (as *Dionysius Halicarnassius*, book ii. relates) convoked the people to their religious assemblies by the sound of *bulls horns*. And perhaps to reclaim this, was the Mosaic rite of sounding with the *horns*, to convoke to the worship of, or to praise God. Upon this account the

Ch. VIII.

503.  
(307.)

\* *Horace*, praising wine, says,  
*Tu spem reducis mentibus anxiiis*  
*Viresque & addis cornua pauperi.*

Car. 3, 21, 17-

heads

heads of cherubim, or oxen, with horns, were placed upon the hangings of the Tabernacle, and the walls of the Temple, and elsewhere.— In token of his intercourse and communication with God on the mount, *Moses's* face, when he came down, issued or reflected *streams of light*, expressed by this word. And upon this account almost all material representations of divinity or power (*Δυναμις*) issuing from God or Christ, or his apostles, have been, and are represented by *rays of light* streaming from the head of the representative: and thence the attribute of *horns* so often claimed, and tendered, which in the Old Testament run very high: So in the New Testament, Rev. v. 6. where the Lamb had the *seven horns* and *seven eyes* [omnipotence and omniscience]. \* *Samson's seven locks*, in which his *great strength* (*כח גדול*) lay, represented this *irradiation*, which gives life and strength to every thing, and which is exerted by the *Shemesh* in fruit, vegetables, &c. and he was called *שמשון* *Semsun*, a little or representative sun. And the Jews tell us †, that *Solomon*, to typify this  
radi-

\* Upon this account the *horn* was the vessel from whence was poured the anointing oil upon kings and prophets, which was emblematically anointing them with the Holy Ghost, and *Δυναμις*, the powerful one, the horn, as we have seen, being the emblem of irradiation.

† See Matth. vi. 29. Luke xii. 27. —“ Consider the lillies of the field how they grow! they toil not, neither do they spin: and yet I say unto you, that *Solomon* in all his (*Δόξα*) glory was not arrayed like one of these.”

The glory of the one was the arrayment of art and dress, the others were arrayed by the immediate irradiation of the light, the glory: so *Solomon*, in all his glory, was not arrayed like one of the lillies, because he was beholden to exterior ornaments to make him an emblem of what they represented naturally; being emblems both of the material and immaterial light: whence they are ornaments used in imperial and regal



*radiation* or glory (for kings were types of the *light*, the heathen of the material, the Jewish of the ineffable *light* or glory) powdered his hair, which was cut short to stand out like *rays* or *horns*, with gold-dust. — The heathens bestowed the utmost pains and expence to represent this; witness their Sun images, their Colossus's, their Pyramids, their Obelisks, which last were called in the Egyptian tongue Νιτεβπυρη, the fingers of the sun; so *Hermoclasti*, the fingers of *Hermes*, which, as you may see at p. 60, & seq. is the power of *moving* things in or by these *horns* of light and spirit. They also abound with testimonies full to the point in hand; out of an infinite number, I shall select a few.

*Bosace* relates, that *Jupiter*, or *Pan*, had *horns* on his head, to represent the *rays* of the sun, moon, and other stars: his red and fiery face denoting the ætherial fire. And *Eusebius*, from *Sanchoiatbon*, calls *Astarte* [עשתרת] the daughter of heaven, and says, that she put the head of a bull upon her own head, as the insign of her power, empire, or rule\*. And *Selden*, in his book of the Gods of the *Syrians*, makes the curled hairs, and *horns* in the bull's head, the emblem of *fire*; and cites *Horace*—

Sed assumpto taurino capite,  
“ Fronte curvatos imitabatur ignes.”

*Macrobius* informs us, that the *Lybians* represented the sun, whom they called *Ammon*,

crowns to this day, and are the bearings of the French monarch. And perhaps the *Fleur de Lis* is the mark of the North, because the needle may have its direction by means of the light.

\* This was making her עשתרת קרניש *Astarte*, the Horned or Irradiated.

or *Hammon*, (Heb. חַמּוֹן) with the *horns* of a ram, because that animal has its strength in his *horns*, as the sun has in his *rays*. And *Kircher*, in his *Œdipus*, gives an account of an image of the sun that holds a goat by the *horns*, because the solar *power* is expressed by *horns*: and also of an ox with an human face, vibrating or irradiating flames or rays from his head. And in his *Obel. Pampb.* from *Fulgentius*, he says, that the sun is pictured with a bow and arrows, because his *rays* fly out from a circle, as arrows from a bow: And from *Brisonicus*, he relates, that the *Persians* adorned their Gods with a circle of *rays*, because the light round the sun was split into *rays* \*.

From this root, though it may at first sight seem visionary, is derived the Scotch word *CORONACH* or *KRONACH*, which, like the Irish howl, is a rending the air by weeping and wailing in honour of the dead. What is this but, by actions, wishing the deceased a crown of glory, by putting the air into that vibratory motion which causes irradiation, and forms glory, of which the crown is the emblem.—The custom is very ancient.—*Deborah*, *Rebekah's* nurse, was buried under an *oak* beneath *Beth-el*, and the place, from the extraordinary wailing,

\* Hither we may refer what *Heliodorus* and *Lucian* mention of the Ethiopians. The latter says,— “Τῆ κεφαλῇ αὐτῶν φαρέτρας χροῖται, περιδέοντες αὐτῇ ἀκτινοῦν τὰ βέλη — “ They make use of their head instead of a quiver, binding arrows all round it, in the manner of rays.” —The former describes it thus: Πλῆγμα γὰρ τι κυκλοτορὲς τῇ κεφαλῇ περιδέοντες, ἢ τὸτο ἔθελαι κατα τὸν κύκλον περιπέλαιτες, τὸ μὲν ἐπτερομένην τῷ ἔθελαι τῇ κεφαλῇ κατατίθενται, τὰς δὲ ἀκίδας ὕιον ἀκτίνας εἰς τὸ ἔκτος προδέδονται. Κάντευθεν ἐξ ἐτοίμης παρὰ τὰς μάχας ὡσπερ ἐκ φαρέτρας ἀφαιρῶν ἕκαστος, ἀγέρωχόν τι ἢ σατυρικὸν σκίσημα λογιζομένης, τε ἢ καπτῶμνος, ἢ τοῖς ἰσὺς ἐστερμῆος ἀπὸ γυμνῆ τῷ σαμάτης τοῖς ἰνατοῖς ἐφῆσιν. *Heliodori Ethiop.* lib. 9. p. 204. edit. ima. Basil 1534. Græc.

was called (עֵלֹן בְּכוֹת) *Alun-Becutt*, the oak of Ch. VIII.  
*wailing*. The mourning, for *Jacob* the Patriarch, Gen. l. 11.  
 lasted seventy-seven days; seventy in *Egypt*, and  
 seven at the threshing-floor of *Atad*, in *Canaan*,  
 where they mourned with a great and very sore  
 (Heb. כָּבֵד) lamentation; whence the place was  
 called (אֵבֶל מֵעֵרִים) *Abel Mejrim*, the *Lamenta-*  
*tion of the Egyptians*—So, over the Jewish kings,  
 there was great lamentation made, and the bur-  
 den of the dirge seems to have been, *Ah Adon,*  
*ah glory*: see Jer. xxii. 18.—xxxiv. 5. The  
 dead bodies both of Jewish and Heathen kings  
 were laid in a *bed* called *Glory* (Heb. כְּבוֹד) as  
 appears from Isa. xiv. 18. “All the kings of the  
 “ nations, even all of them, lie in *glory*, every  
 “ one in his own house—but thou (king of  
 “ *Babylon*) shall not be joined with them in bu- See 2 Chro.  
 “ rial.” Whence it appears that these rites of xvi. 14.  
*wailing*, &c. were allowed only to those who  
 were thought *worthy*; as Jer. xxii. 18. “They  
 “ shall not lament for him (*Jehciakim* king of  
*Judah*) “ saying, *Ah Adon, ah glory*—But thou  
 “ (*Zedekiah*) shalt die in peace—and they shall ch. xxxiv.  
 “ lament thee, saying, *Ab Adon.*” They also 5.  
 used musical instruments upon these occasions; Eccl. xii.  
 as Matth. ix. 23. where, upon the death of 5  
*Jairus*'s daughter, there were the *minstrels* (Gr.  
 αὐληταὶ) and the people making a noise, or  
 howling (ἀλαλάζοντες, \* says St. Mark.) And, chap. v.  
 perhaps, from hence is derived the custom of 38.  
*singing* before the corpse to the grave.— Under  
 this head we may range the custom of *tolling* the

\* See 1 Cor. xiii. 1. where ἀλαλάζοις is used for the sound of the cymbal: and Jer. xxv. 34. where it is used by the LXX. for sorrowful lamentation; as it is up and down in the Psalms for joyful vociferations, as Psal. xcvi. 1.—c. 1.—and xcvi. 4, 6 &c.

Ch. VIII.

bell as the person was a-dying—which, as it broke the air, and put it into irradiation, was a prayer by action, to *lighten his darkness*, to break in pieces, and so give him conquest over the power of darkness, and the *prince of the power of the air*, as the *devil* is stiled, Ephes. ii. 2. The very word *toll* seems to be the Hebrew לָלַת, used \* for a song, tune, or expressive sound: and the word *Bell* is the Hebrew בֵּל, to *impel*, *make flow*, to *mix*; which the bell does to the air in sound, by putting its parts into a vibratory motion, and so keeping the light and spirit in a proper mixture. Hence the consecrated bells among the Papists had their rise.—Hence the motto upon bells—*Fear God and honour the king*; i. e. Christ the true light, the King of Glory.—Hence the ringing them in *storms*, *tempests*, *thunder* and *lightning*, which are unequal mixtures of the air.—Hither we may

\* Psal. cxxxvii. 3 —“ For they that carried us away captive required of us the words of a song, and שָׂמְנוּ לָנוּ שִׁיר. *our exultations of joy.*” This was some tune, or &c. that attributed the power to the *Creator*, because it is called the *song of Sion* and the *song of Jehovah*; which they could not sing in a *strange land*, where the *creature* was worshipped, and where they were captives. The asking them to sing, was insulting them to an high degree. — It was saying, “ Let us now hear “ you sing your songs of triumph, wherein you vainly boasted “ of the superiority of your God over ours, to whom, and to “ us his servants, you are now in captivity.”—The word being here used in the sense of *joy* and *triumph*, is no objection to the etymology of TOLL, because ἀλαλάζω, used Mark v. 38. for howling for the dead, comes from ἀλαλάη, which is a military shout before battle, to terrify the enemy, and bespeak victory: And indeed this was the design of such vociferations, whether used over the dead or living.

לָלַת, whence the Latin TOLLO, is to *raise*, *heap*, *lift up*. We use the phraseology to *raise* the voice in honour and praise of a person; and to this day express joy by a sound very like this word, viz. *Tol-lol*. &c. The Scotch word *Lilt*, for a tune, is used in the sense of לָלַת, to *lift*, or *raise up*.

refer

refer all the tinkling, sounding, and beating of Ch. VIII. cymbals, trumpets, drums, &c. by the heathens, at the eclipses of the sun, moon, &c. in order to restore light and irradiation, of which they supposed them then to be violently deprived, by some evil, malignant spirit, or by what other means soever they imagined the light taken away. Hence Job, in his commemoration of the return of his prosperity, gives his third daughter the expressive name of קֶרֶן הַפֶּן *Keren-Epuc*, the horn or irradiation turned or restored; which is rendered by the LXX. Ἀμαλθαίας κέρας, *cornu copias*, the horn of plenty, or horn of Amalthea\*.

כֶּטֶר the verb is to surround, inclose; to defend, protect, &c. the noun, a crown, diadem, turban, tiara, Gr. Στέφανος, Διάδημα, &c. a circuit, or circle, as the Latins use *Corona*. — 508. (512.)

*Vulgi stanta Coronâ.*


OVID. *Metam.* lib. 13.

The idea is taken from the action of the heavens in irradiation. Pſal. lxxv. 12. עֲטֵרָה, “Thou crownest the year with thy goodness, thy clouds drop fatness.” In a spiritual sense, Pſal. viii. 5. cited Heb. ii. 7. “Thou hast crowned עֲטֵרָה

\* From hence too comes our word CORONER, who is an ancient officer of the crown, and was formerly invested with greater authority than at present; being the only one whose office and power subsisted after the demise of the Kings. The Coroner, by virtue of his office, when any person is found dead, enquires how the party came by his death, &c. It is a quality of the Light to irradiate, so penetrate, and thereby open what before lay hid and was a secret, whereby it becomes ὁρατὸν ἁγίου, of which *κερας* the lily is a type, and typifies the ineffable Light and his attributes, *Jesus Christ* the Light of the world. who at Pſal. i: the great general inquest at the last judgment will “make in- 12. “quisition for blood, will bring to light the hidden things of 1 Cor. iv: “darkness, and manifest the councils of the heart.” More 5. might be said upon the subject, but this is enough to point out how the office of *Coroner* tallies with the idea of קֶרֶן.

