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VOLUME I
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HEADMASTER OF SHREWSBURY SCHOOL

THESE VOLUMES ARE DEDICATED

BY HIS FORMER PUPIL THE EDITOR
T. Lucreti Cari

De Rerum Natura

Liber Primus

Aeneadum genetrix, hominum divomque voluptas, alma Venus, caeli subter labentia signa quae mare navigerum, quae terras frugiferentis concelebras, per te quoniam genus omne animantium concipitur visitque exortum lumina solis, te, dea, te fugiunt venti, te nubila caeli adventumque tuum, tibi suavis daedala tellus summittit flores, tibi rident aequora ponti placatumque nitet diffuso lumine caelum. nam simul ac species patefactast verna diei et reserata viget genitabilis aura favoni, aeriae primum volucres te, diva, tuumque significant initum perculsae corda tua vi. inde ferae pecudes persultant pabula laeta et rapidos tranant amnis: ita capta lepore

Mother of the Aeneadæ, darling of men and gods, increase-giving Venus, who beneath the gliding signs of heaven fillest with thy presence the ship-carrying sea, the corn-bearing lands, since through thee every kind of living things is conceived, rises up and beholds the light of the sun. Before thee, goddess, flee the winds, the clouds of heaven; before thee and thy advent; for thee earth manifold in works puts forth sweet-smelling flowers; for thee the levels of the sea do laugh and heaven propitiated shines with outspread light. For soon as the vernal aspect of day is disclosed, and the birth-favouring breath of favonius unbarred is blowing fresh, first the fowls of the air, o lady, shew signs of thee and thy entering in, throughly smitten in heart by thy power. Next the wild herds bound over the glad pastures and swim the rapid rivers: in such wise each made prisoner by thy charm follows thee with desire,
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whither thou goest to lead it on. Yes throughout seas and mountains and sweeping rivers and leafy homes of birds and grassy plains, striking fond love into the breasts of all thou constrainest them each after its kind to continue their races with desire. Since thou then art sole mistress of the nature of things, and without thee nothing rises up into the divine borders of light, nothing grows to be glad or lovely, I would have thee for a helpmate in writing the verses which I essay to pen on the nature of things for our own son of the Memmii, whom thou, goddess, hast willed to have no peer, rich as he ever is in every grace. Wherefore all the more, o lady, lend my lays an everliving charm. Cause meanwhile the savage works of war to be lulled to rest throughout all seas and lands; for thou alone canst bless mankind with calm peace, seeing that Mavors lord of battle controls the savage works of war, Mavors who often flings himself into thy lap quite vanquished by the never-healing wound of love; and then with upturned face and shapely neck thrown back feeds with love his greedy sight gazings, goddess, open-mouthed on thee; and as backward he reclines, his breath stays hanging on thy lips. While then, lady, he is reposing on thy holy body, shed thyself about him and above, and pour from
thy lips sweet discourse, asking, glorious dame, gentle peace for the Romans. For neither can we in our country's day of trouble with untroubled mind think only of our work, nor can the illustrious offset of Memmius in times like these be wanting to the general weal.

for what remains to tell, apply to true reason unbusied ears and a keen mind withdrawn from cares, lest my gifts set out for you with steadfast zeal you abandon with disdain, before they are understood. For I will essay to discourse to you of the most high system of heaven and the gods and will open up the first-beginnings of things, out of which nature gives birth to all things and increase and nourishment, and into which nature likewise dissolves them back after their destruction. These we are accustomed in explaining their reason to call matter and begetting bodies of things and to name seeds of things and also to term first bodies, because from them as first elements all things are.

When human life to view lay fouly prostrate upon earth crushed down under the weight of religion, who shewed her head from the quarters of heaven with hideous aspect lowering upon mortals, a man of Greece ventured first to lift up his mortal eyes to her face and first

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est oculos ausus primusque obsistere contra, 
quam neque fame deum nec fulmina nec mimitant
murmure compressit caelum, sed eo magis acre
inritat animi virtutem, effringere ut arta
naturae primus portarum claustra cupiret.

ergo vivida vis animi pervicit, et extra
processit longe flammantia moenia mundi
atque omne immensum peragravit mente animo
unde referat nobis victor quid possit oriri, quid nequeat, finita potestas denique cuque
quanam sit ratione atque alte terminus haerens.
quare religio pedibus subiecta vicissim
opteritur, nos exaequat victoria caelo.

Illud in his rebus vereor, ne forte rearis
inopia te rationis inire elementa viamque
indugredi sceleris. quod contra saepius illa
religio peperit scelerosa atque impia facta.
Aulide quo pacto Triviae virginis aram
Iphianassai turparunt sanguine foede
ductores Danaum delecti, prima virorum.
cui simul infula virgineos circumdata comptus
ex utraque pari malarum parte profusast,
et maestum simul ante aras adstare parentem
to withstand her to her face. Him neither story of gods nor thunder-
bolts nor heaven with threatening roar could quell, but only stirred
up the more the eager courage of his soul, filling him with desire to
be the first to burst the fast bars of nature's portals. Therefore the
living force of his soul gained the day: on he passed far beyond the
flaming walls of the world and traversed throughout in mind and spirit
the immeasurable universe; whence he returns a conqueror to tell us
what can, what cannot come into being; in short on what principle each
thing has its powers defined, its deepest boundary mark. Therefore
religion is put under foot and trampled upon in turn; us his victory
brings level with heaven.

This is what I fear herein, lest haply you should fancy that you
are entering on unholy grounds of reason and treading the path of sin;
whereas on the contrary often and often that heinous religion has given
birth to sinful and unholy deeds. Thus in Aulis the chosen chieftains
of the Danai foremost of men foully polluted with Iphianassa's blood
the altar of the Trivian maid. Soon as the fillet encircling her maiden
tresses shed itself in equal lengths adown each cheek, and soon as she
saw her father standing sorrowful before the altars and beside him the
sensit et hunc propter ferrum celare ministros 
aspectuque suo lacrimas effundere civis, 
muta metu terram genibus summissa petebat, 
nec miserae prodesse in tali tempore quibat 
quod patrio princeps donarat nomine regem; 
nam sublata virum manibus tremibundaque ad aras 
deductast, non ut sollemni more sacrorum 
perfecto posset claro comitari Hymenaeo, 
sed casta inceste nubendi tempore in ipso 
hostia consideret maestis parentis, 
exitus ut classi felix faustusque daretur. 
tantum religio potuit suadere malorum.

Tutemet a nobis iam quovis tempore vatum 
terriloquis victus dictis desciscere quaeres, 
quippe etenim quam multa tibi iam fingere possunt 
somnia quae vitae rationes vertere possint 
fortunasque tuas omnis turbare timore!
et merito; nam si certam finem esse viderent 
aerumnarum homines, aliqua ratione valerent 
religionibus atque minis obsistere vatum. 
nunc ratio nulla est restandi, nulla facultas, 
aeternas quoniam poenas in morte timendumst.

ministering priests hiding the knife and her countrymen at sight of her shedding tears, speechless in terror she dropped down on her knees and sank to the ground. Nor aught in such a moment could it avail the luckless girl that she had first bestowed on the king the name of father. For lifted up in the hands of the men she was carried shivering to the altars, not after due performance of the customary rites to be escorted by the clear-ringing bridal song, but in the very season of marriage stainless maid mid the stain of blood to fall a sad victim by the sacrificing stroke of a father, that thus a happy and prosperous departure might be granted to the fleet. So great the evils to which religion could prompt!

You yourself some time or other overcome by the terror-speaking tales of the seers will seek to fall away from us. Ay indeed, for how many dreams may they now imagine for you, sufficient to upset the calculations of life and trouble all your fortunes with fear! And with good cause; for if men saw that there was a fixed limit to their woes, they would be able in some way to withstand the religious scruples and threatenings of the seers. As it is, there is no way, no means of resisting, since they must fear after death everlasting pains. For they
ignoratur enim quae sit natura animai, nata sit an contra nascentibus insinuetur, et simul intereat nobiscum morte dirempta an tenebras Orci visat vastasque lacunas an pecudes alias divinitus insinuet se, Ennius ut noster cecinit qui primus amoeno detulit ex Helicone perenni fronde coronam, per gentis Italas hominum quae clara clueret; etsi praeterea tamen esse Acherusia templam Ennius aeternis exponit versibus edens, quo neque permaneant animae neque corpora nostra, sed quaedam simulacra modis pallentia miris; unde sibi exortam semper florentis Homeri commemorat speciem lacrimas effundere salsas coepisse et rerum naturam expandere dictis. quapropter bene cum superis de rebus habenda nobis est ratio, solis lunaeque meatus qua sint ratione, et qua vi quaeque gerantur in terris, tum cum primis ratione sagaci unde anima atque animi constet natura videndum, et quae res nobis vigilantibus obvia mentes terrificet morbo adfectis somnoque sepultis, cernere uti videamur eos audireque coram,
morte obita quorum tellus amplectitur ossa. Nec me animi fallit Graiorum obscura reperta 
difficile inlustrare Latinis versibus esse, multa novis verbis præsertim cum sit agendum 
propter egestatem linguæ et rerum novitatem; sed tua me virtus tamen et sperata voluptas 
suavis amicitiae quemvis /sufferre laborem 
suadet et inducit noctes vigilare serene 
quaerentem dictis quibus et quo carmine demum 
claræ tuae possim praepandere lumina menti, 
res quibus occultas penitus consisere possis. 

Hunc igitur terrorem animi tenebrasque nessesest 
non radii solis neque lucida tela diei 
discutiant, sed naturæ species ratioque. 
principium cuius hinc nobis exordia sumet, 
nullam rem e nilo gigni divinitus umquam. 
quippe ita fœrimdo mortalis continet omnis, 
quod multa in terris fieri caeloque tuentur 
quorum operum causas nulla ratione videre 
possint ac fieri divino numine rentur. 

quas ob res ubi viderimus nil posse creari 
de nilo, tum quod sequimur iam rectius inde 

seem to see and hear speaking to us face to face them who are dead and 
whose bones earth holds in its embrace.

Nor does my mind fail to perceive how hard it is to make clear in 
Latin verses the dark discoveries of the Greeks, especially as many 
points must be dealt with in new terms on account of the poverty of the 
language and the novelty of the questions. But yet your worth and the 
looked for pleasure of sweet friendship prompts me to undergo any labour 
and leads me on to watch the clear nights through, seeking by what 
words and in what verse I may be able in the end to shed on your mind 
so clear a light that you can thoroughly scan abstruse things.

This terror then and darkness of mind must be dispelled not by the 
rays of the sun and glittering shafts of day, but by the aspect and the 
law of nature; whose first principle we shall begin by thus stating, 
nothing is ever gotten out of nothing by divine power. Fear in sooth 
takes such a hold of all mortals, because they see many operations go 
on in earth and heaven, the causes of which they can in no way un-
derstand, believing them therefore to be done by divine power. For 
these reasons when we shall have seen that nothing can be produced 
from nothing, we shall then more correctly ascertain that which we
perspiciemus, et unde queat res quaeque creari
et quo quaeque modo fiat opera sine divom.

Nam si de nilo fierent, ex omnibus rebus
omne genus nasci posset, nil semine egeret.

and what kind might be born of any things,
nothing would require seed. Men for instance might rise out of
the sea, the scaly race out of the earth, and birds might burst out of the
sky; horned and other herds, every kind of wild-beasts would haunt
with changing brood tilth and wilderness alike. Nor would the same
fruits keep constant to trees, but would change; any tree might bear
any fruit. For if there were not begetting bodies for each, how
could things have a fixed unvarying mother? But in fact because
things are all produced from fixed seeds, each thing is born and goes
forth into the borders of light out of that in which resides its matter
and first bodies; and for this reason all things cannot be gotten out
of all things, because in particular things resides a distinct power.
Again why do we see the rose put forth in spring, corn in the season of
heat, vines yielding at the call of autumn, if not because, when the fixed
seeds of things have streamed together at the proper time, whatever is
born discloses itself, while the due seasons are there and the quickened
earth brings its weakly products in safety forth into the borders of
light? But if they came from nothing, they would rise up suddenly at uncertain periods and unsuitable times of year, inasmuch as there would be no first-beginnings which might be kept from a begetting union by the unpropitious season. No nor would time be required for the growth of things after the meeting of the seed, if they could increase out of nothing. Little babies would at once grow into men and trees in a moment would rise and start out of the ground. But none of these events it is plain ever comes to pass, since all things grow step by step, as is natural, [since they all grow] from a fixed seed and in growing preserve their kind; so that you may be sure that all things increase in size and are fed out of their own matter. Furthermore without fixed seasons of rain the earth is unable to put forth its gladdening produce, nor again if kept from food could the nature of living things continue its kind and sustain life; so that you might hold with greater truth that many bodies are common to many things, as we see letters common to different words, than that any thing could come into being without first-beginnings. Again why could not nature have produced men of such a size and strength as to be able to wade on foot across the sea.
transire et magnos manibus divellere montis multaque vivendo vitalia vincere saecla, si non, materies quia rebus reddita certast gignundis e qua constat quid possit oriri? nil igitur fieri de nilo posse fatendumst, semine quando opus est rebus quo quaeque creatae aерis in teneras possint proferri aurae. postremo quoniam incultis praestare videmus culta loca et manibus melioris reddere fetus, esse videlicet in terris primordia rerum quae nos fecundas vertentes vomere glebas terraque solum subigentes cimus ad ortus, quod si nulla forent, nostro sine quaeque labore sponte sua multo fieri meliora videres. 

Huc accedit uti quicque in sua corpora rursum dissoluat natura neque ad nilum interemad res. nam siquid mortale e cunctis partibus esset, ex oculis res quaeque repente erepta periret. nulla vi foret usus enim quae partibus eius discidium parere et nexus exsolvere posset. quod nunc, aeterno quia constant semine quaeque, donec vis obiit quae res diverberet ictu aut intus penetret per inania dissoluatque, and rend great mountains with their hands and outlive many generations of living men, if not because an unchanging matter has been assigned for begetting things and what can arise out of this matter is fixed? We must admit therefore that nothing can come from nothing, since things require seed before they can severally be born and be brought out into the buxom fields of air. Lastly since we see that tilled grounds surpass untilled and yield a better produce by the labour of hands, we may infer that there are in the earth first-beginnings of things which we by turning up the fruitful clods with the share and labouring the soil of the earth stimulate to rise. But if there were no such, you would see all things without any labour of ours spontaneously come forth in much greater perfection.

Moreover nature dissolves every thing back into its first bodies and does not annihilate things. For if aught were mortal in all its parts alike, the thing in a moment would be snatched away to destruction from before our eyes; since no force would be needed to produce disruption among its parts and undo their fastenings. Whereas in fact, as all things consist of an imperishable seed, nature suffers the destruction of nothing to be seen, until a force has encountered it sufficient
nullius exitium patitur natura videri. praeterea quaecumque vetustate amovet aetas, si penitus peremit consumens materiem omnem, unde animale genus generatim in lumina vitae redducit Venus, aut redductum daedala tellus unde alit atque auget generatim pabula praebens? unde mare, ingenui fontes externaque large flumina suppedimat? unde aether sidera pascit? omnia enim debet, mortali corpore quae sunt, infinita aetas consumpse anteaque diesque. quod si in eo spatio atque antea actate fuere e quibus haec rerum consistit summa refecta, inamortali sunt natura praedita certe, haut igitur possunt ad nilum quaeque reverti* denique res omnis eadem vis causaque volgo conficeret, nisi materies aeterna teneret, inter se nexus minus aut magis indupedita; tactus enim leti satis esset causa profecto, quippe, ubi nulla forent aeterno corpore, quorum contextum vis deberet dissolvere quaeque. at nunc, inter se quia nexus principiorum dissimiles constant aeternaque materies est, to dash things to pieces by a blow or to pierce through the void places within them and break them up. Again if time, whenever it makes away with things through age, utterly destroys them eating up all their matter, out of what does Venus bring back into the light of life the race of living things each after its kind, or, when they are brought back, out of what does earth manifold in works give them nourishment and increase, furnishing them with food each after its kind? The sea, its native fountains and extraneous rivers, out of what are they supplied? Out of what does ether feed the stars? For infinite time gone by and lapse of days must have eaten up all things which are of mortal body. Now if in that period of time gone by those things have existed, of which this sum of things is composed and recruited, they are possessed no doubt of an imperishable body, and cannot therefore any of them return to nothing. Again the same force and cause would destroy all things without distinction, unless everlasting matter held them together, matter more or less closely linked in mutual entanglement: a touch in sooth would be sufficient cause of death, inasmuch as any amount of force must of course undo the texture of things in which no parts at all were of an everlasting body. But in fact, because the fastenings of first-beginnings one with the other are unlike and matter is everlasting,
incolumi remanent res corpore, dum satis acris
vis obeat pro textura cuiusque reperta.
haud igitur redit ad nilum res ulla, sed omnes
discidio redeunt in corpora materiali.
postremo pereunt imbres, ubi eos pater aether
in gremium matris terrai praecipitavit;
at nitidae surgunt fruges ramique virescunt
arborebus, crescunt ipsae fetuque gravantur;
hinc alitur porro nostrum genus atque ferarum,
hinc laetas urbes pueris flore videmus
frondiferasque novis avibus canere undique silvas;
hinc fessae pecudes pingui per pabula laeta
corpora deponunt et candens lacteus umor
uberibus manat distentis; hinc nova proles
artibus infirmis teneras lasciva per herbas
ludit lacte mero mentes percusa novellas.
haud igitur penitus pereunt quaecumque videntur,
quando alid ex alio reficit natura nec ullam
rem gigni patitur nisi morte adiuta aliena.

Nunc age, res quoniam docui non posse creari
de nilo neque item genitas ad nil revocari,
nequa forte tamen coepes diffidere dictis,

things continue with body uninjured, until a force is found to encounter
them sufficiently strong to overpower the texture of each. A thing
therefore never returns to nothing, but all things after disruption go
back into the first bodies of matter. Lastly rains die, when father
ether has tumbled them into the lap of mother earth; but then goodly
crops spring up and boughs are green with leaves upon the trees, trees
themselves grow and are laden with fruit; by them in turn our race and
the race of wild-beasts are fed, by them we see glad towns teem with
children and the leafy forests ring on all sides with the song of new
birds; through them cattle wearied with their load of fat lay their
bodies down about the glad pastures and the white milky stream pours
from the distended udders; through them a new brood with weakly
limbs frisks and gambols over the soft grass, their young minds smitten
with the love of new milk. None of the things therefore which seem
to be lost is utterly lost, since nature replenishes one thing out of
another and does not suffer any thing to be begotten, before she has
been recruited by the death of some other.

Now mark me: since I have taught that things cannot be born from
nothing, cannot when begotten be brought back to nothing, that you
may not haply yet begin in any shape to mistrust my words, because
quod nequeunt oculis rerum primordia cerni,
accipe praeterea quae corpora tute necessest
confiteare esse in rebus nec posse videri.

principio venti vis verberat incita portus
ingentisque ruit navis et nubila differt,
interdum rapido percurrens turbine campos
arborebus magnis sternit montisque supremos
silvifragis vexat flabris: ita perfurit acri
cum fremitu saevitque minaci murmure ventus.
sunt igitur venti nimirum corpora caeca
quae mare, quae terras, quae denique nubila caeli
verrunt ac subito vexantia turbine raptant,
nec ratione fluunt alia stragemque propagant
et cum mollis aquae fertur natura repente
flumine abundanti, quam largis imbribus auget
montibus ex altis magnus decursus aquai
fragmina coniciens silvarum arbustaque tota,
nec validi possunt pontes venientis aquai
vim subitam tolerare: ita magno turbidus imbri
molibus incurrit validis cum viribus amnis.
dat sonitu magno stragem volvitque sub undis
grandia saxa ruitque aqua quidquid fluctibus obstat.
sic igitur debent venti quoque flamina ferri,

the first-beginnings of things cannot be seen by the eyes, take more-
over this list of bodies which you must yourself admit are in the number
of things and cannot be seen. First of all the force of the wind when
aroused beats on the harbours and whelms huge ships and scatters
clouds; sometimes in swift whirling eddy it scourcs the plains and
straws them with large trees and scourges the mountain summits with
forest-rending blasts: so fiercely does the wind rave with a shrill howling
and rage with threatening roar. Winds therefore sure enough are un-
seen bodies which sweep the seas, the lands, ay and the clouds of heaven,
tormenting them and catching them up in sudden whirls. On they
stream and spread destruction abroad in just the same way as the soft
liquid nature of water when all at once it is borne along in an over-
flowing stream, and a great downfall of water from the high hills aug-
ments it with copious rains, flinging together fragments of forests and
entire trees; nor can the strong bridges sustain the sudden force of
coming water: in such wise turbid with much rain the river dashes
upon the piers with mighty strength. With a loud noise the water
makes havoc and rolls under its eddies huge stones and throws down
whatever opposes its waves. In this way then must the blasts of wind
move on, and when they like a mighty stream have borne down in any
direction, they push things before them and throw them down with
repeated assaults, sometimes catch them up in curling eddy and carry
them away in swift-circling whirl. Wherefore once and again I say
winds are unseen bodies, since in their works and ways they are found
to rival great rivers which are of a visible body. Then again we per-
ceive the different smells of things, yet never see them coming to our
nostrils; nor do we behold heats nor can we observe cold with the
eyes nor are we used to see voices. Yet all these things must consist
of a bodily nature, since they are able to affect the senses; for nothing
but body can touch and be touched. Again clothes hung up on a shore
which waves break upon become moist, and then get dry if spread out
in the sun. Yet it has not been seen in what way the moisture of
water has sunk into them nor again in what way this has been dispelled
by heat. The moisture therefore is dispersed into small particles
which the eyes are quite unable to see. Again after the revolution of
many years a ring on the finger is thinned on the under side by wearing,
the dripping from the eaves hollows a stone, the bent ploughshare of
Iron imperceptibly decreases in the fields, and we behold the stone-paved streets worn down by the feet of the multitude; the brass statues too at the gates shew their right hands to be wasted by the touch of the numerous passers by who greet them. These things then we see are lessened, after they are thus worn down; but what bodies depart at any given time nature has jealously shut out the means of seeing. Lastly the bodies which time and nature add to things by little and little, constraining them to grow in due measure, no exertion of the eyesight can behold; and so too wherever things grow old by age and decay, and when rocks hanging over the sea are eaten away by the fine salt spray, you cannot see what they lose at any given moment. Nature therefore works by unseen bodies.

And yet all things are not on all sides jammed together and kept in by body: there is also void in things. To have learned this will be good for you on many accounts; it will not suffer you to wander in doubt and be to seek in the sum of things and distrustful of our words. If there were not void, things could not move at all; for that which is the property of body, to let and hinder, would be present to all things at
all times; nothing therefore could go on, since no other thing would be
the first to give way. But in fact throughout seas and lands and the
heights of heaven we see before our eyes many things move in many
ways for various reasons, which things, if there were no void, I need not
say would lack and want restless motion: they never would have been
begotten at all, since matter jammed on all sides would have been at
rest. Again however solid things are thought to be, you may yet learn
from this that they are of rare body: in rocks and caverns the moisture
of water oozes through and all things weep with abundant drops. Food
distributes itself through the whole body of living things; trees grow
and yield fruit in season because food is diffused through the whole from
the very roots over the stem and all the boughs. Voices pass through
walls and fly through houses shut, stiffening frost pierces to the bones.
Now if there are no void parts, by what way can the bodies severally
pass? You would see it to be quite impossible. Once more, why do we
see one thing surpass another in weight though not larger in size? For
if there is just as much body in a ball of wool as there is in a lump of
lead, it is natural it should weigh the same, since the property of body
corporis officiumst quoniam premere omnia deorsum, 
contra autem natura manet sine pondere inanis; 
ergo quod magnumst aeque leviusque videtur, 
nimirum plus esse sibi declarat inanis; 
at contra gravius plus in se corporis esse 
dedicat et multo vacui minus intus habere. 
est igiturnimirum id quod ratione sagaci 
quae stimus, admixtum rebus, quod inane vocamus. 
Il lus in his rebus ne te deducere vero 
possit, quod quidam fingunt, praecurrere cogor. 
cedere squamigeris latices nitentibus aiunt 
et liquidas aperire vias, quia post loca pisces 
linquant, quo possint cedentes confluere undae; 
sic alias quoque res inter se posse moveri 
et mutare locum, quamvis sint omnia plena. 
selicet id falsa totum ratione receptumst. 
nam quo squamigeri poterunt procedere tandem, 
ni spatium dederint latices? concedere porro 
quo poterunt undae, cum pisces ire nequibunt? 
avt igitur motu privandumst corpora quaeque 
avt esse admixtum dicundumst rebus inane 
unde initum primum capiat res quaeque movendi. 
postremo duo de concursu corpora lata

is to weigh all things downwards, while on the contrary the nature of void is ever without weight. Therefore when a thing is just as large, yet is found to be lighter, it proves sure enough that it has more of void in it; while on the other hand that which is heavier shews that there is in it more of body and that it contains within it much less of void. Therefore that which we are seeking with keen-sighted reason exists sure enough, mixed up in things; and we call it void.

And herein I am obliged to forestall this point which some raise, lest it draw you away from the truth. The waters they say make way for the scaly creatures as they press on, and open liquid paths, because the fish leave room behind them, into which the yielding waters may stream; thus other things too may move and change place among themselves, although the whole sum be full. This you are to know has been taken up wholly on false grounds. For on what side I ask can the scaly creatures move forwards, unless the waters have first made room? again on what side can the waters give place, so long as the fish are unable to go on? Therefore you must either strip all bodies of motion or admit that in things void is mixed up from which every thing gets its first start in moving. Lastly if two broad bodies after contact quickly
si cita dissiliant, nempe aer omne necessest, inter corpora quod fiat, possidat inane. is porro quamvis circum celerantibus auris confluat, haud poterit tamen uno tempore totum compleri spatium; nam primum quemque necessest occupet ille locum, deinde omnia possideantur. quod si forte aliquis, cum corpora dissiluere, tum putat id fieri quia se condenseat aer, errat; nam vacuum tum fit quod non fuit ante et repletur item vacuum quod constitit ante, nec tali ratione potest denserier aer, nec, si iam posset, sine inani posset, opinor, ipse in se trahere et partis conducere in unum. Quapropter, quamvis causando multa moreris, esse in rebus inane tamen fateare necessest. multaque praeterea tibi possum commemorando argumenta fidem dictis conradere nostris. verum animo satis haec vestigia parva sagaci sunt per quae possis cognoscere cetera tute. namque canes ut montivagae persaepe ferai naribus inveniunt intectas fronde quietes, cum semel institerunt vestigia certa viai, sic alid ex alio per te tute ipse videre

spring asunder, the air must surely fill all the void which is formed between the bodies. Well however rapidly it stream together with swift-circling currents, yet the whole space will not be able to be filled up in one moment; for it must occupy first one spot and then another, until the whole is taken up. But if haply anyone supposes that, when the bodies have started asunder, that result follows because the air condenses, he is mistaken; for a void is then formed which was not before, and a void also is filled which existed before; nor can the air condense in such a way, nor supposing it could, could it methinks without void draw into itself and bring its parts together.

Wherefore however long you hold out by urging many objections, you must needs in the end admit that there is a void in things. And many more arguments I may state to you in order to accumulate proof on my words; but these slight footprints are enough for a keen-searching mind to enable you by yourself to find out all the rest. For as dogs often discover by smell the lair of a mountain-ranging wild beast though covered over with leaves, when once they have got on the sure tracks, thus you in cases like this will be able by yourself alone to see one thing
talibus in rebus poteris caecasque latebras insinuare omnis et verum protrahere inde. quod si pigraris paulumve recesseris ab re, hoc tibi de plano possum promittere, Memmi: usque adeo largos haustus e fontibu' magnis lingua meo suavis diti de pectore fundet, ut verear ne tarda prius per membra senectus serpat et in nobis vitai claustra resolvat, quam tibi de quavis una re versibus omnis argumentorum sit copia missa per auris. Sed nunc ut repetam coeptum pertexere dictis, omnis ut est igitur per se natura duabus constitit in rebus; nam corpora sunt et inane, haec in quo sita sunt et qua diversa moventur. corpus enim per se communis dedicat esse sensus; cui nisi prima fides fundata valebit, haut erit occultis de rebus quo referentès confirmare animi quicquam ratione queamus. tum porro locus ac spatium, quod inane vocamus, si nullum foret, haut usquam sita corpora possent esse neque omnino quoquam diversa meare; id quod iam supera tibi paulo ostendimus ante. praeterea nil est quod possis dicere ab omni corpore seisunctum secretumque esse ab inani, after another and find your way into all dark corners and draw forth the truth. But if you lag or swerve a jot from the reality, this I can promise you, 0 Memmius, at once without more ado: such plenteous draughts from abundant wellsprings my sweet tongue shall pour from my richly furnished breast, that I fear slow age will steal over our limbs and break open in us the fastnesses of life, ere the whole store of reasons on any one question has by my verses been dropped into your ears.

But now to resume the thread of the design which I am weaving in verse: all nature then, as it exists by itself, has been founded on two things: there are bodies and there is void in which these bodies are placed and through which they move about. For that body exists by itself the general feeling of mankind declares; and unless the first foundation of belief shall be firmly grounded on this, there will be nothing to which we can appeal in order to prove anything by reasoning of mind. Then again, if room and space which we call void did not exist, bodies could not be placed anywhere nor move about at all; as we have demonstrated to you a little before. Moreover there is nothing which you can affirm to be at once separate from all body and quite distinct
quod quasi tertia sit numero natura reperta.
nam quodcumque erit, esse aliquid debetit id ipsum;

cui si tactus erit quamvis levis exiguusque,

corpus vel grandi vel parvo denique, dum sit,

corpus vel grandi vel parvo denique, dum sit,
sin intactile erit, nulla de parte quod ullam
rem prohibere queat per se transire meautem,
scilicet hoc id erit, vacuum quod inane vocamus.
praeterea per se quodcumque erit, aut faciet quid
aut aliis fungi debetit agentibus ipsum
aut erit ut possint in eo res esse gerique.
at facere et fungi sine corpore nulla potest res
nec praebere locum porro nisi inane vacansque.
ergo praeter inane et corpora tertia per se
nulla potest rerum in numero natura relinqui,
nec quae sub sensus cadat ullo tempore nostros
nec ratione animi quam quisquam possit apisci.

Nam quaecumque cluent, aut his coniuncta duabus
rebus ea invenies aut horum eventa videbis.
coniunctum est id quod nusquam sine permiciiali
discidio potis est seiungi seque gregari,
pondus uti saxist, calor ignis, liquor aquai.

from void, which would so to say count as the discovery of a third
nature. For whatever shall exist, this of itself must be something or
other. Now if it shall admit of touch in however slight and small a
measure, it will, be it with a large or be it with a little addition, pro-
vided it do exist, increase the amount of body and join the sum. But
if it shall be intangible and unable to hinder any thing from passing
through it on any side, this you are to know will be that which we call
empty void. Again whatever shall exist by itself, will either do some-
thing or will itself suffer by the action of other things, or else in it
things will be able to exist and go on. But no thing can do and suffer
without body nor aught furnish room except void and vacancy. There-
fore beside void and bodies no third nature taken by itself can be left in
the number of things, either such as to fall at any time under the ken of
our senses or such as any one can grasp by the reason of his mind.

For whatever things are named, you will either find to be properties
linked to these two things or you will see to be accidents of these
things. That is a property which can in no case be disjoined and
separated without destruction accompanying the severance, such as
the weight of a stone, the heat of fire, the fluidity of water. Slavery
on the other hand, poverty and riches, liberty war concord and all other things which may come and go while the nature of the thing remains unharmed, these we are wont, as it is right we should, to call accidents. Time also exists not by itself, but simply from the things which happen the sense apprehends what has been done in time past, as well as what is present and what is to follow after. And we must admit that no one feels time by itself abstracted from the motion and calm rest of things. So when they say that the daughter of Tyndarus was ravished and the Trojan nations were subdued in war, we must mind that they do not force us to admit that these things are by themselves, since those generations of men, of whom these things were accidents, time now gone by has irrevocably swept away. For whatever shall have been done may be termed an accident in one case of the Teucran people, in another of the countries simply. Yes for if there had been no matter of things and no room and space in which things severally go on, never had the fire, kindled by love of the beauty of Tyndarus’ daughter, blazed beneath the Phrygian breast of Alexander and lighted up the famous struggles of cruel war, nor had the timber-horse unknown to the Trojans wrapt...
I

inflammasset equos nocturno Graiiugenarum;
perspicere ut possis res gestas funditus omnis
non ita uti corpus per se constare neque esse,
nec ratione cluere eadem qua constet inane,
sed magis ut merito possis eventa vocare
corporis atque loci, res in quo quaeque gerantur.