“him (the man Christ) with glory כבוד and honour הדר.” The LXX. Δόξη καὶ τιμὴ ἐσεφάνωσας αὐτὸν.—Psal. ciii. 4. גואל “Redeeming thy  
 “lives from the pit, and המעטרכי crowning thee (the man Christ) “with הטר mercy and loving-  
 “kindness.”—“A Crown, says *Estell*, in his “*Heptaglot*, is the first of all God’s attributes.” There was a place or places called by this name. Numb. xxxii. 2. העטרות; and ver. 34. עטרת. Josh. xvi. 2. with an epithet הארכי עטרות, and ver. 5. and chap. xviii. 13. עטרות אדר. and chap. xvi. ver. 7. עוהה עטרות, which last *Castell* takes for *Asteroth*. In Syriac and Arabic the word has the signification of *smoke, fume, vapour, breath, incense, a scocet-gum, a perfume, pitch*. As a verb in Arabic it is to *smell, or yield a scent*, and in Chaldee, to *recede, go away, depart*. All which retain something of the primary idea, allowance being made, as must always be done in such cases, for the different sentiments, &c. of the several nations. The Rabbins use this word for the *fore-skin of the glans in a man’s yard*, which resembles a *crown*, the prepuce being cut off. So *Buxtorf*, in his *Chaldee, Talmudic and Rabbinical Lexicon*, says, עטרת is the *crown of the glans*, the *glans* or *head of the penis*, its *crown*, as it were, and *inclosure*, the *flesh covering the glans* or *nut*; which makes it seem probable that this part of the member was made a representation or symbol of this attribute of *crown*, or *circle*, דור, וואר, or אדר, *radiation*, round the Sun\*. They represented the ארת *Ahith* or *Att* of light, as it appears on every side of the sun; and the *Att* upon the

\* This conjecture seems favoured from the place where Circumcision was renewed by Joshua, being called גלגל GILGAL, *circulation, or revolution in a circle*, Josh. v. 9.

hemisphere of each other orb, as the *cap* of a *Ch. VIII.*  
*crowns*; and the streams of light, from each to   
 each other globe, were represented by tapering  
 plates of gold, and the globe at the end of each  
 by a bright stone. The *tapering plates* or *horns*  
 were symbols of *radiation*, *power*, Δυναμῖς, the  
*globe*, of *glory*, Δόξα, כבוד, הדר, &c. So the  
*Beast*, in *Rev.* xiii. 1. had ten *crowns* (Διαδήματα)  
 upon his ten *horns*, which was assuming the *king-*  
*dom*, the *power*, and the *glory*; whence he had  
 the name of *Blasphemy*. — Chap. iv. ver. 4. the  
 Elders had *crowns* (σεφάνες) upon their heads;  
 and chap. xix. ver. 12. Christ is represented with  
 crowns (διαδήματα) on his head. Thence all the  
 representations of *crowns* in the Tabernacle and  
 Temple; the claims and tenders of *that* attri-  
 bute, and *that figure* upon the head, as the em-  
 blem of sovereign power. — IIa. xxiii. 8. Tyre  
 has this attribute given it, צר המעטרה, ren-  
 dered *Tyre*, the *crowning city*.

גל, גלל, גול, 'o roll, *revolve*, &c. It expresses <sup>511, 12,</sup>  
 all sorts of *revolutions*. — When it is applied <sup>& seq.</sup>  
 to a *solid*, 'tis *turning it round*, one part up and <sup>(515, 16,</sup>  
 the other down alternately, and so moving it <sup>&c.)</sup>  
 forward; as 1 Sam. xiv. 33. “גול Roll a great  
 “stone unto me.” — When it is applied to a  
*fluid*, as fresh water, for instance, it signifies  
*going down and returning up*, as the revolution of  
 water by springs; as Judg. i. 15. “Give me also  
 גולת *springs* of water.” — When to salt water, it  
 expresses the flux and reflux, or *flow* and *ebb*, of  
 the sea, &c. as Job xxxviii. 11. “here shall thy  
 “proud גלי *waves* be stayed.” \*

גלגל

\* So גלל is used for *dung*, excrement, &c. which is rolled  
 downward by the circulation of the microcosm. And the Eng-  
 lish word *reveal*, q. d. *reveil*, the Latin *revelo*, the Greek ἀνα-

Ch. VIII. גלגל, the root doubled, *revolution of revolutions*, the PRIMUM MOBILE; the *circulation* of the heavens or air, which produces all other revolutions. — *Buxtorf* says, it is a *sphere*, a *circle*, &c. and that hence among astronomers the seven orbits of the planets are called גלגלים; and cites a Rabbinical passage, גלגל ספירי, וזכנבים אונם ספירים, “The sphere or orbit “ is sapphire or pellucid, but the stars are not “ pellucid.” Which is applying the epithet, ספירי *clear like sapphire*, to the matter of the heavens, and not to the substance of the orbs. And it is explained by שחקים ספיריים, the *sapphire heavens*. The שחקים, as p. 47. are the joint action of the *light* and *spirit* struggling to take place of, and so mix with each other: and in a serene day they appear of a bright blue or *sapphire* colour, what we call a *sky-blue*.

The word גלגל, in its primary and full signification, expresses the columns of the *spirit*, which continually pursue the *light* upon each orb, and so impel the earth and planets in those bended lines which we call their orbits, and which the *Jews*, as above, call their spheres, and describe as *sapphire* or *pellucid*, and in the same condition as the שחקים, *the air in conflict, the strugglers*.

The earth and planets move in, and are moved by these גלגלי, *circulators*, or *vortices*; but then it must be remembered, that these are not vortices of the whole matter of the heavens in each circle at once, but that action of the hea-

αποκαλυπτω, by which גלה is sometimes rendered, retain the same idea; which is taken, as I think, from the drawing up or *rolling* the *veil* or curtain, which hung before, and covered their sacred images or shrines, and so *revealing* them to sight. — So גליון and סגולה is a *volume*, or *roll*, Isa. viii. 1, Jer. xxxvi. 23.



vens or air at each globe occasioned by the in-  
 terruption of the light, and the driving in of the  
 spirit, which continually attends, and pushes  
 each of those globes, and so in the progression  
 of each globe about the sun, makes a vortex in  
 each part of each sphere or orbit, but only  
 where the globe is at that time. From thence  
 the word is carried down to all lesser and parti-  
 cular revolutions of the same kind, and to all  
 other kind of revolutions, as Isa. xvii. 13. to  
 the *circular motion* of the air in a *whirlwind*;  
 Psal. lxxvii. 19. to the *circulation* of the heavens  
 or air in the act of *thundering* and *lightening*,  
 where, as all is full, the grains accede and the  
 atoms recede in the same lines.—Isa. v. 28.  
 the rapid motion of *wheels* is compared to  
 the rotation of air in a whirlwind. — Dan.  
 vii. 9. גלגליוהי נור דלק, *his wheels*, or revolu-  
 tions *as fire burning*: perhaps the three agents  
 might be at work here, and the action or circu-  
 lation of fire carried on in the form of a wheel.  
 Ecclef. xii. 6. to the circulation of the blood;  
 (of which more fully below.) So גול,  
*joy, rejoicing, &c.* the effect of its circula-  
 tion; which was outwardly expressed by mo-  
 tion and gestures of the body, such as turning  
 round, dancing in circles, and such like. So  
 גלה און, a strictly philosophical expression, for  
 the air in sound *traversing* the *labyrinth* of the  
 ear. Many persons and places took their names  
 from this attribute, as גלית, *Goliath* of  
 גת *Gath*; i. e. *the circulator of the wine-press*, who  
 was איש-הבנים, LXX. Ἀνὴρ Δυνατὸς, *vir*  
*intermedius, a powerful one, the stander between*  
*them and the enemy.* And his name, גלית כננת,  
*the circulator of the wine-press*, imports much the  
 same as what Christ, the real *stander between us*  
 and

Ch.VIII.

Ch. VIII.

Isa. xi. 6.

and our spiritual enemies, is called in Scripture, the *treader of the wine-press*; or perhaps גלית may come from גלה, and then it will signify the *taker of captives*. — Hence *Galilee* had its name; and hence Christ and his Apostles were in contempt called *Galileans*, i. e. *circulators, jugglers, magicians, &c.* thereby attributing the miracles they wrought to the power of magic. And to assert his superiority over the heavens, the material agents, in the power of working miracles, Christ wrought the first miracle in *Cana of Galilee*. Upon which St. *John* remarks, chap. ii. 11. “This beginning of miracles did Jesus in Cana of Galilee, and manifested forth τὴν δόξαν αὐτοῦ his glory” That is, gave demonstration, that he was the *glory Jehovah*, the Δύναμις ὑψίστη, the Δύναμις Θεῶν, the פלא, the person possessed of the great and invisible power; “and his disciples believed in him,” (*viz.*) that he was *that* person. Glory and light in irradiation is the express image of his person, the character of the divinity in Christ; and his humanity, his body was the temple or house of the glory, from whence it issued out with healing in its wings, and diffused its beneficence every way. This word is compounded with ער, as in גלעד. And as it was the custom from the beginning, to record in the names of their children and places, the attributes and offices of him in whom all nations were to be blessed, this name is expressive of that Person whom Job xvi. 19. calls בשמים עדי, his *witness* in heaven; and St. *John*, Rev. i. 5.—iii. 14. the *faithful witness*, who, in the pre-appointed *revolution* of time, was to wash us from our sins in his own blood.

There was a noted place in the land of *Israel* called בית גלגל, the *temple of Gugal*, dedicated,  
I sup-

I suppose, to this power, whose ascent was very lofty and steep, its descent shelving and winding. It might, perhaps, be like the tower of *Babel*, whose summit was an altar to the heavens or air, and its winding, spiral ascent might represent the גלגל הנדלים, the *revolution of the planets* \*. The Scriptures mention one or more places, or cities, where the *Canaanites* worshipped their God, the שמים heavens, under this attribute of the *causer of revolution*. 1 Sam. x. 8. there is mention of one which seems to stand low, where there was an altar upon which they sacrificed at the making *Saul* king. [See 1 Sam. xi. 14. — xiii. 9.] But whether there was a temple does not appear. But there were graven images mentioned, Judg. iii. 19, 26. by the common name פסלים, which the LXX translate here γλυπτά, as they do Deut. xii. 3. where this word is used for the *gods of the nations*; and in the Second Commandment they render it by εἰδωλον. The representatives of this power are called, Deut. xxix. 17. by the name of the thing represented גלגלי; and Ezek. xx. 7, 8. they are said to be the *idols of Egypt*; and verse 24. the *idols of their fathers*. And as this word represents the universal power which includes the *fire, light, and spirit*, all idols are comprehended under this name; and the word כל is often used with it, as Ezek. vi. 13. The worship of the heavens or air under this form of motion, is described in the text just cited, and

\* We find a general notion of this as low as *Ovid*, *Metam.* l. 2. v. 70. as also of the Light moving in a direction contrary to the Spirit, and the opposition and struggle it thereby goes through.

—Assiduâ rapitur vertigine cælum.  
Sideraque alta trahit, celerique volumine torquet.  
Nititur in adversum: nec me, qui cætera, vincit  
Impetus: et rapido contrarius evehor orbi.

the worshippers threatened, Hof. ix. 15. — xii. 11. Amos v. 5. It consisted in sacrifice, and burning incense, &c. This motion of the orbs, &c. is represented by wheels, which were emblems of the power which revolves the earth; and the service to this power was running and turning of wheels, to represent the earth's rotative and progressive course. Thence wheel-work in the temple, as chariots were an emblem of carrying the earth and other planets in the progressive motion, and so brought into the temple. See 2 Kings xxiii. 11. And this is claimed upon the columns, &c. before the temple. See 1 Kings vi. 34. — vii. 41, 42. and 2 Chron. iv. 12, 13. and is superseded by miracles. The heathens had this symbolical rite of turning a wheel in the temples of their deities, as *Clemens Alexandrinus*, from *Dionysus Thrax*, in his book of the signification of the symbol of wheels, informs us: Hence the chariot races among the *Greeks* and *Romans* had their rise: hence too the games of the *turbo* and *trochus*. The *turbo* was a sort of top, which they whipped round. The *trochus* was an hoop of iron five or six feet in diameter, set all over in the inside with iron rings: This was whirled along (as our boys do the wooden hoops) with a rod of iron having a wooden handle; which rod was called by the *Greeks* Ἐλατήρ, *the driver*, by the *Romans* *Radius*. — *Horace*, in his *Art of Poetry*, ranks this among the manly sports in the *Campus Martius*.

“Ludere qui nescit campestribus abstinet armis,  
“Indoctusque pilæ, discique trochique quiescit.”

But these nations, at the time *Horace* wrote, seem to have arrived at that height of human wildness

wisdom and knowledge (as our moderns by Ch. VIII.  
 copying them have done) as to be thoroughly ignorant of the original design of these, and all other institutions, and to view them in no other light than play-things and diversions.

The *Jews* call the beginning of *Ezekiel* מַעֲשֵׂה הַמְּרִכְבָּה the *chariot* or *wheel-work*: they say, it is full of mysteries, and therefore not to be explained, concerning which there is a tradition in the *Talmud*. This, I think, contains a three-fold confession: First, That the visions of the wheels, &c. are emblematical. Secondly, That they are not explained. And, Thirdly, That they, the enemies of the cross, would not have them explained. Which is a strong intimation and presumption to Christians, that they contain *some things* which the apostate *Jews* would not have Christians come to the knowledge of: the completion will help us to the explication of the mysteries—The two visions were directly leveled against the service of this power, called גִּלְגַּל, and so shewed what it was that the heathens, and their fathers, and, perhaps, some of their descendants served for God; and that it was only the effect of created matter, and mechanical. They shewed, that the *glory*, *Jehovah*, was to depart from their Temple, and not return till it came in the Temple of Christ's body; so the Jewish was to give way to and be superseded by the Christian dispensation. And beside this, they prefigured the respective parts, which each person of the cherubim, the representatives of the eternal uncreated Trinity, and of the man united to the second person, the lion, the *light*, was to act in the covenant of grace, for the redemption of fallen man: which belongs not to this place.—Let us take a view of the visions. In the first, the SPIRIT, the FIRE, and the LIGHT first

Q 2 appeared,

appeared, each in its respective action; then out of the midst of the fire the likenesses of four moving creatures, the cherubim, with the faces of all their representatives, and with wings; then the machine, or wheel-work, and its motion by the spirit; then they standing under, and so seeming to carry the complex work of the three agents, or of those two which went out of fire; then the likenesses of the expansion, terribly bright as chrystal stretched forth over their heads above; and above that the *Glory-Jehovah*, God-Man. And to prove more strongly what this represented, the prophet uses the word אופן for the wheels, in describing the wheel-work, the wheel within a wheel. And, chapter x. after he had been shewn by a vision, chap. viii. what service had been paid to these powers at *Jerusalem*, he calls the whole גלגל, as verse 2. “And he spake unto the man clothed in linen, and said, Go in between *Gilgal*.” So verse 6. where both words are used. — “When he had commanded the man clothed in linen, saying, Take fire from between the *Gilgal*, from between the cherubim; then he went in and stood beside אופן one wheel: and one cherub stretched forth his hand from between the cherubim unto the fire that was between the cherubim, and took and put into the hands of him that was clothed in linnen. ver. 9. — behold the four אופנים wheels by the cherubim, one אופן wheel by one cherub, and another אופן wheel by another cherub: and the likenesses of the אופנים wheels as the colour of a beryl-stone; and their appearance as a wheel (אופן) within a wheel (אופן).” And to put beyond doubt what was meant, the appearance, by a supernatural voice was called *Gilgal*.

*Gilgal.* Verse 13. "As for the אופנים wheels, Ch. VIII: " he called them the גלגל in my hearing." Nor could there be any dispute what essence these cherubim represented, the uncreated or the created, since they commanded the material created substance, fire, light, and spirit, the cherubim of heathens and apostates. to obey them; and one of them took coals of fire, and put them into the hand of the man clothed in white linnen to scatter over the city, which was forcing them to act against themselves, and destroy their worshippers; which, had they had that power and intelligence in them which the apostates supposed they would not have done, or suffered to be done. And the appearance of the man in glory upon the throne above the expansion that was over the heads of the cherubim and wheel-work, shewed that Christ, the son of man, was to be the minister of the new dispensation, the plan of redemption; that he was to reign over the subjects of these powers, and so be carried by them, and their representative beasts, in triumph.

The Talmudists give us to understand, in their way, that these wheels are symbols of aerial powers. For the prohibition, *Exod. xx. 23.* "Thou shalt not make to me any strange gods," they thus explain, (i. e.) "Thou shalt not make after the likenesses of my ministers that minister before me on high, such as are אופנים the wheels, seraphim, sacred animals, and ministering angels." Our divines would make us believe these are spiritual angels, but it has now been sufficiently proved, that they are not the spiritual, but the material host of heaven, *Psal. civ.* the mechanical powers of the air, the fire, light, and spirit, which God has made his agents and mi-

ministers, and which the Scriptures, over and over, inform us the apostate Jews and Heathens worshipped.


519. סביב this word is used for the circulation of the heavens or air, and expresses *the revolution on every side, from circumference to center, and so round.* The Heathens give us an exact definition of the idea contained in this word, in the description of their *Deus*, which was indeed the air, when they tell us, as does *Plato*; — ‘Θεὸς αἰὲ κυκλομετρῆι. *God continually acts in a circle.* So to reclaim this, Psal. lxxvi. 12. “Vow and “reclaim to your *Elahim* all סביב his circuits.” The word is used, Ezek. i. 4. — “And behold “a whirlwind came out of the north, a great “cloud, ואש מתלקחת ונגה לו סבוב, and a “fire infolding, exchanging, or spreading itself “to a splendor or glory all around it.” Psal. l. 3. “A fire shall devour before his faces (the “idea taken from the athth of the sun) “and his circuits a violent “tempest.” Psal. lxxxix. 8. — “God is terrible “in all his סביב circuits.” (The idea taken from the appearance of the sun in storms and tempests.) Psal. xcvi. 2. — “ענן וערפל סביב “Clouds and darkness his circuits.” Here God is represented encompassed with clouds and darkness, as this system is \*. So in that glorious description of Job xxxvii. 11, 12. “The fire dis- “solves the dense air: the cloud (*i. e.* the re-

\* *Lucretius* makes this system self-bounded, by condensed ether. Book V. ver. 408.

- “ Sic igitur tum se levis, ac diffusilis aether  
 “ Corpore concreto circumdatus undique sepfit,  
 “ Et late diffusus in omnes undique partes  
 “ Omnia sic avido complexu cætera sepfit.”

“ turning



“ turning spirit) disperses its light, and it, *from* Ch. VIII  
 “ *all parts round, returns by its reciprocal motions\**   
 “ (inward and outward) that they may execute  
 “ what he has appointed them on the face of the  
 “ sphere near the earth.”

The *Jews* were required, by the law, to pay several acknowledgments to *Jehovah-Elabim*, in the same manner the Heathens had paid them to these *powers*; and perhaps some others might be directed afterwards by prophets upon special occasions: so that every Hebrew word of acknowledgment to God, such as we render *solemnizing, feasting, rejoicing, confessing, praising, singing, playing, sounding, dancing*, and such like, not only describe these actions, or the actions of the mind or body, or upon the instrument; but the actions of the heavens or air, for which God was thereby praised: so that *singing*, or *playing*, or *dancing*, &c. as we say, such a tune, or upon such an instrument, by the sound, motion, or &c. expressed the *attribute* which the Heathens had ascribed to matter, and which the *Jews* thereby ascribed to God; such as 1 Chron. xvi. 31. Psal. xcvi. 11. “ Let the heavens or air *שָׁמְרוּ*  
 “ *reciprocate* or move backward and forward.”  
 Psal. c. 2. “ Serve *Jehovah בְּשִׁמְרָה* in expres-  
 “ five recognitions of this reciprocal motion;

\* *מתהפך בתהבולתו*, *reciprocally reverting in chorus*.—The chorus of the antients seems to have been a representation of this aerial chorus. A chorus, whether it be of dancers or music, is made up of several different parts, whose reciprocal motions compose the whole. Now *this* part takes the lead, and is a principal, then *another*, and then a *third*, till each, in its turn, has taken the feuge: the other parts in the mean time being so interwoven with each other, changing and interchanged, that the chorus is always kept up strong and full; which is exactly the case with the parts of the heavens or air. This they called the music of the spheres, by which was meant, not the solid orbs, as has been supposed, but the æthers which carry the orbs. *Confer.* p. 97, 110, 111.

“ come

“ come before his faces ברננה with ovation,”  
 finging, shouting, &c. We put a small por-  
 tion of the air by the voice into this quivering  
 motion, or vibration, which is therefore exprei-  
 sive of the motion that circulates the earth, &c.  
 So Isa. xlix. 13: “ רנו sing, *vibrate*, ye heavens,  
 “ and גלי roll round, or circulate, oh earth.”  
 Chap. xliv. 23. רנו “ Vibrate, oh ye heavens.”  
 Pfal. lxxv. 9. “ The outgoings of the morning  
 “ and the evening תרנין shall praise thee;” That  
 is, the airs which circulate the earth, and there-  
 by alternately turn it into morning and evening,  
 by this their *vibration*, shew forth thy power  
 and handy-work. Pfal. xlii. 5. “ I will go to  
 “ the temple of the Elahim, in the voice רנה  
 “ of finging, or shouting,” [which is putting  
 the air into a vibrative tremulous motion, which  
 Job\* gives to the columns of light and spirit  
 which support and carry the earth] “ and תורה  
 “ confession.” (This was expressed many ways:  
 In what manner it was done here, the next  
 words explain.) הכון הווג “ the multitude dan-  
 “ cing in circles, tripudiating.” So Neh. xii.  
 27. at the dedication of the wall of Jerusalem,  
 “ they kept it with שמחה and תודות † and שיר  
 “ joy, confessions, and songs, cymbals, psalte-  
 “ ries and harps.” What were all these but  
 several confessions that Jehovah was creator,  
 former, and master of the powers of the air,  
 and so by these several actions described in these  
 words, ascribing to him the power and the glory  
 due unto his name, which the apostates and hea-  
 thens had unjustly robbed him of, by ascribing  
 them to properties inherent in the air. So Pfal.

\* Job ix. 6. “ Which shaketh the earth out of her place,  
 “ and the pillars thereof *tremble*.” So chap. xxvi. 11. “ The  
 “ pillars of the heavens or air *tremble*.”

† The LXX have the word *ἑστῶτες*, for the Heb. תודות.

lix. 35. " Let the heavens and earth יהללוהו Ch. VIII. {  
 " praise, or give radiation to him, *i. e.* Jeho-  
 " vah ;"— the heavens or air by their irradia-  
 tion and thereby circulation of the earth, the  
 earth by being circulated by that irradiation. *Jeb*  
 puts the sense of the word beyond dispute, chap.  
 xxxi. 26. " If I beheld the אור \* light when it  
 " יהל irradiated or shined."—and he lets us know  
 that paying the least adoration to it was deny-  
 ing the אל ממעל irradiator on high. — So Jer.  
 xxxi. 4. " Oh virgin of Israel, thou shalt again  
 " be adorned with thy tabrets, and shalt go  
 " forth in מחרול the choir משהקידה of those who  
 " dance, the mystic dances that represent, and  
 " so ascribe to Jehovah, the conflict of the hea-  
 " vens or air in the opposite motion of its parts."  
 So at the bringing up of the Ark to the Temple  
 of Solomon, 2 Chron. v. 12, 13. " The Levites  
 " arrayed in Byssus, white silk, stood with cym-  
 " bals, psalteries, and harps, at the east end  
 " of the altar, and with them an hundred and  
 " twenty priests מוצנצרות בהצנצרות trumpeting  
 " with trumpets; and the trumpeters and  
 " singers were as one to make one sound to be  
 " heard ולהלל ולהדרת in praising or attributing  
 " irradiation or glory to, and thanking or con-  
 " fessing Jehovah." And he shewed his appro-  
 bation and acceptance of this service by the sig-  
 nals of his presence, for as soon as the sacred music  
 had played, the cloud, and the *Glory-Jehovah*  
 filled the *Temple of the Elahim*.

The *Jews* had two kind of trumpets or in-  
 struments to sound with; the one named הצנצר,  
 the other שופר: the first we render *trumpet*, the  
 second *cornet* †. The הצנצר was a strait tube,

\* The LXX translate אור in this place Ηλιος.

† That sacred to the *Light* might have a shriller or treble  
 tone; that to the *Spirit* a deeper or base tone.



and, I think, was a symbol of the rays or columns of the spirit; the שופר was a crooked tube, and, I think, was the symbol of the light as it first comes from the arch of the sun: just as in a sun-image, where the *spirit* is represented in straight lines or horns pointed inward, the light is figured in bended or crooked horns pointed outward.—Levit. xxv. 9. ‘ In the day  
 ‘ of atonement the שופר was to sound through-  
 ‘ out the land, and proclaim liberty; which  
 ‘ seems to be typical of Christ the true light  
 ‘ coming into the world to preach deliverance  
 ‘ to the captives, to proclaim the great jubilee,  
 ‘ the acceptable year of the Lord, and set at  
 ‘ liberty them that are bruised.’ Luke iv. 18,  
 19.

As our translators have rendered שמש the *body* or *orb* of the *sun*; so have they likewise rendered the words applied to, or used with it; such as יצא, זרח, בוא, &c. as if the orb moved round the earth, and so rose and set in reality, as it does in appearance; whereas these words of themselves imply no such thing. Indeed, if these, or any other words of motion, be applied to an agent that moves itself, in this case the agent may be said to *come* or *go*; if to an agent that leads or drives other things, it may be said to *bring* or *carry* them; but if to a *patient* which is moved or impelled by something else, in this case the patient can only be said to be brought or carried by that other which impels it: So in the Hebrew phrases לפנות בקר לפני ערב, which we translate *when the morning appeared, — when evening cometh on*; which is transposing the words, and predicating the verb of motion of the *morning* and *evening*; whereas the texts say, not that the *morning* or *evening* turned, but that something understood  
 (viz.)