Corpora sunt porro partim primordia rerum,
partim concilio quae constant principiorum.
sed quae sunt rerum primordia, nulla potest vis
stinguere; nam solido vincunt ea corpore demum.
etsi difficile esse videtur credere quicquam
in rebus solido reperiri corpore posse.
transit enim fulmen caeli per saepta domorum,
clamor ut ac voces; ferrum candescit in igni
dissiliuntque fero ferventia saxa vapore;
tum labefactatus rigor auri solvitur aestu;
tum glacies aeris flamma devicta liquescit;
permanat calor argentum penetraleque frigus,
usque adeo in rebus solidi nil esse videtur.
sed quia vera tamen ratio naturaque rerum

Pergama in flames by its night-issuing brood of sons of the Greeks; so
that you may clearly perceive that all actions from first to last ex-
ist not by themselves and are not by themselves in the way that body
is, nor are terms of the same kind as void is, but are rather of such a
kind that you may fairly call them accidents of body and of the room in
which they severally go on.

Bodies again are partly first-beginnings of things, partly those which
are formed of a union of first-beginnings. But those which are first-
beginnings of things no force can quench; they are sure to have the
better by their solid body. Although it seems difficult to believe that
aught can be found among things with a solid body. For the lightning
of heaven passes through the walls of houses, as well as noise and voices;
iron grows red-hot in the fire and rocks burning with fierce heat burst
asunder; the hardness of gold is broken up and dissolved by heat; the
ice of brass melts vanquished by the flame; warmth and piercing cold
ooze through silver, since we have felt both as we held cups with the
hand in due fashion and the water was poured down into them. So
universally there is found to be nothing solid in things. But yet
because true reason and the nature of things constrains, attend until we
I cogit, ades, paucis dum versibus expediamus esse ea quae solido atque aeterno corpore constent, semina quae rerum primordiaque esse docemus, unde omnis rerum nunc constet summa creata.

Principio quoniam duplex natura duarum dissimilis rerum longe constare repertast, corpos atque loci, res in quo quaeque geruntur, esse utramque sibi per se puramque necessest.

nam quacumque vacat spatio, quod inane vocamus, corpus ea non est; qua porro cumque tenet se corpus, ea vacuum nequaquam constat inane.

sunt igitur solida ac sine inani corpora prima. praeterea quoniam genitis in rebus inanest, materiem circum solidam constare necessest, nec res ulla potest vera ratione probari corpore inane suo celare atque intus habere, si non, quod cohibet, solidum constare relinquas.

id porro nil esse potest nisi materiai concilium, quod inane queat rerum cohibere. matieres igitur, solido quae corpore constat, esse aeterna potest, cum cetera dissoluantur.

tum porro si nil esset quod inane vocaret, omne foret solidum; nisi contra corpora certa essent quae loca complerent quaecumque tenerent,
omne quod est, spatium vacuum constaret inane.
alternis igitur nimium corpus inani distinguishet, quoniam nec plenum naviter extat nec porro vacuum. sunt ergo corpora certa quae spatium pleno possint distinguere inane.
haec neque dissolvi plagis extrinsecus icta possunt nec porro penitus penetrata retexi nec ratione queunt alia temptata labare; id quod iam supra tibi paulo ostendimus ante.
nam neque confundi sine inani posse videtur quiequam nec frangi nec findi in bina secando nec capere umorem neque item manabile frigus nec penetralem ignem, quibus omnia conficiuntur.
et quo quaeque magis cohibet res intus inane, tam magis his rebus penitus temptata labascit. ergo si solida ac sine inani corpora prima sunt ita uti docui, sint haec aeterna necessit.
praeterea nisi materies aeterna fuisset, antehac ad nilum penitus res quaeque redissent de niloque renata forent quaecumque videmus. at quoniam supra docui nil posse creari de nilo neque quod genitum est ad nil revocari, esse inmortali primordia corpore debent,
certain bodies to fill up whatever places they occupied, the existing universe would be empty and void space. Therefore sure enough body and void are marked off in alternate layers, since there exists neither a perfect fulness nor a perfect void. There are therefore certain bodies capable of marking off void space from full. These can neither be broken in pieces by the stroke of blows from without nor have their texture undone by aught piercing to their core nor give way before any other kind of assault; as we have proved to you a little before. For without void nothing seems to admit of being crushed in or broken up or split in two by cutting, or of taking in wet or permeating cold or penetrating fire, by which all things are destroyed. And the more anything contains within it of void, the more thoroughly it gives way to the assault of these things. Therefore if first bodies are as I have shewn solid and without void, they must be everlasting. Again unless matter had been eternal, all things before this would have utterly returned to nothing and whatever things we see would have been born anew from nothing. But since I have proved above that nothing can be produced from nothing, and that what is begotten cannot be recalled to nothing, first-beginnings must be of an imperishable body, into which
dissolui quo quaeque supremo tempore possint, materies ut subpeditet rebus reparandis.
sunt igitur solida primordia simplicitate nec ratione queunt alia servata per aevem
ex infinito iam tempore res reparare.

Denique si nullam finem natura parasset
frangendis rebus, iam corpora materiai
usque redacta forent aevo frangente priore,
ut nil ex illis a certo tempore posset
conceptum summum aetatis pervadere ad auctum.

nam quidvis citius dissolvi posse videmus
quam rursus refici; quapropter longa diei
infinita aetas anteacti temporis omnis
quod fregisset adhuc disturbans dissoluensque,
numquam relicuo reparari tempore posset.
at nunc nimirum frangendi reddita finis
certa manet, quoniam refici rem quamque videmus
et finita simul generatim tempora rebus
stare, quibus possint aevi contingere florem.
huc accedit uti, solidissima materiai
corpora cum constant, possit tamen, omnia, reddi,
mollia quae fiunt, aer aqua terra vapore, 
quo pacto fiunt et qua vi quaeque gerantur,

all things can be dissolved at their last hour, that there may be a
supply of matter for the reproduction of things. Therefore first-be-
ginnings are of solid singleness, and in no other way can they have
been preserved through ages during infinite time past in order to re-
produce things.

Again if nature had set no limit to the breaking of things, by this
time the bodies of matter would have been so far reduced by the break-
ing of past ages that nothing could within a fixed time be conceived out
of them and reach its utmost growth of being. For we see that any-
thing is more quickly destroyed than again renewed; and therefore that
which the long, the infinite duration of all bygone time had broken up
demolished and destroyed, could never be reproduced in all remaining
time. But now sure enough a fixed limit to their breaking has been
set, since we see each thing renewed, and at the same time definite
periods fixed for things to reach the flower of their age. Moreover
while the bodies of matter are most solid, it may yet be explained in
what way all things which are formed soft, as air water earth fires, are
so formed and by what force they severally go on, since once for all
admixtum quoniam semel est in rebus inane.

at contra si mollia sint primordia rerum,

unde queant validi silices ferrumque creari

non poterit ratio reddi; nam funditus omnis

principio fundamenti natura carebit.

sunt igitur solida pollentia simplicitate

quorum condenso magis omnia conciliatu

artari possunt validasque ostendere viris.

Porro si nullast frangendis reddita finis
corporibus, tamen ex aeterno tempore quaeque

nunc etiam superare necesest corpora rebus,

quae nondum clueant ullo temptata periculo.

at quoniam fragili natura praedita constant,
discrepat aeternum tempus potuisse manere

innumerabilibus plagis vexata per aevom.

denique iam quoniam generatim reddita finis
crescendi rebus constat vitamque tenendi,

et quid quaeque queant per foedera naturai,

quid porro nequeant, sancitum quandoquidem extat,

 nec commutatur quicquam, quin omnia constant

usque adeo, variae volucres ut in ordine cunctae

ostendant maculas generalis corpore inesse,

inmutabili' materiae quoque corpus habere
debent nimirum. nam si primordia rerum

there is void mixed up in things. But on the other hand if the first beginnings of things be soft, it cannot be explained out of what enduring basalt and iron can be produced; for their whole nature will utterly lack a first foundation to begin with. First-beginnings therefore are strong in solid singleness, and by a denser combination of these all things can be closely packed and exhibit enduring strength.

Again if no limit has been set to the breaking of bodies, nevertheless the several bodies which go to things must survive from eternity up to the present time, not yet assailed by any danger. But since they are possessed of a frail nature, it is not consistent with this that they could have continued through eternity harassed through ages by countless blows. Again too since a limit of growing and sustaining life has been assigned to things each after its kind, and since by the laws of nature it stands decreed what they can each do and what they cannot do, and since nothing is changed, but all things are so constant that the different birds all in succession exhibit in their body the distinctive marks of their kind, they must sure enough have a body of unchangeable matter also. For if the first-beginnings of things could in any way be van-
commutari aliqua possint ratione revicta, incertum quoque iam constet quid possit oriri, quid nequeat, finita potestas denique cuique quanam sit ratione atque alte terminus haerens, nec totiens possint generatim saecula referre naturam mores victum motusque parentum.

Tum porro quoniam est extremum quodque cacumen corporis illius quod nostri cernere sensus iam nequeunt, id nimirum sine partibus extat et minima constat natura nec fuit umquam per se secretum neque posthac esse valebit, alterius quoniamst ipsum pars; primaque et una inde aliae atque aliae similes ex ordine partes agmine condenso naturam corporis explent, quae quoniam per se nequeunt constare, necessest haerere unde quae nullum ratione revelli. sunt igitur solida primordia simplicitate quae minimis stipata cohaerent partibus arte, non ex illarum conventu conciliata, sed magis aeterna pollentia simplicitate, unde neque avelli quicquam neque diminui iam concedit natura reservans semina rebus, praeterea nisi erit minimum, parvissima quaeque quished and changed, it would be then uncertain too what could and what could not rise into being, in short on what principle each thing has its powers defined, its deepest boundary mark; nor could the generations reproduce so often each after its kind the nature, habits, way of life and motions of the parents.

Then again since there is ever a bounding point to that first body which already is beyond what our senses can perceive, that point sure enough is without parts and consists of a least nature and never has existed apart by itself and will not be able in future so to exist, since it is in itself part of that other; and so a first and single part and then other and other similar parts in succession fill up in close serried mass the nature of the first body; and since these cannot exist by themselves, they must cleave to that from which they cannot in any way be torn. First-beginnings therefore are of solid singleness, massed together and cohering closely by means of least parts, not compounded out of a union of those parts, but, rather, strong in everlasting singleness. From them nature allows nothing to be torn, nothing further to be worn away, reserving them as seeds for things. Again unless there shall be a least,
the very smallest bodies will consist of infinite parts, inasmuch as the half of the half will always have a half and nothing will set bounds to the division. Therefore between the sum of things and the least of things what difference will there be? There will be no distinction at all; for how absolutely infinite soever the whole sum is, yet the things which are smallest will equally consist of infinite parts. Now since on this head true reason protests and denies that the mind can believe it, you must yield and admit that there exist such things as are possessed of no parts and are of a least nature. And since these exist, those first bodies also you must admit to be solid and everlasting. Once more, if nature creatress of things had been wont to compel all things to be broken up into least parts, then too she would be unable to reproduce anything out of those parts, because those things which are enriched with no parts cannot have the properties which begetting matter ought to have, I mean the various entanglements, weights, blows, clashings, motions, by means of which things severally go on.

For which reasons they who have held fire to be the matter of things and the sum to be formed out of fire alone, are seen to have strayed most widely from true reason. At the head of whom enters Heraclitus
to do battle, famous for obscurity more among the frivolous than the earnest Greeks who seek the truth. For fools admire and like all things the more which they perceive to be concealed under involved language, and determine things to be true which can prettily tickle the ears and are varnished over with finely sounding phrase.

For I want to know how things can be so various, if they are formed out of fire one and unmixed: it would avail nothing for hot fire to be condensed or rarefied, if the parts of fire had always the same nature which the whole fire likewise has. The heat would be more intense by compression of parts, more faint by their severance and dispersion. More than this you cannot think it in the power of such causes to effect, far less could so great a diversity of things come from mere density and rarity of fires. Observe also, if they suppose void to be mixed up in things, fire may then be condensed and left rare; but because they see many things rise up in contradiction to them and shrink from leaving unmixed void in things, fearing the steep, they lose the true road, and do not perceive on the other hand that if void is taken from things, all things are condensed and out of all things is formed one single body,
which cannot briskly radiate anything from it, in the way heat-giving fire emits light and warmth, letting you see that it is not of closely compressed parts. But if they haply think that in some other way fires may be quenched in the union and change their body you are to know that if they shall scruple on no side to do this, all heat sure enough will be utterly brought to nothing, and all things that are produced will be formed out of nothing. For whenever a thing changes and quits its proper limits, at once this change of state is the death of that which was before. Therefore something or other must needs be left to those fires of theirs undestroyed, that you may not have all things absolutely returning to nothing, and the whole store of things born anew and flourishing out of nothing. Since then in fact there are some most unquestionable bodies which always preserve the same nature, on whose going or coming or change of order things change their nature and bodies are transformed, you are to know that these first bodies of things are not of fire. For it would matter nothing that some should withdraw and go away and others should be added on and some should have their order changed, if they yet one and all retained the nature of heat; for whatever they produced would be altogether fire. But thus methinks it is:
I

there are certain bodies whose clashings motions order position shapes produce fires, and which by a change of order change the nature of the things and do not resemble fire nor anything else which has the power of sending bodies to our senses and touching by its contact our sense of touch.

Again to say that all things are fire and that no real thing except fire exists in the number of things, as this same man does, appears to be sheer dotage. For he himself takes his stand on the side of the senses to fight against the senses and shakes their authority, on which rests all our belief, ay from which this fire as he calls it is known to himself; for he believes that the senses can truly perceive fire, he does not believe they can perceive all other things which are not a whit less clear. Now this appears to me to be as false as it is foolish; for to what shall we appeal? what surer test can we have than the senses, whereby to note truth and falsehood? Again why should any one rather abolish all things and choose to leave the single nature of heat, than deny that fires exist, while he allows any thing else to be? it seems to be equal madness to affirm either this or that.

For these reasons they who have held that fire is the matter of
things and that the sum can be formed out of fire, and they who have determined air to be the first-beginning in begetting things, and all who have held that water by itself alone forms things, or that earth produces all things and changes into all the different natures of things, appear to have strayed exceedingly wide of the truth; as well as they who make the first-beginnings of things twofold coupling air with fire and earth with water, and they who believe that all things grow out of four things, fire earth and air and water. Chief of whom is Agrigentine Empedocles: him within the three-cornered shores of its lands that island bore, about which the Ionian sea flows in large cranklings, and splashes up brine from its green waves. Here the sea racing in its straitened frith divides by its water the shores of Italia's lands from the other's coasts; here is wasteful Charybdis and here the rumblings of Ætna threaten anew to gather up such fury of flames, as again with force to belch forth the fires bursting from its throat and carry up to heaven once more the lightnings of flame. Now though this great country is seen to deserve in many ways the wonder of mankind and is held to be well worth visiting, rich in all good things, guarded by large force of
nil tamen hoc habuisse viro praeclarius in se
nec sanctum magis et mirum carumque videtur.
carmina quin etiam divini pectoris eius
vociferantur et exponunt praeclara reperta,
ut vix humana videatur stirpe creatus.

Hic tamen et supra quos diximus inferiores
partibus egregie multis mutloque minores,
quamquam multa bene ac divinitus invenientes
ex adyto tamquam cordis responsa dedere
sanctius et multo certa ratione magis quam
Pythia quae tripodi a Phoebi lauroque profatur,
principis tamen in rerum fecere ruinas
et graviter magni magno cecidere ibi casu;
primum quod motus exempto rebus inani
constituunt, et res mollis rarasque relinquent,
aera solem ignem terras animalia frugis,
nec tamen admiscens in eorum corpus inane;
deinde quod omnino finem non esse secundis
corporibus faciunt neque pausam stare fragori
nec prorsum in rebus minimum consistere qui
quam; cum videamus id extremum cuiusque cacumen
esse quod ad sensus nostros minimum esse videtur,
conicere ut possis ex hoc, quae cernere non quis

men, yet seems to have held within it nothing more glorious than this
man, nothing more holy, marvellous and dear. The verses too of his
godlike genius cry with a loud voice and set forth in such wise his
glorious discoveries that he hardly seems born of a mortal stock.

Yet he and those whom we have mentioned above immeasurably
inferior and far beneath him, although the authors of many excellent
and godlike discoveries they have given responses from so to say their
hearts' holy of holies with more sanctity and on much more unerring
grounds than the Pythia who speaks out from the tripod and laurel
of Phoebus, have yet gone to ruin in the first-beginnings of things: it is
there they have fallen, and great themselves great and heavy has been
that fall; first because they have banished void from things and yet
assign to them motions, and allow things soft and rare, air sun fire
earth living things corn, and yet mix not up void in their body; next
because they suppose that there is no limit to the division of bodies and
no stop set to their breaking and that there exists no least at all
in things; though we see that that is the bounding point of any thing
which seems to be least in reference to our senses, so that from this you
may infer that because the things which you do not see have a bounding
extremum quod habent, minimum consistere in illis. 
huc accedit item, quoniam primordia rerum mollia constituunt, quae nos nativa videmus esse et mortali cum corpore funditus, utque debeat ad nilum iam rerum summa reverti de niloque renata vigescere copia rerum; quorum utrumque quid a vero iam distet habebis. deinde inimica modis multis sunt atque veneno ipsa sibi inter se; quare aut congressa peribunt aut ita diffugient ut tempestate coacta fulmina diffugere atque imbris ventosque videmus.

Denique quattuor ex rebus si cuncta creantur atque in eas rursum res omnia dissoluuntur, qui magis illa queunt rerum primordia dici quam contra res illorum retroque putari? alternis gignuntur enim mutantque colorem et totam inter se naturam tempore ab omni. sin ita forte putas ignis terraeque coire corpus et aerias auras roremque liquoris, nil in concilio naturam ut mutet eorum, nulla tibi ex illis poterit res esse creata, non animans, non exanimo cum corpore, ut arbos:

point, there is a least in them. Moreover since they assign soft first-beginnings of things, which we see to have birth and to be of a body altogether mortal, both the sum of things must in that case revert to nothing and the store of things be born anew and flourish out of nothing: now how wide of the truth both of these doctrines are you will already comprehend. In the next place these bodies are in many ways mutually hostile and poisonous; and therefore they will either perish when they have met, or will fly asunder just as we see, when a storm has gathered, lightnings and rains and winds fly asunder.

Again if all things are produced from four things and all again broken up into those things, how can they more be called first-beginnings of things than things be called their first-beginnings, the supposition being reversed? For they are begotten time about and interchange colour and their whole nature without ceasing. But if haply you suppose that the body of fire and of earth and air and the moisture of water meet in such a way that none of them in the union changes its nature, nothing I can tell you will be able to be thus produced out of them, neither living thing nor thing with inanimate body, as a tree; in fact
each thing amid the medley of this discordant mass will display its own nature and air will be seen to be mixed up with earth and heat to remain in union with moisture. But first-beginnings ought in begetting things to bring with them a latent and unseen nature in order that no thing stand out, to be in the way and prevent whatever is produced from having its own proper being.

Moreover they go back to heaven and its fires for a beginning, and first suppose that fire changes into air; next that from air water is begotten and earth is produced out of water, and that all in reverse order come back from earth, water first, next air, then heat, and that these cease not to interchange, to pass from heaven to earth, from earth to the stars of ether. All which first-beginnings must on no account do; since something unchangeable must needs remain over, that things may not utterly be brought back to nothing. For whenever a thing changes and quits its proper limits, at once this change of state is the death of that which was before. Wherefore since those things which we have mentioned a little before pass into a state of change, they must be formed out of others which cannot in any case be transformed, that you may not have things returning altogether to nothing. Why not rather hold that
there are certain bodies possessed of such a nature, that, if they have
haply produced fire, the same may, after a few have been taken away
and a few added on and the order and motion changed, produce air,
and that all other things may in the same way interchange with one
another?

'But plain matter of fact clearly proves' you say 'that all things
grow up into the air and are fed out of the earth; and unless the season
at the propitious period send such abundant showers that the trees reel
beneath the soaking storms of rain, and unless the sun on its part foster
them and supply heat, corn trees living things could not grow.' Quite
true, and unless solid food and soft water should recruit us, the body
would waste away and then the whole life would break up out of all the
sinews and bones; for we beyond doubt are recruited and fed by cer¬
tain things, this and that other thing by certain other things. Because
many first-beginnings common to many things in many ways are mixed
up in things, therefore sure enough different things are fed by different
things. And it often makes a great difference with what things and
in what position the same first-beginnings are held in union and what
motions they mutually impart and receive; for the same make up
constituunt, cadem fruges arbusta animantis, verum aliis alioque modo commixta moventur. quin etiam passim nostris in versibus ipsis multa elementa vides multis communia verbis, cum tamen inter se versus ac verba neecessest confiteare et re et sonitu distare sonanti. tantum elementa queunt permutato ordine solo; at rerum quae sunt primordia, plura adhibere possunt unde queant variae res quaeque creari.

Nunc et Anaxagorae scrutemur homoeomerian quam Grai memorant nec nostra dicere lingua concedit nobis patrii sermonis egestas, sed tamen ipsam rem facilest exponere verbis. principio, rerum quem dicit homoeomerian, ossa videlicet e pauxillis atque minutis ossibus hic et de pauxillis atque minutis visceribus viscus gigni sanguenque creari sanguinis inter se multis coeuntibus' guttis ex aurique putat micis consistere posse. aurum et de terris terram concrescere parvis, ignibus ex ignis, umorem umoribus esse, cetera consimili fingit ratione putatque.

heaven sea lands rivers sun, the same make up corn trees living things; but they are mixed up with different things and in different ways as they move. Nay you see throughout even in these verses of ours many elements common to many words, though you must needs admit that the lines and words differ one from the other both in meaning and in the sound wherewith they sound. So much can elements effect by a mere change of order; but those elements which are the first-beginnings of things can bring with them more combinations out of which different things can severally be produced.

Let us now also examine the homoeomoria of Anaxagoras as the Greeks term it, which the poverty of our native speech does not allow us to name in our own tongue; though it is easy enough to set forth in words the thing itself. First of all then, when he speaks of the homoeomeria of things, you must know he supposes bones to be formed out of very small and minute bones and flesh of very small and minute fleshes and blood by the coming together of many drops of blood, and gold he thinks can be composed of grains of gold and earth be a concretion of small earths and fires can come from fires and water from waters, and everything else he fancies and supposes to be produced on a like princi-
nec tamen esse ualla parte idem in rebus inane
concedit neque corporibus finem esse secundis.
quere in utraque mihi pariter ratione videtur errare atque illi, supra quos diximus ante.
adde quod inbecilla nimis primordia fingit;
si primordia sunt, simili quae praedita constant
natura atque ipsae res sunt aequaque laborant et
peraunt neque ab exitio res ualla refrenat.
nam quid in oppressu valido durabit eorum,
ut mortem effugiat, leti sub dentibus ipsi?
ignis an umor an aura? quid horum? sanguen an ossa?
nil, ut opinor, ubi ex aequo res funditus omnis
tam mortalis erit quam quae manifesta videmus
ex oculis nostris aliqua vi victa perire.
at neque reccidere ad nilum res posse neque autem
crescere de nilo testor res ante probatas.
praeterea quoniam cibus auget corpus alitque,
scire licet nobis venas et sanguen et ossa
sive cibos omnis commixto corpore dicent
esse et habere in se nervorum corpora parva
ossaque et omnino venas partisque cruoris,

And yet at the same time he does not allow that void exists anywhere in things, or that there is a limit to the division of things. Wherefore he appears to me on both these grounds to be as much mistaken as those whom we have already spoken of above. In addition to this the first-beginnings which he supposes are too frail; if first-beginnings they be which are possessed of a nature like to the things themselves and are just as liable to suffering and death, and which nothing reins back from destruction. For which of them will hold out against a strong crushing force so as to escape death, in the very jaws of destruction? fire or water or air? which of these? blood or bones? Not one methinks, since everything will be just as essentially mortal as those things which we see with the senses vanquished before our eyes vanquished by some force. But I appeal to facts demonstrated above for proof that things cannot fall away to nothing nor on the other hand grow from nothing. Again since food gives increase and nourishment to the body, you are to know that our veins and blood and bones [and the like are formed of things foreign to them in kind]; or if they shall say that all foods are of a mixed body and contain in them small bodies of sinews and bones and veins as well and particles of blood, it will follow that all
fiet uti cibus omnis, et aridus et liquor ipse, 
ex alienigenis rebus constare putetur, 
ossibus et nervis sanieque et sanguine mixto. 
praeterea quaececumque e terra corpora crescent 
si sunt in terris, terram constare necessest 
ex alienigenis, quae terris exoriantur. 
transfer item, totidem verbis utare licebit. 
in lignis si flamma latet fumusque cinisque, 
ex alienigenis consistant ligna necessest. 
praeterea tellus quae corpora cumque alit, auget 
ex alienigenis, quae lignis his oriuntur. 
Linquitur hic quaedam latitandi copia tenvis, 
id quod Anaxagoras sibi sumit, ut omnibus omnis 
res putet inmixtas rebus latitare, sed illud 
apparere unum cuius sint plurima mixta 
et magis in promptu primaque in fronte locata. 
quod tamen a vera longe ratione repulsumst. 
conveniebat enim fruges quoque saepe, minaci 
robore cum saxi franguntur, mittere signum 
sanguinis aut alicui, nostro quae corpore aluntur;
cum lapidi lapidem terimus, manare cruorem. 885
et laticis dulcis guttas similique sapore
mittere, lanigerae quali sunt ubere lactis,
scilicet et glebis terrarum saepe friatis
herbarum genera et fruges frondesque videri
dispertita inter terram latitare minute,
postremo in lignis cinerem fumumque videri,
cum praefracta forent, ignisque latere minitos.
quorum nil fieri quoniam manifesta docet res,
scire licet non esse in rebus res ita mixtas,
verum semina multimodis inmixta latere
multarum semina rerum in rebus communia debent.

‘At saepe in magnis fit montibus’ inquis ‘ut altis
arboribus vicina cacumina summa terantur
inter se, validis facere id cogentibus australis,
donec flammai fulserunt flore coorto.’ 900
scilicet et non est lignis tamen insitus ignis,
verum semina sunt ardoris multa, terendo
quae cum confluxere, creant incendia silvis.
quod si facta foret silvis abscondita flamma,
non possent ullum tempus celarier ignes,
conficerent volgo silvas, arbusta cremarent.

and when we rub one stone on another, blood should ooze out. For like reasons it were fitting that grasses too should yield drops of a sweet liquid, like in flavour to those which a sheep has in its udder of milk; yes and that often, when clods of earth have been crumbled, kinds of grasses and corn and leaves should be found to lurk distributed among the earth in minute quantities; and lastly that ash and smoke and minute fires should be found latent in woods, when they were broken off. Now since plain matter of fact teaches that none of these results follows, you are to know that things are not so mixed up in things; but rather seeds common to many things must in many ways be mixed up and latent in things.

‘But it often comes to pass on high mountains’ you say ‘that contiguous tops of tall trees rub together, the strong southwinds constraining them so to do, until the flower of flame has broken out and they have burst into a blaze.’ Quite true and yet fire is not innate in woods; but there are many seeds of heat, and when they by rubbing have streamed together, they produce conflagrations in the forests. But if the flame was stored up ready made in the forests, the fire could not be concealed for any length of time, but would destroy forests, burn up trees indiscrimi-
iamne vides igitur, paulo quod diximus ante, permagni referre eadem primordia saepe cum quibus et quali positura contineantur et quos inter se dent motus accipientque, atque eadem paulo inter se mutata creare ignes et lignum? quo pacto verba quoque ipsa inter se paulo mutatis sunt elementis, cum ligna atque ignes distincta voce notemus, denique iam quae cumque in rebus cernis apertis si fieri non posse putas, quin materia corpora consimili natura praedita fingas, hac ratione tibi pereunt primordia rerum: fiet uti risu tremulo concussa cachinnent et lacrimis salsis umectent ora genasque.

Nunc age quod superest cognosce et clarius audi, nec me animi fallit quam sint obscura; sed acri percussit thyrso laudis spes magna meum cor et simul incussit suavem mi in pectus amorem musarum, quo nunc instinctus mente vigenti avia Pieridum peragro loca nullius ante trita solo. iuvat integros accedere fontis atque haurire, iuvatque novos decerpere flores

nately. Do you now see, as we said a little before, that it often makes a very great difference with what things and in what position the same first-beginnings are held in union and what motions they naturally impart and receive, and that the same may when a little changed in arrangement produce say fires and a fir? just as the words too consist of elements only a little changed in arrangement, though we denote firs and fires with two quite distinct names. Once again, if you suppose that whatever you perceive among visible things cannot be produced without imagining bodies possessed of a like nature, in this way, you will find, the first-beginnings of things are destroyed: it will come to this that they will be shaken by loud fits of convulsive laughter and will bedew with salt tears face and cheeks.

Now mark and learn what remains to be known and hear it more distinctly. Nor does my mind fail to perceive how dark the things are; but the great hope of praise has smitten my heart with sharp thyrsus, and at the same time has struck into my breast sweet love of the muses, with which now inspired I traverse in blooming thought the pathless haunts of the Pierides never yet trodden by sole of man. I love to approach the untasted springs and to quaff, I love to cull fresh flowers
insignemque meo capiti petere inde coronam
unde prius nulli velarint tempora musae;
primum quod magnis doceo de rebus et artis
religionum animum nodis exsolvere pergo,
deinde quod obscura de re tam lucida pango
carmina, musaeo contingens cuncta lepore.

id quoque enim non ab nulla ratione videtur;
sed veluti pueris absinthia taetra medentes
cum dare conantur, prius oras pocula circum
contingunt mellis dulci flavoque liquore,
ut puerorum aetas improvida ludifecetur
labororum tenus, interea perpotet amarum
absinthe laticem deceptaque non capiatur,
sed potius tali pacto recreata valescat,
sic ego nunc, quoniam haec ratio plerumque videtur
tristior esse quibus non est tractata, retroque
volgus abhorret ab hac, volui tibi suaviloquenti
carmine Pierio rationem exponere nostram
et quasi musaeo dulci contingere melle,
si tibi forte animum tali ratione tenere
versibus in nostris possem, dum perspicis omnem
naturam rerum qua constet compta figura.

Sed quoniam docui solidissima materiai
and gather for my head a distinguished crown from spots whence the
muses have yet veiled the brows of none; first because I touch of great
things and essay to release the mind from the fast bonds of religious
scruples, and next because on a dark subject I pen such lucid verses
o'erlaying all with the muses' charm. For that too would seem to be
not without good grounds; but even as physicians when they purpose
to give nauseous wormwood to children, first smear the rim round the
bowl with the sweet yellow juice of honey, that the unthinking age of
children may be fooled as far as the lips, and meanwhile drink up the
bitter draught of wormwood and though beguiled yet not be betrayed,
but rather by such means recover health and strength; so I now, since
this doctrine seems generally somewhat bitter to those by whom it has
not been handled, and the multitude shrinks back from it in dismay, I
have resolved to set forth to you our doctrine in sweet-toned Pierian
verse and o'erlay it as it were with the pleasant honey of the muses, if
haply by such means I might engage your mind on my verses, till such
time as you clearly perceive with what shape the whole nature of things
has been put together.

But since I have taught that most solid bodies of matter fly about
I

for ever unvanquished through all time, mark now, let us unfold whether there is or is not any limit to their sum; likewise let us clearly see whether that which has been found to be void, or room and space, in which things severally go on, is all of it altogether finite or stretches without limits and to an unfathomable depth.