(viz.) a segment of the earth's surface with its inhabitants was turned into or to the morning and evening. And as this implies the diurnal motion of the globe of the earth, so by parity of reason *הקפות השנה* *the revolution or gyration of a year*, must imply the progressive or annual motion of the earth. But, further, the Scripture tells us expressly what it is that is turned Job xii. 22. — \* *יֵצֵא לְאוֹר צִלְמוֹת* — *He brings out to the light the shadow of death*, i. e. the dark hemisphere of the earth; the *place* to the *light*, not the *light* to the *place*. So Amos v. 8. *הִפְךָ לְבֹקֶר הַצִּלְמוֹת* — *turning to the morning the shadow of death*, i. e. the dark hemisphere.

When therefore the sacred writers speak of the *שֶׁמֶשׁ*, the *light*, they use the word *זָרַח*, in the first sense, for the *going out* of the light from the opposite hemisphere, into the hemisphere (and so country) where the writer lived, or which he spoke of; and they use *בּוֹא* for the *going in* of it into the opposite hemisphere. This way of expressing motion stands a little opposite to our manner of speaking, not only *ad captum vulgi*, but philosophically: for though our pretenders to more knowledge than the inspired writers, have, by chance, stumbled upon the motion of the earth, which they own was known to the first astronomers, Egyptian or Chaldean; yet as they continue perfectly ignorant of the agents which circulate it, the light and spirit,

\* The whole verse runs thus—“He rolls round the lower parts, and brings to the light the shadow of death” *עֲמֹקֵי* is the dark hemisphere, which is called *low* with respect to the enlightened one, which is termed uppermost; as we say, *the Sun is down*, or below, when the earth, by rolling round, has turned the place, where we are, from the light; and *the Sun is up*, above, or risen, when the earth, by rolling round, has turned up the place, where we are, into the light. See chap. xxviii.

what they are, and how formed: they talk as confusedly, and with as much uncertainty about these points as the vulgar.—They confound the **מארת**, the *orb* or *body* of the sun, and **אתת**, the *hot athth*, or *action of fire* in the *orb* or *body*, with **מאור** the *stream of light* from the *athth* of the sun, which successively hits the earth, whose end is called *Light* (to which the rule and government of *ard* in the day is given) and **שמש** the flux of light from the *athth* of the sun on every side to the extremities of the heavens, which includes **מאור**, and which is one half of the matter of the whole heavens or air; a cone of which light, having its vertex at the sun, covers one half of the earth with its base. This is translated and called the *Sun*: and when they endeavour to speak of light as something separate, they speak of it as an effect, and call it *sun shine*; though all is full between, and by the continual compression of the returning spirit, the air divided into light at the **אתת** only drives the intermediate light in that line against our eyes. So they talk of the apparent *rising* and *setting* of the sun, but still without having any fixed sense of the word. But the Scriptures are clear and determinate, and use proper and distinct words. And as the **מארת** is a round mass of matter, bounded and passive where it is, and cannot act where it is not present; and the **אתת**; and **זרית** only acts in the pores of that body, and at a small distance about its surface, where it is present, and while it is in form of fire, or flame, and none of them come to the earth; they apply not the terms of **זרית** and **בוא** to them, but to **שמש**, which really is, and acts upon the earth\*.

Moses

\* N.B. A seeming objection may arise to this, from Judg. viii. 13. where we have **בוא עליה הזרית** translated, *before the*

*Moses* uses יצא, Gen. xix. 23. for זרח — Ch. VIII.  
 ' השמש יצא על-הארץ, the sun went forth up-  
 ' on the earth, as *Lot* בא went from *Sodom*  
 ' into צערה *Zoar*.' So Judg. v. 31. ' They  
 ' that love Jehovah כצאת השמש בגברתו (shall  
 ' be) as the going forth of the sun in *his might* :'  
 or, as the 19th Psalm expresses it, ' יצא כגבור',  
 ' as goeth forth a giant, or one made strong to  
 ' run his course: whose מוצא going or issuing  
 ' forth is from one extreme of the heavens, (viz.)  
 ' the center, and his revolution by the other ex-

*sun was up.* — And chapter xiv. 18. where we read בטרם  
 בא הזרחה rendered, *before the sun went down*. In the first of  
 these texts מלמעלה is an adverb, and the text implies nothing  
 more than this, that the *solar fire* was yet *above*, without de-  
 termining what moves, or stands still. The Interlineary of  
*Pagninus* has *de super sole* (sc. *existente*.) And an old English  
 Bible—the *sun being yet high*. Our translators have rendered  
 מלמעלה *before*, and inserted, after הזרחה, the words [*was up*]  
 to make out what they thought the sense of the passage; but the  
 context shews the meaning to be, that *Gideon* returned from  
 battle *the sun being above* the horizon. In the second, the  
 final ה. by their own rules of grammar, opposes the noun's  
 הזרחה being the nominative case to the verb יבא; so it must  
 be taken and rendered impersonally, as in the Hebrew phrases,  
*it turns evening, it turns morning*; or in our English ones, *it*  
*rains, 'tis night, 'tis day, &c.* and it will literally run thus בטרם  
 יבא *it went toward* הזרחה, *the sun-ward*. The last  
 day of the feast was almost expired; and before it went toward  
 the light or solar fire, they told the riddle.—בוא or בא is *to go*,  
 or *cause to go* from one place to another; and although we may  
 be obliged to render it by various English words, yet will they  
 all come under this idea.

N. B. The LXX, according to the *Vatican* copy, render הזרחה  
 in the first passage as a proper name, *Apes*; the second they  
 translate *προ τε ανατολων ηλιου, before the sun rise*; which is not  
 so wide of the matter as it at first sight looks to be. The He-  
 brew is, before it (viz. the day or place where they were) went  
 towards the solar orb. Now any given place upon the terre-  
 strial globe, from mid-day to mid-night, is turning or going  
 from the solar orb, and from mid night to mid-day, it is  
 turning or going towards the solar orb. So the text implies,  
 that on the seventh day of the feast, before mid-night, the time  
 when the place, where they were, began to turn towards the  
 solar orb, they unriddled the riddle.

‘ tremes, the circumference; and there is no-  
 ‘ thing hid from his heat, or the small parts in  
 ‘ motion:’ For it strikes and pushes against the  
 side of the earth, and against the side of every  
 orb in its way, and gives each its proper degree  
 ‘ of glory and gravity, as the true *Shemosb* of  
 righteousness, in the spiritual system, or the next  
 world, will do to his faithful servants: as Dan.  
 xii. “ And they that are wise shall shine כֹּהֵר  
 “ הרקיע as the brightness of the firmament or  
 “ expansion (which is put into that condition  
 by the *צאת השמש* the going forth of the *She-  
 mosb* in his might) “ and they that turn many  
 “ to righteousness, as the stars.”

522  
 (527)

The word *צא* expresses the *goings out* of the  
*שמש* on every side of the sun; the word *זרה*  
 expresses the manner. *זרה* to *diffuse itself*, to  
*scatter* or *disperse* light, to *rise*, *shine out*; and it is  
 particularly spoken of the *rising* of the sun, and  
 the day, which at its rising or breaking scatters,  
 and pours forth or diffuses, bright and splendid  
 rays, and so has some affinity with *זרה* to *scat-  
 ter*, &c. In the Arabic it signifies *to move* from  
 place to place. The word has no relation to the  
 motion of an orb, as the word *פנה* has; but  
 expresses the manner of the motion of light, or  
 the *שמש*, which moving in a straight line, pushes  
 against the earth in its way to the circumference,  
 or extremities of this system, and thereby gives  
 the spirit, in its way to the sun, the center, an  
 opportunity of rushing into the lightened hemi-  
 sphere, at the evening or western edge, where  
 the impulse first began, and so dispersing the  
 light there, and circulating the earth. It is a  
 complex word, and expresses an action wherein  
 several things (a solid or point fixed. and a solid  
 and fluids continually or successively in motion)  
 each in their respective manners, are concern-  
 ed.



ed. The whole root of the word expresses the Ch. VIII.  
 action of being pressed out, being forced to re-  
 tire from a point outward or backward, and  
 forcing what it can drive in those lines, being  
 pushed forward by those in succession behind,  
 against, and mostly stopped by, something solid  
 before. This motion is first, as has been de-  
 scribed, with respect to the center of the sun,  
 whence the שמש, by the descending spirit, is  
 pressed outward, and so upward: with respect  
 to the earth, it is pressed or pushed in this line  
 towards its center, or against its surface: but  
 in repetitions, or succession of its parts striking  
 against the hemisphere of the earth, it is, as we  
 call it, shining, or reflecting each atom by others  
 in succession; being first pushed against, and  
 then pushed out, or driven, by succeeding  
 atoms, or by the spirit; and each drives the  
 other against and from each part of the hemi-  
 sphere, with respect to the earth's center, up-  
 wards. \* And though the word has no more  
 relation to *rising*, than בא has to *setting*; yet  
 part of the שמש, (viz.) the part we are speak-  
 ing of, is always above that side of the earth  
 opposite to the sun, with respect to the earth's  
 center. And though the course of the שמש  
 change not, by the turning of the earth, yet is  
 it alternately above, and below, any one coun-  
 try, as a man terms the side, he is upon, upper-  
 most.

In that noble description, which the wisest of  
 men, and the greatest naturalist, completed  
 by the spirit of prophecy, has left us of the mo-  
 tion of the שמש, the spirit, and thereby of  
 the earth, Eccles. i. 4. the same word זורח

\* See *Enquiry after Philosophy and Theology*, pag. 138, &c.  
 edit. Edinburgh, *Editor*.

Ch. VIII.



is used for the שמש upon the hindmost edge of light on the surface of the earth שואף yielding, receding, giving way for the spirit to move and push in that line, and so disperse the שמש there, or press it successively upward from the center of the earth, and so push against and impel the earth. So that if it had not been expressly revealed, that the earth turns round, and goes in an orbit, be it circular or elliptical, about the sun, when it is shewed that the שמש does not turn or go about the earth, the revolution from night to day proves the earth's rotation as that of years does its progression.—But that is not all: for here are at once shewn the manner and the instruments by which those motions are performed. The light is the ruler, the leader, ארון the spirit the driver, the impeller, מלך the earth the patient.

Ecclef. i. 4. דור generation הלך comes on, ודור and generation בא goes off, והארץ but the earth לעולם עמדת is supported to the end, וזרה השמש, and the Shemesh springs up, ובא השמש and the Shemesh goes off, ואל מקומו and at its place or station, שואף continually drawing in, or receding to, the spirit הוא שם it is continually springing up from thence הולך alternately going אל דרום towards the south, וסובב אל צפון, and circuiting round to the north, הולך הרוח, circuiting its circuits, סובב סבב, the spirit is continually or successively coming on, ועל סביבתיו, and upon, or in, its circuits, שב הרוח, the spirit reverts.

The royal author is here shewing that every thing is subject to the heavens, the air, in its three conditions of *fire*, *light*, and *spirit*, of which the שמש is the principal agent and ruler, in this system. He is not, as we render him, treat-

treating of winds blowing, or such comparatively small actions, but of the *circulation* of the *circulators*, the *airs*, which produce and regulate the motion of every thing that moves in this system, of the whole heavens, the earth, and waters upon and under the earth, *Ver. 7.* And he shews how their respective rotations supply the race of men in their successive generations with necessaries to the end of the world: And though they are in a continual fleeting state, yet the support of man is produced by their fluxions. Ch. VIII.

First, he tells us, generations are brought on, and generations are carried off; but the earth, for the use of all generations, is supported in all its conditions, motions and courses, in its rotations, declinations, and circular progressions, &c. Next, he informs us in order; how, and by what agents this is performed; which is in the following manner.—The *שמש*, or flux of light springs up from the *ארת* of the sun, and ‘goes forth as a bridegroom from his chamber, and as one made strong to run his race,’ and in its way hits against the earth in a cone of light, whose base covers one whole hemisphere, having its vertex at the orb of the sun. But this light would continue upon one and the same hemisphere, and neither rise nor set, unless the earth, by being turned, shifted it on to another part, which was dark, and as much of the dark part on to the part which was light, and so made days and nights; or else the point from whence the stream of light proceeds must go round the earth. But this point (the orb or athh of the sun) is at a vast distance from the earth, is neither upon it, nor can act but where it is present; and what is here spoken of, is said to be, and act on the earth, and at its *station to draw in the spirit.*—Whence it is evident, that it is the *light*, not the orb of the sun, which is here said to move; and consequently,

Ch. VIII. frequently, as the agent which divides and sends the light against this orb of the earth does not move, but is fixed, that proves that the earth is turned and moved. — But why is it not expressly said that the earth moves? If there were any such properties inherent in matter, as those with which our philosophers have lately invested it, or could bodies, once projected, continue motion by innate virtues after projection, without an impulse from without continually acting upon them; then it might be proper to attribute motion directly to the earth. But if the earth cannot move one turn, neither in its regular or progressive motion, further than the light and spirit direct and give it motion, the light by springing up at the instant the spirit impels the earth, and thereby  $\aleph$  receding, and so giving the spirit an opportunity of rushing in, and turning successively part of a new face, at each push, into and out of the light. — If this, I say, be, as it really is, the case, then it is more proper to name the *agents*; for saying, that they act upon the earth which is passive, and that they rise and set, as we term it, and go to the south and to the north, is not only saying that the earth moves, but that *they* move it. — Thus far relates chiefly to the rotation of the globe — What follows regards its progression.

The space between the two Tropics, or the Torrid Zone, is  $\beth$ , or the *grand station* of the light or  $\aleph$  upon the earth, from the middle of which (*viz.*) the Equator, it declines twice every year, now to the south, and then round towards the north pole, in a constant orbit, which we call the Ecliptic. The light not only springs up to the earth every morning, and gives the spirit an opportunity of impelling the earth at the evening edge, but taking its station, as it necessarily must, on the middle of the orb, the spirit from each pole will


will push into this enlightened space, and cause the earth to decline alternately from equinox to solstice. Ch. VIII.  
 One half of the globe is always illuminated; and at the equinoxes, the line, or circles, that divides light and darkness, or the *Shemosb* and the spirit, cutting the equator at right angles in  $\gamma$  and  $\epsilon$  coincides with the poles of the earth. As the *Shemosb* springs up thence, and goes south or north, this circle of illumination begins gradually to change its position, it no longer coincides with the poles, as before, but cuts the axis of the earth at the centre, and forms a small angle; one half of the axis being on this side of the solar horizon, or line, that bounds the circle of illumination towards the sun, and the other half on the opposite side: For at the same instant the spirit pushes into the light at the evening or western edge, to give the globe its diurnal motion, the spirit from one pole (the south for instance) pushes into the enlightened space between that pole and the tropic of *Capricorn*, and alters the position of the boundary line of light and darkness; and this consequently varies the pushes of the spirit, both that at the evening edge, and that from the pole, which alter, as the direction of that line alters, whose inclination to the earth's axis varies from  $1^{\circ}$  to  $23^{\circ} 30'$ . By which means the earth will have part of a new face turned into and out of the light at each push, and this will preserve the parallelism of its axis, and cause the declination, and so the inequality of seasons and days. — — — When the solar horizon, or boundary of *Shemosb* and spirit, continually shifting as the earth goes forward, gets to the distance of  $23^{\circ} 30'$  from the axis, with which it makes an angle of so many degrees; that is, when the earth arrives at  $\psi$ , which is its greatest declination southward, (equal to the inclination of the

Ch.VIII. ecliptic to the equator) and therefore the sun appears in  $\ominus$ , where it will seem to have its greatest declination northward, it has then got to the length of its tether, and can run out no further without breaking it; that is, the earth can decline no further, unless it was to fly off in a tangent to its orbit, which is prevented by the pressure of the spirit on her back, or dark hemisphere, continually tending to the sun, the center, and which is here at right angles with the lateral impulse, and keeps her in her orbit: and consequently, as the earth turns from the tropic of  $\varpi$ , that is, from our summer solstice (the pressure of the spirit at its back, or what they call the centripetal force continually urging it to the sun) the *Shemosh* or light, with every diurnal gyration of the globe, gradually withdraws itself from the north pole, and comes on at the south pole; and so the spirit pursuing the light brings the earth to equinox again, or makes the line which divides the *Shemosh* and the Spirit coincide with the axis; and from equinox it will proceed to the other solstice, and so on, in the same manner, and for the same reasons, as described above\*. Besides, as the impulse and

\* The increase of the pressure of the spirit from the equator to the polar points, where it is the strongest, is proved by this undoubted experiment.

If upon a Terrella turned out of a very good loadstone, which has marked on it the polar points, and the equator, tropics, and colures drawn upon it: if, I say, upon its equator you lay a piece of a needle, it will continue in a horizontal position; move it ever so little towards either of the poles, it begins to form a very small acute angle, move it forward by little and little and the angle gradually increases till it reaches the pole where the needle stands upright, and forms a right angle with the plane of the equator. Whence it manifestly appears, that the strongest pressure of the spirit must be upon the polar points, and must gradually decrease as you approach the equator, where the pressure becomes equal.

But

and force of the spirit acts in proportion to the Ch. VIII.  
superficies of what it pushes against; the larger   
the

But it may be objected, that when the pressure of the spirit is equal at each pole, as it is at equinox, then the earth according to these principles should move in the equator. I answer, so it would, if the condition of the airs at each pole were then equal or the same. But when the earth is at our autumnal equinox, for instance, the air is much thinner or rarer at the north pole than it is at the south pole, the north pole having been in the light from equinox to equinox, and therefore the spirit will of course rush into that thinned space, and so keep the Earth in the ecliptic. And the case will be the same at the vernal equinox, for then the south pole will have been as long in the light as the north pole was before; and consequently the air being rarer there than at the north pole, the spirit will bend its course towards the south, rather than towards the north pole where the air is grosser: So that though the pressure upon each pole be supposed equal at the equinoxes, yet the condition of the air at each pole being unequal, this will cause the spirit to push into the part where the air is the thinnest, and so always keep the pressure at one pole greater than at the other, and by this means the earth in the ecliptic.

My worthy friend, the ingenious Mr. *Henry Horne* upon *London* bridge, has a conjecture, and no improbable one, *viz.* that the moon is an agent concerned in the earth's declination, the interposition of whose orb, &c. taking off the pressure of the spirit where it is most necessary, prevents the earth going forward in the equator, or in the direction in which it turns round, and so facilitates its motion from tropic to tropic; and what further balance is wanting may be supplied by the planets, which moving round the sun, some at one distance, some at another, intercept, and so shorten the columns of the light and spirit, thereby directing and regulating their force and agency, so as to put the parts of the earth's surface into those periodical positions to the line of light from the sun, which cause the alternate vicissitudes of spring and summer, autumn and winter, with all their consequences and effects.

To settle this will require a great number of accurate observations and nice calculations, so I must leave the hint to its author, or to others, who have proper instruments and abilities, to prosecute and go thorough therewith; and shall only observe, that as the planets are in Hebrew called *מְשִׁיבֵי* *influencers* or *regulators*, men, when they began to lose the knowledge of the mechanism of the agents, and to set them up as Gods, might imagine that they had an influence over their lives and fortunes,


Ch. VIII. the superficies, the greater will be the impulse: Whence it follows, that as the earth is an oblate spheroid flatted at the poles, it will in its progressive annual motion turn at one time a broader, at another a narrower face to the impulse of the spirit. The narrowest will be at the equinoxes, and from thence each surface will grow broader and broader to the solstices, and narrower and narrower from the solstices to the equinoxes again: and this will not only cause the orbit of the earth to be elliptical, but will also concur to cause the declination of the *Shemosh*, or of the earth, as 'tis called. For from each equinox, the impelling force gradually increasing with the surface objected to its impulse, the earth will gradually enlarge its orbit, or run out more and more towards a right line, by which means the *Shemosh* will decline or spread by turns over each pole; the boundary of light and darkness gradually gaining upon one pole, and falling short of the other, and so making gradually a greater and greater angle with the axis, till it comes to  $23^{\circ} 30'$ : And from each solstice to each equinox, it will gradually draw back towards the pole it overspread before, and as gradually advance towards the pole it before fell short of, making still a less and less angle with the axis till it coincides with it.—The earth moves between a column or cone of light, or *Shemosh*, whose base covers the enlightened hemisphere, having its

tunes, &c. whence judicial astrology had its rise. And if the astrological configurations of the planets, and the placing them in houses, and the calculations of their different positions, aspects, &c. be of any antiquity, it might originally be designed not to calculate natiuities, but to measure the force and action of the light and spirit, and how much and in what manner their rency was diminished, increased, or altered by those different positions.

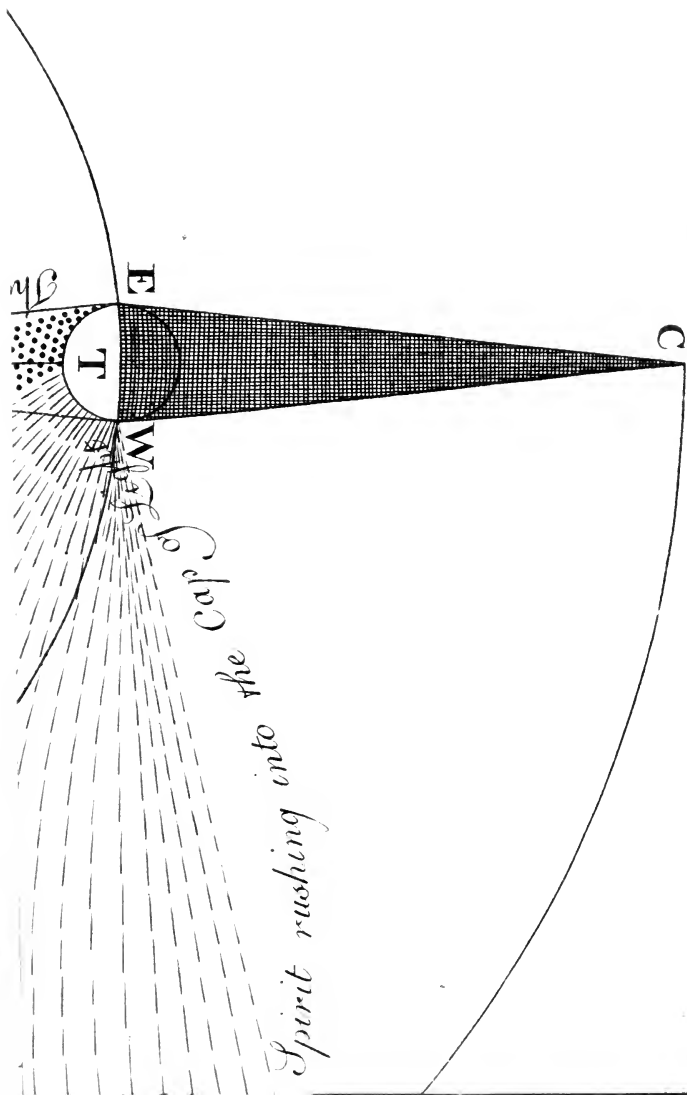
vertex



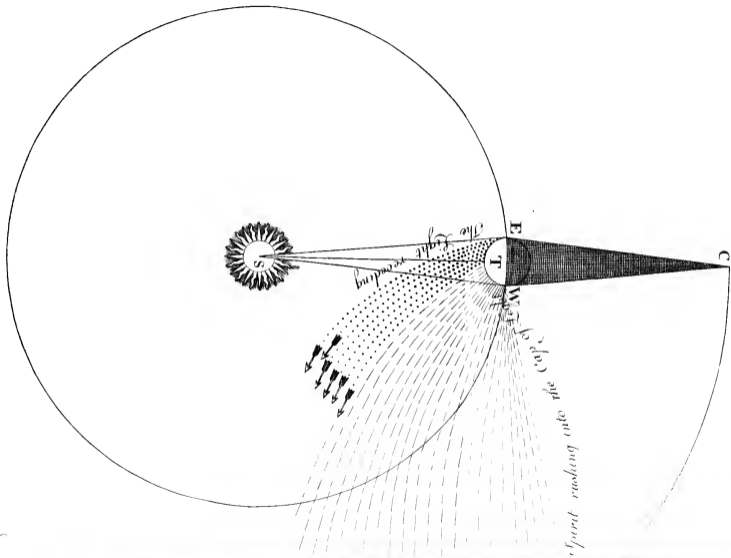
vertex at the sun, and between a column or cone of spirit, whose base covers the darkened hemisphere, having its vertex at a proper distance towards the circumference of this system: to what distance it extends, is difficult to determine, but the moon is within that distance, and by it tethered to the earth: and in whatever part of its orbit the earth is, it moves between two such columns acting upon it.—The lateral impulse of the spirit acts in the line which divides the two cones of light and spirit, and is their common base upon the surface of the earth. The place of the *impulse* is the western or evening edge, where it first began, Gen. i. 5.—Its direction is from west to east. This is what the *Newtonians* call projection, or the projectile force. The spirit descending on every side from the circumference in strait lines to the solar focus, urges the earth in every part of its orbit towards the sun as its center; and this is what they call *gravity*, or the centripetal force: and between these two forces they own the earth may perform its circuit. Let T, be the earth; SWE, the cone of light; CWE, the cone of spirit; and the line WE, the common base of both. The pressure of the cone of spirit CWE, will urge the globe towards the sun, and so in every part of its orbit; and the impulse of the spirit at W, will impel it in the direction of the line WE; for as all is full, a single grain of the spirit cannot take place of the light at the western edge W, but the next adjoining side-grains will rush in with a lateral impulse, in the direction WE. And the spirit rushing into the cap of light at W, will not only turn the earth round from W to E, by pulling W, into the dark cone CWE, and E into the light one SWE, but must also push it forward the same way from W to E; so here we have both its rotular and progressive motion. It is allowed

Ch. VIII.  