Well then the existing universe is bounded in none of its dimensions; for then it must have had an outside. Again it is seen that there can be an outside of nothing, unless there be something beyond it to bound it, so that that is seen, farther than which this our nature of sense does not follow the thing. Now since we must admit that there is nothing outside the sum, it has no outside, and therefore is without end and limit. And it matters not in which of its regions you take your stand; so invariably, whatever position any one has taken up, he leaves the universe just as infinite as before in all directions. Again if for the moment all existing space be held to be bounded, supposing a man runs forward to its outside borders and stands on the utmost verge and then throws a winged javelin, do you choose that it when hurled with vigorous force shall advance to the point to which it has been sent and fly to a distance, or do you decide that something can get in its way

corpora perpetuo volitare invicta per aevorn, nunc age, summai quaedam sit finis eorum necne sit, evolvamus; item quod inane repertumst seu locus ac spatium, res in quo quaeque gerantur, pervideamus utrum finitum funditus omne constet an immensum pateat vasteque profundum.

Ommne quod est igitur nulla regione viarum finitumst; namque extremum debebat habere. extremum porro nullius posse videtur esse, nisi ultra sit quod finiat; ut videatur quo non longius haec sensus natura sequatur. nunc extra summam quoniam nil esse fatendum, non habet extremum, caret ergo fine modoque. nec refert quibus adsitias regionibus eius; usque adeo, quem quisque locum possedit, in omnis tantundem partis infinitum omne relinquit. praeterea si iam finitum constituatur omne quod est spatium, siquis procurrat ad oras ultimus extremas iaciatque volatile telum, id validis utrum contortum viribus ire quo fuerit missum mavis longeque volare, an prohibere aliquid censes obstareque posse?
alterutrum fatearis enim sumasque necessest.
quorum utrumque tibi effugium praecidit et omne
cogit ut exempta concedas fine patere.
nam sive est aliquit quod probeat officiatque
quominu' quo missum est veniat finique locet se,
sive foras fertur, non est a fine profectum.
hoc pacto sequar atque, oras ubicumque locaris
extremas, quaequam quid telo denique fiat.
fiet uti nusquam possit consistere finis
effugiumque fugae prolatet copia semper.

postremo ante oculos res rem finire videtur;
aer dissaepit collis atque aera montes,
terra mare et contra mare terras terminat omnis;
omne quidem vero nil est quod finiat extra.

Praeterea spatum summai totius omne
undique si inclusum certis consisteter oris
finitumque foret, iam copia materiai
undique ponderibus solidis confluxet ad imum
nec res ulla geri sub caeli tegmine posset
nec foret omnino caelum neque lumina solis,
quippe ubi materies omnis cumulata iaceret
ex infinito iam tempore subsidendo.
at nunc nimirum requies data principiorum

and stop it? for you must admit and adopt one of the two suppositions. Either of which shuts you out from all escape and compels you to grant that the universe stretches without end. For whether there is something to get in its way and prevent its coming whither it was sent and placing itself in the point intended, or whether it is carried forward, in either case it has not started from the end. In this way I will go on and, wherever you have placed the outside borders, I will ask what then becomes of the javelin. The result will be that an end can nowhere be fixed, and that the room given for flight will still prolong the power of flight. Lastly one thing is seen by the eyes to end another thing; air bounds off hills, and mountains air, earth limits sea and sea again all lands; the universe however there is nothing outside to end.

Again if all the space of the whole sum were enclosed within fixed borders and were bounded, in that case the store of matter by its solid weights would have streamed together from all sides to the lowest point nor could anything have gone on under the canopy of heaven, no nor would there have been a heaven nor sunlight at all, inasmuch as all matter, settling down through infinite time past, would lie together in a heap. But as it is, sure enough no rest is given to the bodies of the
corporibus nullast, quia nil est funditus imum
quod quasi conflueret et sedes ubi ponere possint.
995 semper in adsiduo motu res quaeque geruntur
partibus e cunctis infernaque suppediantur
ex infinito cita corpora materiai.
1002 est igitur natura loci spatiumque profundi,
quod neque clara suo percurrere fulmina cursu
perpetuo possint aevi labentia tractu
nec prorsum facere ut restet minus ire meando:
usque adeo passim patet ingens copia rebus
finibus exemptis in cunctas undique partis.

Ipsa modum porro sibi rerum summa parare
ne possit, natura tenet, quae corpus inani
et quod inane autem est finiri corpore cogit,
ut sic alternis infinita omnia reddat,
ae etiam alterutrum, nisi terminet alterum, eorum
simplice natura pateat tamen inmoderatum.

* nec mare nec tellus neque caeli lucida templar
nec mortale genus nec divum corpora sancta
exiguum possent horai sistere tempus;
nam dispulsa suo de coetu materiai

first-beginnings, because there is no lowest point at all, to which they
might stream together as it were, and where they might take up their
positions. All things are ever going on in ceaseless motion from all
quarters and bodies of matter stirred to action are supplied from beneath
out of infinite space. Therefore the nature of room and the space of
the unfathomable void, is such as bright thunderbolts cannot race
through in their course though gliding on through endless tract of time,
no nor lessen one jot the journey that remains to go by all their travel:
so huge a room is spread out on all sides for things without any bounds
in all directions round.

Again nature keeps the sum of things from setting any limit to itself,
since she compels body to be ended by void and void in turn by body, so
that either she thus renders the universe infinite by this alternation of the
two, or else the one of the two, in case the other does not bound it, with
its single nature stretches nevertheless immeasurably. [But void I have
already proved to be infinite; therefore matter must be infinite: for if void
were infinite, and matter finite] neither sea nor earth nor the glittering
quarters of heaven nor mortal kind nor the holy bodies of the gods could
hold their ground one brief passing hour; since forced asunder from its
copia ferretur magnum per inane soluta, sive adeo potius numquam concreta creasset ullam rem, quoniam cogi disiecta nequisset. nam certe neque consilio primordia rerum ordine se suo quaeque sagaci mente locarunt nec quos quaeque _daret motus pepigere profecto_, sed quia multa modis multis mutata per omne ex infinito vexantur percia plagis, omne genus motus et coetus experiundo tandem deveniunt in talis disposituras, qualibus haec-rerum consistit summa creata, et multos etiam magnos servata per annos ut semel in motus coniectast convenientis, efficit ut largis avidum mare fluminis undis integrent amnes et solis terra vapore fota novet fetus summissaque gens animantum floreat et vivant labentes aetheris ignes; quod nullo facerent pacto, nisi materiai ex infinito suboriri copia posset, unde amissa solent reparare in tempore quaeque. nam veluta privata cibo natura animantum diffluit amittens corpus, sic omnia debent union the store of matter would be dissolved and borne along the mighty void, or rather I should say would never have combined to produce any thing, since scattered abroad it could never have been brought together. For verily not by design did the first-beginnings of things station themselves each in its right place guided by keen-sighted intelligence, nor did they bargain sooth to say what motions each should assume, but because many in number and shifting about in many ways throughout the universe they are driven and tormented by blows during infinite time past, after trying motions and unions of every kind at length they fall into arrangements such as those out of which this our sum of things has been formed, and by which too it is preserved through many great years when once it has been thrown into the appropriate motions, and causes the streams to replenish the greedy sea with copious river-waters and the earth, fostered by the heat of the sun, to renew its produce, and the race of living things to breed and flourish, and the gliding fires of ether to live: all which these several things could in no wise bring to pass, unless a store of matter could rise up from infinite space, out of which store they are wont to make up in due season whatever has been lost. For as the nature of living things when robbed of food loses its body and wastes
dissolui simul ac defecit suppeditare materies aliqua ratione aversa viapi.
nec plagae possunt extrinsecus undique summam conservare omnem quaecumque est conciliata.
cyedere enim crebro possunt partemque morari,
dum veniant aliae ac supplieri summa queatur.
interdum resilire tamen coguntur et una
principiis rerum spatium tempusque fugai largiri, ut possint a coetu libera ferri.
quae etiam atque etiam suboriri multa necesstet,
et tamen ut plagae quoque possint suppetere ipsae,
infinita opus est vis undique materiai.

Illud in his rebus longe fuge credere, Memmi,
in medium summae, quod dicunt, omnia niti,
atque ideo mundi naturam stare sine ullis ictibus externis neque quoquam posse resolv
summa atque ima, quod in medium sint omnia nixa:
ipse si quicquam posse in se sistere credis:
et quae pondera sunt sub terris omnia sursum nitier in teraque retro requiescere posta,
ut per aquas quae nunc rerum simulacra videmus.
et similis ratione animalia suppa vagari

away, thus all things must be broken up, as soon as matter has ceased to be supplied, diverted in any way from its proper course. Nor can blows from without hold together all the sum which has been brought into union. They can it is true frequently impinge upon and stay a part, until others come and the sum can be completed. At times however they are compelled to rebound and in so doing grant to the first-beginnings of things room and time for flight, to enable them to get clear away from the mass in union. Wherefore again and again I repeat many bodies must rise up; nay more that the blows themselves may not fail, there is need of an infinite supply of matter on all sides.

And herein, Memnius, be far from believing this, that all things as they say press to the centre of the sum, and that for this reason the nature of the world stands fast without any strokes from the outside and the uppermost and lowest parts cannot part asunder in any direction, because all things have been always pressing towards the centre (if you can believe that anything can rest upon itself); or that the heavy bodies which are beneath the earth all press upwards and are at rest on the earth, turned topsyturvy, just like the images of things which we see before us in the waters. In the same way too they maintain
I contendunt neque posse e terris in loca caeli reccidere inferiora magis quam corpora nostra sponte sua possint in caeli templar volare; illi cum videant solem, nos sidera noctis cernere, et alternis nobiscum tempora caeli dividere et noctes parilis agitare diebus. sed vanus stolidis haec amplexi quod habent perv nam medium nil esse potest infinita. neque omnino, si iam medium sit, possit ibi quicquam consistere quam quavis alia longe ratione omnis enim locus ac spatium quod inane vocamus per medium per non medium, concedere debet aeque ponderibus, motus quacumque feruntur. nec quisquam locus est, quo corpora cum venerunt, ponderis amissa vi possint stare in inani; nec quod inane autem est ulli subsistere debet, quin, sua quod natura petit, concedere pergat. haud igitur possunt tali ratione teneri res in concilio medii cuppedine victae.

Praeterea quoniam non omnia corpora fingunt in medium niti, sed terrarum atque liquoris, that living things walk head downwards and cannot tumble out of earth into the parts of heaven lying below them any more than our bodies can spontaneously fly into the quarters of heaven; that when those see the sun, we behold the stars of night; and that they share with us time about the seasons of heaven and pass nights equal in length to our days. But groundless [error has devised such dreams] for fools, because they have embraced [false principles of reason.] For there can be no centre [where the universe is] infinite; no nor, even if there were a centre, could anything take up a position there [any more on that account] than for some quite different reason [be driven away.] For all room and space, which we term void, must through centre, through no-centre alike give place to heavy bodies, in whatever directions their motions tend. Nor is there any spot of such a sort that when bodies have reached it, they can lose their force of gravity and stand upon void; and that again which is void must not serve to support anything, but must, as its nature craves, continually give place. Things cannot therefore in such a way be held in union, o’ermastered by love of a centre.

Again since they do not suppose that all bodies press to the centre,
et quasi terreno quae corpore contineantur, quae
umorem ponti magnasque e montibus undas,
at contra tenuis exponunt aeris auras,
et calidos simul a medio differrier ignis,
atque ideo totum circum tremere aethera signis,
et solis flammam per caeli caerula pasci,
quod calor a medio fugiens se ibi conligat omnis,
nec prorsum arboribus summos frondescere ramos
posse, nisi a terris paulatim cuique cibatum

ne volucri ritu flammarum moenia mundi
diffugiant subito magnum per inane soluta
et ne cetera consimili ratione sequantur
neve ruant caeli penetralia templa superne
terraque se pedibus raptim subducat et omnis
inter permixtas rerum caelique ruinas
corpora solventes abeat per inane profundum,

but only those of earth and water, and such things as are held together
by a body of an earthy nature, the fluid of the sea and great waters
from the mountains; while on the other hand they teach that the subtle
element of air and hot fires at the same time are carried away from the
centre and that for this reason the whole ether round bickers with signs
and the sun's flame is fed throughout the blue of heaven, because heat
flying from the centre all gather together there, and that the topmost
boughs of trees could not put forth leaves at all, unless from time to
time [nature supplied] food from the earth to each, [their reasons are
not only false, but they contradict each other. Space I have already
proved to be infinite; and space being infinite matter as I have said
must also be infinite] lest after the winged fashion of flames the walls of
the world should suddenly break up and fly abroad along the mighty void
and all other things follow for like reasons and the innermost quar-
ters of heaven tumble in from above and the earth in an instant with-
draw from beneath our feet and amid the commingled ruins of things
in it and of heaven, ruins unloosing the first bodies, should wholly
pass away along the unfathomable void, so that in a moment of time
temporis ut puncto nil extet reliquiarum
desertum praeter spatum et primordia caeca.

nam quacumque prius de parti corpora desse
constitues, haec rebus erit pars ianua leti,
hac se turba foras dabit omnis materiai.

Haec seì pernosces, parva perductus opella

namque alid ex alio clarescet nec tibi caeca

nox iter eripiet quin ultima naturai
pervideos: ita res accendent lumina rebus.

not a wrack should be left behind, nothing save untenanted space and
viewless first-beginnings. For on whatever side you shall first determine
first bodies to be wanting, this side will be the gate of death for things,
through this the whole crowd of matter will fling itself abroad.

If you will well learn these things, then carried to the end with
slight trouble [you will be able by yourself to understand all the rest.]
For one thing after another will grow clear and dark night will not rob
you of the road, to keep you from surveying the utmost ends of nature:
in such wise things will light the torch for other things.
Suave, mari magno turbantibus aequora ventis,
e terra magnum alterius spectare laborem;
non quia vexari quemquamst iucunda voluptas,
sed quibus ipse malis careas quia cernere suave est,
suae etiam bellii certamina magna tueri
per campos instructa tua sine parte pericli.
sed nil dulcius est, bene quam munita tenere
edita doctrina sapientum templat serena,
despicere unde queas alios passimque videre
errare atque viam palantis quaerere vitae,
certare ingenio, contendere nobilitate,
noctes atque dies nitii praestante labore
ad summas emergere opes rerumque potiri.
o miseras hominum mentes, o pectora caeca!

It is sweet, when on the great sea the winds trouble its waters, to
behold from land another's deep distress; not that it is a pleasure and
delight that any should be afflicted, but because it is sweet to see from
what evils you are yourself exempt. It is sweet also to look upon the
mighty struggles of war arrayed along the plains without sharing your-
self in the danger. But nothing is more welcome than to hold the lofty
and serene positions well fortified by the learning of the wise, from
which you may look down upon others and see them wandering all
abroad and going astray in their search for the path of life, see the con-
test among them of intellect, the rivalry of birth, the striving night
and day with surpassing effort to struggle up to the summit of power
and be masters of the world. O miserable minds of men! o blinded
breasts! In what darkness of life and in how great dangers is passed all this term of life whatever its duration! not choose to see that nature craves for itself nothing more than that the man from whose body pain holds aloof, should in mind enjoy a feeling of pleasure exempt from care and fear? Therefore in respect of the body’s nature we see that but little is at all needed in order that such things as take away pain, should be able to spread before us many delights as well. Nor at times does nature herself want any greater solace, although there are no golden images of youths through the house holding in their right hands flaming lamps, for supply of light to the nightly banquet, though the house shines not with silver nor glitters with gold nor do the panelled and gilded roofs reecho to the harp, what time, though these things be wanting, they spread themselves in groups on the soft grass beside a stream of water under the boughs of a high tree and at no great cost pleasantly refresh their bodies, above all when the weather smiles and the seasons of the year besprinkle the green grass with flowers. Nor do hot fevers sooner quit the body, if you toss about on pictured tapestry and blushing purple, than if you must lie under a poor man’s blanket. Wherefore since treasures avail nothing in respect of our body nor birth nor
proficiunt neque nobilitas nec gloria regni, quod superest, animo quoque nil prodesse putandum; si non forte tuas legiones per loca campi fervere cum videas belli simulacra cientes, subsidiis magis et ecum vi constabiles, ornatasque armis statuas pariterque animatas, his tibi tum rebus timefactae religiones effugiunt animo pavide; mortisque timores tum vacuum pectus linquant curaque solutum, fervere cum videas classem lateque vagari. quod si ridicula haec ludibriaque esse videmus, re verae metus hominum curaeque sequaces nec metuunt sonitus armorum nec fera tela audacterque inter reges rerumque potentes versantur neque fulgorem reverentur ab auro nec clarum vestis splendorem purpurei, quid dubitas quin omni' sit haec rationi' potestas? omnis cum in tenebris praesertim vita laboret. nam veluti pueri trepidant atque omnia caecis in tenebris metuunt, sic nos in luce timemus interdum, nilo quae sunt metuenda magis quam quae pueri in tenebris pavitant finguntque futura. hunc igitur terrorem animi tenebrasque necessest

the glory of kingly power, advancing farther you must hold that they are of no service to the mind as well; unless may be when you see your legions swarm over the ground of the campus waging the mimicry of war, strengthened flank and rear by powerful reserves and great force of cavalry, and you marshall them equipped in arms and animated with one spirit, thereupon you find that religious scruples scared by these things fly panic-stricken from the mind; and that then fears of death leave the breast unembarrassed and free from care, when you see your fleet swarm forth and spread itself far and wide. But if we see that these things are food for laughter and mere mockeries, and in good truth the fears of men and dogging cares dread not the clash of arms and cruel weapons, if unabashed they mix among kings and kesaris and stand not in awe of the glitter from gold nor the brilliant sheen of the purple robe, how can you doubt that this is wholly the prerogative of reason, when the whole of life withal is a struggle in the dark? For even as children are flurried and dread all things in the thick darkness, thus we in the daylight fear at times things not a whit more to be dreaded than those at which children shudder in the dark and fancy sure to be. This terror therefore and darkness of mind must be dis-
non radii solis neque lucida tela diei
discutiant, sed naturae species ratioque.

Nunc age, quo motu genitalia materiai
corpora res varias gignant genitasque resolvant
et qua vi facere id cogantur quaeque sit ollis
reddita mobilitas magnum per inane meandi,
expediam: tu te dictis praebere memento.
nam certe non inter se stipata cohaeret
materies, quoniam minni rem quamque videmus
et quasi longinquo fluere omnia cernimus aevò
ex oculisque vetustatem subducere nostris,
cum tamen incolmis videatur summa manere
propterea quia, quae deecedunt corpora cuique,
unde abeunt minuunt, quo venere augmine donant,
illa senescere at haec contra florescere cogunt,
nec remorantur ibi. sic rerum summa novatur
semper, et inter se mortales mutua vivunt.
augescent aliae gentes, aliae minuuntur,
inque brevi spatio mutantur saecla animantium
et quasi cursores vitai lampada tradunt.

Si cessare putas rerum primordia posse
cessandoque novos rerum progignere motus,
avius a vera longe ratione vagaris.

pelled not by the rays of the sun and glittering shafts of day, but by
the aspect and law of nature.

Now mark and I will explain by what motion the begetting bodies
of matter do beget different things and after they are begotten again
break them up, and by what force they are compelled so to do and what
velocity is given to them for travelling through the great void: do you
mind to give heed to my words. For verily matter does not cohere
inseparably massed together, since we see that everything wanes and
perceive that all things ebb as it were by length of time and that age
withdraws them from our sight, though yet the sum is seen to remain
unimpaired by reason that the bodies which quit each thing, lessen the
things from which they go, gift with increase those to which they have
come, compel the former to grow old, the latter to come to their prime,
and yet abide not with these. Thus the sum of things is ever renewed
and mortals live by a reciprocal dependency. Some nations wax, others
wane, and in a brief space the races of living things are changed and
like runners hand over the lamp of life.

If you think that first-beginnings of things can stop and by stopping
propagate new motions of things, you wander far astray from the path
nam quoniam per inane vagantur, cuncta necessest
aut gravitate sua ferri primordia rerum
aut ictu forte alterius. nam cum cita saepe
obvia confluxere, fit ut diversa repente
dissiliant; neque enim mirum, durissima quae sint
ponderibus solidis neque quicquum a tergo ibus obtet.
et quo iactari magis omnia materiai
corpora pervideas, reminiscere totius imum
nil esse in summa, neque habere ubi corpora prima
consistant, quoniam spatium sine fine modoquest
inmensumque patere in cunctas undique partis
pluribus ostendi et certa ratione probatumst.
quod quoniam constat, nimirum nulla quies est
reddita corporibus primis per inane profundum,
sed magis adsiduo varioque exercita motu
partim intervallis magnis confulta resultant,
 pars etiam brevibus spatiis vexantur ab ictu.
et quacumque magis condenso conciliatu
exiguus intervallis convecta resultant,
indupedita suis perplexis ipsa figuris,
haec validas saxi radices et fera ferri
corpora constituunt et cetera de genere horum.

of true reason: since they travel about through void, the first-beginnings
of things must all move on either by their own weight or haply by the
stroke of another. For when during motion they have, as often happens,
met and clashed, the result is a sudden rebounding in an opposite direc-
tion; and no wonder, since they are most hard and of weight propor-
tioned to their solidity and nothing behind gets in their way. And
that you may more clearly see that all bodies of matter are in restless
movement, remember that there is no lowest point in the sum of the
universe, and that first bodies have not where to take their stand, since
space is without end and limit and extends immeasurably in all direc-
tions round, as I have shewn in many words and as has been proved by
sure reason. Since this then is a certain truth, sure enough no rest is
given to first bodies throughout the unfathomable void, but driven on
rather in ceaseless and varied motion they partly, after they have pressed
together, rebound leaving great spaces between, while in part they are
so dashed away after the stroke as to leave but small spaces between.
And all that form a deuser aggregation when brought together and re-
bound leaving trifling spaces between, held fast by their own close-tangled
shapes, these form enduring bases of stone and unyielding bodies of iron
PAUCUIA QUAE PORRO MAGNUM PER INANE VAGANTUR

sed quae dissiliunt longe longeque recursant
in magnis intervallis, haec aera rarum
sufficiunt nobis et splendida lumina solis.
multaque praeterea magnum per inane vagantur,
conciliis rerum quae sunt reiecta nec usquam
consociare etiam motus potuere recepta.
cuius, uti memoro, rei simulacrum et imago
ante oculos semper nobis versatur et instat.
contemplator enim, cum solis lumina cumque
inserti fundunt radii per opaca domorum:
multa minuta modis multis per inane videbis
corpora misceri radiorum lumine in ipso
et velut aeterno certamine proelia pugnas
edere turmatim certantia nec dare pausam,
conciliis et discidiis exercita crebris;
conicere ut possis ex hoc, primordia rerum
quale sit in magno iactari semper inani.
dumtaxat rerum magnarum parva potest res
exemplare dare et vestigia notitiai.
hoc etiam magis haec animum te advertere par est

corpora quae in solis radiis turbare videntur,
quad tales turbae motus quoque materiai
significant clandestinos caecosque subesse.

and such like. But those which spring far off and rebound far leaving
great spaces between, these furnish us with thin air and bright sunlight.
And many more travel along the great void, which have been thrown
off from the unions of things or though admitted have yet in no case
been able likewise to assimilate their motions. Of this truth, even as I
relate it, we have a representation and picture always going on before
our eyes and present to us: observe whenever the rays are let in and
pour the sunlight through the dark chambers of houses: you will see
many minute bodies in many ways through the apparent void mingle in
the midst of the light of the rays, and as in never-ending conflict skirmish
and give battle combating in troops and never halting, driven about in
frequent meetings and partings; so that you may guess from this, what
it is for first-beginnings of things to be ever tossing about in the great
void. So far as it goes, a small thing may give an illustration of great
things and put you on the track of knowledge. And for this reason too
it is meet that you should give greater heed to these bodies which are
seen to tumble about in the sun's rays, because such tumblings imply
that motions also of matter latent and unseen are at the bottom. For
multa videbis enim plagis ibi percita caecis
commutare viam retroque repulsa reverti
nunc huc nunc illuc in cunctas undique partis.
silicet hic a principiis est omnibus error.
prima moveantur enim per se primordia rerum;
inde ea quae parvo sunt corpora conciliatud
et quasi proxima sunt ad viris principiorum,
ictibus illorum caecis impulsa cipient,
ipsaque propino paulo maiora lacessunt.
sic a principiis ascendit motus et exit
 paulatim nostrus ad sensus, ut moveantur
illa quoque, in solis quae lumine cernere quimus
nec quibus id faciant plagis apparat aperte.

Nunc quae mobilitas sit reddita materia
corporibus, paucis licet hinc cognoscere, Memmi.
primum aurora novo cum spargit lumine terras
et variae volucres nemora avia pervolitantes
aera per tenerum liquidis loca vocibus opplent,
quam subito soleat sol ortus tempore tali
convestire sua perfundens omnia luce,
omnibus in promptu manifestumque esse videmus,
at vapor is quem sol mittit lumenque serenum
non per inane meat vacuum; quo tardius ire

you will observe many things there impelled by unseen blows to change
their course and driven back to return the way they came now this way
now that way in all directions round. All you are to know derive this
restlessness from the first-beginnings. For the first-beginnings of things
move first of themselves; next those bodies which form a small aggregate
and come nearest so to say to the powers of the first-beginnings, are im-
pelled and set in movement by the unseen strokes of those first bodies,
and they in turn stir up bodies which are a little larger. Thus motion
mounts up from the first-beginnings and step by step issues forth to our
senses, so that those bodies also move, which we can discern in the sun-
light, though it is not clearly seen by what blows they so act.

Now what velocity is given to bodies of matter, you may apprehend,
Memmius, in few words from this: when morning first sprinkles the
earth with fresh light and the different birds flitting about the pathless
woods through the buxom air fill all places with their clear notes, we
see it to be plain and evident to all how suddenly the sun after rising
is wont at such a time to overspread all things and clothe them with
his light. But that heat which the sun emits and that bright light pass
not through empty void; and therefore they are forced to travel more
cogitur, aerias quasi dum diverberet undas.
nec singillatim corpuscula quaeque vaporis
sed complexa meant inter se conque globata;
quapropter simul inter se retrahuntur et extra
officiuntur, uti cogantur tardius ire.
at quae sunt solida primordia simplicitate,
cum per inane meant vacuum nec res remoratur
ulla foris atque ipsa, suis e partibus una,
unum in quem coeptere locum conixa feruntur,
de bent nimirum praecellere mobilitate
et multo citius ferri quam lumina solis
multiplexque loci spatium transcurrere eodem
tempore quo solis pervolgant fulgura caelum.

[ne persectari primordia singula quaeque,
ut videant qua quicque geratur cum ratione.
At quidam contra haec, ignari materiain,
naturam non posse deum sine numine credunt
tanto opere humanis rationibus admodere
tempora mutare annorum frugesque creare,
et iam cetera, mortalis quae suadet adire
ipsaque deducit dux vitae dia voluptas
et res per Veneris blanditur saecla propagent,

slowly, until they cleave through the waves so to speak of air. Nor do
the several minute bodies of heat pass on one by one, but closely en-
tangled and massed to gather; whereby at one and the same time they are
pulled back by one another and are impeded from without, so that they
are forced to travel more slowly. But the first-beginnings which are
of solid singleness, when they pass through empty void and nothing
delays them from without and they themselves, single from the nature
of their parts, are borne with headlong endeavour towards the one single
spot to which their efforts tend, they must sure enough surpass in velocity
and be carried along much more swiftly than the light of the sun, and
race through many times the extent of space in the same time in which
the beams of the sun fill the heaven throughout. Nor follow up the
several first-beginnings to see by what law each thing goes on.

But some in opposition to this, being ignorant of matter, believe
that nature cannot without the providence of the gods in such nice
conformity to the ways of man vary the seasons of the year and bring
forth crops, ay and procure all the other things, which divine pleasure
the guide of life prompts men to approach, escorting them in person
and enticing them by her fondlings to continue their races through the
ne genus occidat humanum, quorum omnia causa constituisse deos cum fingunt, omnibus rebus magno opere a vera lapsi ratione videntur. namquamvis rerum ignorem primordia quae sint, hoc tamen ex ipsis caeli rationibus ausim confirmare aliiisque ex rebus reddere multis, nequaquam nobis divinitus esse creatam naturam mundi: tanta stat praedita culpa. quae tibi posterius, Memmi, faciemus aperta. nunc id quod superest de motibus expediemus.]

Nunc locus est, ut opinor, in his illud quoque rebus confirmare tibi, nullam rem posse sua vi corpoream sursum ferri sursumque meare; ne tibi dent in eo flammamurum corpora fraudem. sursus enim versus gignuntur et augmina sumunt et sursum nitidae fruges arbustaque crescunt, pondera, quantum in se est, cum deorsum cuncta ferantur. nec cum subsiliunt ignes ad tecta domorum et celeri flamma degustant tigna trabesque, sponte sua facere id sine vi subigente putandum est, quod genus e nostro quom missus corpore sanguis emicat exultans alte spargitque cruorem.

arts of Venus, that mankind may not come to an end. For when they suppose that the gods designed all things for the sake of men, they seem to me in all respects to have strayed most widely from true reason. For even if I did not know what first-beginnings are, yet this, judging by the very arrangements of heaven, I would venture to affirm, and led by many other circumstances to maintain, that the nature of the world has by no means been made for us by divine power: so great are the defects with which it stands encumbered. All which, Memmius, we will hereafter make clear to you: we will now go on to explain what remains to be told of motions.

Now methinks is the place, herein to prove this point also that no bodily thing can by its own power be borne upwards and travel upwards; that the bodies of flames may not in this matter lead you into error. For they are begotten with an upward tendency, and in the same direction receive increase, and goodly crops and trees grow upwards, though their weights, so far as in them is, all tend downwards. And when fires leap to the roofs of houses and with swift flame lick up rafters and beams, we are not to suppose that they do so spontaneously without a force pushing them up. Even thus blood discharged from our body spirits out and springs up on high and scatters gore about.
nonne vides etiam quanta vi tigna trabesque respuat umor aquae? nam quo magis ursimus alte deiecta et magna vi multi pressimus aegre, tam cupide sursum revomit magis atque remittit, plus ut parte foras emergant exiliantque.

corpusa cum deorsum rectum per inane feruntur,
ponderibus propriis incerto tempore ferme
incertisque loci spatiis decellere paulum,
tantum quod momen mutatum dicere possis.

quod nisi declinare solerent, omnia deorsum,
imbris uti guttae, caderent per inane profundum,
 nec foret offensus natus nec plaga creata
principiis: ita nil umquam natura creasset.

Quod si forte aliquis credit graviora potesse
corpora, quo cibus rectum per inane feruntur,
incidere ex supero levioribus atque ita plagas
gignere quae possint genitalis reddere motus,
avius a vera longe ratione recedit.

nam per aquas quaecumque cadunt atque aera rarum,
haec pro ponderibus casus celerare necessest
propterea quia corpus aquae naturaque tenvis
aeris haut possunt aequa rem quamque morari,
sed cius sedunt gravioribus exsuperata;
at contra nulli de nulla parte neque ullo
tempo inane potest vacuum subsistere rei,
quin, sua quod natura petit, concedere pergam;
omnia quapropter debent per inane quietum
aeque ponderibus non aequis concita ferri.

haud igitur poterunt levioribus incidere umquam

uncertain points of space they swerve a little from their equal poise:
you just and only just can call it a change of inclination. If they
were not used to swerve, they all would fall down, like drops of rain,
through the deep void, and no clashing would have been begotten, nor
blow produced among the first-beginnings: thus nature never would
have produced aught.

But if haply any one believes that heavier bodies, as they are carried
more quickly sheer through space, can fall from above on the lighter and
so beget blows able to produce begetting motions, he goes most widely
astray from true reason. For whenever bodies fall through water and
thin air, they must quicken their descents in proportion to their weights,
because the body of water and subtle nature of air cannot retard every-
thing in equal degree, but more readily give way, overpowered by the
heavier: on the other hand empty void cannot offer resistance to any-
thing in any direction at any time, but must, as its nature craves, con-
tinually give way; and for this reason all things must be moved and
borne along with equal velocity though of unequal weights through the
unresisting void. Therefore heavier things will never be able to fall
ex supero graviora neque ictus gignere per se qui varient motus per quos natura gerat res. quare etiam atque etiam paulum inclinare necesse corpora; nec plus quam minimum, ne fingere motus obliquos videamur et id res vera refutet. namque hoc in promptu manifestumque esse videmus, pondera, quantum in sept, non posse obliqua meare, ex supero cum praecipitant, quod cernere possis; sed nil omnino recta regione viae declinare quis est qui possit cernere sese?