Ch. VIII llowed that the impulse of the spirit at W, may turn the orb round; but denied that it is sufficient to give its progressive motion: because, say the objectors, the resistance of the spirit at E, will be a counter-balance to its impulse at W. But it must be considered, that the instant the impulse begins at W, and turns a segment of the orb into the dark cone, from the light, a like segment at E, is turned into the light; and by this means the light springs up from E, and declines or recedes towards W; whereby the spirit at E, instead of lying a dead weight, or resisting at E, flows or turns with the orb into the light, and follows the light as it recedes from E to W, and so yields an easy passage to the earth, by making the resistance before always less than the impulse behind: by which means the earth must continually be kept moving on from W to E, because the spirit pushes and impels from W to E, and the spirit at E recedes with the light from E to W; and as the earth *hangs upon nothing, i. e.* in open air, and does not turn, as a wheel, upon an axis, but is pushed forward by repeated impulses from without at its hinder side W, which are stronger than the resistance before at E, there is nothing to hinder its progressive motion. Besides, as the earth leaves behind, in its progressive motion, a column of light, and a column of darkness, the spirit in the lower part of the column of darkness left behind the earth, and that spirit behind the lower end of the column of light also left behind the earth, push into the part of the column of light the earth has left behind, and into the edge of the cap of light the earth hath turned behind, in two directions; one will push on the earth, and the other will turn it. And it must likewise be considered, that the propulsive force of the spirit is greater at the western edge, than at the eastern, the cap of light being more rarified



*Spirit rushing into the Case of*



rarified towards that edge than towards the other, Cb. VIII.  
 because the light from the sun has operated all along from the western edge to the meridian, every line having lately been a meridian; whereas the reverse happens at the eastern edge, every line having lately been in darkness or gross air. Upon which account the action of light is not only greater, the parts smaller, but the cap deeper towards the western edge than towards the eastern, and this makes the firmament brighter at the sun's going off, than at his coming on. All which make the push greater on that side than the resistance on the other; both by greater force from the sun, while the action and re-action continue, and freer and greater scope for the admission of the spirit when that edge turns off, and the action and re-action from the sun to the earth, &c. ceases. And that this greater force may be kept in due proportion, to answer its end of impelling and driving the earth; and the earth hindered from flying out of its orbit, it is counterbalanced by the part of the column of darkness which has been longest at rest, and thereby become grossest and most full of spirit.

There is then a threefold impulse acting at different places upon the earth; one at the back or dark hemisphere; another at the side or confines of light and darkness; and the third by turns from each pole. The first retains the earth in its orbit; the second impels it forward; and the third causes the declination: the "Light by that means (as *Solomon* describes it) going towards the south, and turning round to the north, goes round in a circle; the spirit coming on, and in its rounds the spirit returns."

I may have fallen short in my explication of the manner how the agents act and perform their office; but, I think, it evidently appears, that the

Ch. VIII. Scriptures make the *Shemosh* and the spirit the agents which move the earth; and that there is a perfect harmony in all their accounts. The royal Psalmist describes the שמש as having a *Tabernacle fixed* in the heavens, or air, from whence he goes out as light, from one extremity of the heavens, viz. the center, and his revolution, as spirit, is by the other extremity, viz. the circumference or verge of this system. The שמש, and its *Tabernacle*, are spoke of here as *two distinct* things: the *Tabernacle* is said to be placed, or *fixed*, in the heavens, or air, and the שמש to *issue* from it, and *run its race*: so the שמש cannot in this place be the *orb* of the sun, nor the orb of the sun in this place be said to move. In like manner, in *Solomon's* description above, the שמש is said to spring up on the earth, and to go off;— to draw in the spirit at its station:— to spring up from thence, and to go towards the south, and turn round to the north, completing its circuit;— and that the spirit comes on pursuing the light, and returns in its rounds; that is, goes and returns from one tropic to the other alternately. \* So Joshua x. 12, 13. “Sun stand thou still upon *Gibeon*.” Heb. שמש † בנגעון דום — “*Shemosh* be silent upon *Gibeon*.” “And thou, Moon, in the valley of *Ajalon*.”— וירח בעמק אילון, “and the *Ireb*, (not לבנה) in

\* See *An Enquiry after Philosophy and Theology*, chap. IV. Editor.

† St. Mark iv. 39. uses this manner of speaking — “And (Jesus) said to sea, Σιῶνα, *be silent*, σιγησασ, *be mute*,— and there was a great calm.”

Classic authors have also imitated this use of the Hebrew phrase in their languages. *Virgil* has——

—— *Taciæ per amica silentia Lunæ.*

And *Pliny*. *Luna silens*, for the unenlightened hemisphere of the moon being turned towards the earth, when it cannot irradiate its borrowed light.

the

the valley of *Ajalon*." (A place, perhaps, sacred Ch. VIII. to the irradiation of the *Ireb*, as *Gibeon* was to that of the *Shemosb*.) Here the two fluxes of light are spoke to; that from the Sun, called, Gen. i. 16. the *greater light*, which rules the day; and that from the Moon, called the *lesser light*, which rules the night. What was there to stay at *Gibeon*? not the globe, or orb, or body, or fluid of the Sun; it was neither there, nor upon it. But the light, or greater degree of light was there, and staid there, and was what was wanted, and was spoken to: and the lesser degree of light in the valley of *Ajalon*; and what was there obeyed. There is no mention what globes moved or stood still.—But it is implied, in consequence, that a globe stood still, or, at least, did not turn round. And if that globe moved of itself, it would be proper to speak to *it*; but if it was moved by an agent, then it would be proper to speak to that agent or operation which moved or turned it; for stopping the operation would stop the progression or rotation of the earth. *Joshua* had the same master, as his master *Moses*; so had *David* and *Solomon*. He made no mistakes, but he and they agree in the same account. He spoke to *that*, which had the first motion, and which moves every thing in this system which does move; and if its operation be *silent* in any part, *that* part will stand still; and if *silent* in the whole, all operation and motion will cease. Commanding the שָׁמַשׁ to be *silent*, is, in *Solomon's* words, commanding *it* not זָרָה to *spring up*; and as it is the הָרָא, *hinge*, on which the earth turns, stopping its motion, is stopping the motion of the earth. When this injunction was taken off, or ceased, we hear nothing of any new projections to set what was stopped a going; and there needed none. The שָׁמַשׁ would of course זָרָה *spring up*, and all would go on in the same

Ch. VIII. same channel as before. So 2 Kings xx. 11. Isa. xxxviii. 8, “the bringing of the shadow ten degrees backward,” was commanding the same operation, and shewing God’s power over it, in that part of its service.

I shall conclude this Volume with an Explication of the CIRCULATION of the BLOOD, as described by the same royal Prophet above, Ecclef. xii. 6. It is chiefly an Extract from the pious and learned Dr. JOHN SMITH’s Book, intitled, *King Solomon’s Portraiture of Old Age*, save that here and there I have made use of Mr. HUTCHINSON’s doctrine of the *Steam*, which is a freedom I am inclined to believe the Doctor, were he living, would pardon.

Ecclef. xii. 6. “*ירחק חבל הכסף עד אשר* Or ever *the silver cord be loosened; ותריך גלת הזהב* or the *golden bowl be broken: ותשבר כד על-המבוע* or the *pitcher be broken at the fountain; ונרץ* or *the wheel broken at the cistern.*”

The whole six verses contain, by way of allegory, the progress of death, or an anatomical enumeration of the sad *Symptoms* of extreme old age; and such an one as I dare be bold to say, is not elsewhere to be found. This last verse describes *those* that immediately forerun man’s dissolution; and, whenever they are found, give a most certain prognostic of approaching death, and may be called the four *attendants* upon dying man.

### FIRST SYMPTOM.

The First is, *the Loosening of the Silver Cord.*

By the *silver cord*, not only the *spinal marrow* is here to be understood (as principally it ought to be) but all the nerves arising thencefrom, and also

all



all the filaments, and fibres, and tendons, that proceed from all those nerves, with all the other rivulets of animality. In short, it comprehends the whole instrument of sense and motion, &c. after it has proceeded out of the skull, and as it is distributed throughout the body, with all its coats and tunics, with all its divisions and separations. And although all these several and innumerable filaments are to be accounted hereunto, yet they are most aptly expressed in the singular number by the *silver cord*, because they are but the continuation of the same thing; the fibres being nothing else but the nerves divided and dispersed, and the nerves nothing else but the spinal marrow in like manner separated, as so many arms and branches of the same tree. They are all *one* in their original, the brain: They are all *one* in their continuation for a long time in the spine; are all *one* in their colour, which is white, — in their form, which is long and round, — in their coats, which have the same three tunics, and in their use, to convey the *steam*, which they call *animal spirits*, and all this in an apt resemblance to a *cord*, to which they are not unlike in their division, for then they are but as so many wreathes or wattles of the same cord; and what is most observable to the present purpose, the more distant they are from their original, by so much the thinner and finer, the harder and more compact they grow, like the several smaller and better twitted ends of the same cord.

It is called the *silver cord* from its colour, appearing to the eye, of a white, shining, resplendent beauty, bright as silver; and this even when taken out of the body after it is dead: how much more beautiful must it needs be while it remains in the body yet living, and actuated with abundance of the most refined *steam*. As *Job* says,  
 “ surely

“surely there is a vein for the silver,” so this *silver cord* has a deep, secret, and secure place in the body, lying lower, deeper and safer than the veins or arteries, or any other common conveyers in the body of man. It is also called the *silver cord* on account of its excellency; for as silver is next to gold in value and esteem, so this part, of which we are speaking, is next unto that most absolute and perfect part, the brain, which in this very symptom is assimilated unto that most absolute and perfect mineral, gold. And, lastly, we must not yet pass by unobserved, how naturally and beautifully it takes in the idea of the verb *קָנָה*, which signifies *to desire, lust, affect, crave, &c.* For this *silver cord*, including the spinal marrow with all its branches, is the instrument of vitality, and of the highest and most noble operations thereof, and upon it depend all our *appetites, desires, affections, &c.* and as it is loosed and weakened, so are *they*. Hence the ancients called the cavity of the spine *Ιερὰν σύριγγα, the holy pipe*; and the great master of physicians dignified it with the name of *Ἀίωv, vitality*. When this cord is *relaxed, contracted, or broken asunder*, as the word *קָנָה* is here variously translated; we must then expect a sudden dissolution\*.

This loosening of the cord is what the *Greeks*, and the *Latins* from them, call *Παράλυσις, (Paralysis)* from *λύω, solvo, to loose*; and we a *palsy*. When

\* Job xxx. 11. says, speaking of his earthly tabernacle,—  
 “He (God) has let loose my cords, and afflicted me.”—And as it was said of the Tabernacle, “that it was spoiled, and  
 “near its utter ruin, when the cords thereof were broken;”  
 the same may be said of our earthly tabernacle: But we have this comfortable prospect, that it will be raised from the dust,  
 “a Tabernacle that shall not be taken down, not one of the  
 “stakes thereof shall ever be removed, neither shall any of the  
 “cords thereof be broken.” See Jer x. 20. and Isa. xxxiii. 20.

this solution happens only to one part of the silver cord, it is a particular palsy, and affects those parts of the body only, which the *steam* is hindered from reaching, and animating: when it happens to the head of the spinal marrow, whereby the influence of the *steam* is hindered from acting upon the whole silver cord, it consequently takes away all sense and motion from the subjected parts, and causes an universal palsy; which, at all times, and upon all occasions, gives a very probable prognostic, but in the decrepit age of man, a most certain, and infallible one, of immediate death.

## SECOND SYMPTOM.

The second attendant or symptom is, *the breaking of the golden bowl.*

The *golden bowl* may include the *Dura Mater*, the *pericranium*, and *cranium* itself; but what is principally intended is the *Pia Mater*, that most inward membrane which, by immediate contact, encircles the very substance of the brain. This is that part which deeply insinuates itself into all the anfractuous passages of the brain; and being firmly annexed thereunto, keeps every part thereof in its proper place and due texture; so that whatsoever is performed within the whole compass of the brain, whether the secretion of the *steam*, its exercise therein, or its distribution thencefrom, is done principally by the help of this membrane: which the ancients, upon account of its motherly care, have justly honoured with the name of *Pia Mater*. And if we do but thoroughly consider the innumerable branches of the veins, but especially of the arteries that are hereunto inserted, their wonderful interchasings, intermixtures, and insertions, not only one into another, but even among them-

themselves, (which is not found in any other part of the body) we shall surely be induced to believe, that the greatest depuration and defecation, and consequently the highest exaltation of the *steam*, is performed herein.