Denique si semper motus conectitur omnis et vetere exoritur semper novus ordine certo nec declinando faciunt primordia motus principium quoddam quod fati foedera rumpat, ex infinito ne causam causa sequatur, libera per terras unde haec animantibus exstat, unde est haec, inquam, fatis avolsa potestas per quam progredimur quo ducit quemque voluntas, declinamus item motus nec tempore certo nec regione loci certa, sed ubi ipsa tulit mens? nam dubio procul his rebus sua cuique voluntas principium dat et hinc motus per membra rigantur.

from above on lighter nor of themselves to beget blows sufficient to produce the varied motions by which nature carries on things. Wherefore again and again I say bodies must swerve a little; and yet not more than the least possible; lest we be found to be imagining oblique motions and this the reality should refute. For this we see to be plain and evident, that weights, so far as in them is, cannot travel obliquely, when they fall from above, at least so far as you can perceive; but that nothing can swerve in any case from the straight course, who is there that can perceive?

Again if all motion is ever linked together and a new motion ever springs from another in a fixed order and first-beginnings do not by swerving make some commencement of motion to break through the decrees of fate, that cause follow not cause from everlasting, whence have all living creatures here on earth, whence, I ask, has been wrested from the fates the power by which we go forward whither the will leads each, by which likewise we change the direction of our motions neither at a fixed time nor fixed place, but where and when the mind itself has prompted? For beyond a doubt in these things his own will makes for each a beginning and from this beginning motions are welled through
nonne vides etiam patefactis tempore puncto
\[casseribus non posse tamen prorumpere equorum\]
vim cupidam tam de subito quam mens avet ipsa?
\[265\]
onnis enim totum per corpus materiai
copia conquiri debet, concita per artus
omnis ut studium mentis conixa sequatur;
\[270\]
ut videas initum motus a corde creari
ex animique voluntate id procedere primum,
inde dari porro per totum corpus et artus.
nec similest ut cum impulsi procedimus ictu
viribus alterius magnis magnoque coactu;
nam tum materiem totius corporis omnem
perspicuumst nobis invitis ire rapique,
\[275\]
donec eam refrenavit per membra voluntas.
iamne vides igitur, quamquam vis extera multos
pellat et invitos cogat procedere saepe
praecipitesque rapi, tamen esse in pectore nostro
quiddam quod contra pugnare obstareque possit?
\[280\]
cuius ad arbitrium quoque copia materiai
cogitur interdum fleci per membra per artus
et proiecta refrenatur retroque residit.
quare in seminibus quoque idem fateare necessest,

the limbs. See you not too, when the barriers are thrown open at a
given moment, that yet the eager powers of the horses cannot start
forward so instantaneously as the mind itself desires? the whole store
of matter through the whole body must be sought out, in order that
stirred up through all the frame it may follow with undivided effort the
bent of the mind; so that you see the beginning of motion is born from
the heart, and the action first commences in the will of the mind and
next is transmitted through the whole body and frame. Quite different
is the case when we move on propelled by a stroke inflicted by the
strong might and strong compulsion of another; for then it is quite
clear that all the matter of the whole body moves and is hurried on
against our inclination, until the will has reined it in throughout the limbs.
Do you see then in this case that, though an outward force often pushes
men on and compels them frequently to advance against their will and
to be hurried headlong on, there yet is something in our breast sufficient
to struggle against and resist it? And when too this something chooses,
the store of matter is compelled sometimes to change its course through
the limbs and frame, and after it has been forced forward, is reined in
and settles back into its place. Wherefore in seeds too you must
esse aliam praeter plagas et pondera causam motibus, unde haec est nobis innata potestas, de nilo quoniam fieri nil posse videmus. pondus enim prohibet ne plagis omnia fiat externa quasi vi; sed ne mens ipsa necessum intestinum habeat cunctis in rebus agendis et devicta quasi hoc cogatur ferre patique, id facit exiguum clinamen principiorum nec regione loci certa nec tempore certo.

Nec stipata magis fuit umquam materiali copia nec porro maioribus intervallis; nam neque adaugescit quicquam neque deperit inde. quapropter quo nunc in motu principiorum corpora sunt, in eodem ante acta aetate fuere et post haec semper simili ratione ferentur, et quae consuerint gigni gignentur eadem condicione et erunt et crescent vique valebunt, quantum cuique datum est per foedera natural. nec rerum summam commutare ulla potest vis; nam neque, quo possit genus ullum materiali effugere ex omni, quicquam est extra, neque in omne unde coorta queat nova vis inrumpere et omnem naturam rerum mutare et vertere motus.

admit the same, admit that besides blows and weights there is another cause of motions, from which this power of free action has been begotten in us, since we see that nothing can come from nothing. For weight forbids that all things be done by blows through as it were an outward force; But that the mind itself does not feel an internal necessity in all its actions and is not as it were overmastered and compelled to bear and put up with this, is caused by a minute swerving of first-beginnings at no fixed part of space and no fixed time.

Nor was the store of matter ever more closely massed nor held apart by larger spaces between; for nothing is either added to its bulk or lost to it. Wherefore the bodies of the first-beginnings in time gone by moved in the same way in which now they move, and will ever hereafter be borne along in like manner, and the things which have been wont to be begotten will be begotten after the same law and will be and will grow and will wax in strength so far as is given to each by the decrees of nature. And no force can change the sum of things for there is nothing outside, either into which any kind of matter can escape out of the universe or out of which a new supply can arise and burst into the universe and change all the nature of things and alter their motions.
Illud in his rebus non est mirabile, quare, omnia cum rerum primordia sint in motu, summa tamen summa videatur stare quiete, praeterquam siquid propio dat corpore motus. omnis enim longe nostris ab sensibus infra primorum natura iacet: quapropter, ubi ipsa cernere iam nequeas, motus quoque surpere debent; praesertim cum, quae possimus cernere, celent saepe tamen motus spatio diducta locorum. nam saepe in colli tendentes pabula laeta lanigerae reptant pecudes quo quamque vocantes invitant herbae gemmantes rore recenti, et satiati agni ludunt blandeque coruscant; omnia quae nobis longe confusa videntur et velut in viridi candor consistere colli. praeterea magnae legiones cum loca cursu camporum complent belli simulacra cientes, fulgor ibi ad caelum se tollit totaque circum aere renidescit tellus sustaque virum vi excitur pedibus sonitus clamoreque montes icti reiecant voces ad sidera mundi et circumvolitant equites mediosque repente tramittunt valido quatientes impete campos.

And herein you need not wonder at this, that though the first-beginnings of things are all in motion, yet the sum is seen to rest in supreme repose, unless where a thing exhibits motions with its individual body. For all the nature of first things lies far away from our senses beneath their ken; and therefore since they are themselves beyond what you can see, they must withdraw from sight their motions also; and the more so that the things which we can see, do yet often conceal their motions when a great distance off. For often the woolly flocks as they crop the glad pastures on a hill, creep on whither the grass jewelled with fresh dew summons and invites each, and the lambs fed to the full gambol and playfully butt; all which objects appear to us from a distance to be blended together and to rest like a white spot on a green hill. Again when mighty legions fill with their movements all parts of the plains waging the mimicry of war, the glitter then lifts itself up to the sky and the whole earth round gleams with brass and beneath a noise is raised by the mighty trampling of men and the mountains stricken by the shouting reecho the voices to the stars of heaven, and horsemen fly about and suddenly wheeling scour across the middle of the plains, shaking them with the vehemence of their charge. And
et tamen est quidam locus altis montibus unde
stare videntur et in campis consistere fulgor.

Nunc age iam deinceps cunctarum exordia rerum
qualia sint et quam longe distantia formis
percipe, multigenis quam sint variata figuris;
non quo multa parum simili sint praedita forma,
sed quia non vulgo paria omnibus omnia constant.
nec mirum; nam cum sit eorum copia tanta
ut neque finis, uti docui, neque summa sit uilla,
dequent nimirum non omnibus omnia prorsum
esse pari filo similique affectu figura.
priestat rem genus humanum mutaeque natantes
squamigerum pecudes et laeta armenta feraeque
et variae volucres, laetantia quae loca aquarum
concelebrant circum ripas fontisque lacusque,
et quae pervolvant nemora avia pervolitantes;
quorum unum quidvis generatim sumere perge,
invenies tamen inter se differre figuris,
nec ratione alia proles cognoscere matrem
nec mater posset prolem; quod posse videmus
nec minus atque homines inter se nota chere.
nam saepe ante deum vitulus delubra decora

yet there is some spot on the high hills, seen from which they appear
to stand still and to rest on the plains as a bright spot.

Now mark and next in order apprehend of what kind and how
widely differing in their forms are the beginnings of all things, how
varied by manifold diversities of shape; not that a scanty number are
possessed of a similar form, but because they are not all without ex-
ception one like another. And no wonder; for since there is so great
a store of them that, as I have shewn, there is no end or sum, they
must sure enough not be all marked by a precisely equal bulk and like
shape, one with another. The race of man vouches the fact and the
mute swimming shoals of the scaly tribes and the blithe herds and wild
beasts and the different birds which haunt the gladdening watering spots
about river-banks and springs and pools, and those which flit about
and throng the pathless woods: go and take any one you like in any
one kind, and you will yet find that they differ in shapes, every one
from every other. And in no other way could child recognise mother
or mother child; and this we see that they all can do, and that they
are just as well known to one another as human beings are. Thus often
in front of the beauteous shrines of the gods a calf falls sacrificed beside
the incense-burning altars, spirting from its breast a warm stream of blood; but the bereaved mother as she ranges over the green lawns knows the footprints stamped on the ground by the cloven hoofs, scanning with her eyes every spot to see if she can anywhere behold her lost youngling: then she fills with her moanings the leafy wood as she desists from her search and again and again goes back to the stall pierced to the heart by the loss of her calf; nor can the soft willows and grass quickened with dew and those rivers gliding level with their banks comfort her mind and put away the care that is on her, nor can other forms of calves throughout the glad pastures divert her mind and ease it of its care: so persistently she seeks something special and known. Again the tender kids with their shaking voices know their horned dams and the butting lambs the flocks of bleating sheep: thus they run, as nature craves, each without fail to its own udder of milk. Lastly in the case of any kind of corn you like you will yet find that any one grain is not so similar to any other in the same kind, but that there runs through them some difference to distinguish the forms. On a like principle of difference we see the class of shells paint the lap of earth,
where the sea with gentle waves beats on the thirsty sand of the wind-
ing shore. Therefore again and again I say it is necessary for like
reasons that first-beginnings of things, since they exist by nature and
are not made by hand after the exact model of one, should fly about
with shapes in some cases differing one from the other.

It is right easy for us on such a principle to explain why the fire
of lightning has much more power to pierce than ours which is born
of earthly pinewood: you may say that the heavenly fire of lightning
subtle as it is is formed of smaller shapes and therefore passes through
openings which this our fire cannot pass born as it is of woods and
sprung from pine. Again light passes through horn, but rain is thrown
off. Why? if not that those first bodies of light are smaller than those
of which the nurturing liquid of water is made. And quickly as we
see wines flow through a strainer, sluggish oil on the other hand is slow
to do so, because sure enough it consists of elements either larger in
size or more hooked and tangled in one another, and therefore it is that
the first-beginnings of things cannot so readily be separated from each
other and severally stream through the several openings of any thing.

Moreover the liquids honey and milk excite a pleasant sensation of
iucundo sensu linguæ tractentur in ore; 
at contra taetra absinthi natura ferique 
centaurei foedo pertorquent ora sapore; 
ut facile agnoscas e levibus atque rutundis 
esse ea quæ sensus iucunde tangere possunt, 
at contra quae amara atque aspera cumque videntur, 
haec magis hamatis inter se nexa teneri 
propter eaque solere vias rescindere nostris 
sensibus introituque suo perrumpere corpus. 
Omnia postremo bona sensibus et mala tactu 
dissimili inter se pugnant perfecta figura; 
ne tu forte putes serrae stridentis acerbum 
horrorem constare elementis levibus acque 
ac musaeæ mele, per chordas organis quæ 
mobilibus digitis expergefacta figurant; 
neu simili penetrare putes primordia forma 
in nares hominum, cum taetra cadavera torrent. 
et cum scena croco Cilici perfusa recens est 
araque Panchaeos exhalat propter odores; 
neve bonos rerum simili constare colores 
semine constituas, oculos qui pascere possunt, 
et qui compungunt aciem lacrimareque cogunt 
tongue when held in the mouth; but on the other hand the nauseous 
nature of wormwood and of harsh centaury writhe the mouth with a 
noisome flavour; so that you may easily see that the things which are 
able to affect the senses pleasantly, consist of smooth and round ele-
ments; while all those on the other hand which are found to be bitter 
and harsh, are held in connexion by particles that are more hooked and 
for this reason are wont to tear open passages into our senses and in 
entering in to break through the body. 
All things in short which are agreeable to the senses and all which 
are unpleasant to the feeling are mutually repugnant, formed as they 
are out of an unlike first shape; lest haply you suppose that the harsh 
grating of the creaking saw consists of elements as smooth as those of 
tuneful melodies which musicians wake into life with nimble fingers and 
give shape to on strings; or suppose that the first-beginnings are of like 
shape which pass into the nostrils of men, when noisome carcasses are 
burning, and when the stage is fresh sprinkled with Cilician saffron, 
while the altar close by exhales Panchaean odours; or decide that the 
pleasant colours of things which are able to feast the eyes are formed 
of a seed like to the seed of those which make the pupil smart and force
aut foeda specie diri turpese videntur.
onmis enim, sensus quae mulcet cumque, figura
haut sine principiali aliquo levore creatast;
at contra quaecumque molesta atque aspera constat,
on aliquo sine materiae squalore repertast.
sunt etiam quae iam nec levia iure putantur
esse neque omnino flexis mucronibus una;
sed magis angellis paulum prostantibus' quique
titillare magis sensus quam laedere possint;
faecula iam quo de genere est inulaeque sapore.
denique iam calidos ignis gelidamque pruinam
dissimili dentata modo compungere sensus
corporis, indicio nobis est tactus uterque.
tactus enim, tactus, pro divum numina sancta,
corporis est sensus, vel cum res extera sese
insinuat, vel cum laedit quae in corpore natast
aut iuvat egregiens genitalis per Veneris res,
aut ex offensu cum turbant corpore in ipso
semina confunduntque inter se concita sensum;
ut si forte manu quamvis iam corporis ipse
tute tibi partem ferias atque experiare.
quapropter longe formas distare necessest
principiis, varios quae possint edere sensus.

it to shed tears or from their disgusting aspect look hideous and foul.
For every shape which gratifies the senses has been formed not without
a smoothness in its elements; but on the other hand whatever is painful
and harsh, has been produced not without some roughness of matter.
There are too some elements which are with justice thought to be nei-
ther smooth nor altogether hooked with barbed points, but rather to
have minute angles slightly projecting, such as can tickle rather than
hurt the senses; of which class tartar of wine is formed and the flavours
of elecampane. Again that hot fires and cold frost have fangs of a
dissimilar kind wherewith to pierce the senses, is proved to us by the
touch of each. For touch, touch, ye holy divinities of the gods, is feel-
ing of the body, either when an extraneous thing makes its way in, or
when a thing which is born in the body hurts it, or gives pleasure as
it issues forth by the birth-bestowing ways of Venus, or when from
some collision the seeds are disordered within the body and distract the
feeling by their mutual disturbance; as if haply you were yourself to
strike with the hand any part of the body you please and so make trial.
Wherefore the shapes of the first-beginnings must differ widely, since
they are able to give birth to different feelings.
Denique quae nobis durata ac spissa videntur,
haec magis hamatís inter sese esse necessest
et quasi ramosís alte compacta teneri.
in quo iam genere in primís adamantína saxa
prima acie constant ictus comtecmere sueta
et validi sillices ac duri robora ferri
aeraque quae claustrís restantia vociferantur.
illa quidem debent e levibus atque rutundis
esse magis, fluvido quae corpore liquida constant;
NAMQUE PAPAVERIS HAUSTUS ITEMST FACILIS QUOD AQUARUM
nec retinentur enim inter se glomeramina quaeque
et procursus item proclive volubilis exstat.
omnia postremo quae puncto tempore cernís
diffugere, ut fumum nebulae flammásque, necessest,
si minus omnibus sunt e levibus atque rutundís
at non esse tamen perplexis indupedita,
pungere uti possint corpus penetrareque laxa
nec tamen haerere inter se; quodcumque videmus
sensibús sic latum, facile ut cognoscere possí
non e perplexis sed acutís esse elementís.
sed quod amara vides eadem quae fluvída constant,
sudor uti marís est, minime mirabile habeto;
nam quod flúvidus est, e levibus atque rutundís

Again things which look hard and dense must consist of particles more
hooked together, and be held in union because compacted throughout
with branch-like elements. In this class first of all adamant rocks stand
in foremost line inured to despise blows, and stout blocks of basalt and
the strength of hard iron and brass bolts which cry aloud as they hold
fast to their staples. Those things which are liquid and of fluid body
ought to consist more of smooth and round elements; for the several
drops have no mutual cohesion and their onward course too has a ready
flow downwards. All things lastly which you see disperse themselves
in an instant, as smoke mists and flames, if they do not consist entirely
of smooth and round, must yet not be held fast by closely tangled ele-
ments, so that they may be able to pierce the body and enter into loose
substances, yet not stick together: thus you may easily know, that what-
ever we see in this way conveyed to the senses, consists not of tangled
but of pointed elements. Do not however hold it to be wonderful
that some things which are fluid you see to be likewise bitter, for in-
stance the sea's moisture: because it is fluid, it consists of smooth and
round particles, and many rough bodies mixed up with these produce
est, et *squalida multa creant* admixta doloris corpora; nec tamen haec retineri hamata necessum est; scilicet esse globosa tamen, cum squalida constent, provolvi simul ut possint et laedere sensus.

et quo mixta putes magis aspera levibus esse principiis, unde est Neptuni corpus acerbum, est ratio secernendi; seorsumque videndi umor dulcis, ubi per terras crebrius idem percolatur, ut in fovcam fluat ac mansuescat; linquit enim supera taetri primordia viri, aspera quom magis in terris haeresece possint.

Quod quoniam docui, pergam conectere rem quae ex hoc apta fidem ducat, primordia rerum finita variare figurarum ratione, quod si non ita sit, rursum iam semina quaedam esse infinito debentur corporis auctu, nam quoniam eadem una cuiusvis in brevitate corporis inter se multum variare figurae non possunt: fac enim minimis e partibus esse corpora prima tribus, vel paulo pluribus augue; nempe ubi eas partis unius corporis omnis, summa atque ima locans, transmutans dextera laevis, omnimodis expertus eris, quam quisque det ordo

pains; and yet they must not be hooked so as to hold together: you are to know that though rough, they are yet spherical, so that while they roll freely on, they may at the same time hurt the senses. And that you may more readily believe that with smooth are mixed rough first-beginnings from which Neptune's body is made bitter, there is a way of separating these, and of seeing apart how the fresh water, when it is often filtered through the earth, flows into a trench and sweetens; for it leaves above the first-beginnings of the nauseous saltiness, inasmuch as the rough particles can more readily stay behind in the earth.

And now that I have shewn this, I will go on to link to it a truth which depends on this and from this draws its proof: the first-beginnings of things have different shapes, but the number of shapes is finite. If this were not so, then once more it would follow that some seeds must be of infinite bulk of body. For since in one and the same small size of any first body you like the shapes cannot vary much from one another:—say for instance that first bodies consist of three least parts, or augment them by a few more; when to wit in all possible ways, by placing each in turn at the top and at the bottom, by making the right change places with the left, you shall have tried all those parts of one
formai speciem totius corporis eius, quod superest, si forte voles variare figuras, addendum partis alias erit, inde sequetur, adsimili ratione alias ut postulet ordo, si tu forte voles etiam variare figuras: ergo formarum novitatem corporis augmen subsequitur. quare non est ut credere possis esse infinitis distantia semina formis, ne quaedam cugas inmani maximitate esse, supra quod iam docui non posse probari. iam tibi barbaricae vestes Meliboeaque fulgens purpura Thessalico concharum tacta colore . . . . . . . . . . . . . . . . . . . aurea pavonum ridenti imbuta lepore saecla, novo rerum superata colore iacerent et contemptus odor smyrnae melliisque sapores, et cycnea mele Phoebeaque daedala chordis carmina consimili ratione oppressa silerent; namque aliis aliud praestantius exoreretur. cedere item retro possent in deteriores omnia sic partis, ut diximus in melioris; namque aliis aliud retro quoque taetrius esset naribus auribus atque oculis orisque sapori.

first body and found what manner of shape each different arrangement gives to the whole of that body, if after all this haply you shall wish still to vary the shapes, you will have to add other parts: it will next follow that for like reasons the arrangement will require other parts, if haply you shall wish still again to vary the shapes:—from all this it results that increase of bulk in the body follows upon newness of the shapes. Wherefore you cannot possibly believe that seeds have an infinite variety of forms, lest you force some to be of a monstrous hugeness, which as I have above shewn cannot be proved. Moreover I tell you barbaric robes and radiant Meliboean purple dipped in Thessalian dye of shells [and the hues which are displayed] by the golden brood of peacocks steeped in laughing beauty would all be thrown aside surpassed by some new colour of things; the smell of myrrh would be despised and the flavours of honey, and the melodies of the swan and Phoebean tunes set off by the varied play of strings would in like sort be suppressed and silenced; for something ever would arise more surpassing than the rest. All things likewise might fall back into worse states, even as we have said they might advance to better; for reversely too one thing would be more noisome than all other things to nostril ear and eye and taste.
quae quoniam non sunt, sed rebus reddita certa finis utrimque tenet summam, fateare necessest materiem quoque finitis differre figuris. denique ab ignibus ad gelidas iter usque pruinam finitum ab retroque pari ratione remensum ab extima enim calor ac frigus, mediique tepores interutraque iacent explentes ordine summam. ergo finita distant ratione creatam, ancipiti quoniam mucroni utrimque notantur, hinc flammis illinc rigidis infesta pruinam.

Quod quoniam docui, pergam conectere rem quae ex hoc apta fidem ducat, primordia rerum, inter se simili quae sunt perfecta figura, infinita cluer e tenet. etenim distantia cum sit formarum finita, necesse est quae similes sint esse infinitas aut summam materiam finitam constare, id quod non esse probavi versibus ostendens corpuscula materiam ex infinito summam rerum usque tenere, undique proteilo plagarum continuato. nam quod rara vides magis esse animalia quaedam fecundamque minus naturam cernis in illis,

Now since these things are not so, but a fixed limit has been assigned to things which bound their sum on each side, you must admit that matter also has a finite number of different shapes. Once more from summer fires to chill frosts a definite path is traced out and in like manner is again travelled back; for cold and heat lie on the outside, and moderate warmths midway between both, filling up in succession the sum. Therefore things produced differ by finite degrees, since on each side they are marked off by points, one at one, another at the other end, molested on the one band by flames, on the other by stiffening frosts.

And now that I have shewn this, I will go on to link to it a truth which depends on this and from this draws its proof: the first-beginnings of things which have a like shape one with the other, are infinite in number. For since the difference of forms is finite, those which are like must be infinite or the sum of matter will be finite, which I proved not to be the case, when I shewed in my verses that the minute bodies of matter from everlasting continually uphold the sum of things through an uninterrupted succession of blows on all sides. For though you see that some animals are rarer than others and discern a less fruitful nature in
at regione locoque aho terrisque remotis
multa licet genere esse in eo numerumque repleri;
sicut quadripedum cum primis esse videmus
in genere anguimanus elephantos, India quorum
milibus e multis valis munitur eburno,
ut penitus nequeat penetrari: tanta ferarum
vis est, quarum nos perpauca exempla videmus.
sed tamen id quoque uti concedam, quamlibet esto
unica res quaedam nativo corpore sola,
cui similis toto terrarum nulla sit orbi;
infinita tamen nisi erit vis materiai
unde ea progigni possit concepta, creari
non poterit, neque, quod superest, procrescere aliqua.
quippe etenim sumam hoc quoque uti finita per omne
corpora iactari unius genitalia rei,
unde ubi qua vi et quo pacto congressa coibunt
materiae tanto in pelago turbaque aliena?
non, ut opinor, habent rationem conciliandi;
sed quasi naufragis multisque coortis
disiectare solet magnum mare transtra guberna
antennas proram malos tonsasque natantis
per terrarum omnis oras fluitantia aplustra

them, yet in another quarter and spot and in distant lands there may be
many of that kind and the full tale may be made up; just as we see
that in the class of four-footed beasts snake-handed elephants are else-
where especially numerous; for India is so fenced about with an ivory
rampart made out of many thousands of these, that its inner parts can-
not be reached, so great is the quantity of brutes, of which we see but
very few samples. But yet though I should grant this point too: be
there even as you will some one thing sole in its kind existing alone
with a body that had birth, and let no other thing resemble it in the
whole world; yet unless there shall be an infinite supply of matter out
of which it may be conceived and brought into being, it cannot be pro-
duced, and, more than this it cannot have growth and food. For
though I should assume this point also that birth-giving bodies of some
one thing are tossed about in finite quantity throughout the universe,
whence, where, by what force and in what way shall they meet together
and combine in so vast a sea, such an alien medley of matter? They
have methinks no way of uniting; but even as when great and numerous
shipwrecks have occurred, the great sea is wont to tumble about banks
rudders yards prow masts and swimming oars, so that poop-fittings are
seen floating about along every shore and utter to mortals a warning to
try to shun the snares and violence and guile of the faithless sea, and
never at any time to trust to it, when the winning face of calm ocean
laughs treacherously; thus too if you shall once decide that certain first-
beginnings are finite, different currents of matter must scatter and
tumble then about through all time, so that they can never be brought
into union and combine, nor abide in that union nor grow up and
increase. But plain matter of fact shews that each of these results
plainly takes place, that things can be brought into being and when
begotten advance in growth. It is clear then that in any class you
like the first-beginnings of things are infinite out of which all supplies
are furnished.

Thus then neither can death-dealing motions keep the mastery always
nor entomb existence for evermore, nor on the other hand can the birth
and increase giving motions of things preserve things always after they are
born. Thus the war of first-beginnings waged from eternity is carried
on with dubious issue: now here now there the life-bringing elements
of things get the mastery and are o'ermastered in turn; with the funeral
wail is blended the cry which babies raise when they enter the borders
of light; and no night ever followed day nor morning night that heard not mingling with the sickly infant’s cries wailings the attendants on death and black funeral.

And herein it is proper you should keep under seal and guard, there consigned, in faithful memory this truth, that there is nothing whose nature is apparent to sense, which consists of one kind of first-beginnings; nothing which is not formed by a mixing of seed. And whenever a thing possesses in itself in a greater degree many powers and properties, in that measure it shews that there are in it the greatest number of different kinds and varied shapes of first-beginnings. First of all the earth has in her first bodies out of which springs rolling coolness along replenish without fail the boundless sea, she has bodies out of which fires rise up; for in many spots the earth’s crust is on fire and burns, though headstrong Aetna rages with fires of surpassing force. Then too she has bodies out of which she can raise for mankind goodly crops and joyous trees, out of which too she can supply to the mountain-ranging race of wild beasts rivers leaves and glad pastures. Wherefore she has alone been named great mother of gods and mother of beasts and parent of our body.
Of her the old and learned poets of the Greeks have sung, that [borne aloft on high-raised] seat in a chariot she drives a pair of lions, teaching that the great earth hangs in the expanse of air and that earth cannot rest on earth. To her chariot they have yoked wild-beasts, because a brood however savage ought to be tamed and softened by the kind offices of parents. They have encircled the top of her head with a mural crown, because fortified in choice positions she sustains towns; adorned with which emblem the image of the divine mother is carried now-a-days through wide lands in awe-inspiring state. Her different nations after old-established ritual term Idean mother, and give her for escort Phrygian bands, because they tell that from those lands corn first began to be produced throughout the world. They assign her galli, because they would shew by this type that they who have done violence to the divinity of the mother and have proved ungrateful to their parents, are to be deemed unworthy to bring a living offspring into the borders of light. Tight-stretched tambourines and hollow cymbals resound all round to the stroke of their open hands, and horns menace with hoarse-sounding music, and the hollow pipe stirs their minds in Phrygian mood. They carry weapons before them, emblems of furious
rage, meet to fill the thankless souls and godless breasts of the rabble
with terror for the divinity of the goddess. Therefore when first borne
in procession through great cities she nimbly enriches mortals with
a blessing not expressed in words, they strew all her path with brass
and silver presenting her with bounteous alms, and scatter over her
a snow-shower of roses, o’ershadowing the mother and her troops of
attendants. Here an armed band to whom the Greeks give the name of
Phrygian Curetes, in that it haply joins in the game of arms and springs
up in measure all dripping with blood, shaking with its nodding the
frightful crests upon the head, represents the Dictaean Curetes who, as
the story is, erst drowned in Crete that infant cry of Jove, when the
young band about the young babe in rapid dance arms in hand to
measured tread beat brass on brass, that Saturn might not get him
to consign to his devouring jaws and stab the mother to the heart with
a never-healing wound. Therefore they escort in arms the great mother,
either because they mean by this sign that the goddess preaches to men
to be willing with arms and valour to defend their country and be ready
to be a safeguard and an ornament to their parents. All which, well
and beautifully as it is set forth and told, is yet widely removed from
omnis enim per se divom natura necessest
inmortali aeo summa cum pace fruatatur
semota ab nostris rebus seiunctaque longe;
nam privata dolore omni, privata periclis,
ipsa suis pollens opibus, nil indiga nostri,
nec bene promeritis capitur neque tangitur ira.

hic siquis mare Neptunum Ceneremque vocare
constituit fruges et Bacchi nomine abuti
mavolt quam laticis proprium proferre vocamen,
concedamus ut hic terrarum dictitet orbem
esse deum matrem, dum vera re tamen ipse

religione animum turpi contingere parcat.

terra quidem vero caret omni tempore sensu,
et quia multarum potitur primordia rerum,
multa modis multis effert in lumina solis.

Saepe itaque ex uno tondentes gramina campo
lanigerae pecudes et equorum duellica proles
buceriaeque greges eodem sub tegmine caeli
ex unoque sitim sedantes flumine aquai
dissimili vivont specie retinentque parentum

naturam et mores generatim quaeque imitantur.
tanta est in quovis genere herbae materiai
dissimilis ratio, tanta est in flumine quoque.

ttrue reason. For the nature of gods must ever in itself of necessity
enjoy immortality together with supreme repose, far removed and with-
drawn from our concerns; for exempt from every pain, exempt from all
dangers, strong in its own resources, not wanting aught of us, it is
neither gained by favours nor moved by anger. And here if any one
thinks proper to call the sea Neptune and corn Ceres and chooses rather
to misuse the name of Bacchus than to utter the term that belongs to
that liquor, let us allow him to declare that the earth is mother of
the gods, if he only forbear in earnest to stain his mind with foul
religion. The earth however is at all time without feeling, and because it
receives into it the first-beginnings of many things, it brings them forth
in many ways into the light of the sun.

And so the wooly flocks and the martial breed of horses and horned
herds, though often cropping the grass from one field beneath the same
canopy of heaven and slaking their thirst from one stream of water, yet
have all their life a dissimilar appearance and retain the nature of their
parents and severally imitate their ways each after its kind: so great is
the diversity of matter in any kind of herbage, so great in every river.
hinc porro quamvis animantem ex omnibus unam ossa crur venae calor umor viscera nervi

670 constituint; quae sunt porro distantia longe, dissimili perfecta figura principiorum. tum porro quaecumque igni flammata cremantur, si nil praeterea, tamen haec in corpore condunt unde ignem iacere et lumen summittere possint

675 scintillasque agere ac late differe favillam. cetera consimili mentis ratione peragrans invenies igitur multarum semina rerum corpore celare et varias cohibere figuras. denique multa vides quibus et color et sapor una

680 reddita sunt cum odore. in privis pleraque dona haec igitur variis debent constare figuris; nidor enim penetrat qua fucus non it in artus, fucus item sorsum, sorsum sapor insinuatur sensibus; ut noscas privis differe figuris. 685 dissimiles igitur formae glomeramen in unum conveniunt et res permixto semine constant.