It is called the *golden bowl* for the same reasons for which the other was called the *silver cord*. First, in respect of the colour, not only because that most precious and deep coloured liquor of life is abundantly contained in the vessels of this membrane; but chiefly, because the membrane itself is somewhat of a flavous colour, and tends more towards that of gold than any other part whatsoever. And as there is “ a (מקור) place for gold where they “ Heb. יוקר fine it,” so there is an hidden, secret, and well defended place, where this precious part has its natural residence, for the fining and purifying the *steam*. But chiefly it is so called from this its excellency, and its universal use. The instrument that depurates the best of blood, and defecates and exalts the *steam*, and so prepares them for animality, can be likened in this lower world to nothing but that most absolute and perfect, that best concocted and most exalted mineral of gold; to which it has a very great resemblance in ductility. For as gold of all metals is the most ductile, and may be drawn out at the greatest length; so the *Pia Mater* is pure, fine beyond expression; and none but the diligent observer, who has often endeavoured its separation from the parts to which it is annexed, can possibly understand its exquisite fineness. For this, as so much leaf-gold drawn out to a very great thinness, doth securely, tenderly, and universally wrap up all those little hills and valleys, those convex or concavous parts that are within the compass of its own circumference.

This


This *golden bowl*, so long as man remains in his strength, is firmly knit unto itself in all its parts, but in the extremity of extreme old age, when he is just giving up the ghost, it can no longer continue its continuity; but by reason either of its natural dryness, shrivelling into itself, or preternatural moisture, imbibing excrementitious humours, till it is over full, it often snaps asunder, and so *recurrs* into itself, as the word  $\text{פָּרַט}$  properly signifies; from whence the brain must necessarily subside, and all the parts serving in any wise to animality, must be suddenly and irrecoverably smitten, and cease from their several uses; moreover immediately hereupon follows a change of the whole countenance, the nose appears very sharp, the eyes sink in the head, the temples are pinched in, the ears become cold and contracted, and the fibres thereof inverted, the skin about the forehead hard, intense, and dry, and the colour of the whole face livid and black, and in all things perfectly representing that last farewell, known among physicians by the name of the *Hippocratic Face*, and so consequently the man dies immediately apoplectical; according to that of *Jab.*—“Thou changeest his countenance:” (and what follows immediately thereupon) “thou sendest him away.” So that the symptom hereby intended, is, a sudden abolition of all the operations of the brain, of motion, namely, sense, and the other animal functions, both the principal as well as the less principal ones, with the *Hippocratic Face*. Query, If what they call a *concussion of the brain*, is not the *breaking of the golden bowl*?

## THIRD SYMPTOM.

The third symptom is, *the Breaking of the Pitcher at the Fountain.*

As the two former symptoms belonged to the instruments of the *animal* faculty, so these two that remain belong to the *vital*.—But we must further know, for the explication of these symptoms, that there are within the body of the heart two firmly distinct cavities, a right and a left, usually called *ventricles*; from which there arise, and unto which there are annexed, certain peculiar vessels conducing to the ends hereafter specified.—Out of the right ventricle of the heart, proceed the great vein, called *vena cava*, which sends forth branches throughout the whole body; and has, at its entrance into the heart, certain portals, from their form called *valvulae tricuspidæ*; and also that artery, anciently called *vena arteriosa*, inserted into the lungs, unto whose original are annexed the portals resembling the Greek *Sigma*\*, and are therefore called *valvulae sigmoideæ*.——Out of the left ventricle proceed that vein anciently called *arteria venosa*, inserted in like manner into the lungs; and also the great artery called *arteria aorta*, which disseminates its branches throughout the whole body, both whose cavities are defended with the like portals as the former. It remains only to shew how the blood and life is actuated in these parts, and how it passes in and through them, and in and through the whole habit of the body; which is by way of rotation, or running the round, going out from the fountain, and returning thither again;—  
“ The *Shemosb* springs up, and the *Skemosb* goes off :

\* The Greek *Sigma* was written thus C, whence these Valves are also called *Semilunares*.

“ and at its station drawing the spirit, springing Ch.VIII.  
 “ up from thence, going towards the south, and   
 “ turning round to the north, goes round in a  
 “ circle: The spirit coming on, and in its rounds  
 “ the spirit returns.— All the rivers are conti-  
 “ nually running into the sea, yet the sea is not  
 “ full: unto the place [the great reservoir, the  
 “ abyss] from whence the rivers are continually  
 “ running, thither are they continually returning,  
 “ ללכת, in order to go their round.” — Thus it  
 pleaseth the king to express the *circulations* of the  
*greater* world: those of the *lesser* are no less re-  
 markable. The blood, wherein is the life of man,  
 passeth about the body continually, and returns ac-  
 cording to its circuits: the streams thereof run into  
 the fountain, which is never full: unto the place  
 from whence they come, thither they return, to  
 keep up the circulation, which is thus performed.  
 As the grand circulation of the heavens, or of the  
 MACROCOSM, is the effect of the two con-  
 trary motions of the *light* and *spirit*; so, I think,  
 the circulation of the blood in the MICROCOSM  
 is the effect of two contrary motions; one go-  
 ing from the heart along the arteries to the ex-  
 treme parts of the lungs, externals, and intestines;  
 the other returning through the veins into the  
 heart. Which two motions are performed by two  
*different agents*, the one within, the other without  
 the body.

The first is performed by the STEAM, raised  
 out of the meat, drink, and juices, in the sto-  
 mach and guts; which, as it rarifies and expands,  
 issues thence, by the joint pressure of the air or  
 atmosphere, and its own expansion, from all parts  
 of the guts, through the lacteal vessels into the re-  
 ceptacle of the chyle, thence through the chyle-  
 duct into the subclavian branch of the *vena cava*,  
 and so forward through the right ventricle of the  
 heart;

Ch. VIII.

heart; which being thereby dilated in its *diſtole* for its reception, and immediately thereupon being contracted, jointly by \* [the expansion of the Steam,] the compreffure of the atmosphere, and the contraction of the mufcles, in its *ſyſtole*, (the three pointed portals hindering the paſſage back: again into the *cava*) it thence puſhes into the open paſſage of the *vena arterioſa*, (where the ſigmoidal portals hindering its return) it goes into the branches of the *arteria venoſa*, and thereby into the left ventricle of the heart; which being placed as a ſtop or check, the force of the Steam is thereby increaſed, and it is again with violence puſhed forth into the *aorta* (the portals here, as before, always hindering its regreſs) by the branches of which artery it is carried to all parts of the body to enliven them; and to the parts which ſerve for ſecretion or diſcharge, where the remainder of the Steam condenſes or perſpires.

The ſecond is performed by the preſſure of the atmosphere, which forces the blood up the capillaries of the veins in the ſeveral parts, whence it is carried from the leſſer into the greater branches of the veins, into the upper and lower parts of the *vena cava* to the place where they unite at the right ventricle of the heart, where the Steam iſſued into the upper part of the *vena cava* near the heart takes it to be chaſed the foil.

The heart, I think, uſes not, nor has any great force, to puſh the blood forward, but is placed for a check or ſtop; the right ventricle, to the ſteam and blood iſſued from the *vena cava*, and the left ventricle, to the blood, and remainder of the ſteam, iſſued from the veins in the lungs. And its valves are ſo contrived, thoſe from the veins to open in-

\* Quere? Should not theſe words [the expansion of the Steam] be omitted? Or is not *expaſion* a ſlip of the pen for *evaporation*? *Eaſion*.

ward,



ward, and those into the arteries to open outward, Ch. VIII.  
 and thut the contrary way, that as the mixture of {  
 steam and blood presses out of the veins, it opens  
 the valves into each ventricle, fills the ventricles,  
 and extends them, opens the valves into the ar-  
 teries, and pushes forward, whereby the force of  
 the steam behind is spent, so that the valves from  
 the veins shut, and the motion of the blood in  
 the ventricles is continued forward, and the heart  
 emptied jointly by the compression of the atmo-  
 sphere, the expansion of the steam, and the con-  
 traction of its muscles, and so successively a kind  
 space or vacuum is made in each ventricle, at once  
 for the blood to flow from the veins, and the steam  
 from the guts.

These things being thoroughly weighed, and well understood, the two symptoms which remain to be spoken to, do open themselves into the same doctrine without any more ado. By the *pitcher* therefore we must understand the true and proper receptacle of the blood, namely, the veins, which, throughout the whole body, serve only as a vessel, to contain that noble liquor, and carry it back again to the fountain. The original word כַּד, signifies sometimes more generally any containing vessel, and so is taken for the widow's barrel, in which was the meal, 1 Kings xvii. 14. but more especially that which is called a *pitcher*, and so more frequently it is used, Gen. xxiv. 6. Judg. vii. 1. This word both the Greeks and Latins take unto themselves, only varying the termination as is most proper to each language, and that in the very same signification. Now the proper containing vessel for the blood is the veins; there the blood is, as I may say, at home, in its own place: While it is in the heart, it is preparing, enlivening, and ennobling: while it is in the lungs, and all the other parenchymous parts

Ch.VIII. parts of the bowels, it is depurating and cleansing; while it is in the arteries, it is by force journeying; while it is in the porosities of the fleshy parts, it is communicating life, and nourishing; but while it is in the veins, it is only consulting its own good, and tending, in its own natural course, to its proper center; as milk is in the breasts, and marrow in the bones, so is blood in the *veins*, and therefore *these* are the *pitcher* here intended.

This *Pitcher* also has its *Ear*, which is usually called *auricula cordis*, which (notwithstanding its name, as if it most properly appertained belonged to the heart) yet we must know does rather belong to the *vein*, and is indeed a part thereof; and not only a part, but the principal and primary part thereof, from whence all other parts and branches do arise, as from their original, and whereunto all the blood of the body, by the compressure of the circumambient air, naturally tends, as to its ultimate hold; and whence from it will by no means depart but by force: and therefore this head-spring of the veins being dilated by the continual afflux of blood, brought by the force of the steam, which impels it, is contracted by the outward air, and so forces out a due proportion of blood into the *fountain*, whereunto it is annexed.

Now, the *fountain* can be no other than the right ventricle of the heart; for this is yet more strictly the *fountain of life*, and forge of the steam, to prepare it for its office of what they call *animal spirits*; and it doth sensibly live before, and die after the other parts, even of the heart itself. Moreover, here it is that the matter of our nourishment receives its first enlivening; for our food being received from the stomach and guts into the common passage of the chyle, is thencefrom carried

ed by the steam directly into the subclavian branch Ch. VIII.  
of the *vena cava*, where being mixed with blood, ~~~~~  
it yet remains lifeless and heartless, till being carried along that vein, it is at last brought into the right ventricle of the heart, wherein the heat, motion, and ferment, set the active principles, that is, the small fine parts of the steam, at perfect freedom, and so instantly endow it with plenty both of life and spirits. This part therefore, which at the first gives life to that which enlivens the whole man, and does, as often as it returns thither, impregnate it anew with the same, must needs be the fountain here intended. And to this the original word מַבְרֵית gives an extraordinary clearness; implying, not only the *signum*, but the *signatum*, not the *hieroglyphic* only, but the part thereby decyphered: signifying in the first place, *fons*, a *fountain*, and secondarily *scatarigo cœnarium*, the spring or original from whence the veins arise\*.

As long, therefore, as Man remains in perfect health and strength, these vessels are incessantly and carefully performing all those offices unto which they are appointed: But this natural course does not continue for ever; for the *pitcher* is but an earthen vessel, and does not so often go to the *fountain*, but at last it comes broken home. This breaking of the *pitcher* here, (which is the symptom of old age, just upon the point of death,) is the failing of the veins, their ceasing from their natural action and use, when they can no longer carry

\* So *Plato* in *Timeo*, cited by *Longinus de Sublimitat.*, Sect. xxxiii. calls the heart, *αγαπη των φλεβων ης προηρι τε ΠΕΡΙΦΕΡΟΜΕΝΟΥ σφοδρωσ αιματος*, the conjunction or source of the veins, and the fountain of the briskly circulating blood.— Is not this one of the many truths which *Plato* learnt from the *Jews in Egypt*? Observe that *προηρι* is the very word the LXX. use for מַבְרֵית. *Editor.*

Ch.VIII. back, nor conveniently pass into the heart that  
 { liquor which they properly contain. That little  
 blood which remains in the cold body of Man near  
 his end, (the force of the *steam* being well nigh  
 spent) is soon coagulated, and stagnating in the  
 veins, the motion and circulation thereof is hin-  
 dered, and so it becomes thick, like pith of elder;  
 and because it cannot return to the *fountain* for a  
 redintegration of it's life and spirit, it dieth in the  
 veins, and so all the extreme parts of the body be-  
 come spiritless and cold; which is the Symptom  
 here intended: According to that often repeated  
 maxim of *Hippocrates* ψύξις ἀκρωτηρίων θανάσιμον,  
 the coldness of the extremities is the sure prognos-  
 tic of death.