690 quin etiam passim nostris in versibus ipsis multa elementa vides multis communia verbis, cum tamen inter se versus ac verba necesse est

And hence too any one you please out of the whole number of living creatures is made up of bones blood veins heat moisture flesh sinews; and these things again differ widely from one another and are composed of elements of dissimilar shape. Furthermore whatever things are set on fire and burned, store up in their body, if nothing else, at least those particles, out of which they may radiate fire and send out light and make sparks fly and scatter embers all about. If you will go over all other things by a like process of reasoning, you will thus find that they conceal in their body the seeds of many things and contain elements of various shapes. Again you see many things to which are given at once both colour and taste together with smell. These properties, as there are several of them in each thing, must therefore be made up of elements of different shapes; for smell enters in where colour passes not into the frame, colour too in one way, taste in another makes its way into the senses; so that you know they differ in the particular shapes of their elements. Therefore unlike forms unite into one mass and things are made up of a mixture of seed. Throughout moreover these very verses of ours you see many elements common to many words, though yet you must admit that the verses and words one with another are different and composed of different elements; not that but few
confiteare alia ex aliis constare elementis; non quo multa parum communis littera currat aut nulla inter se duo sint ex omnibus isdem, sed quia non volgo paria omnibus omnia constant. sic alii in rebus item communia multa multarum rerum cum sint primordia, verum dissimili tamen inter se consistere summa possunt; ut merito ex aliiis constare feratur humanum genus et fruges arbustaque laeta.

Nec tamen omnimodis conecti posse putandum est omnia; nam volgo fieri portenta videres, semiferas hominum species existere et altos interdum ramos egigni corpore vivo, multaque conecti terrestria membra marinis, tum flammam taetro spirantis ore Chimaeras pascere naturam per terras omniparentis. quorum nil fieri manifestum est, omnia quando seminibus certis certa genetrice creatae conservare genus crescentia posse videmus. scilicet id certa fieri ratione necessust. nam sua cuique cibis ex omnibus intus in artus corpora discedunt conexaque convenientis efficiunt motus; at contra aliena videmus letters which are in common run through them or that no two words or verses one with another are made up entirely of the same, but because as a rule they do not all resemble one the other. Thus also though in other things there are many first-beginnings common to many things, yet they make up one with the other a quite dissimilar whole; so that men and corn and joyous trees may fairly be said to consist of different elements.

And yet we are not to suppose that all things can be joined together in all ways; for then you would see prodigies produced on all hands, forms springing up half man half beast and sometimes tall boughs sprouting from the living body, and many limbs of land-creatures joined with those of sea-animals, nature too throughout the all-bearing lands feeding chimeras which breathed flames from hideous mouth. It is plain however that nothing of the sort is done, since we see that all things produced from fixed seeds and a fixed mother can in growing preserve the marks of their kind. This you are to know must take place after a fixed law. For the particles suitable for each thing from all kinds of food when inside the body pass into the frame and joining on produce the appropriate motions; but on the other hand we see
reicere in terras naturam, multaque caecis
corporibus fugiunt e corpore percita plagis,
quae neque conecti quoquam potuere neque intus
vitalis motus consentire atque imitari.
sed ne forte putes animalia sola teneri
legibus hisce, ea res ratio disterminat omnis.
nam veluti tota natura dissimiles sunt
inter se genitae res quaeque, ita quamque necessest
dissimili constare figura principiorum;
on quo multa parum simili sint praedita forma,
sed quia non volgo paria omnibus omnia constant.
semina cum porro distent, differre necessust
intervalla vias conexus pondera plagas
concursus motus, quae non animalia solum
corpora seiungunt, sed terras ac mare totum
secernunt caelumque a terris omne retentant.

Nunc age dicta meo dulci quaesita labore
percipe, ne forte haec albis ex alba rearis
principiis esse, ante oculos quae candida cernis,
ae ea quae nigrant nigro de semine nata;
nive alium quemvis quae sunt inbuta colorem,
propterea gerere hunc credas, quod materiai

nature throw out on the earth those that are alien, and many things
with their unseen bodies fly out of the body impelled by blows: those
I mean which have not been able to join on to any part nor when
inside to feel in unison with and adopt the vital motions. But lest you
haply suppose that living things alone are bound by these conditions,
such a law keeps all things within their limits. For even as things
begotten are in their whole nature all unlike one the other, thus each
must consist of first-beginnings of unlike shape; not that but few are
possessed of a like form, but because as a rule all do not resemble one
another. Again since the seeds differ, there must be a difference in the
spaces between, the passages, the connexions, the weights, the blows, the
clashings, the motions; all which not only disjoin living bodies, but
hold apart the lands and the whole sea, and keep the whole heaven
away from the earth.

Now mark, and apprehend precepts amassed by my welcome toil, lest
haply you deem that those things which you see with your eyes to be
bright, because white are formed of white principles, or that the things
which are black are born from black seed; or that things which are
steeped in any other colour, bear that colour because the bodies of
corpora consimili sint eius tincta colore.
nullus enim color est omnino materiai
corporibus, neque par rebus neque denique dispar.
in quae corpora si nullus tibi forte videtur
posse animi iniecia fieri, procul avius erras.
nam cum caecigeni, solis qui lumina numquam
dispexere, tamen cognoscant corpora tactu,
scire licet nostrae quoque menti corpora posse
vorti in notitiam nullo circumlita fuco.
denique nos ipsi caecis quaecumque tenebris
tangimus, haud ullo sentimus tincta colore.
quo quoniam vinco fieri, nunc esse docebo
ex ineunte aevo nullo coniuncta colore.
743 omnis enim color omnino mutatur in omnis;
quod facere haud ullo debent primordia pacto;
immutabile enim quidam superare necesest,
ze res ad nilum redigantur funditus omnes.
nam quodcumque suis mutatum finibus exit,
continuo hoc mors est illius quod fuit ante.
proinde colore cave contingas semina rerum,
ze tibi res redeant ad nilum funditus omnes.
Praeterea si nulla coloris principis est
reddita natura et variis sunt praedita formis,
matter are dyed with a colour like to it. For there is no colour at all
to the bodies of matter, either like to the things or unlike. But if
haply it seems to you that no impression of the mind can throw itself
into these bodies, you wander far astray. For since men born blind
who have never beheld the light of the sun, do yet know bodies
by touch, you are to know that bodies can fall under the ken of our
mind too, though stained with no colour. Again whatever things we
ourselves touch in the thick darkness, we do not perceive to be dyed with
any colour. And since I prove that this is the case, I will now shew
that there are things linked to no colour from the beginning of time.
Well any colour without any exception changes into any other; and
this first-beginnings ought in no wise to do: something unchangeable
must remain over, that all things be not utterly reduced to nothing.
For whenever a thing changes and quits its proper limits, at once
this change of state is the death of that which was before. Therefore
mind not to dye with colour the seeds of things, that you may not have
all things altogether returning to nothing.

Moreover if no quality of colour is assigned to first-beginnings and
they are yet possessed of varied shapes out of which they beget colours
e quibus omne genus gignunt variantque colores
propter ea, magni quod refert semina quaeque
cum quibus et quali positura contineantur
et quos inter se dunt motus accipiantque,
perfacile extemplo rationem reddere possis
cur ea quae nigro fuerint paulo ante colore,
marmoreo fieri possint candore repente;
ut mare, cum magni commorunt aequora venti,
vertitur in canos candeunti marmore fluctus;
dicere enim possis, nigrum quod saepe videmus,
materies ubi permixta est illius et ordo
principiis mutatus et addita demptaque quaeque, 760
continuo id fieri ut candens videatur et album.
quod si caeruleis constarent aequora ponti
seminibus, nullo possent albsere pacto;
nam quocumque modo perturbes caerula quae sint,
umquam in marmoreum possunt migrare colorem. 765
sin alio atque alio sunt semina tincta colore
quae maris efficiunt unum purumque nitorem,
ut saepe ex aliis formis variisque figuris
efficitur quiddam quadratum unaque figura,
conveniebat, ut in quadrato cernimus esse
770
dissimiles formas, ita cernere in aequore ponti
of every kind and change them about by reason that it makes a great
difference with what other seeds and in what position the seeds are
severally held in union and what motions they mutually impart and
receive, you can explain at once with the greatest ease why those things
which just before were of a black colour, may become all at once of
marble whiteness; as the sea, when mighty winds have stirred up its
waters, is changed into white waves of the brightness of marble: you
may say that when the matter of that which we often see to be black,
has been mixed up anew and the arrangement of its first-beginnings has
been changed and some have been added and some been taken away; the
immediate result is that it appears bright and white. But if the waters
of the sea consisted of azure seeds, they could in no wise become white;
for however much you jumble together seeds which are azure, they can
never pass into a marble colour. But if the seeds which make up the
one unmixed brightness of the sea are dyed some with one, some with
other colours, just as often out of different forms and varied shapes
something square and of a uniform figure is made up, in that case it
were natural that as we see unlike forms contained in the square, so we
should see in the water of the sea or in any other one and unmixed
brightness colours widely unlike and different to one another. Moreover the unlike figures do not in the least hinder or prevent the whole figure from being a square on the outside; but the various colours of things are a let and hindrance to the whole things being of a uniform brightness.

Then too the reason which leads and draws us on sometimes to assign colours to the first-beginnings of things, falls to the ground, since white things are not produced from white, nor those which are black from black, but out of things of various colours. For white things will much more readily rise up and be born from no colour than from a white or any other colour which thwarts and opposes it. Moreover since colours cannot exist without light and first-beginnings of things do not come out into the light, you may be sure they are clothed with no colour. For what colour can there be in total darkness? may it changes in the light itself according as its brightness comes from a straight or slanting stroke of light. After this fashion the down which encircles and crowns the nape and throat of doves shews itself in the sun: at one time it is ruddy with the hue of bright pyropus; at another it appears by a certain way of looking at it to
inter curialium viridis miscere zmaragdos. caudaque pavonis, larga cum luce repleta est, consimili mutat ratione obversa colores; qui quoniam quodam gignuntur luminis ictu, scire licet, sine eo fieri non posse putandum est. et quoniam plagae quoddam genus excipit in se pupula, cum sentire colorem dicitur album, atque aliud porro, nigrum cum et cetera sentit, nec refert ea quae tangas quo forte colore praedita sint, verum quali magis apta figura, scire licet nil principiis opus esse colores, sed variis formis variantes edere tactus.

Praeterea quoniam non certis certa figuris est natura coloris et omnia principiorum formamenta queunt in quovis esse nitore, cur ea quae constant ex illis non pariter sunt omne genus perfusa coloribus in genere omni? conveniebat enim corvos quoque saepe volantis ex albis album pinnis iactare colorem, et nigrors fieri negro de semine cycnos aut alio quovis uno varioque colore. Quin etiam quanto in partes res quaeque minutas

blend with coral-red green emeralds. The tail of the peacock when it is saturated with abundant light, changes in like fashion its colours as it faces the sun. And since these colours are begotten by a certain stroke of light, sure enough you must believe that they cannot be produced without it. And since the pupil receives into it a kind of blow, when it is said to perceive a white colour, and then another, when it perceives black or any other colour, and since it is of no moment with what colour the things which you touch are provided, but rather with what sort of shape they are furnished, you are to know that first-beginnings have no need of colours, but give forth sensations of touch varying according to their various shapes.

Moreover since no particular kind of colour is assigned to particular shapes and every configuration of first-beginnings can exist in any colour, why on a like principle are not the things which are formed out of them in every kind o'erlaid with colours of every kind? For then it were natural that crows too in flying should display a white colour from white wings and that swans should come to be black from a black seed, or of any other colour you please, uniform or diversified.

Again the more minute the parts are into which anything is rent,
the more you may perceive the colours fade away by little and little and become extinct; as for instance if a piece of purple is torn into small shreds: when it has been plucked into separate threads, the purple and the scarlet far the most brilliant of colours are quite effaced; from which you may infer that the shreds part with all their colour before they come back to the seeds of things.

Lastly since you admit that all bodies do not utter a voice nor emit a smell, for this reason you do not assign to all sounds and smells. So also since we cannot perceive all things with the eye, you are to know that some things are as much denuded of colour as others are without smell and devoid of sound, and that the keen-discerning mind can just as well apprehend these things as it can take note of things which are destitute of other qualities.

But lest haply you suppose that first bodies remain stripped of colour alone, they are also wholly devoid of warmth and cold and violent heat, and are judged to be barren of sound and drained of moisture, and emit from their body no scent of their own. Just as when you set about preparing the balmy liquid of sweet marjoram and myrrh and the flower of spikenard which gives forth to the nostrils a
cum facere instituas, cum primis quaeerere par est, quoad licet ac possis reperire, inolentis olivi naturam,nullam quae mittat naribus auram, quam minime ut possit mixtos in corpore odores concoctosque suo contractans perdere viro, propter eandem rem debent primordia rerum non adhibere suum gignundis rebus odorem nec sonitum, quoniam nil ab se mittere possunt, nec simili ratione saporem denique quemquam nec frigus neque item calidum tepidumque vaporem, cetera; quae cum ita sunt tamen ut mortalia constent, molli lenta, fragosa putri, cava corpore raro, omnia sint a principiis seiuncta necessest, inmortalia si volumus subiungere rebus fundamenta quibus nitatur summa salutis; ne tibi res redeant ad nilum funditus omnes. Nunc ea quae sentire videmus cumque necessest ex insensilibus tamen omnia confiteare principiiis constare. neque id manufesta refutant nec contra pugnant, in promptu cognita quae sunt, sed magis ipsa manu ducunt et credere cogunt ex insensilibus, quod dico, animalia gigni.

scent like nectar, before all you should seek, so far as you may and can find it, the substance of scentless oil, such as gives out no perfume to the nostrils, that it may as little as possible meddle with and destroy by its own pungency the odours mixed in its body and boiled up with it; for the same reason the first-beginnings of things must not bring to the begetting of things a smell or sound of their own, since they cannot discharge anything from themselves, and for the same reason no taste either nor cold nor any heat moderate or violent, and the like. For as these things, be they what they may, are still liable to death, whether pliant with a soft, brittle with a crumbling, or hollow with a porous body, they must all be withdrawn from the first-beginnings, if we wish to assign to things imperishable foundations for the whole sum of existence to rest upon: that you may not have things returning altogether to nothing.

To come to another point, whatever things we perceive to have sense, you must yet admit to be all composed of senseless first-beginnings: manifest tokens which are open to all to apprehend, so far from refuting or contradicting, do rather themselves take us by the hand and constrain us to believe that, as I say, living things are begotten
quippe videre licet vivos existere vermes
stercore de taetro, putorem cum sibi nacta est
intempestivis ex imbrisbus umida tellus;
praeterea cunctas itidem res vertere sese.
vertunt se fluvii frondes et pabula laeta
in pecudes, vertunt pecudes in corpora nostra
naturam, et nostro de corpore saepe sererum
augescunt vires et corpora pennipotentium.
ergo omnes natura cibos in corpora viva
vertit et hinc sensus animantum procreat omnes.
non alia longe ratione adque arida ligna
explicat in flammab et in ignis omnia versat.
iamne vides igitur magni primordia rerum
referre in quali sint ordine quaeque locata
et commixta quibus dent motus accipiantque?
Tum porro quid id est, animum quod percutit, ipsum
quod movet et varios sensus expromere cogit,
ex insensilibus ne credas sensile gigni?
nimirum lapides et ligna et terra quod una
mixta tamen nequeunt vitalem reddere sensum.
illud in his igitur rebus meminisse decebit,
on ex omnibus omnino, quaecumque creant res,
sensile et extemplo me gigni dicere sensus,
sed magni referre ea primum quantula constent,
sensile quae faciunt, et qua sint praedita forma,
motibus ordinibus posituris denique quae sint.
quarum nil rerum in lignis glaebisque videamus;
et tamen haec, cum sunt quasi putrefacta per imbres,
vermiculos pariunt, quia corpora materiai
antiquis ex ordinibus permota nova re
conciliantur ita ut debent animalia gigni.
deinde ea, sensilibus qui sensile posse creari
constituunt porro ex aliis, sentire suëta
mollia iam faciunt. nam sensus iungitur omnis
visceribus nervis venis, quae cuique videmus
mollia mortali consistere corpore creta.

sed tamen esto iam posse haec aeterna manere:
nempe tamen debent aut sensum partis habere
aut simili totis animalibus esse putari.
at nequeant per se partes sentire necesse est;
namque alio sensus membrorum respicit omnis,
nec manus a nobis potis est secreta neque ulla
corpus omnino sensum pars sola tenere.
linquitur ut totis animantibus adsimulentur.
sic itidem quae sentimus sentire necesest,
ception which produce things; but that it is of great moment first how
minute the particles are which make up the sensible thing and then
what shape they possess and what in short they are in their motions
arrangements positions. None of which requisites we find in woods and
cloths; and yet even these things, when they have so to speak become
rotten through the rains, bring forth worms, because bodies of matter
driven from their ancient arrangements by a new condition are com-
bined in the same way as when living creatures are to be begotten.
Next they who hold that the sensible can be produced anew out of other
sensible things, in that case suppose those things, accustomed thus to
have sense, to be soft; for all sense is bound up with flesh sinews
veins; which in everything we see to be soft and formed of a mortal
body. But even suppose that these things can remain eternal: they
must yet I presume either have the sense of some part or else be
supposed to possess a sense similar to the entire living creatures. But
the parts cannot possibly have sense by themselves alone; for all sense
of the different members has reference to something else; nor can
the hand when severed from us nor any other part of the body whatever
by itself maintain sensation. It remains to assume that they resemble
the entire living creatures. In this case it is necessary that they should
feel the things which we feel in the same way as we do, in order that they may be able on all hands to work in concert with the vital sense. How then can they be called first-beginnings of things and shun the paths of death, seeing that they are living things, and that living things are one and the same with mortal things? Nay granting they could do this, yet by their meeting and union they will make nothing but a jumble and medley of living things; just you are to know as men cattle and wild-beasts would be unable to beget any other thing by all their mixing with one another. But if haply they lose from their body their own sense and adopt another, what use to assign what is again withdrawn? moreover, the instance to which we had before recourse, inasmuch as we see the eggs of fowls change into living chicks and worms burst forth, when putridity has seized on the earth after excessive rains, you are to know that sensations can be begotten out of no-sensations.

But if haply any one shall say that sense so far may arise from no-sensation by a process of change, or because it is brought forth by a kind of birth, it will be enough to make plain and to prove to him that no birth takes place until a union of elements has first been effected, and that nothing changes without such a process of uniting.
senses cannot exist in any body before the nature itself of the living things has been begotten, because sure enough the matter remains scattered about in air rivers earth and things produced from earth, and has not met together and combined in appropriate fashion the vital motions by which the all-discerning senses are kindled into action in each living thing.

Again a blow more severe than its nature can endure, prostrates at once any living thing and goes on to stun all the senses of body and mind. For the positions of the first-beginnings are broken up and the vital motions entirely stopped, until the matter, disordered by the shock through the whole frame, unties from the body the vital fastenings of the soul and scatters it abroad and forces it out through all the pores. For what more can we suppose the infliction of a blow can do, than shake from their place and break up the union of the several elements? Often too when the blow is inflicted with less violence the remaining vital motions are wont to prevail, to prevail I say and still the huge disorders caused by the blow and recall each part into its proper channels and shake off the motion of death now reigning as it were paramount in the body and kindle afresh the almost lost senses.
nam qua re potius leti iam limine ab ipso
ad vitam possit collecta mente reverti,
quam quo decursum prope iam siet ire et abire?

Praeterea quoniam dolor est ubi materiai
 corpora vi quadam per viscera viva per artus
 sollicitata suis trepidant in sedibus intus,
inque locum quando remigrant, fit blanda voluptas,
scire licet nullo primordia posse dolore
temptari nullamque voluptatem capere ex se;
quandoquidem non sunt ex ullis principiorum
corporibus, quorum motus novitate laborent
aut aliquem fructum capiant dulcedinis almae.
haut igitur debent esse ullo praedita sensu.

Denique uti possint sentire animalia quaeque,
principiis si iam est sensus tribuendus eorum,
quid, genus humanum proprtitim de quibus factumst?
scilicet et risu tremulo concussa cachinant
et lacrimis spargunt rorantibus ora genasque
multaque de rerum mixtura dicere callent
et sibi proporro quae sint primordia quae rurunt;
quandoquidem totis mortalibus adsumulata
ipsa quoque ex aliis debent constare elementis,

For in what other way should the thing be able to gather together its
powers of mind and come back to life from the very threshold of death
rather than pass on to the goal to which it had almost run and so pass
away?

Again since there is pain when the bodies of matter are disordered by
any force throughout the living flesh and frame and quake in their seats
within, and as when they travel back into their place, a soothing pleasure
ensues, you are to know that first-beginnings can be assailed by no
pain and can derive no pleasure from themselves; since they are not
formed of any bodies of first-beginnings, so as to be distressed by any
novelty in their motions or derive from it any fruit of fostering delight;
and therefore they must not be possessed of any sense.

Again if in order that living creatures may severally have sense,
sense is to be assigned to their first-beginnings as well, what are we to say
of those of which mankind is specifically made? sure enough they burst
into fits of shaking laughter and sprinkle with dewy tears face and
cheeks and have the cunning to speak at length on the nature of things
and enquire next what their own first-beginnings are; since like in their
natures to the entire mortals they must in their turn be formed out of
other elements, then these others out of others, so that you can venture
inde alia ex aliis, nusquam consistere ut ausis: quippe sequar, quodcumque loqui ridereque dices et sapere, ex aliis eadem haec facientibus ut sit. quod si delira haec furiosaque cernimus esse et ridere potest non ex ridentibus' factus et sapere et doctis rationem reddere dictis non ex seminibus sapientibus atque disertis, qui minus esse queant ea quae sentire videmus seminibus permixta carentibus undique sensu? 

Denique caelesti sumus omnes semine oriundi; omnibus ille idem pater est, unde alma liquentis umoris guttas mater cum terra recepit, feta parit nitidas fruges arbustaque laeta et genus humanum, parit omnia saecla ferarum, pabula cum praebet quibus omnes corpora pascunt et dulcem ducunt vitam prolemque propagant; quapropter merito maternum nomen adepta est. cedit item retro, de terra quod fuit ante, in terras, et quod missumst ex aetheris oris, id rursum caeli rellatum templa receptant. nec sic interemit mors res ut materiai corpora conficiat, sed coetum dissupat ollis, 

nowhere to come to a stop: yes whatever you shall say speaks and laughs and thinks, I will press you with the argument that it is formed of other things performing these same acts. But if we see these notions to be sheer folly and madness, and a man may laugh though not made of laughing things, and think and reason in learned language though not formed of thoughtful and eloquent seeds, why cannot the things which we see to have sense be made up of a mixture of things altogether devoid of sense?

Again we are all sprung from a heavenly seed, all have that same father, by whom mother earth the giver of increase, when she has taken in from him liquid drops of moisture, conceives and bears goodly crops and joyous trees and the race of man, bears all kinds of brute beasts, in that she supplies food with which all feed their bodies and lead a pleasant life and continue their race; wherefore with good cause she has gotten the name of mother. That also which before was from the earth, passes back into the earth, and that which was sent from the borders of ether, is carried back and taken in again by the quarters of heaven. Death does not extinguish things in such a way as to destroy the bodies of matter, but only breaks up the union amongst them, and then
joins anew the different elements with others; and thus it comes to pass that all things change their shapes and alter their colours and receive sensations and in a moment yield them up; so that from all this you may know it matters much with what others and in what position the same first-beginnings of things are held in union and what motions they do mutually impart and receive, and you must not suppose that that which we see floating about on the surface of things and now born, then at once perishing, can be a property inherent in everlasting first bodies. Moreover in our verses themselves it matters much with what other elements and in what kind of order the several elements are placed. If not all, yet by far the greatest number are alike; but the totals composed of them are made to differ by the position of these elements. Thus in actual things as well when the clashings motions arrangement position shapes of matter change about, the things also must change.

Apply now, we entreat, your mind to true reason. For a new question struggles earnestly to gain your ears, a new aspect of things to display itself. But there is nothing so easy as not to be at first more difficult to believe than afterwards; and nothing too so great, so marvel-
quod non paulatim minuant mirarier omnes.
suspicito caeli clarum purumque colorem,
quaeque in se cohibet, palantia sidera passim,
lunamque et solis praeclara luce nitorem;
omnia quae nunc si primum mortalibus essent,
ex improviso si nunc obiecta repente,
quid magis his rebus poterat mirabile dici
aut minus ante quod auderent fore credere gentes?
nil, ut opinor: ita haec species miranda fuisset.
quam tibi iam nemo, fessus satiate videndi,
suspicere in caeli dignatur lucida templam!
expuere quaeroptrter novitate exterritus ipsa
et latere ex utroque supra spterque per omne
nulla est finis; uti docui, res ipsaque per se

lous, that all do not gradually lessen their admiration of it. Look up at
the bright and unsullied hue of heaven and the stars which it holds
within it, wandering all about, and the moon and the sun’s light of
dazzling brilliancy: if all these things were now for the first time, if
I say they were now suddenly presented to mortals beyond all expecta-
tion, what could have been named that would be more marvellous than
these things, or that nations beforehand would less venture to believe
could be? nothing, methinks: so wondrous strange had been this
sight. Yet how little, you know, wearied as all are to satiety with
seeing, any one now cares to look up into heaven’s glittering quarters!
Cease therefore to be dismayed by the mere novelty and so to reject
reason from your mind with loathing: weigh the questions rather with
keen judgment and if they seem to you to be true, surrender, or if the
thing is false, gird yourself to the encounter. For since the sum of
space is unlimited outside beyond these walls of the world, the mind
seeks to apprehend what there is yonder there, to which the spirit ever
yearns to look forward, and to which the mind’s immission reaches in free
and unembarrassed flight.

In the first place we see that round in all directions, about above
and underneath, throughout the universe there is no bound, as I have
vociferatur, et elucet natura profundii.
nullo iam pacto veri simile esse putandumst,
undique cum vorsum spatum vacet infinitum
seminaque innumero numero summaque profonda
multimodis volitent aeterno percita motu,
hunc unum terrarum orbem caelumque creatum,
nihil agere illa foris tot corpora materiai;
cum praesertim hic sit natura factus, et ipsa
sponte sua forte offensando semina rerum
multimodis temere incassum frustraque coacta
tandem coluerint ea quae coniecta repente
magnarum rerum fierent exordia semper,
illam terrae et caeli generisque animantum.
quare etiam atque etiam talis fateare necesse est
esse alios alibi congressus materiai,
qualis hic est, avido complexu quem tenet aether.
Praeterea cum materies est multa parata,
cum locus est praesto nec res nec causa moratur
ulla, geri debent nimirum et confieri res.
nunc et seminibus si tanta est copia quantam
enumerare aetas animantium non queat omnis,
visque eadem et natura manet quae semina rerum
shewn and as the thing of itself proclaims with loud voice and as clearly
shines out in the nature of bottomless space. In no wise then can it be
demed probable, when space yawns illimitable towards all points and
seeds in number numberless and sum unfathomable fly about in manifold
ways driven on in ceaseless motion, that this single earth and heaven
have been brought into being; that those bodies of matter so many in
number do nothing outside them; the more so that this world has been
made by nature, and the seeds of things chancing spontaneously to clash,
after being brought together in manifold wise without purpose, without
foresight, without result, have at last combined in such masses as, sud-
denly thrown together, became on each occasion the rudiments of great
things of earth sea and heaven and the race of living things. Wherefore
again and again I say you must admit that there are elsewhere other
combinations of matter like to this which ether holds in its greedy
grasp.

Again when much matter is at hand, when room is there and there
is no thing, no cause to hinder, things sure enough must go on and
be completed. Well then if on the one hand there is so great a store of
seeds as the whole life of living creatures cannot reckon up, and if the
same force and nature abide in them and have the power to throw the
conicere in loca quaegque quat simili ratione atque hoc sunt coniecta, necesse est confiteare esse alios aliis terrarum in partibus orbis et varias hominum gentis et saecla ferarum.

Huc accedit ut in summa res nulla sit una, unica quae gignatur et unica solaque crescat, quin aliquoiu' siet saecli permultaque eodem sint genere. in primis animalibus, inclute Memmi, invenies sic montivagum genus esse ferarum, sic hominum genitam prolem, sic denique mutas squamigerum pecudes et corpora cuncta volantum. quapropter caelum simili ratione fatendumst terramque et solam lunam mare, cetera quae sunt, non esse unica, sed numero magis innumerali; quandoquidem vitae depactus terminus alte tam manet haec et tam nativo corpore constant, quam genus omne quod hic generatimst rebus abundans.

Quae bene cognita si teneas, natura videtur libera continuo dominis privata superbis ipsa sua per se sponte omnia dis agere expers, nam pro sancta deum tranquilla pectora pace quae placidum degunt aevom vitamque serenam, seeds of things together into their several places in the same way as they are thrown together into our world, you must admit that in other parts of space there are other earths and various races of men and kinds of wild beasts.

Moreover in the sum of all there is no one thing which is begotten single in its kind and grows up single and sole of its kind; but a thing always belongs to some class and there are many other things in the same kind. First in the case of living things, most noble Memmius, you will find that in this sort has been begotten the mountain-ranging race of wild beasts, in this sort the breed of men, in this sort too the mute shoals of scaly creatures and all bodies of fowls. Wherefore on a like principle you must admit that earth and sun moon sea and all things else that are, are not single in their kind, but rather of a number past numbering; since the deep-set boundary-mark of life just as much awaits these and they are just as much of a body that had birth, as any class of things which here on earth abounds in samples of its kind.

If you well apprehend and keep in mind these things, nature free at once and rid of her haughty lords is seen to do all things spontaneously of herself without the meddling of the gods. For I appeal to the holy breasts of the gods who in tranquil peace pass a calm time and an un-
quis regere immensi summam, quis habere profundi indu manu validas potis est moderanter habenas, quis pariter caelos omnis convertere et omnis ignibus aetheris terras suffire feracis, omnibus inve locis esse omni tempore praesto, nubibus ut tenebras faciat caelique serena concutiat sonitu, tum fulmina mittat et aedis saepe suas disturbet et in deserta recedens saeviat exercens telum quod saepe nocentes praeterit examinatque indigos inque merentes?

Multaque post mundi tempus genitale diemque primigenum maris et terrae solisque coortum addita corpora sunt extrinsecus, addita circum semina quae magnum iaculando contulit omne; unde mare et terrae possent augescere et unde appareret spatium caeli domus altaque tecta tollerat a terris procul et consurgeret aer.

nam sua cuique locis ex omnibus omnia plagis corpora distribuuntur et ad sua saecla recedunt, umor ad umorem, terreno corpore terra crescit et ignem ignes procudunt aetheraque donique ad extremam crescendi perfica finem

ruffled existence, who can rule the sun, who hold in his hand with controlling force the strong reins of the immeasurable deep? who can at once make all the different heavens to roll and warm with ethereal fires all the fruitful earths, or be present in all places at all times, to bring darkness with clouds and shake with noise the heaven’s serene expanse, to hurl lightnings and often throw down his own temples and withdrawing into the deserts there to spend his rage in practising his bolt which often passes the guilty by and strikes dead the innocent and unoffending?

And since the birth-time of the world and first day of being to sea and earth and the formation of the sun many bodies have been added from without, many seeds added all round, which the great universe in tossing to and fro has contributed; that from them the sea and lands might increase and from them heaven’s mansion might enlarge its expanse and raise its high vaults far above earth, and that air might rise up around. For all bodies from all quarters are assigned by blows each to its appropriate thing and all withdraw to their proper classes; moisture passes to moisture, from an earthy body earth increases and fires forge fires and ether ether, until nature parent of things with finishing hand has brought all things on to their utmost limit of growth.
omnia perduxit rerum natura creatrix;
ut fit ubi nilo iam plus est quod datur intra
vitalis venas quam quod fluit adque recedit.
omnibus hic aetas debet consistere rebus,
hic natura sui refrenat viribus auctum.
nam quaecumque vides hilaro grandescere adaeuctu
paulatimque gradus aetatis scandere adultae,
plura sibi adsumunt quam de se corpora mittunt,
dum facile in venas cibus omnis inditur et dum
non ita sunt late dispessa ut multa remittant
et plus dispendi faciant quam vescitur aetas.
nam certe fluere adque recedere corpora rebus
multa manus dandum est; sed plura accedere debent,
donc alescendi summum tetigere cacumen.
inde minuratim vires et robur adulthood
frangit et in partem peiorem liquitur aetas.
quippe etenim quanto est res amplior, augmine adempto,
et quo latior est, in cunctas undique partis
plura modo dispargit et ab se corpora mittit,
nec facile in venas cibus omnis diditur ei
nec satis est proquam largos exaestuat aestus,
unde queat tantum suboriri ac subpeditare.
omnia debet enim cibus integrare novando

And this comes to pass when that which is infused into the life-arteries
is no more than that which ebbs from them and withdraws: at this
point the life-growth in all things must stop, at this point nature
by her powers checks further increase. For whatever things you see
grow in size with joyous increase and mount by successive steps to
mature age, take to themselves more bodies than they discharge from
themselves, while food is readily infused into all the arteries and the
things are not so widely spread out as to throw off many particles and
occasion more waste than their age can take in as nourishment. For no
doubt it must be conceded that many bodies ebb away and withdraw
from things; but still more must join them, until they have touched the
utmost point of growth. Then piece by piece age breaks their powers and
matured strength and wastes away on the side of decay. For the larger
a thing is and the wider, as soon as its growth is stopped, at once it
sheds abroad and discharges from it more bodies in all directions round;
and its food is not readily transmitted into all its arteries and is not
enough, in proportion to the copious exhalations which the thing throws
off, to enable a like amount to rise up and be supplied. For food must
et fulcire cibus, cibus omnia sustentare, nequiquam, quoniam nec venae perpetiuntur quod satis est neque quantum opus est natura ministrat.  
1139 itire igitur pereunt, cum rarefacta fluendo sunt et cum externis succumbent omnia plagis, quandoquidem grandi cibus aevi denique defit nec tuidantia rem cessant extrinsecus  ullam corpora conficere et plagis infesta domare. sic igitur magni quoque circum moenia mundi expugnata dabunt labem putrisque ruinas.

1145 iamque adeo fracta est aetas effetaque tellus vix animalia parva creat quae cuncta creavit saecia deditque ferarum ingentia corpora partu. haud, ut opinor, enim mortalitqua aecia superne aurea de caelo desinit funis in arva nec mare nec fluctus plangentis saxa crearunt, sed genuit tellus eadem quae nunc alit ex se. praeterea nitidas fruges vinetaque laeta sponte sua primum mortalibus ipsa creavit, ipsa dedit dulcis fetus et fabula laeta; quae nunc vix nostro grandescunt aucta labore, conterimusque boves et viris agricolarum, conficimus ferrum vix arvis suppediati:

keep all things entire by renewing them, food must uphold, food sustain all things: all in vain, since the arteries refuse to hold what is sufficient, and nature does not furnish the needful amount. With good reason therefore all things perish, when they have been rarefied by the ebb of particles and succumb to blows from without, since food sooner or later fails advanced age, and bodies never cease to destroy a thing by thumping it from without and to overpower it by aggressive blows. In this way then the walls too of the great world around shall be stormed and fall to decay and crumbling ruin. Yes and even now the age is enfeebled and the earth exhausted by bearing scarce produces little living creatures, she who produced all races and gave birth to the huge bodies of wild beasts. For methinks no golden chain let down to earth from heaven above the races of mortal beings, nor did the sea and waves which lash the rocks produce them, but the same earth bare them which now feeds them from herself. Moreover she first spontaneously of herself produced for mortals goodly corn-crops and joyous vineyards; of herself gave sweet fruits and joyous pastures; which now-a-days scarce attain any size when furthered by our labour: we exhaust the oxen and the strength of the husbandmen; we wear out our iron, scarce equal to the
usque adeo parcunt fetus augmentque labore.
iamque caput quassans grandis suspirat arator
crebrius, incassum manuum cecidisse labores,
et cum tempora temporibus praeceptia confert
praeteritis, laudat fortunas saepe parentis

et crepat, anticum genus ut pietate repletum
perfacile angustis tolerarit finibus aevom,
cum minor esset agri multo modus ante viritim.

tristis item vetulae vitis sator atque vietae
temporis incusat momen caelumque fatigat
nec tenet omnia paulatim tabescere et ire
ad capulum spatio aetatis defessa vetusto.

tillage of the fields; so niggardly are they of their produce and after so much labour do they let them grow. And now the aged ploughman shakes his head and sighs again and again to think that the labours of his hand have come to nothing; and when he compares present times with times past, he often praises the fortunes of his sire and harps on the theme, how the men of old comfortably supported life on a scanty plot of ground, since the allotment of land to each man was far less of yore than now. The sorrowful planter too of the exhausted and shrivelled vine impeaches the march of time and wearies heaven, and comprehends not that all things are gradually wasting away and passing to the grave, quite forespent by age and length of days.
E tenebris tantis tam clarum extollere lumen
qui primus potuisti inlustrans commoda vitae,
te sequor, o Graiae gentis decus, inque tuis nunc
ficta pedum pono pressis vestigia signis,
non ita certandi cupidus quam propter amorem
quod te imitari aveo; quid enim contendat hirundo
cynnis, aut quidnam treulus facere artibus haedi
consimile in cursu possint et fortis equi vis?
tu, pater, es rerum inventor, tu patria nobis
suppeditas praecepta, tuisque ex, inclute, chartis,
floriferis ut apes in saltibus omnia libant,
omnia nos itidem depascimur aurea dicta,
aurea, perpetua semper dignissima vita.

nam simul ac ratio tua coepit vociferari
naturam rerum, divina mente coorta,

Thee, who first wast able from amid such thick darkness to raise on
high so bright a beacon and shed a light on the true interests of life, thee
I follow, glory of the Greek race, and plant now my footsteps firmly fixed
in thy imprinted marks, not so much from a desire to rival thee as that
from the love I bear thee I yearn to imitate thee; for why need the
swallow contend with swans, or what likeness is there between the feats
of racing performed by kids with tottering limbs and by the powerful
strength of the horse? Thou, father, art discoverer of things, thou fur-
nishes us with fatherly precepts, and like as bees sip of all things in
the flowery lawns, we, o glorious being, in like manner feed from out
thy pages upon all the golden maxims, golden I say, most worthy ever
of endless life. For soon as thy philosophy issuing from a godlike in-
tellect has begun with loud voice to proclaim the nature of things, the
diffugiunt animi terrores, moenia mundi
discedunt, totum video per inane geri res.
apparet divum numen sedesque quietae
quas neque concutunt venti nec nubila nimbis
aspergunt neque nix acri concreta pruina
cana cadens violat semperque innubilus aether
integit, et large diffuso lumine rident,
onnia suppeditat porro natura neque ulla
res animi pacem delibat tempore in ullo.
at contra nusquam apparent Acherusia templae
nec tellus obstat quin omnia dispiciantur,
sub pedibus quaecumque infra per inane geruntur.
his ibi me rebus quaedam divina voluptas
percipit adque horror, quod sic natura tua vi
tam manifesta patens ex omni parte retecta est.

Et quoniam docui cunctarum exordia rerum
qualia sint et quam variis distantia formis
sponte sua volitent aeterno percita motu
quove modo possint res ex his quaeque creari,
asce secundum res animi natura videtur
atque animae claranda meis iam versibus esse
et metus ille foras praeceps Acheruntis agendus,
funditus humanam qui vitam turbat ab imo
omnia suffundens mortis nigrore neque ulla

I see things in operation throughout the whole void: the divinity of the
gods is revealed and their tranquil abodes which neither winds do shake
nor clouds drench with rains nor snow congealed by sharp frost harms
with hoary fall: an ever cloudless ether o'ercanopies them, and they
laugh with light shed largely round. Nature too supplies all their wants
and nothing ever impairs their peace of mind. But on the other hand
the Acherusian quarters are nowhere to be seen, though earth is no bar
to all things being descried, which are in operation underneath our
feet throughout the void. At all this a kind of godlike delight mixed
with shuddering awe comes over me to think that nature by thy power
is laid thus visibly open, is thus unveiled on every side.

And now since I have shewn what-like the beginnings of all things
are and how diverse with varied shapes as they fly spontaneously driven
on in everlasting motion, and how all things can be severally produced
out of these, next after these questions the nature of the mind and soul
should methinks be cleared up by my verses and that dread of Acheron
be driven headlong forth, troubling as it does the life of man from its
esse voluptatem liquidam puramque relinquit. nam quod saepe homines morbos magis esse timendos infamemque ferunt vitam quam Tartara leti et se scire animae naturam sanguinis esse

aut etiam venti, si fert ita forte voluntas, nec prosum quicquam nostrae rationis egere, hinc licet advertas, animum, magis omnia laudis

iactari causa quam quod res ipsa probetur. extorres idem patria longeque fugati conspectu ex hominum, foedati crimine turpi, omnibus aerumnis affecti denique vivunt, et quocumque tamen miseri venere parentant et nigras mactant pecudes et manibu’ divis inferias mittunt multoque in rebus acerbi acrius advertunt animos ad religionem. quo magis in dubiis hominem spectare periclis convenit adversisque in rebus noscere qui sit; nam verae voces tum demum pectore ab imo eiciuntur et eripitur persona, manet res.

denique avarities et honorum caeca cupidio quae miseros homines cogunt transcendere fines iuris et interdum socios scelerum atque ministros noctes atque dies niti praestante labore

inmost depths and overspreading all things with the blackness of death, allowing no pleasure to be pure and unalloyed. For as to what men often give out that diseases and a life of shame, are more to be feared than Tartarus place of death, and that they know the soul to be of blood or it may be of wind, if haply their choice so direct, and that they have no need at all of our philosophy, you may perceive for the following reasons that all these boasts are thrown out more for glory’s sake than because the thing is really believed. These very men exiles from their country and banished far from the sight of men live degraded by foul charge of guilt, sunk in a word in every kind of misery, and whithersoever the poor wretches have come, they yet do offer sacrifices to the dead and slaughter black sheep and make libations to the gods manes and in times of distress turn their thoughts to religion much more earnestly. Wherefore you can better test the man in doubts and dangers and mid adversity learn what he is; for then and not till then the words of truth are forced out from the bottom of his heart: the mask is torn off, the reality is left. Avarice again and blind lust of honours which constrain unhappy men to overstep the bounds of right and sometimes as partners and agents of crimes to strive night and day with sur-
ad summas emergere opes, haec vulnera vitae non minimam partem mortis formidine aluntur. turpis enim ferme contemptus et acris egestas semota ab dulci vita stabilique videntur et quasi iam leti portas cunctarier ante; unde homines dum se falsa terrore coacti effugisse volunt longe longeque remosse, sanguine civili rem conflant divitasque conduplicant avidi, caedem caede accumulantes; crudeles gaudent in tristi funere fratris et consanguineum mensas odere timentque. consimili ratione ab eodem saepe timore macerat invidia. ante oculos illum esse potentem, illum aspectari, claro qui incedit honore, ipsi se in tenebris volvi caenoque queruntur. intereunt partim statuarum et nominis ergo. et saepe usque adeo, mortis formidine, vitae percipit humanos odium lucisque videndae, ut sibi consciscant maerenti pectore letum obliti fontem curarum hunc esse timorem, hunc vexare pudorem, hunc vincula amicitia rumpere et in summa pietatem evertere fundo; nam iam saepe homines patriam carosque parentis passing effort to struggle up to the summit of power,—these sores of life are in no small measure fostered by the dread of death. For foul scorn and pinching want in every case are seen to be far removed from a life of pleasure and security and to be a loitering so to say before the gates of death. And while men driven on by an unreal dread wish to escape far away from these and keep them far from them, they amass wealth by civil bloodshed and greedily double their riches piling up murder on murder; cruelly triumph in the sad death of a brother and hate and fear the tables of kinsfolk. Often likewise from the same fear envy causes them to pine: they make moan that before their very eyes he is powerful, he attracts attention, who walks arrayed in gorgeous dignity, while they are wallowing in darkness and dirt. Some wear themselves to death for the sake of statues and a name. And often to such a degree through dread of death does hate of life and of the sight of daylight seize upon mortals, that they commit self-murder with a sorrowing heart, quite forgetting that this fear is the source of their cares, puts shame to rout, bursts asunder the bonds of friendship and in fine overturns duty from its very base; since often ere now men have betrayed country and
prodiderunt, vitare Acherusia templar petentes.

nam veluti pueri trepidant atque omnia caecis
in tenebris metuunt, sic nos in luce timemus
interdum, nilo quae sunt metuenda magis quam
quae pueri in tenebris pavitant finguntque futura.

hunc igitur terrorem animi tenebrasque necessest
non radii solis neque lucida tela diei
discutiant, sed naturae species ratioque.

Primum animum dico, mentem quam saepe vocamus,
in quo consilium vitae regimenque locatum est,
esse hominis partem nilo minus ac manus et pes
atque oculi partes animantis totius extant.

sensum animi certa non esse in parte locatum,
verum habitum quendam vitalem corporis esse,
harmoniam Grai quam dicit, quod faciat nos
vivere cum sensu, nulla cum in parte siet mens;
ut bona saepe valetudo cum dicitur esse
corporis, et non est tamen haec pars ualla valentis.
sic animi sensum non certa parte reponunt;
magno opere in quo mi diversi errare videntur.
saepe itaque, in promptu corpus quod cernitur, aegret,
cum tamen ex alia laetamur parte latenti;

dear parents in seeking to shun the Acherusian quarters. For even as
children are flurried and dread all things in the thick darkness, thus we
in the daylight fear at times things not a whit more to be dreaded than
what children shudder at in the dark and fancy sure to be. This
terror therefore and darkness of mind must be dispelled not by the rays
of the sun and glittering shafts of day, but by the aspect and law of
nature.

First then I say that the mind which we often call the understanding,
in which dwells the directing and governing principle of life, is no less
part of the man, than hand and foot and eyes are parts of the whole
living creature. [Some however affirm] that the sense of the mind does
not dwell in a distinct part, but is a certain vital state of the body,
which the Greeks call harmonia, because by it, they say, we live with
sense, though the understanding is in no one part; just as when good
health is said to belong to the body, though yet it is not any one part of
the man in health. In this way they do not assign a distinct part to
the sense of the mind; in all which they appear to me to be grievously
at fault in more ways than one. Oftentimes the body which is visible
to sight, is sick, while yet we have pleasure in another hidden part; and
oftentimes the case is the very reverse, the man who is unhappy in mind feeling pleasure in his whole body; just as if, while a sick man's foot is pained, the head meanwhile should be in no pain at all. Moreover when the limbs are consigned to soft sleep and the burdened body lies diffused without sense, there is yet a something else in us which during that time is moved in many ways and admits into it all the motions of joy and unreal cares of the heart. Now that you may know that the soul as well is in the limbs and that the body is not wont to have sense by any harmony, this is a main proof: when much of the body has been taken away, still life often stays in the limbs; and yet the same life, when a few bodies of heat have been dispersed abroad and some air has been forced out through the mouth, abandons at once the veins and quits the bones: by this you may perceive that all bodies have not functions of like importance nor alike uphold existence, but rather that those seeds which constitute wind and heat, cause life to stay in the limbs. Therefore vital heat and wind are within the body, and abandon our frame at death. Since then the nature of the mind and of the soul have been proved to be a part as it were of the man, surrender the name of har-
mony, whether brought down to musicians from high Helicon, or whether rather they have themselves taken it from something else and transferred it to that thing which then was in need of a distinctive name; whatever it be, let them keep it: do you take in the rest of my precepts.

Now I assert that the mind and the soul are kept together in close union and make up a single nature, but that the directing principle which we call mind and understanding, is the head so to speak and reigns paramount in the whole body. It has a fixed seat in the middle region of the breast: here throb fear and apprehension, about these spots dwell soothing joys; therefore here is the understanding or mind. All the rest of the soul disseminated through the whole body obeys and moves at the will and inclination of the mind. It by itself alone knows for itself, rejoices for itself, at times when the impression does not move either soul or body together with it. And as when some part of us, the head or the eye, suffers from an attack of pain, we do not feel the anguish at the same time over the whole body, thus the mind sometimes suffers pain by itself or is inspirited with joy, when all the rest of the soul throughout the limbs and frame is stirred by no novel sensation. But when the mind is excited by some more vehement apprehension, we see the whole
corpore et infringi linguam vocemque aboriri, caligare oculos, sonere auris, succidere artus, denique concidere ex animi terrore videmus saepe homines; facile ut quivis hinc noscere possit esse animam cum animo coniunctam, quae cum animi vi percussast, exim corpus propellit et icit.

Haec eadem ratio naturam animi atque animai corpoream docet esse; ubi enim propellere membra, corripere ex sommo corpus mutareque vultum atque hominem totum regere ac versare videtur, quorum nil fieri sine tactu posse videmus nec tactum porro sine corpore, nonne fatendumst corporea natura animum constare animamque? praeterea pariter fungi cum corpore et una consentire animum nobis in corpore cernis. si minus offendit vitam vis horrida teli ossibus ac nervis disclusis intus adacta, at tamen insequitur languor terraeque petitus segnis, et in terra mentis qui gignitur aestus, interdumque quasi exurgendi incerta voluntas. ergo corpoream naturam animi esse necessest, corporeis quoniam telis ictuque laborat.

I feel in unison through all the limbs, and thus sweats and paleness read over the whole body, the tongue falter, the voice die away, a mist over the eyes, the ears ring, the limbs sink under one; in short we see men drop down from terror of mind; so that anybody may easily perceive from this that the soul is closely united with the mind, and, when it has been driven by the influence of the mind, forthwith
I will now go on to explain in my verses of what kind of body the mind consists and out of what it has been formed. First of all I say that it is extremely fine and formed of exceedingly minute bodies. That this is so you may, if you please to attend, clearly perceive from what follows: nothing that is seen takes place with a velocity equal to that of the mind when it starts some suggestion and actually sets it going; the mind therefore is stirred with greater rapidity than any of the things whose nature stands out visible to sight. But that which is so passing nimble, must consist of seeds exceedingly round and exceedingly minute, in order to be stirred and set in motion by a small moving power. Thus water is moved and heaves by ever so small a force, formed as it is of small particles apt to roll. But on the other hand the nature of stone is more sticky, its liquid more sluggish and its movement more dilatory for the whole mass of matter coheres more closely, because sure enough it is made of bodies not so smooth fine and round. A breeze however gentle and light can force, as you may see, a high heap of poppy seeds to be blown away from the top downwards; but on the other hand eurus itself cannot move a heap of stones. Therefore bodies possess a
et levissima sunt, ita mobilitate fruuntur; at contra quaecumque magis cum pondere magnoasperaque inveniuntur, eo stabilita magis sunt.
nunc igitur quoniam est animi natura reperta mobilis egregie, perquam constare necessee corporibus parvis et levibus atque rutundis.
quae tibi cognita res in multis, o bone, rebus utilis invenietur et opportuna cluebit.

haec quoque res etiam naturam dedicat eius, quam tenui constet textura quamque loco se contineat parvo, si possit conglomerari, quod simul atque hominem leti secura quies est indepta atque animi natura animaeque recessit, nil ibi libatum de toto corpore cernas ad speciem, nil ad pondus: mors omnia praestat vitalem praeter sensum calidumque vaporem.

ergo animam totam perparvis esse necesse seminibus, nexam per venas viscera nervos; quatenus, omnis ubi e tota iam corpore cessit, extima membrorum circumcaesura tamen se incolumem praestat nec defit ponderis hilum.
quod genus est Bacchi cum flores evanuit aut cum spiritus unguenti suavis diffugit in auras

power of moving in proportion to their smallness and smoothness; and on the other hand the greater weight and roughness bodies prove to have, the more stable they are. Since then the nature of the mind has been found to be eminently easy to move, it must consist of bodies exceedingly small smooth and round. The knowledge of which fact, my good friend, will on many accounts prove useful and be serviceable to you. The following fact too likewise demonstrates how fine the texture is of which its nature is composed, and how small the room is in which it can be contained, could it only be collected into one mass: soon as the untroubled sleep of death has gotten hold of a man and the nature of the mind and soul has withdrawn, you can perceive then no diminution of the entire body either in appearance or weight: death makes all good save the vital sense and heat. Therefore the whole soul must consist of very small seeds and be inwoven through veins flesh sinews; inasmuch as, after it has withdrawn from the whole body, the exterior contour of the limbs preserves itself entire and not a tittle of the weight is lost. Just in the same way when the flavour of wine is gone or when the delicious aroma of a perfume has been dispersed into the air or when the
aut aliquo cum iam sucus de corpore cessit; nil oculis tamen esse minor res ipsa videtur propertiae neque detractum de pondere quicquam, nimirum quia multa minutaque semina sucos efficiunt et odorem in toto corpore rerum. quare etiam atque etiam mentis naturam animaeque scire licet perquam pauxillis esse creatam seminibus, quoniam fugiens nil ponderis aufert. Nec tamen haec simplex nobis natura putanda est. tenevis enim quaedam moribundos deserit aura mixta vapore, vapor porro trahit aera secum. nec calor est quisquam, cui non sit mixtus et aer; rara quod eius enim constat natura, necessest aeris inter eum primordia multa moveri. iam triplex animi est igitur natura reperta; nec tamen haec sat sunt ad sensum cuncta creandum, nil horum quoniam recepit res posse creare sensitivos motus 'et homo quae mente volutat. quarta quoque his igitur quaedam natura necessest adtribuatur; east omnino nominis expers; qua neque mobilius quicquam neque tenevis exstat, nec magis e parvis et levibus est elementis; sensitivos motus quae didit prima per artus.

savour has left some body, yet the thing itself does not look smaller to the eye, nor does aught seem to have been taken from the weight, because sure enough many minute seeds make up the savours and the odour in the whole body of the several things. Therefore, again and again I say, you are to know that the nature of the mind and the soul has been formed of exceedingly minute seeds, since at its departure it takes away none of the weight.

We are not however to suppose that this nature is single. For a certain subtle spirit mixed with heat quits men at death, and then the heat draws air along with it; there being no heat which has not air too mixed with it: for since its nature is rare, many first-beginnings of air must move about through it. Thus then the nature of the mind is proved to be threefold; and yet these things all together are not sufficient to produce sense; since the fact of the case does not admit that any of these can produce sense-giving motions and the thoughts which a man turns over in mind. Thus some fourth nature too must be added to these: it is altogether without name; than it nothing exists more nimble or more fine, or of smaller or smoother elements: it first transmits the sense-giving motions through the frame; for it is first stirred, made up
III

prima cietur enim, parvis perfecta figuris; inde calor motus et venti caeca potestas accipit, inde aer; inde omnia mobilantur, concutitur sanguis, tum viscera persentiscunt omnia, postremis datur ossibus atque medullis sive voluptas est sive est contrarius ardur. nec temere huc dolor usque potest penetrare neque acre permanare malum, quin omnia perturbentur usque adeo ut vitae desit locus atque animai diffugiant partes per caulas corporis omnis. sed plerumque fit in summo quasi corpore finis motibus: hanc ob rem vitam retinere valemus.

Nunc ea quo pacto inter sese mixta quibusque compta modis vigant rationem reddere aventem abstrahit invitum patrii sermonis egestas; sed tamen, ut potero summam attingere, tangam. inter enim cursant primordia principiorum motibus inter se, nil ut secernier unum possit nec spatio fieri divisa potestas, sed quasi multae vis unius corporis extant. quod genus in quovis animantum viscere volgo est odor et quidam calor et sapor, et tamen ex his as it is of small particles; next the heat and the unseen force of the spirit receive the motions, then the air; then all things are set in action, the blood is stirred, every part of the flesh is filled with sensation; last of all the feeling is transmitted to the bones and marrow, whether it be one of pleasure or an opposite excitement. No pain however can lightly pierce thus far nor any sharp malady make its way in, without all things being so thoroughly disordered that no room is left for life and the parts of the soul fly abroad through all the pores of the body. But commonly a stop is put to these motions on the surface as it were of the body: for this reason we are able to retain life.

Now though I would fain explain in what way these are mixed up together and what is the method of their arrangement when they exert their powers, the poverty of my native speech deters me sorely against my will: yet will I touch upon them and in summary fashion to the best of my ability: the first-beginnings by their mutual motions are interlaced in such a way that none of them can be separated by itself, nor can the function of any go on divided from the rest by any interval; but they are so to say the several qualities of one body. Even so in any flesh of living creature you please without exception there is a smell and a heat and savour, and yet out of all these is made up one single bulk of
omnibus est unum perfectum corporis augmen.
sic calor atque aer et venti caeca potestas
mixta creant unam naturam et mobilis illa
vis, initum motus ab se quae dividit ollis,
sensifer unde oritur primum per viscera motus.
nam penitus prorsum latet haec natura subestque
nec magis hac infra quicquam est in corpore nostro
atque anima est animae proprorro totius ipsa.
quod genus in nostris membris et corpore toto
mixta latens animi vis est animaeque potestas,
corporibus quia de parvis paucisque creatast.
sic tibi nominis haec expers vis facta minutis
corporibus latet atque animae quasi totius ipsa
proporrost anima et dominatur corpore toto.
consimili ratione necessest ventus et aer
et calor inter se vigeant commixta per artus
adque aliis aliud subit magis emineatque
ut quiddam fieri videatur ab omnibus unum,
i et calor ac ventus seorsum seorsumque potestas
aeris interemant sensum diductaque solvant.
est etenim calor ille animo, quem sumit; in ira
cum fervescit et ex oculis micat acribus ardor;

body. Thus the heat and the air and the unseen power of the spirit
mixed together produce a single nature, together with that nimble force
which transmits to them from itself the origin of motion; by which
means sense-giving motion first takes its rise though the fleshly frame.
For this nature lurks secreted in its inmost depths, and nothing in our
body is farther beneath all ken than it, and more than this it is the very
soul of the whole soul. Just in the same way as the power of the mind
and the function of the soul are latent in our limbs and throughout our
body, because they are each formed of small and few bodies: even so,
you are to know, this nameless power made of minute bodies is concealed
and is moreover the very soul, so to say of the whole soul, and reigns
supreme in the whole body. On a like principle the spirit and air and
heat must, as they exert their powers be mixed up together through the
frame, and one must ever be more out of view or more prominent than
another, that one substance may be seen to be formed from the union of
all, lest the heat and spirit apart by themselves and the power of the air
apart by itself should destroy sense and dissipate it by their disunion.
Thus the mind possesses that heat which it displays when it boils up in
anger and fire flashes from the keen eyes; there is too much cold spirit
comrade of fear, which spreads a shivering over the limbs and stirs the whole frame; yes and there is also that condition of still air which has place when the breast is calm and the looks cheerful. But they have more of the hot whose keen heart and passionate mind lightly boils up in anger. Foremost in this class comes the fierce violence of lions who often as they chafe break their hearts with their roaring and cannot contain within their breast the billows of their rage. Then the chilly mind of stags is fuller of the spirit and more quickly rouses through all the flesh its icy currents which spread over the limbs a shivering motion. But the nature of oxen has its life rather from the still air, and never does the smoky torch of anger applied to it stimulate it too much, shedding over it the shadow of mirky gloom, nor is it transfixed and stiffened by the icy shafts of fear: it lies between the other two, stags and cruel lions. And thus it is with mankind: however much teaching renders some equally refined, it yet leaves behind the earliest traces of the nature of each mind; and we are not to suppose that evil habits can be so thoroughly plucked up by the roots, that one man shall not be more prone than another to keen anger, a second shall not be somewhat more
tertius accipiat quaedam clementius aequo.
inque aliis rebus multis differre necessest
naturas hominum varias moresque sequacis;
quorum ego nunc nequeo caecas exposere causas
nec reperire figurarum tot nomina quot sunt
principis, unde haec oritur variantia rerum.
illud in rebus videor firmare possesse,
usque adeo naturarum vestigia linqui
parvola quae nequeat ratio depellere nobis,
ut nil inpediat dignam dis degere vitam.

Haec igitur natura tenetur corpore ab omni
ipsaque corporis est custos et causa salutis;
nam communibus inter se radicibus haerent
nec sine pernicie divelli posse videntur.
quod genus e thuris glaebis evellere odorem
haud facile est quin intereat natura quoque eius.
sic animi atque animae naturam corpore toto
extrahere haut facile est quin omnia dissoluantur.
inplexis ita principiis ab origine prima
inter se fiunt consorti praeedita vita,
nec sibi quaeque sine alterius vi posse videtur
corporis atque animi seorsum sentire potestas,

quickly assailed by fear, a third shall not take some things more meekly
than is right. In many other points there must be differences between
the varied natures of men and the tempers which follow upon these;
though at present I am unable to set forth the hidden causes of these or
to find names enough for the different shapes which belong to the first-
beginnings from which arises this diversity of things. What herein I
think I may affirm is this: traces of the different natures left behind,
which reason is unable to expel from us are so exceedingly slight that
there is nothing to hinder us from living a life worthy of gods.

Well this nature is contained by the whole body and is in turn the
body's guardian and the cause of its existence; for the two adhere
together with common roots and cannot it is plain be riven asunder
without destruction. Even as it is not easy to pluck the perfume out of
lumps of frankincense without quite destroying its nature as well; so it
is not easy to withdraw from the whole body the nature of the mind
and soul without dissolving all alike. With principles so interlaced
from the beginning of their existence are they formed and gifted with a
life of joint partnership, and it is plain that the faculty of the body and
of the mind cannot feel separately, each alone without the other's power,
sed communibus inter eas conflatur utrimque motibus accensus nobis per viscera sensus. praeterea corpus per se nec gignitum unquam nec crescit neque post mortem durare videtur. non enim, ut umor aquae dimittit saepe vaporem qui datus est, neque ea causa convellitur ipse, sed manet incolmis, non, inquam, sic animali discidium possunt artus perferre relictî, sed penitus perent convulsi conque putrescunt. ex ineunte aevo sic corporis atque animali mutua vitalis discunt contagia motus maternis etiam membris alvoque reposta, discidium ut nequeat fieri sine peste maloque; ut videas, quoniam coniunctast causa salutis, coniunctam quoque naturam consistere eorum. Quod superest, siquis corpus sentire refutat atque animam credit permixtam corpore toto suscipere hunc motum quem sensum nominitamus, vel manifestas res contra verasque repugnat. quid sit enim corpus sentire quis adferet umquam, si non ipsa palam quod res dedit ac docuit nos? at dimissa anima corpus caret undique sensu;

but sense is kindled throughout our flesh and blown into flame between the two by the joint motions of these two natures. Moreover the body by itself is never either begotten or grows or, it is plain, continues to exist after death. For not in the way that the liquid of water often loses the heat which has been given to it, yet is not for that reason itself riven in pieces, but remains unimpaired,—not in this way, I say, can the abandoned frame endure the separation of the soul, but riven in pieces it utterly perishes and rots away. Thus the mutual connexions of body and soul from the first moment of their existence learn the vital motions even while hid in the body and womb of the mother, so that no separation can take place without mischief and ruin. Thus you may see that, since the cause of existence lies in their joint action, their nature too must be a joint nature.

Furthermore if any one tries to disprove that the body feels and believes that the soul mixed through the whole body takes upon it this motion which we name sense, he combats even manifest and undoubted facts. For who will ever bring forward any explanation of what the body's feeling is, except that which the plain fact of the case has itself given and taught to us? But when the soul it is said has departed, the
perdit enim quod non proprium fuit eius in aevo.

MULTAQUE PRAETEREA PERDITUM EXPELLITUR AEVO QUAM

Dicere porro oculos nullam rem cernere posse,

sed per eos animum ut foribus spectare reclusis, 360
difficilest, contra cum sensus dicat eorum;
SENSUS ENIM TRAHIT ATQUE ACIES DETRUDIT AD IPSAS
fulgida praesertim cum cernere saepe nequimus,
lorum luminumibus quia nobis praepediuntur.

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quences enim, quia cernimus ipsi,
ostia suscipiunt ullam reclusa laborem.
praeterea si pro foribus sunt lumina nostra,

dem agis exemptis oculis debere videtur

cernere res animus sublatis postibus ipsis.