#### FOURTH SYMPTOM.

*The Fourth and Last Symptom is the Wheel broken  
 at the Cistern.*

THE blood (as before observed) by the pres-  
 sure of the air seems naturally as it were of its own  
 accord to tend in the veins unto the heart; but it  
 returns not from the heart, into the parts of the  
 body but by force. Thus all the rivers in the  
 land, by the common pressure of the air, ebb into  
 the Sea, but they flow not from thence any fur-  
 ther, than the violence and impulse of the Sea  
 (caused, I think, by the *action* and *steam* of the  
 fermentation of the *great abyss*) extends. The  
 Blood, being once forced from the heart, by the  
 impulse of the *steam*, is presently received into the  
 trunk of the *great artery*, called the *Aorta*, and  
 by the branches thereof is carried to all parts of the  
 body. This therefore being the chief and princi-  
 pal instrument of rotation, or *circulation of the blood*,

is

is most aptly intimated unto us by a *wheel*. For what is a *wheel*, but an instrument of circulation? and of what can a *wheel* be an Hieroglyphic, but of something that goes or makes the round? What this grand circulation is, and how performed, hath been already explained; and those vessels that are inward bound, which bring home the noble Traveller, the encompasser of the little world, were described in the explication of the foregoing Symbol; but those which are outward bound, which carry him forth with all his wealth and substance, to accomplish his intended end, are here intimated unto us by a *wheel*. That the great Artery, with all its branches, is here principally pointed at, has already been said, and may be further confirmed: First, in that it answers so directly to the *veins* signified in the last Symptom by the *pitcher*. Secondly, in that it is to us the most apparent *pulsor*: We can feel the blood to be forced along its cavity, in the wrists, the temples, and divers other parts of the body. Lastly, in that it is so appositely placed at the cock of the *cistern*, as will be shewn hereafter. Yet we must not so limit this *wheel* to the Arteries, as to exclude the very substance and parenchymous part of the *heart* itself, much less the STEAM, which is the *primum mobile*, the grand *gilgal* גלגל in the human frame; as *steam* in the steam-engine is *that* which works the whole engine. Indeed it may be said of the *steam*, that by its intermediate parts going to, and coming from, it acts upon the whole animal Œconomy; and that the matter which composes it, is continually changing, or changed; yet neither of these will hinder the distinction. For upon whatever instruments the *steam* is exercising itself, they are all here intended by the *wheel*, which performs this work that is of so publick a concern to the whole. The *cistern*, from whence

this *wheel* forces that liquor, which afterwards it conveyeth throughout all the parts, is the *left ventricle* of the heart, for thereunto it is, that the *great artery* is annexed, and from thence it does arise. And by the check which this *ventricle* gives the blood and steam, issued from the veins in the lungs, the force of the steam is encreased, the superfluous steam is made to secrete out of the lungs, and the motion of the blood is regulated to the quantity which the cavity of this *ventricle* contains at each push. A *cistern* is a vessel made on purpose to receive a due proportion of water, and to retain it till the time of use, and then conveniently to pass it into those vessels that are appointed to receive it from thence. And thus the *left ventricle* of the heart does in its dilation by the steam, (called its *diastole*) receive that blood which is brought unto it by the *arteria venosa* of the lungs, and having retained it a little, it doth in its contraction, or *systole*, conveniently pass a due proportion thereof into the *aorta*, to be dispensed as was spoken before: And this is the true use of the *left ventricle*. For the blood being ennobled, and enlivened in the *right ventricle*, and refrigerated and cleansed, from its fuliginous vapours, in the lungs; it is now in all things accomplished for its ultimate use, and remains only to be sent into those several parts it is to quicken, which it cannot conveniently be, unless it be first received into this *cistern*, and afterwards be disposed of by the *steam*, &c. to that appointed end: And we cannot but here again mention, those portals that are placed, both at the entrance into, and passage from, the vessel we are now speaking of, (*viz.*) the *valvula-tricuspidis* and *sigmoidea*, which, as the cocks of the *cistern*, to let in and let out, by their opening or shutting give convenient passage, or absolute stoppage to  
that

that liquor, which continually runs that way. When it is said that the heart is only a check or stop to the *steam* and blood; this will not deprive the two *ventricles* of the uses assigned them; nor will it lessen, but rather add to the propriety of their being here called the *Fountain* and the *Cistern*. For what are a *fountain* and a *cistern*, but a check or stop to the fluids, (as well as a reservoir) by which it may more conveniently be conveyed to its respective uses? and if we give the full force to the preposition אל used here, which is irradiating to, from, and every way; the wheel at the cistern [הגלגל אל הבור] will aptly answer to the *sisan* circulating, and giving circulation every way. The *symptom* of Old Age, at the time of death, which is here signified to us by the wheel broken at the *cistern*, can only be understood to be, the ceasing of the pulse, and so the man immediately ceaseth living: For the *steam*, the chief instrument of pulsation, decays, and can no longer perform that work which must necessarily be continued for the preservation of life. And thus the wheel, upon which our life is turned, being taken off, we must needs drive heavily. The old man's pulse does yearly and daily decline, both in respect of the mover, the stroke and the interval; and consequently beat more languidly, slower and seldomer than before, *Pulsus rarus tardus, languidus & nonnunquam intermittens*, is the true pulse of the old man, all the while he is in that condition, and is like unto the tolling of a passing-bell, which may put him and all his friends in mind, that he is shortly going the way of all flesh; but an *Asphyxia*, or utter abolition of the pulse, which is the symptom here mentioned, is like the striking of the passing-bell, or rather the ringing out of the knell, which

gives notice unto all that he is gone; and may serve as a loud and distinct invitation to the funeral: And then, as in the following verse “ shall “ the dust return to the earth as it was, and the “ spirit shall return unto the Aleim who gave “ it.”

From hence, it appears that the doctrine, which is now called *Harvéan*, was at first *Solomonian*; tho’ it pleased the Lord that this knowledge should, as far as we know, lie buried for the space of 2500 years, till it was retrieved by the renowned Doctor *William Harvey*. What wonder then, the discoveries our author, the renowned Mr. *Hutchinson* has lately made, should like that, lie buried in the rubbish of translations and comments, &c. for near 1700 years, till it pleased God, for the interest, and honour of Christianity, to raise up him to ἐρευνᾶν, *search* the Scriptures, and dig in them, so as to recover this hidden Treasure.

I would gladly, adds the pious and learned Dr. *Smith*, have what is here set down in this and the foregoing verses, to be compared with any, or all of those systems of the diseases of age, which have been given us by *Hippocrates*, *Galen*, or any of their followers; by *David de Pomis* the Jew, *Franc. Egerolæus*, or *Franc. Ranchinus*, or any other Heathen or Christian, that have antiently or modernly treated of this subject; and let Preference be given to the most Worthy. I would fain have the crown to be put upon the head of the King (*Solomon*) his wisdom only, among all the rest being pure, and from above; which that it may be, I would in no wise have the Comment delivered by us, but the Text delivered by *Solomon* to enter the list of compare.



## I N D E X

OF THE

## HEBREW WORDS, &amp;c.

Explained in this Volume.

## א

- אבן page 25  
 אהל 90  
 אור and מאור 35—37. distinction between these and ישיב 74, 95  
 אור 38  
 אל 50. It's different Constructions reconciled, 50. Whence 'חגג.  
 אלית 50  
 אמן 47  
 Heathen Testimony, 48  
 אפל 21, It's effects and degree 22. English derivatives from it, 23. and use of similar Latin words, 24  
 Foreign testimonies, 23  
 אר 73  
 מארת 69 It's use, 69, 70  
 מארת 71. English derivatives from these words, 72. Note. Their distinctions. 70, 74  
 ארה 90  
 ארה 90  
 ארה, מארה, ארה, 75  
 א סטרוביל 98  
 אתה 76  
 אתה 76  
 Foreign testimonies cited, 76  
 אות. אתן 77  
 Foreign testimonies, 77  
 אתן 77  
 אגגא, 105  
 Aggie, 97. Note.  
 אגג how used, 97, 3. Note.

## ב

- בוא, בא 122—127  
 בהו 13  
 בדל 41, 93  
 בול, בולל, בול 29  
 בלימה 40  
 תבל, נבל 5, 29  
 בעל 29  
 בער 83  
 ברא 1. Sense of the word ascertained, 2, 3. how used for whales, 2. how for concreting atoms into grains, 2. how the heathen used the word, 3  
 ברד 29  
 בתה בולתו 97  
 Bells why tolled for dying persons, 105, 6.  
 Blood it's circulation described by Solomon, Eccles. xii. c. 140, to the end,

## C

- Coroner, whence derived, 107. Note  
 Chorus, what, 119. Note.

## ג

- גבה 84  
 גבל 80  
 גד 10. English derivatives from it, 11  
 A Goat. it's emblem, 11  
 גדל, גדלים 95  
 גל 43, 109  
 גלגל 110, 118

# I N D E X.

גול 109. גלולי 113, Services paid  
to this power 114

גלוד 17

Galli, whence named, 89

## ד

דח and derivatives, 25, 64  
דלק 82

Dancing, it's symbolical use, 119  
—121

David's dancing before the Ark explained. 52, &c. Note.

Declination of the earth, how performed, 127, &c.

Dipping of the Needle a proof of the different pressure of the Spirit, 132. Note

## ה

המת—הסוף 97

החמה, תחומה 14

ההך 90

## ו

וה, ורה, וואר, ורא 21

והה 122—127

והה, וולית, וול 95

## ז

זח 43--45

זחג 5, 87

זחלח 43

זחלח, זחלח, זחלח, זחלח, the service to this power explained, 80, 90

זחלח, for what Hebrew words put by the LXX,

זחלח 29, 94

זחלח 79

זחלח 80

זחלח 97

זחלח and derivatives 80, 81

זחלח, זחלח, and derivatives, 81. Objections to contraction of זחלח answered, 124, Note

זחלח 82

זחלח 15. English derivatives from this word, 15, Note

## ח

חמה 19

10 בלי, יכל

יווא, 80

ימד 4, 59

ימועד, יעד, 85

יפח 35

יפע 80

יפח 122, 125

יפחאי 43

יפח 27, 39, 64, 65 Its effects, 28

יפח 26

יפח 79

יפח whence *Ἰαχρ*, 33

יפח 90, 94

## כ

כח, כח, כח, 8, 9

כח 52

כח 10

כח 99

כח 94

כח 99

כח 99

כח 40

כח 51

כח 57

*Καταβολα*, 4. Note

*Κατα*, 10.

## ל

לח 10

לח 78

לח 94

## מ

מח 69

מח 59

מחאי 43

מח 95

מח 42

מח 29

מח 3

מח 95

מח 95. Note

מח 82

מח 65

מח 39

מח 63

מח 93

מח 91, 62

מח 33

# I N D E X.

## נ

- נבל 29
- נגד 83
- נהר 74
- נור, כנור, נור 74
- נמה 59
- נמע 98
- נפח, נפחא, נפה 34, 83
- It's emblems, 34
- נפלים, and נפילים 91
- נפק 84
- נשא 28, 83
- נשף 43
- נתך 84

## ס

- סבב 118
- סברוב, סבב 118
- סחרונין 91

## ע

- עבה 17
- עץ-עבת 51
- עגל, מעגל, עגל 87
- עוף 84
- עטר 107—109
- עלט 19
- עמד 38
- ענן 29, 88
- ענקים 90
- ערב 40
- ערה 30
- ערפל 19
- ערפים 95
- עשה 49
- עיש, עיש 98, 99
- עשתרת 97, 103

## פ

- פוח 42
- פופץ, פופץ 83
- פלש 17. It's effects in *Egypt*, 17. gave name to the *Philistines*, 18. why their Champion slain with a nodale, 18
- פנה 42

## צ

- צבא 10
- צבח 6
- צוק 27
- צחח 47

- ציהוב 80
- צעצע 51
- צור, צור, צור 20, 26, 65-68
- צריח 39

## ק

- קדה 82
- קובה 95
- קדר 20
- קילם 96, Note
- קמן 95, 101
- קיסור 29
- קפא 16
- קדר 20. Its effects. *ib.* Greek derivatives from it. *ib.*
- קרן 101, &c.
- Kronsch* what, 102
- קרן-הפוך 107

## ר

- רב, ררב 57, 58
- רגם 62. Services to this power, *ib.*
- רוח and ריה 30. and Note, 33
- רמה, רמם, רום 60. Its services and attributes, 61---63
- רחב 31
- רהף 32
- רכב 12, 57
- מעשה-מרכבה 115--118
- רמון 63
- רצץ 85
- רקיע, רקע 45

## ש

- שאף 82
- שבל 78
- שחק, שחקים 47
- שטה 85
- שלג 29
- שמים, שם 6, 7, 8. Why a Spider and Onion called from this word, 7
- שמוח 119
- שמש 8, 29, 94. Difference between it and אור 74, 94. Note
- ששקיל 32
- שרב 95
- Singing*, &c. it's symbolical use, 119---121
- Sun stand thou still* explained, 138
- תבל

# I N D E X.

ת

5 תבל  
 13 תה  
 31 תכן  
 14 תהום

תלה whence *Atlas*, 39  
 תכור 40  
 תרפים 41  
*Trumpets*, their symbolical use, 121,  
 122

## HEATHEN AUTHORS cited and explained in this Volume.

*Argonautics*, page 37. Note  
 Athenæus, 55, Note  
 Hesiod, 68, 75 Note  
 Homer, 44 Note. 55, 68  
 Lucian, 36 Note, 56 Note

Lucretius, 23, 24 Note, 76 Note  
 Orpheus, 4, 26, 31, 42, 48  
 Phurnutus de Naturâ Deor, 39  
 Valerius Flaccus, 69  
 Virgil, 37 Note. 77 Note

## F I N I S.