ILLUD IN HIS REBUS NEQUAM SUMERE POSSIS,

Democriti quod sancta viri sententia ponit,
corporis atque animi primordia singula prvis
adposita alternis variare, ac nectere membra.

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cum cum multo sunt animae elementa minora
quam quibus e corpus nobis et viscera constant,
tum numero quoque concedunt et rara per artus
dissita sunt dumtaxat; ut hoc promittere possis,

body throughout is without sense; yes for it loses what was not its own peculiar property in life.

Again to say that the eyes can see no object, but that the soul discerns through them as through an open door, is far from easy, since their sense contradicts this; and the more so that often we are unable to perceive bright things, because our eyes are embarrassed by the lights. But this is not the case with doors; for, because we ourselves see, the open doors do not therefore undergo any fatigue. Again if our eyes are in the place of doors, in that case when the eyes are removed the mind ought to have more power of seeing things after doors jambs and all have been taken out of the way.

And herein you must by no means adopt the opinion which the revered judgment of the worthy man Democritus lays down, that the first-beginnings of body and mind placed together in successive layers come in alternate order and so weave the tissue of our limbs. For not only are the elements of the soul much smaller than those of which our body and flesh are formed, but they are also much fewer in number and are disseminated merely in scanty number through the frame, so that you can warrant no more than this: the several first-beginnings of the soul keep at distances from each other exactly corresponding to the smallest possible number of bodies which being severally infused into us.
quantula priva queant nobis iniecta ciere corpora sensíferos mótes in corpore, tanta intervallá tenere exordia priva animai.

nam neque pulvérís interdum sentimus adhæsum corpore nec membrís incussam sidere cretam, nec nebulam noctú neque araneí tenvia fila obvia sentimus, quando obretimur euntes nec superá caput eiusdem cecidisse vietam vestem nec plúmas avíum papposque volantis qui nímia levitáte cadunt plerumque gravatím, nec repentís itum cuíusviscumque animantis sentimus nec priva pedum vestígia quaeque, corpore quae in nostro culícès et cetera ponunt. usque adeo prius est in nobis multa ciendum semina corporibus nostris inmixta per artus, quam primordia sentiscant concusa animai et quam in his intervallís tuditantia possint concursare coire et dissultare vicissim.

Et magis est animus vitai claustra coercens et dominántior ad vitam quam vis animai. nam sine mente animóque nequit residere per artus temporís exiguam partem pars ulla animai, sed comes inequentur facile et discédit in auras et gelídos artus in leti frigore linquit.

have the power of exciting in our body the sense-giving motions. Thus at times we do not feel the adhesion of dust when it settles on our body, nor the impact of chalk when it settles on our limbs, nor do we feel a mist at night nor a spider’s slender threads as they come against us, when we are caught in its meshes in moving along, nor the same insect’s flimsy web when it has fallen on our head, nor the feathers of birds and down of plants as it flies about, which commonly from exceeding lightness does not lightly fall, nor do we feel the tread of every creeping creature whatsoever nor each particular footprint which gnats and the like stamp on our body. So invariably must many seeds mixed up in our bodies throughout our frames be set in motion ere the first beginnings of the soul are roused to feel, and ere by thumping with such spaces between they can clash, unite and in turn recoil.

The mind has more to do with holding the fastnesses of life and has more sovereign sway over it than the power of the soul. For without the understanding and the mind no part of the soul can maintain itself in the frame the smallest fraction of time, but follows at once in the other’s train and passes away into the air and leaves the cold limbs in
at manet in vita cui mens animusque remansit. quamvis est circum caesis lacer undique membris truncus, adempta anima circum membrisque remotas vivit et aetherias vitalis suscipit auras. si non omnimodis, at magna parte animai privatus, tamen in vita cunctatur et haeret; ut, lacerato oculo circum si pupula mansit incolumis, stat cernundi vivata potestas, dummodo ne totum corrumpas luminis orbem et circum caedam aciem solamque reliquas; id quoque enim sine pernicie non fiet eorum. at si tantula pars oculi media illa peresa est, occidit extemplo lumen tenebraeque secuntur, incolumis quamvis aliquoi sit splendidus orbis. hoc anima atque animus vinceti sunt foedere semper.

Nunc age, nativos animantibus et mortalis esse animos animasque levis ut noscere possis, conquisita diu dulcique reperta labore digna tua pergam disposere carmina cura. tu fac utrumque uni subiungas nomen eorum, atque animam verbi causa cum dicere pergam, mortalem esse docens, animum quoque dicere credas,

the chill of death. But he abides in life whose mind and understanding continue to stay with him: though the trunk is mangled with its limbs shorn all round about it, after the soul has been taken away on all sides and been severed from the limbs the trunk yet lives and inhales the ethereal airs of life. When robbed, if not of the whole, yet of a large portion of the soul, it still lingers in and cleaves to life; just as, after the eye has been lacerated all round if the pupil has continued un-injured, the living power of sight remains, provided always you do not destroy the whole ball of the eye and pare close round the pupil and leave only it; for that will not be done without destroying the eyes. But if that middle portion of the eye, small as it is, is eaten into, the sight is gone at once and darkness ensues, though a man have the bright ball quite unimpaired. On such terms of union soul and mind are ever bound to each other.

Now mark me: that you may know that the minds and light souls of living creatures have birth and are mortal, I will go on to set forth verses worthy of your attention got together by long study and invented with welcome effort. Do you mind to attach to either of the two either name, and when for instance I shall choose to speak of the soul, showing it to be mortal, believe that I speak of the mind as well, inasmuch as
both make up one thing and are one united substance. First of all then
since I have shewn the soul to be fine and to be formed of minute bodies
and made up of much smaller first-beginnings than is the liquid of
water or mist or smoke:—for it far surpasses these in nimbleness and
moves if struck by a far slenderer cause; inasmuch as it moves by images
of smoke and mist; as when for instance sunk in sleep we see altars
steam forth their heat and send up their smoke on high; for beyond
a doubt images are begotten for us from these things:—well then since
you see on the vessels being shattered the water flow away on all
sides, and since mist and smoke pass away into air, believe that the
soul too is shed abroad and perishes much more quickly and dissolves
sooner into its first bodies, when once it has been taken out of the limbs
of a man and has withdrawn. For how can you believe that this soul
which the body that serves for its vessel, cannot hold, if shattered from
any cause and rarefied by the withdrawal of blood from the veins, how
can you believe I say that this soul can be held by any air? how can
that air which is rarer than our body hold it in?

Again we perceive that the mind is begotten along with the body
and grows up together with it and becomes old along with it. For even
as children go about with a tottering and weakly body, so slender sagacity of mind follows along with it; then when their life has reached the maturity of confirmed strength, the judgment too is greater and the power of the mind more developed. Afterwards when the body has been shattered by the mastering might of time and the frame has drooped with its forces dulled, then the intellect halts, the tongue dotes, the mind gives away, all faculties fail and are found wanting at the same time. It naturally follows then that the whole nature of the soul is dissolved, like smoke, into the high air; since we see it is begotten along with the body and grows up along with it and, as I have shown, breaks down at the same time worn out with age.

Moreover we see that even as the body is liable to violent diseases and severe pain, so is the mind to sharp cares and grief and fear; it naturally follows therefore that it is its partner in death as well. Again in diseases of the body the mind often wanders and goes astray; for it loses its reason and drivels in its speech and often in a profound lethargy is carried into deep and never-ending sleep with drooping eyes and head; out of which it neither hears the voices nor can recognise the faces of those who stand round calling it back to life and bedewing with tears
quare animum quoque dissolui fateare nescesset,
quandoquidem penetrant in eum contagia morbi;
nam dolor ac morbus leti fabricator uterquest,
multorum exitio perdocti quod sumus ante.

"denique quor, hominem cum vini vis penetravit
acris et in venas discessit diditus ardor,
consequitur gravitas membrorum, praepediuntur
crura vacillanti, tardescit lingua, madet mens,
nant oculi, clamor singultus iurgia gliscunt,
et iam cetera de genere hoc quaecumque secuntur,
cur ea sunt, nisi quod vemens violentia vini
conturbare animam consuevit corpore in ipso?
at quaecumque queunt conturbari inque pediri,
significant, paulo si durior insinuarit
causa, fore ut pereant aevo privata futuro.

"quin etiam subito vi morbi saepe coactus
ante oculos aliquis nostros, ut fulminis ictu,
concidit et spumas agit, ingemit et tremit artus,
desipit, extentat nervos, torquetur, anhelat
inconstanter, et in iactando membra fatigat.

-nimirum quia vis morbi distracta per artus
turbat, agens animam spumat, quasi in aequore salso

face and cheeks. Therefore you must admit that the mind too dissolves,
since the infection of disease reaches to it; for pain and disease are both
forgers of death: a truth we have fully learned ere now by the death of
many. Again, when the pungent strength of wine has entered into a
man and its spirit has been infused into and transmitted through his
veins, why is it that a heaviness of the limbs follows along with it, his
legs are hampered as he reels about, his tongue falters, his mind is be-
sotted, his eyes swim, shouting hiccoughing wranglings are rife, together
with all the other usual concomitants, why is all this, if not because the
overpowering violence of the wine is wont to disorder the soul within
the body? But whenever things can be disordered and hampered, they
give token that if a somewhat more potent cause gained an entrance,
they would perish and be robbed of all further existence. Moreover it
often happens that some one constrained by the violence of disease
suddenly drops down before our eyes, as by a stroke of lightning, and
foams at the mouth, moans and shivers through his frame, stiffens his
muscles, is racked, gasps for breath fitfully, and wearies his limbs with
tossing. Sure enough, because the violence of the disease spreads itself
through his frame and disorders him, he foams as he tries to eject his
soul, just as in the salt sea the waters boil with the mastering might of
ventorum validis fervescunt viribus undae.
exprimitur porro gemitus, quia membra dolore
adficiuntur et omnino quod semina vocis
eiciuntur et ore foras glomerata feruntur
qua quasi consuerunt et sunt munita viai,
desipientia fit, quia vis animi atque animali
conturbatur et, ut docui, divisa seorsum
disiectatur eodem illo distracta veneno.
inde ubi iam morbi reflexit causa reditque
in latebras acer corrupti corporis umor,
tum quasi vaccillans primum consurgit et omnis
 paulatim redit in sensus animaque receptat.
haec igitur tantis ubi morbis corpore in ipso
 iactentur miserisque modis distracta laborent,
cur eadem credis sine corpore in aere aperto
cum validis ventis aetatem degere posse?
< et quoniam mentem sanari, corpus ut aegrum,
cernimus et flecti medicina posse videmus,
id quoque praesagitt mortalem vivere mentem.
addere enim partis aut ordine traiecere accumst
aut aliquid prosum de summa detrabere bilum,
commutare animum quicumque adoritur et infit

the winds. A moan too is forced out, because the limbs are seized with
pain, and mainly because seeds of voice are driven forth and are carried
in a close mass out by the mouth, the road which they are accustomed
to take and where they have a well-paved way. Loss of reason follows,
because the powers of the mind and soul are disordered and, as I have
shewn, are riven and forced asunder, torn to pieces by the same baneful
malady. Then after the cause of the disease has bent its course back
and the acrid humours of the distempered body return to their hiding-
places, then he first gets up like one reeling, and by little and little
comes back into full possession of his senses and regains his soul. Since
therefore even within the body mind and soul are harassed by such
violent distempers and so miserably racked by sufferings, why believe
that they without the body in the open air can continue existence
battling with fierce winds? And since we perceive that the mind is
healed, like the sick body, and we see that it can be altered by medicine,
this too gives warning that the mind has a mortal existence. For it is
natural that whosoever essays and attempts to change the mind or seeks
to alter any other nature you like, should add new parts or change the
arrangement of the present, or at least withdraw some small fraction
from the whole sum. But that which is immortal wills not to have its
aut aliam quamvis naturam flectere quaerit,
at neque transferri sibi partis nec tribui vult
inmortale quod est quicquam neque defluere hilum.
nam quodcumque suis mutatum finibus exit,
continuo hoc mors est illius quod fuit ante.
dergo animus sive aegrescit, mortalia signa
mittit, uti ducui, seu flectitur a medicina.
usque adeo falsae rationi vera videtur
res occurrere et effugium praecidere eunti
ancipitique refutatu convincere falsum.

Denique saepe hominem paulatim cernimus ire
et membratim vitalem deperdere sensum;
in pedibus primum digitos livescere et unguis.
inde pedes et crura mori, post inde per artus
ire alios tractim gelidi vestigia leti.
scinditur itque animae hoc quoniam natura nec uno
tempore sincera existit, mortalis habendast.
quod si forte putas ipsam se posse per artus
introsum trahere et partis conducere in unum
atque ideo cunctis sensum deducere membris,
at locus ille tamen, quo copia tanta animai
cogitur, in sensu debet maiore videri;
qui quoniam nusquamst, nimirum ut diximus ante,

parts transposed nor any addition to be made nor one tittle to ebb away;
for whenever a thing changes and quits its proper limits, this change
is at once the death of that which was before. Therefore the mind,
whether it is sick or whether it is altered by medicine, alike, as I have
shewn, gives forth mortal symptoms. So invariably is truth found to
make head against false reason and to cut off all retreat from the assailant
and by a two-edged refutation to put falsehood to rout.

Again we often see a man pass gradually away and limb by limb lose
vital sense; first the toes of his feet and the nails turn livid, then the
feet and shanks die, then next the steps of chilly death creep with slow
pace over the other members. Since in this way the nature of the soul
is rent and passes away and comes not forth all at once in its entireness,
it must be reckoned mortal. But if haply you suppose that it can draw
itself in through the whole frame and mass its parts together and in this
way withdraw sense from all the limbs, yet then that spot into which so
great a store of soul is gathered, ought to shew itself in possession of a
greater amount of sense. But as this is nowhere found, sure enough as
we said before, it is torn in pieces and scattered abroad, and therefore
dilaniata foras dispargitur, interit ergo.
quin etiam si iam libeat concedere falsum
et dare posse animam glomerari in corpore eorum,
lumina qui lincunt moribundi particulatim,
mortalem tamen esse animam fateare necesse,
nec refert utrum pereat dispersa per auras
an contracta suis e partibus obbrutescat,
quando hominem totum magis ac magis undique sensus
deficit et vitae minus et minus undique restat.

Et quoniam mens est hominis pars una, loco quae
fixa manet certo, velut aures atque oculi sunt
atque alii sensus qui vitam cumque gubernant,
et veluti manus atque oculus naresve seorsum
secretà ab nobis nequeunt sentire neque esse,
sed tamen in parvo licuntur tempore tabe,
sic animus per se non quit sine corpore et ipso
esse homine, illius quasi quod vas esse videtur
sive aliud quid vis potius coniunctius ei
fingere, quandoquidem conexu corpus adhaeret.

Denique corporis atque animi vivata potestas
inter se coniuncta valent vitaque fruuntur;
nec sine corpore enim vitalis edere motus
sola potest animi per se natura nec autem
dies. Moreover if I were pleased for the moment to grant what is false
and admit that the soul might be collected in one mass in the body of
those who leave the light dying piecemeal, even then you must admit
the soul to be mortal; and it makes no difference whether it perish
dispersed in air, or gathered into one lump out of all its parts lose all
feeling, since sense ever more and more fails the whole man throughout
and less and less of life remains throughout.

And since the mind is one part of a man which remains fixed in a
particular spot, just as are the ears and eyes and the other senses which
guide and direct life; and just as the hand or eye or nose when separated
from us cannot feel and exist apart, but in however short a time waste
away in putrefaction, thus the mind cannot exist by itself without the
body and the man’s self which as you see serves for the mind’s vessel or
any thing else you choose to imagine which implies a yet closer union
with it, since the body is attached to it by the nearest ties.

Again the quickened power of body and mind by their joint partner-
ship enjoy health and life; for the nature of the mind cannot by itself
alone without the body give forth vital motions nor can the body again
cassum anima corpus durare et sensibus uti. 
scilicet avolsus radicibus ut nequit ullam 
dispicere ipse oculus rem seorsum corpore toto, 
sic anima atque animus per se nil posse videtur. 
nimirum quia per 
per nervos atque ossa, tenentur corpore ab omni 
nece magnis intervallis primordia possunt 
libera dissilltare, ideo conclusa moventur 
sensiferos motus quos extra corpus in auras 
aeris haut possunt post mortem eiecta moveri 
propterea quia non simili ratione tenentur: 
corpus enim atque animans erit aer, si cohibere 
se anima atque in eo poterit concludere motus 
quos ante in nervis et in ipso corpore agebat. 
quare etiam atque etiam resoluto corporis omni 
tegmine et eieceris extra vitalibus auris 
dissolui sensus animi fateare necesset 
atque animam, quoniam coniunctast causa duobus. 
Denique cum corpus nequeat perferre animai 
discidium quin in taetra tabescat odore, 
quid dubitas quin ex imo penitusque coorta 
emanatur uti fumus diffusa animae vis,
aque ideo tanta mutatum putre ruina
conciderit corpus, penitus quia mota loco sunt
fundamenta, foras anima emanante per artus
porque viarum omnis flexus, in corpore qui sunt
que foramina? multimodis ut noscere possis
esperi animae naturam exisse per artus
et prius esse sibi distractam corpore in ipso,
quam prolapsa foras enaret in aeris auras.
quin etiam finis dum vitae vertitur intra,
saepe aliqua tamen e causa labefacta videtur
in anima ac toto solui de corpore velle
et quasi supremo languescere tempore voltus
molliaque exsanguis truncum cadere omnia membra.
 quand genus est, animo male factum cum perhibetur
ant animam liquisse; ubi iam trepidatur et omnes
extremum cupiunt vitae reprehendere vinclum.
conquassatur enim tum mens animaeque potestas
omnis et haec ipso cum corpore conlabefiunt;
a gravior paulo possit dissolvere causa.
quia dubitas tandem quin extra prodita corpus
 Oscilla foras in aperto, tegmine dempto,
non modo non omnem possit durare per aevom,

...and dispersed like smoke, and that the crumbling body has changed and
rumbled with so total a ruin for this reason because its foundations
are stirred throughout their place, the soul oozing out abroad through
the frame, through all the winding passages which are in the body, and
out; so that in ways manifold you may learn that the nature
of the soul has been divided piecemeal and gone forth throughout the
body, and that it has been first torn to shreds within the body, ere it
shook forth and swam out into the air. Moreover even while it yet
in the confines of life, often the soul shaken from some cause or
other to wish to pass out and be loosed from the whole body, the
features are seen to droop as at the last hour and all the limbs to sink
dead: even the bloodless trunk: just as happens, when the phrase is
used, the mind is in a bad way, or the soul is quite gone; when all is
barren and every one is anxious to keep from parting the last tie of life;
for the mind and the power of the soul are shaken throughout and
both are quite loosened together with the body; so that a cause some-
what more powerful can quite break them up. Why doubt, I would
ask, that the soul when driven forth out of the body, when in the open
air, feels as it is, stript of its covering, not only cannot continue
sed minimum quodvis nequeat consistere tempus? nec sibi enim quisquam moriens sentire videtur ire foras animam incolumem de corpore toto nec prius ad iugulum et supera succedere fauces, verum deficere in certa regione locatam; ut sensus alios in parti quemque sua scit dissolui. quod si inmortalis nostra foret mens, non tam se moriens dissolvi conqueretur, sed magis ire foras vestemque relinquere, ut anguis.

Denique cur animi numquam mens consiliumque gignitur in capite aut pedibus manibusve, sed unis sedibus et certis hominis regionibus haeret, si non certa loca ad nascendum reddita cuique sunt, et ubi quicquid possit durare creatum, atque ita multimodis partitis artibus esse, membrorum ut numquam existat praeposterus ordo? usque adeo sequitur res rem neque flamma creari fluminibus solitast neque in igni gignier algor.

Praeterea si inmortalis natura animaist et sentire potest secreta a corpore nostro, quinque, ut opinor, eam faciundum est sensibus auctam; nec ratione alia nosmet proponere nobis possumus infernas animas Acherunte vagari.

through eternity, but is unable to hold together the smallest fraction of time? No one when dying appears to feel the soul go forth entire from his whole body or first mount up to the throat and gullet, but all feel it fail in that part which lies in a particular quarter; just as they know that other senses suffer dissolution each in its own place. But if our mind were immortal, it would not when dying complain so much of its dissolution, as of passing abroad and quitting its vesture, like a snake.

Again why are the mind's understanding and judgment never be-gotten in the head or feet or hands, but cling to one spot and fixed quarter of the man, if it be not that particular places are assigned for the birth of each part, and for the abode of each after it is born, that thus the members may be distributed with such a manifold organisation of parts, that no perverted arrangement of them shall ever show itself? so invariably effect follows cause, nor is flame wont to be born in rivers nor cold in fire.

Again if the nature of the soul is immortal and can feel when separated from our body, methinks we must suppose it to be provided with five senses; and in no other way can we picture to ourselves souls below flitting about Acheron. Painters therefore and former genera-
tions of writers have thus represented souls provided with senses. But
neither eyes nor nose nor hand can exist for the soul apart from the
body nor can tongue, nor can ears perceive by the sense of hearing
or exist for the soul by themselves apart from the body.

And since we perceive that vital sense is in the whole body and we
see that it is all endowed with life, if on a sudden any force with swift
blow shall have cut it in twain so as quite to dissever the two halves, the
power of the soul will without doubt at the same time be cleft and
cut asunder and dashed in twain together with the body. But that
which is cut and divides into any parts, you are to know renounces for
itself an everlasting nature. Stories are told how scythed chariots
recking with indiscriminate slaughter often lop off limbs so instantaneous-
ously that that which has fallen down lopped off from the frame is seen
to quiver on the ground, while yet the mind and faculty of the man
from the suddenness of the mischief cannot feel the pain; and because
his mind once for all is wholly given to the business of fighting, with
what remains of his body he mingles in the fray and carnage, and often
perceives not that the wheels and devouring scythes have carried off
among the horses' feet his left arm shield and all; another sees not that
inde alius conatur adempto surgere crure, cum digitos agitat propter moribundus humi pes. et caput absceisum calido viventeque truncō servat humi voltum vitalem oculosque patentis, donec reliquias animai reddidit omnes. quin etiam tibi si, lingua vibrante, micānti serpentis cauda e procero corpore, utrumque sit libitum in multas partis discidere ferro, omnia iam sorsum cernes ancisa recenti volnere tortari et terram conspargere tabo, ipsam seque retro partem petere ore priorem, volnēris ardentī ut morsu premat icta dolorem. omnibus esse igitur totas dicemus in illis particulis animas? at ea ratione sequetur omnibus esse igitur totas dicemus in illis particulis animas? at ea ratione sequetur unam animantem animas habuisse in corpore multas. ergo divisast ea quae fuit una simul cum corpore; quapropter mortale utrumque putandumst, in multas quoniam partis disciditur aeque. Praeterea si iūnortalis natura animai constat et in corpus nascentibus insinuatūr, nec super anteactam aetatem meminisse nequimus nec vestigia gestarum rerum ulla tenemus? his right arm has dropped from him, while he mounts and presses forward. Another tries to get up after he has lost his leg, while the dying foot quivers with its toes on the ground close by. The head too when cut off from the warm and living trunk retains on the ground the expression of life and open eyes, until it has delivered up all the remnants of soul. To take another case, if, as a serpent’s tongue is quivering, as its tail is darting out from its long body, you choose to chop with an axe into many pieces both tail and body, you will see all the separate portions thus cut off writhing under the fresh wound and bespattering the earth with gore, the fore part with the mouth making for its own hinder part, to allay with burning bite the pain of the wound with which it has been smitten. Shall we say then that there are entire souls in all those pieces? why from that argument it will follow that one living creature had many souls in its body; and this being absurd, therefore the soul which was one has been divided together with the body; therefore each alike must be reckoned mortal, since each is alike chopped up into many pieces. Again if the nature of the soul is immortal and makes its way into our body at the time of birth, why are we unable to remember besides the time already gone, and why do we retain no traces of past actions?
If the power of the mind has been so completely changed, that all remembrance of past things is lost, that methinks differs not widely from death; therefore you must admit that the soul which was before has perished and that which now is has now been formed.

Again if the quickened power of the mind is wont to be put into us after our body is fully formed, at the instant of our birth and our crossing the threshold of life, it ought agreeably to this to live not in such a way as to seem to have grown with the body and together with its members within the blood, but in a den apart to and by itself: the very contrary to what undoubted fact teaches; for it is so closely united with the body throughout the veins flesh sinews and bones, that the very teeth have a share of sense; as the act of biting proves and the sharp twinge of cold water and the crunching of a rough stone, when it has got into them out of bread. Wherefore, again and again I say, we must believe souls to be neither without a birth nor exempted from the law of death; for we must not believe that they could have been so completely united with our bodies, if they found their way into them from without, nor, since they are so closely inwoven with them, does it appear that they can get out unharmed and unloose themselves without destruction from
omnibus e nervis atque ossibus articulisque. quod si forte putas extrinsecus insinuatum permanare animam nobis per membra solere, tanto quique magis cum corpore fusa peribit. quod permanat enim dissolvitur, interit ergo, dispersus enim per caulis corporis omnis ut cibus, in membra atque artus cum diditur omnis, disperit atque aliam naturam sufficit ex se, sic anima atque animus quamvis integra recens in corpus eunt, tamen in manando dissoluuntur, dum quasi per caulis omnis diduntur in artus particulae quibus haec animi natura creatur, quae nunc in nostro dominatur corpore nata ex illa quae tum perit partita per artus. quapropter neque natali privata videtur esse die natura animae nec funeris expers. Semina praeterea linquuntur necne animae corpore in exanimo? quod si lincuntur et insunt, aut erit ut merito immortalis possit haberi, partibus amissis quoniam libata recessit, sin ita sinceris membris ablata profugit ut nullas partis in corpore liquerit ex se, unde cadavera rancenti iam visceres vermes

all the sinews and bones and joints. But if haply you believe that the soul finds its way in from without and is wont to ooze through all our limbs, so much the more it will perish thus blended with the body; for what oozes through another is dissolved, and therefore dies. As food distributed through all the cavities of the body, while it is transmitted into the limbs and the whole frame, is destroyed and furnishes out of itself the matter of another nature, thus the soul and mind, though they pass entire into a fresh body, yet in oozing through it are dissolved, whilst there are transmitted so to say into the frame through all the cavities those particles of which this nature of mind is formed, which now is sovereign in our body, being born out of that soul which then perished when dispersed through the frame. Wherefore the nature of the soul is seen to be neither without a birthday nor exempt from death.

Again are seeds of the soul left in the dead body or not? If they are left and remain in it, the soul cannot fairly be deemed immortal, since it has withdrawn lessened by the loss of some parts; but if when taken away it has fled forth with its members so entire that it has left in the body no parts of itself, whence do carcasses exude worms from the
now rank flesh and whence does such a swarm of living things, boneless and bloodless, surge through the heaving frame? But if haply you believe that souls find their way into worms from without and can severally pass each into a body and you make no account of why many thousands of souls meet together in a place from which one has withdrawn, this question at least must, it seems, be raised and brought to a decisive test, whether souls hunt out the several seeds of worms and build for themselves a place to dwell in, or find their way into bodies fully formed so to say. But why they should on their part make a body or take such trouble, cannot be explained; since being without a body they are not plagued as they flit about with diseases and cold and hunger: the body indeed is more akin to, more troubled by such infirmities, and by its contact with it the mind suffers many ills. Nevertheless be it ever so expedient for them to make a body, when they are going to enter, yet clearly there is no way by which they can so do. Therefore souls do not make for themselves bodies and limbs; no nor is there any mode by which they can find their way into bodies after they are fully formed; for they will neither be able to unite themselves with a nice precision nor will any connexion of mutual sensation be formed between them.

Again why does untamed fierceness go along with the sullen brood
of lions, cunning with foxes and proneness to flight with stags? and to take any other instance of the kind, why are all qualities engendered in the limbs and temper from the very commencement of life, if not because a fixed power of mind derived from its proper seed and breed grows up together with the whole body? If it were immortal and wont to pass into different bodies, living creatures would be of interchangeable dispositions; a dog of Hyrcanian breed would often fly before the attack of an antlered stag, a hawk would cower in mid air as it fled at the approach of a dove, men would be without reason, the savage races of wild-beasts would have reason. For the assertion that an immortal soul is altered by a change of body is advanced on a false principle. What is changed, is dissolved, and therefore dies: the parts are transposed and quit their former order; therefore they must admit of being dissolved throughout the frame, in order at last to die one and all together with the body. But if they shall say that souls of men always go into human bodies, I yet will ask how it is a soul can change from wise to foolish, and no child has discretion, and why the mare’s foal is not so well trained as the powerful strength of the horse. You may be sure they will fly to the subterfuge that the mind grows weakly in a weakly body. But
confugient. quod si iam fit, fateare necessest
tument esse animam, quoniam mutata per artus
tanto opere amittit vitam sensumque priorem.
quove modo poterit pariter cum corpore quoque
confirmata cupitum acetis tanger florem
vis animi, nisi erit consors in origine prima?
qnidve foras sibi vult membris exire senectis?
an metuit conclusa manere in corpore putri
et domus acetis spatio ne fessa vetusto
obruat? at non sunt immortali ulla pericla.

Denique conubia ad Veneris partusque ferarum
esse animas praesto deridiculum esse videtur,
expectare immortalis mortalia membra
inunmero numero certareque praeproperanter
inter se quae prima potissimaque insinuetur;
si non forte ita sunt animarum foedera pacta
ut quae prima volans avdenerit insinuetur
prima neque inter se contendant viribus hilum.

Denique in aethere non arbor, non aequore in alto
nubes esse queunt nec pisces vivere in arvis
nec cruor in lignis neque saxis sucus inesse.
certum ac dispositumst ubi quicquit crescat et insit.
sic animi natura nequit sine corpore oriri

granting this is so, you must admit the soul to be mortal, since changed
so completely throughout the frame it loses its former life and sense. Then
too, in what way will it be able to grow in strength uniformly with its
allotted body and reach the coveted flower of age, unless it shall be its
partner at its first beginning? or what means it by passing out from the
limbs when decayed with age? Does it fear to remain shut up in a
crumbling body, fear that its tenement, worn out by protracted length
of days, bury it in its ruins? Why an immortal being incurs no risks.

Again for souls to stand by at the unions of Venus and the birth-
throes of beasts seems to be passing absurd, for them the immortals to
wait for mortal limbs in number numberless and struggle with one an-
other in forward rivalry, which shall first and by preference have entrance
in; unless haply bargains are struck among the souls on these terms,
that whichever in its flight shall first come up, shall first have right of
entry, and that they shall make no trial at all of each other's strength.

Again a tree cannot exist in the ether, nor clouds in the deep sea
nor can fishes live in the fields nor blood exist in woods nor sap in
stones. Where each thing can grow and abide is fixed and ordained.
Thus the nature of the mind cannot come into being alone without the
sola neque a nervis et sanguine longiter esse. quod si (posset enim multo prius) ipsa animi vis in capite aut umeris aut imis calcibus esse posset et innasci quavis in parte, soleret tandem in eodem homine atque in eodem vase manere. quod quoniam nostro quoque constat corpore certum dispositumque videtur ubi esse et crescere possit sorsum anima atque animus, tanto magis inifiandum totum posse extra corpus durare genique. quare, corpus ubi interiit, perisse necesse confiteare animam distractam in corpore toto. quippe etenim mortale acerno iungere et una consentire putare et fungi mutua posse desiperest; quid enim diversius esse putandumst aut magis inter se disiunctum discrepitanque, quam mortale quod est inmortali atque perenni iunctum in concilio saevas tolerare procellas? quod si forte ideo magis immortalis habendast, quod letalibus ab rebus munita tenetur, aut quia non veniunt omnino aliena salutis aut quia quae veniunt aliqua ratione recedunt pulsa prius quam quid noceant sentire queamus, • ••••#•••••••

body nor exist far away from the sinews and blood. But if (for this would be much more likely to happen than that) the force itself of the mind might be in the head or shoulders or heels or might be born in any other part of the body, it would after all be wont to abide in one and the same man or vessel. But since in our body even it is fixed and seen to be ordained where the soul and the mind can severally be and grow, it must still more strenuously be denied that it can abide and be born out of the body, altogether. Therefore when the body has died, we must admit that the soul has perished, wrenched away throughout the body. To link forsooth a mortal thing with an everlasting and suppose that they can have sense in common and can be reciprocally acted upon, is sheer folly; for what can be conceived more incongruous, more discordant and inconsistent with itself, than a thing which is mortal, linked with an immortal and everlasting thing, trying in such union to weather furious storms? But if the soul is to be accounted immortal for this reason rather, because it is kept sheltered from death-bringing things, either because things hostile to its existence do not approach at all, or because those which do approach, in some way or other retreat discomfited before we can feel the harm they do, [manifest experience proves that
praeter enim quam quod morbis cum corporis aegret, advenit id quod eam de rebus saepe futuris
macerat inque metu male habet curisque fatigat praeteritisque male admissis peccata remordent.
adde fuorem animi proprium atque oblivia rerum, adde quod in nigras lethargi mergitur undas.

Nil igitur mors est ad nos neque pertinet hilum, quandoquidem natura animi mortalis habetur, et velut anteacto nihil tempore sensimus aegri, ad confilquendum venientibus undique Poenis, omnia cum belli trepido concussa tumultu horrida contremuere sub altis aetheris oris, in dubioque fuere utrorum ad regna cadendum omnibus humanis esset terraque marique, sic, ubi non erimus, cum corporis atque animal discidium fuerit quibus e sumus uniter apti, scilicet hanc nobis quicquam, qui non erimus tun, accidere omnino poterit sensumque movere, non si terra mari miscerit et mare caelo. et si iam nostro sentit de corpore postquam distractast animi natura animaeque potestas, nil tamen est ad nos qui comptu coniugioque

this can not be true]. For besides that it sickens in sympathy with the maladies of the body, it is often attacked by that which frets it on the score of the future and keeps it on the rack of suspense and wears it out with cares, remorse for sins gnawing it on account of past misdeeds; then there is madness peculiar to the mind and forgetfulness of all things; then too it often sinks into the black waters of lethargy.

Death therefore is nothing and concerns us not a jot, since the nature of the mind is proved to be immortal. And as in time gone by we felt no distress, when the Poeni from all sides came together to do battle, and all things shaken by war's troublous uproar shuddered and quaked beneath high heaven, and mortal men were in doubt which of the two peoples it should be to whose empire all must fall by sea and land alike, thus when we shall be no more, when there shall have been a separation of body and soul, out of both of which we are each formed into a single being, to us, you may be sure, who then shall be no more, nothing whatever can happen to excite sensation, not if earth shall be mingled with sea and sea with heaven. And even supposing the nature of the mind and power of the soul do feel, after they have been severed from our body, yet that is nothing to us who by the binding tie of
corporis atque animae consistimus uniter apti.

nec, si materiem nostram collegerit aetas
post obitum rursumque redegerit ut sita nunc est
atque iterum nobis fuerint data lumina vitae,
pertineat quicumque tamam ad nos id quoque factum,
interrupta semel cum sit repetentia nostri.
et nunc nil ad nos de nobis attinet, ante
qui fuimus, neque iam de illis nos adficit angor.
nam cum respicias immensi temporis omne
praeteritum spatium, tum motus materiae
multimodis quam sint, facile hoc adcredere possis,
semina saepe in eodem, ut nunc sunt, ordine posta

65 haec eadem, quibus e nunc nos sumus, ante fuisse.
68 nec memori tamen id quibus repraeprehendere mente;
inter enim iectast vitai pausa vageque
deerranunt passim motus ab sensibus omnes.
debet enim, misere si forte aegreque futurumst,
ipse quoque esse in eo tum tempore, cui male possit
accidere. id quoniam mors eximit, esseque probet

64 illum cui possint incommoda conciliari,

65 scire licet nobis nil esse in morte timendum
nec miserum fieri qui non est posse neque hilum

marriage between body and soul are formed each into one single being. And if time should gather up our matter after our death and bring it once more into the condition in which it now is, and the light of life be given to us again, this result even would concern us not at all, when the chain of our self-consciousness has once been snapped asunder. So now we give ourself no concern about any self which we have been before, nor do we feel any distress on the score of that self. For when you look back on the whole past course of inmeasurable time and think how manifold are the shapes which the motions of matter take, you may easily credit this too, that these very same seeds of which we now are formed, have often before been placed in the same order in which they now are; and yet we cannot recover this in memory: a break in our existence has been interposed, and all the motions have wandered to and fro far astray from the sensations they produced. For he whom evil is to befall, must in his own person exist at the very time it comes, if the misery and suffering are haply to have any place at all; but since death precludes this, and forbids him to be, upon whom the ills can be brought, you may be sure that we have nothing to fear after death, and that he who exists not, cannot become miserable, and that it matters not a whit
differre annu ullo fuerit iam tempore natus, mortalem vitam mors cum inmortalis ademit.

Proinde ubi se videas hominem indignaries ipsum, post mortem fore ut aut putescat corpore posto aut flammis interiat malisve ferarum, scire licet non sincerum sonere atque subesse caecum aliquem cordi stimulum, quamvis neget ipse credere se quemquam sibi sensum in morte futurum. non, ut opinor, enim dat quod promittit et unde, nec radicitus e vita se tollit et eicit, vivus enim sibi cum proponit quisque futurum, corpus uti volucrees lacerent in morte feraceque, ipse sui miseret; neque enim se dividunt illum, nec removet satis a proiecto corpore et illum se fingit sensuque suo contaminat astans. hinc indignatur se mortalem esse creatum nec videt in vera nullum fore morte alium se (qui possit vivus sibi se lugere peremptum) stansque iacentem se lacerari urive dolere.

nam si in morte malumst malis morsuque ferarum whether he has been born into life at any other time, when immortal death has taken away his mortal life.

Therefore when you see a man bemoaning his hard case, that after death he shall either rot with his body laid in the grave or be devoured by flames or the jaws of wild-beasts, you may be sure that his ring betrays a flaw and that there lurks in his heart a secret goad, though he himself declare that he does not believe that any sense will remain to him after death. He does not methinks really grant the conclusion which he professes to grant nor the principle on which he so professes, nor does he take and force himself root and branch out of life, but all unconsciously imagines something of self to survive. For when any one in life suggests to himself that birds and beasts will rend his body after death, he makes moan for himself: he does not separate himself from that self, nor withdraw himself fully from the body so thrown out, and fancies himself that other self and stands by and impregnates it with his own sense. Hence he makes much moan that he has been born mortal, and sees not that after real death there will be no other self to remain in life and lament to self that his own self has met death, and there to stand and grieve that his own self there lying is mangled or burnt. For if it is an evil after death to be pulled about by the devouring jaws of
tractari, non invenio qui non sit acerbum
ignibus inpositum calidis torrescere flammis
aut in melle situm suffocari atque rigere
frigore, cum summo gelidi cubat aequore saxi,
urgerive superne obtritum pondere terrae.
‘Iam iam non domus accipiet te laeta, neque uxor
optima, nec dulces occurrent oscula nati
praeripere et tacita pectus dulcedine tangent.
non poteris factis florantibus esse, tuisque
praesidium. misero misere’ aiunt ‘omnia ademit
una dies infesta tibi tot praemia vitae.’
illud in his rebus non addunt ‘nec tibi earum
iam desiderium rerum super insidet una.’
quod bene si videant animo dictisque sequantur,
dissoluant animi magno se angore metuque.
‘tu quidem ut es leto sopitus, sic eris aevi
quod superest cunctis privatu’ doloribus aegris;
at nos horrifico cinefactum te prope busto
insatiabiliter deflevimus, aeternumque
nulla dies nobis maerorem e pectore demet.’
illud ab hoc igitur quarendum est, quid sit amari

wild-beasts, I cannot see why it should not be a cruel pain to be laid on
fires and burn in hot flames, or to be placed in honey and stifled, or to
stiffen with cold, stretched on the smooth surface of a cold slab of stone,
or to be pressed down and crushed by a load of earth from above.
‘Now no more shall thy house admit thee with glad welcome, nor a
most virtuous wife and sweet children run to be the first to snatch
kisses and touch thy heart with a silent joy. No more mayst thou be
prosperous in thy doings, a safeguard to thine own. One disastrous day
has taken from thee luckless man in luckless wise all the many prizes of
life.’ This do men say; but add not thereto ‘and now no longer does
any craving for these things beset thee withal.’ For if they could
rightly perceive this in thought and follow up the thought in words,
they would release themselves from great distress and apprehension of
mind. ‘Thou, even as now thou art, sunk in the sleep of death, shalt
continue so to be all time to come, freed from all distressful pains; but
we with a sorrow that would not be sated wept for thee, when close by
thou didst turn to an ashen hue on thy appalling funeral pile, and no
length of days shall pluck from our hearts our ever-during grief.’ This
question therefore should be asked of this speaker, what there is in it so
tanto opere, ad somnum si res redit atque quietem, cur quisquam aeterno possit tabescere luctu.

Hoc etiam faciunt ubi discubuere tenentque pocula saepe homines et inumbrant ora coronis, ex animo ut dicant ‘brevis hic est fructus homullis; iam fuerit neque post umquam revocare licebit.’

Hoc etiam faciunt ubi discubuere tenentque pocula saepe homines et inumbrant ora coronis, ex animo ut dicant ‘brevis hic est fructus homullis; iam fuerit neque post umquam revocare licebit.’

nec sibi enim quisquam tum se vitamque requirit, cum pariter mens et corpus sopita quiescunt; nam licet aeternum per nos sic esse soporem, nec desiderium nostri nos adficit ulla.

et tamen hauququam nostros tunc illa per artus longe ab sensiferis primordia motibus errant, cum correptus homo ex somno se colligit ipse.

multo igitur mortem minus ad nos esse putandumst, si minus esse potest quam quod nil esse videmus; maior enim turbae disiectus materiai consequitur leto nec quisquam expergitus exstat, frigida quem semel est vitai pausa secuta.

Denique si vocem rerum natura repente

passing bitter, if it come in the end to sleep and rest, that any one should pine in never-ending sorrow.

This too men often, when they have reclined at table and shade their brows with crowns, love to say from the heart, ‘short is this enjoyment for poor weak men; presently it will have been and never after may it be called back.’ As if after their death it is to be one of their chiefest afflictions that thirst and parching drought is to burn them up hapless wretches, or a craving for any thing else is to beset them. What folly! for no one feels the want of himself and life at the time when mind and body are together sunk in sleep; for all we care this sleep might be everlasting, no craving whatever for ourselves then moves us. And yet by no means do those first-beginnings throughout our frame wander at that time far away from their sense-producing motions, when a man starts up from sleep and collects himself at once. Death therefore must be supposed to concern us much less, if less there can be than what we see to be nothing; for a greater dispersion of the mass of matter follows in the train of death, and no one wakes up, upon whom the chill cessation of life has once come.

Once more, if the nature of things could suddenly utter a voice and
mittat et hoc alicui nostrum sic increpet ipsa
‘quid tibi tanto operest, mortalis, quod nimis aegris
luctibus indulges? quid mortem congemis ac fles?
nam gratis anteacta fuit tibi vita priorque
et non omnia pertusum congræt quasi in vas
commoda perfluxere atque ingrata interiere:
cur non ut plenus vitae conviae recedis
aequo animoque capis securam, stulte, quietem?
sin ea quae fructus cumque es periere profusa
vitaque in offensust, cur amplius addere queraris,
rursus quod pereat male et ingratum occidat omne,
non potius vitae finem facis atque laboris?
nam tibi praeterea quod machiner inveniamque,
quod placeat, nil est: eadem sunt omnia semper.
si tibi non annis corpus iam marcet et artus
confecti languent, eadem tamen omnia restant,
omnia si pergas vivendo vincere saecla,
atque etiam potius, si numquam sis moriturus,’
quid respondemus, nisi iustam intendere litem
naturam et veram verbis exponere causam?

grandior hic vero si iam seniorque queratur
atque obitum lamentetur miser amplius aequo,
would she not with greater cause raise her voice and rally him in sharp
accents, 'away from this time forth with your tears, rascal; a truce to
your complainings: thou decayest after full enjoyment of all the prizes
of life. But because thou ever yearnest for what is not present, and
despisest what is, life has slipped from thy grasp unfinished and unsatis-
fying, and or ever thou thoughtest, death has taken his stand at thy
pillow, before thou canst take thy departure sated and filled with good
things. Now however give up all things unsuited to thy age, and come
give place to thy children; for it must be so.' With good reason methinks
she would bring her charge, with reason rally and reproach; for old things
give way and are supplanted by new without fail, and one thing must ever
be replenished out of other things; and no one is delivered over to the pit
and black Tartar: matter is needed for after generations to grow; all
of which though will follow thee when they have finished their term of
life; and it follows that all these no less than thou have before this
come to an end and hereafter will come to an end. Thus one thing
never ceases to rise out of another, and life is granted to none in fee-
simple, to all in usufruct. Think too how the bygone antiquity of ever-
lasting time—before our birth was nothing to us. Nature therefore holds
this up to us as a mirror of the time yet to come after our death. Is

non merito in clamat magis et voce increpeta acri?
54 'aufer abhinc lacrimas, balatro, et compesce querellas. omnia perfunctus vitae praemia marces.
95 sed quia semper aces quod abest, prae sentia tennis, imperfecta tibi elapsast ingrataque vita
et nec opinanti mors ad caput adstitit ante
quam satur ac plenus possis discedere rerum. nunc aliena tua tamen ae tate omnia mitte
aequo animo re aegum gnatam concede: necessest.
iure, ut opinor, agat, iure increpeta inciletque;
60 cedit enim rerum novitate extrusa vetustas
semper, et ex aliiis aliiis reparare necessest;
nunc aliena tua tamen aetate omnia mitte
aequo animoque agedum gnatam concede: necessest.'

iure, ut opinor, agat, iure increpeta inciletque;
65 cedit enim rerum novitate extrusa vetustas
semper, et ex aliiis aliiis reparare necessest;
nec quisquam in barathrum nec Tartara deditur atra:
materies opus est ut crescant postera saecla;
quae tamen omnia te vita perfuncta sequuntur;
nec minus ergo ante haec quam tu cecidere, cadentque.
sic alid ex alio numquam desistet oriri
60 vitaque mancipio nulli datur, omnibus usu.
res pice item quam nil ad nos anteacta vetustas
temporis aeterni fuerit, quam nascimur ante.
hoc igitur speculum nobis natura futuri
temporis exponit post mortem denique nostram.
there aught in this that looks appalling, aught that wears an aspect of gloom? is it not more untroubled than any sleep?

And those things sure enough, which are fabled to be in the deep of Acheron, do all exist for us in this life. No Tantalus, numbed by groundless terror, as the story is, fears poor wretch a huge stone hanging in air; but in life rather a baseless dread of the gods vexes mortals: the fall they fear is such fall of luck as chance brings to each. Nor do birds eat a way into Tityos laid in Acheron, nor can they sooth to say find during eternity food to peck under his large breast. However huge the bulk of body he extends, though such as to take up with outspread limbs not nine acres merely, but the whole earth, yet will he not be able to endure everlasting pain and supply food from his own body for ever. But he is for us a Tityos, whom as he grovels in love vultures rend and bitter anguish eats up or troubled thoughts from any other passion do rive. In life too we have a Sisyphus before our eyes who is bent on asking from the people the rods and cruel axes, and always retires defeated and disappointed. For to ask for power, which empty as it is is never given, and always to undergo in the pursuit severe toil, this is
hoc est adverso nixantem trudere monte
saxum quod tamen e summo iam vertice rsum
volvitur et plani raptim petit aequora campi.
dei de animi ingrata naturam pascere semper
atque explere bonis rebus saviareque numquam,
quod faciunt nobis annorum temporas, circums
redeunt fetusque ferunt variosque lepores,
nec tamen explemur vitai fructibus umquam,
hoc, ut opinor, id est, aevo florente puellas
quod memorant laticem pertusum congerere in vas,
quod tamen expleri nulla ratione potestur.
Cerberus et furiae iam vero et lucis egestas

Tartarus horri feros eructans faucibus aestus,
qui neque sunt usquam nec possunt esse profecto.
sed metus in vita poenarum pro male factis
est insignibus insigni, scelerisque huella,
carcer et horribilis de saxo iactu deorsum,
verbera carnifices robur pix lammina taedae;
quae tamen etsi absunt, at mens sibi conscia factis
praem et quae sit poenarum denique finis

forcing up-hill with much effort a stone which after all rolls back again
from the summit and seeks in headlong haste the levels of the plain.
Then to be ever feeding the thankless nature of the mind, and never to
fill it full and sate it with good things, as the seasons of the year do for
us, when they come round and bring their fruits and varied delights,
though after all we are never filled with the enjoyments of life, this me-
thinks is to do what is told of the maidens in the flower of their age, to
keep pouring water into a perforated vessel which in spite of all can
never be filled full. Moreover Cerberus and the furies and your privation
of light [are idle tales, as well as all the rest, Ixion's wheel and black] Tartarus belching forth hideous fires from his throat: things which
nowhere are nor sooth to say can be. But there is in life a dread of
punishment for evil deeds, signal as the deeds are signal, and as atone-
ment of guilt, the prison and the frightful hurling down from the rock,
escourgings executioners, the dungeon of the doomed, the pitch, the metal
plate, torches; and even though these are wanting, yet the conscience-
stricken mind through boding fears applies to itself goads and frightens
itself with whips, and sees not meanwhile what end there can be of ills
atque eadem metuit magis haec ne in morte gravescant, 
hic Acherusia fit stultorum denique vita.

Hoc etiam tibi tute interdum dicere possis
‘lumina s^s oculis etiam bonus Ancu’ reliquit
qui melior multis quam tu fuit, improbe, rebus.
inde alii multi reges rerumque potentes
occiderunt, magnis qui gentibus imperitarunt.
ille quoque ipse, viam qui quondam per mare magnum
stravit iterque dedit legionibus ire per altum
ac pedibus salsas docuit superare lucunas
et contemipt/equis insultans murmura ponti,
lumine adempto animam moribundo corpore fudit.
Scipiadas, belli fulmen, Carthaginis horror,
ossa dedit terrae proinde ac famul infimus esset.
adde repertores doctrinarum atque leporum,
adde Heliconiadum comites; quorum unus Homerus
sceptra potitus eadem aliis sopitu’ quietest.
denique Democritum postquam matura vetustas
admonuit memores motus languescere mentis,
sponte sua leto caput obvius optulit ipse.
ipse Epicurus obit decurso lumine vitae,
qui genus humanum ingenio superavit et omnis

or what limit at last is to be set to punishments, and fears lest these
very evils be aggravated after death. The life of fools at length becomes
a hell here on earth.

This too you may sometimes say to yourself ‘even worthy Ancus
has quitted the light with his eyes, who was far far better than thou,
unconscionable man. And since then many other kings and cesars have
been laid low, who lorded it over mighty nations. He too, even he who
erst paved a way over the great sea and made a path for his legions to
march over the deep and taught them to pass on foot over the salt pools
and set at naught the roarings of the sea, trampling on them with his
horses, had the light taken from him and shed forth his soul from his
dying body. The son of the Scipios, thunderbolt of war, terror of
Carthage, yielded his bones to earth just as if he were the lowest menial.
Think too of the inventors of all sciences and graceful arts, think of the
companions of the Heliconian maids; among whom Homer bore the
sceptre without a peer, and he now sleeps the same sleep as others. Then
there is Democritus who, when a ripe old age had warned him that the
memory-waking motions of his mind were waning, by his own spontaneou
act offered up his head to death. Even Epicurus passed away,
when his light of life had run its course, he who surpassed in intellect
restincxit, stellas exortus ut aetherius sol.
tu vero dubitabis et indignabere obire?
mortua cui vita est prope iam vivo atque videnti,
qui somno partem maiorem conteris aevi
et vigilans stertis nec somnia cernere cessas
solicitamque geris cassa formidine mentem
nec reperire potes tibi quid sit saepe mali, cum
ebrious urgeris multis miser undique curis
atque animi incerto fluitans errore vagaris.'

Si possent homines, proinde ac sentire videntur
pondus inesse animo quod se gravitate fatiget,
e quibus id fiat causis quoque noscere et unde
tanta mali tamquam moles in pectore constet,
haut ita vitam agerent, ut nunc plerumque videmus
quid sibi quisque velit nescire et quaerere semper
commutare locum quasi quos deponere possit.
exit saepe foras magnis ex aedibus ille,
esse domi quem pertaesumst, subitoque revertit,
quippe foris nilo melius qui sentiat esse.
currir agens mannos ad villam praecipitanter,
auxilium tectis quasi ferre ardentibus instans;
oscitat extemplo, tetigit cum limina villae,

the race of man and quenched the light of all, as the ethereal sun arisen
quenches the stars. Wilt thou then hesitate and think it a hardship to
die? thou for whom life is well nigh dead whilst yet thou livest and
seest the light, who wastest the greater part of thy time in sleep and
snorest wide awake and ceasest not to see visions and hast a mind
troubled with groundless terror and canst not discover often what it is
that ails thee, when besotted man thou art sore pressed on all sides with
a multitude of cares and goest astray tumbling about in a maze of
mental error.

If, just as they are seen to feel that a load is, on their mind which
wears them out with its pressure, men might apprehend from what
causes too it is produced and whence such a pile, if I may say so, of ill
lies on their breast, they would not spend their life as we see them now
for the most part do, not knowing any one of them what he means and
wanting ever change of place as though he might lay down his burden.
The man who is sick of home often issues forth from his large mansion, and
as suddenly comes back to it, finding as he does that he is no better off
abroad. He races to his country-house, driving his jennets in headlong
haste, as if hurrying to bring help to a house on fire: he yawns the
moment he has reached the door of his house, or sinks heavily into
aut abit in somnum gravis atque oblivia quae\textit{rit, aut etiam properans urbem petit atque revisit. hoc se quisque modo fugit (at quem scilicet, ut \textit{fit, effugere haut potis est, ingratis haeret) et odit propterea, morbi quia causam non tenet aeger; quis bene si videat, iam rebus quisque relictis naturam primum student cognoscere rerum, temporis aeterni quoniam, non unius horae, ambigitur status, in quo sit mortalibus omnis aetas, post mortem quae restat cumque manenda. 1070 Denique tanto opere in dubiis trepidare periclis (quae mala nos subigit vitae tanta cupidio?) certa quidem finis vitae mortalibus adstat nec devitari letum pote quin obeamus. praeterea versamur ibidem atque insumus usque nec nova vivendo procuditur ulla voluptas; sed dum abest quod avemus, id exsuperare videtur cetera; post aliut, cum contigit illud, avemus et sitis aequa tenet vitae semper hiantis. posteraque in dubiost fortunam quam vehat aetas, 1085 quidve ferat nobis casus quive exitus instet. nec prorsum vitam ducendo demimus hilum sleep and seeks forgetfulness, or even in haste goes back again to town. In this way each man flies from himself (but self, from whom, as you may be sure is commonly the case, he cannot escape, clings to him in his own despite) and hates himself, because he is sick and knows not the cause of the malady; for if he could rightly see into this, relinquishing all else each man would study to learn the nature of things, since the point at stake is the condition for eternity, not for one hour, in which mortals have to pass all the time which remains for them to expect after death. Once more what evil lust of life is this which constrains us with such force to be so mightily troubled in doubts and dangers? a sure term of life is fixed for mortals, and death cannot be shunned, but meet it we must. Moreover we are ever engaged, ever involved in the same pursuits, and no new pleasure is struck out by living on; but whilst what we crave is wanting, it seems to transcend all the rest; then, when it has been gotten, we crave something else, and ever does the same thirst of life possess us, as we gape for it open-mouthed. Quite doubtful it is what fortune the future will carry with it or what chance will bring us or what end is at hand. Nor by prolonging life do we take one tittle
tempore de mortis nec delibare valemus,
quo minus esse diu possimus forte perempti.
proinde licet quot vis vivendo condere saecla;
1090
mors aeterna tamen nilo minus illa manebit,
nec minus ille diu iam non erit, ex hodierno
lumine qui finem vitai fecit, et ille,
mensibus atque annis qui multis occidit ante.

from the time past in death nor can we fret anything away, whereby we
may haply be a less long time in the condition of the dead. Therefore you
may complete as many generations as you please during your life; none
the less however will that everlasting death await you; and for no less
long a time will he be no more in being, who beginning with today has
ended his life, than the man who has died many months and years ago.
I traverse the pathless haunts of the Pierides never yet trodden by sole of man. I love to approach the untasted springs and to quaff; I love to cull fresh flowers and gather for my head a distinguished crown from spots whence the muses have yet veiled the brows of none; first because I teach of great things and essay to release the mind from the fast bonds of religious scruples, and next because on a dark subject I pen such lucid verses o’erlaying all with the muses’ charm. For that too would seem to be not without good grounds: even as physicians when they purpose to give nauseous wormwood to children, first smear the rim round the bowl with the sweet yellow juice of honey, that the unthinking age of children may be fooled as far as the lips, and meanwhile drink up the bitter draught of wormwood and though beguiled
yet not be betrayed, but rather by such means recover health and strength: so I now, since this doctrine seems generally somewhat bitter to those by whom it has not been handled, and the multitude shrinks back from it in dismay, have resolved to set forth to you our doctrine in sweet-toned Pierian verse and o'erlay it as it were with the pleasant honey of the muses, if haply by such means I might engage your mind on my verses, till such time as you appreliend all the nature of things and throughly feel what use it has.

And now that I have taught what the nature of the mind is and out of what things it is formed into one being with the body, and how it is dissevered and returns into its first-beginnings, I will attempt to lay before you a point which most nearly concerns these questions, the existence of things which we call idols of things: these, like films peeled off from the surface of things, fly to and fro through the air, and do likewise frighten our minds when they present themselves to us awake as well as in sleep, what time we behold strange shapes and idols of the light-bereaved, which have often startled us in appalling wise as we lay relaxed in sleep: this I will attempt, that we may not haply believe that souls break loose from Acheron or that shades fly about among the living or
neve aliquid nostri post mortem posse relinqui, cum corpus simul atque animi natura perempta in sua discessum dederint primordia quaeque.

Dico igitur rerum effigias tenuisque figuras mittier ab rebus summo de corpore rerum, quae quasi membranae vel cortex nominandae, quod speciem ac formam similem gerit eius imago cuiuscumque cluet de corpore fusa vagari.

id licet hinc quamvis hebeti cognoscere corde. principio quoniam mittunt in rebus apertis corpora res multae, partim diffusa solute, robora ceu fumum mittunt ignesque vaporem, et partim contexta magis condensaque, ut olim cum teretis ponunt tunicas aestate cicadae, et vituli cum membranas de corpore summo nascentes mittunt, et item cum lubrica serpens exuit in spinis vestem; nam saepe videmus illorum spolii vepres volitantibus auctas: quae quoniam flunt, tenuis quoque debet imago ab rebus mitti summo de corpore rerum. nam cur illa cadant magis ab rebusque recedant quam quae tenvia sunt, hiscendist nulla potestas; praesertim cum sint in summis corpora rebus

that any part of us is left behind after death, when the body and the nature of the mind destroyed together have taken their departure into their several first-beginnings.

I say then that pictures of things and thin shapes are emitted from things off their surface: these are like films or may each be named a rind, because each image bears an appearance and form like to the thing whatever it is from whose body it is shed and wanders forth. This you may learn however dull of apprehension from what follows. First of all since among things open to sight many emit bodies, some in a state of loose diffusion, like smoke which logs of oak, heat which fires emit; some of a closer and denser texture, like the gossamer coats which at times cicades doff in summer, and the films which calves at their birth cast from the surface of their body, as well as the vesture which the slippery serpent puts off among the thorns; for often we see the brambles enriched with their flying spoils: since these cases occur, a thin image likewise must be emitted from things off their surface. For why those films should drop off and withdraw from things rather than films which are really thin, no reason whatever can be assigned; especially since there are on the surface of things many minute bodies which may
multa minuta, iaci quae possint ordine eodem quo fuerint et formai servare figuram, et multo citius, quanto minus indupediri pauca queunt et sunt in prima fronte locata, nam certe iacere ac largiri multa videmus, non solum ex alto penitusque, ut diximus ante, verum de summis ipsum quoque saepe colorem, et volgo faciunt id lutea russaque vela et ferrugina, cum magnis intenta theatris per malos volgata trabesque trementia flutant; namque ibi consessum caveai supter et omnem scaenai speciem, patrum coetumque decorum inficiunt coguntque suo fluitare colore. et quanto circum mage sunt inclusa theatri moenibiu', tam magis haec intus perfusa lepore omnia conrident correpta luce diei. ergo lintea de summo cum corpore fucum mittunt, effigias quoque debent mittere tenvis res quaeque, ex summo quoniam iaculantur utraque. sunt igitur iam formarum vestigia certa quae volgo volitant suprili praedita filo nec singillatim possunt secreta videri. praeterea omnis odor fumus vapor atque aliae res be discharged in the same order they had before and preserve the outline of the shape, and be discharged with far more velocity, inasmuch as they are less liable to get hampered being few in number and stationed in the front rank. For without doubt we see many things discharge and freely give not only from the core and centre, but from their surfaces, besides other things colour itself. And this is commonly done by yellow and red and dark-blue awnings, when they are spread over large theatres and flutter and wave as they stretch across their poles; for then they dye the seated assemblage below and all the show of the stage and the richly attired company of the fathers, and compel them to dance about in their colour. And the more these objects are shut in all round by the ovalis of the theatre, the more do all of them within laugh on all hands, overlaid with graceful hues, the light of day being narrowed. Therefore since sheets of canvas emit colour from their surface, all things will naturally emit thin pictures too, since in each case alike they discharge from the surface. There are therefore as now shewn sure outlines of shapes, which fly all about possessed of an exquisitely small thickness and cannot when separate be seen one at a time. Again all smell smoke heat and other
consimiles ideo diffusae e rebus abundant,
ex alto quia dum veniunt intrinsecus ortae,
scinduntur per iter flexum, nec recta viarum
ostia sunt qua contendant exire coortae.
at contra tenuis summi membrana coloris
cum iacitur, nil est quod eam discerpere possit,
in promptu quoniam est in prima fronte locata.
postremo speculis in aqua splendoreque in omni
quaecumque apparent nobis simulacra, neccessest,
quandoquidem simili specie sunt praeedita rerum
extima, imaginibus missis consistere rerum.
sunt igitur tenues formae rerum similesque
effigiae, singillatim quas cernere nemo
cum possit tamen, adsiduo crebroque repulsu
reiectae reddunt speculorum ex aequore visum,
nec ratione alia servari posse videntur,
tanto opere ut similes reddantur cuique figurae.

Nunc age quam tenui natura constet imago
percipe. et in primis, quoniam primordia tantum
sunt infra nostros sensus tantoque minora
quam quae primum oculi coeptant non posse tueri,
nunc tamen id quoque uti confirmem, exordia rerum

such-like things stream off things in a state of diffusion, because while
they are coming from the depths of the body having arisen within it,
they are torn in their winding passage, and there are no straight orifices
to the paths, for them to make their way out by in a mass. But on the
other hand when a thin film of surface colour is discharged, there is
nothing to rend it, since it is ready to hand stationed in front rank.
Lastly in the case of all idols which show themselves to us in mirrors
water or any other shining object, since their outsides are possessed of
an appearance like to the things they represent, they must be formed of
emitted images of things. There are therefore thin shapes and pictures
like to the things which, though no one can see them one at a time, yet
when thrown off by constant and repeated reflexion give back a visible
image from the plane surface of mirrors; and in no other way it would
seem can they be kept so entire that shapes are given back so exceedingly
like each object.

Now mark, and learn how thin the nature of an image is. And
first of all, since the first-beginnings are so far below the ken of our
senses and much smaller than the things which our eyes begin to be
able to see, to strengthen yet more the proof of this also, learn in a few
words how minutely fine are the beginnings of all things. First, living things are in some cases so very little, that their third part cannot be seen at all. Of what size are we to suppose any gut of such creatures to be? or the ball of the heart or the eyes? the limbs? or any part of the frame? how small they must be! And then further the several first-beginnings of which their soul and the nature of their mind must be formed? do you not perceive how fine, how minute they are? Again in the case of all things which exhale from their body a pungent smell, all-heal, nauseous wormwood, strong-scented southernwood and the bitter centauries, any one of which, if you happen to [feel it] lightly between two [fingers, will impregnate them with a strong smell]** but rather you are to know that idols of things wander about many in number in many ways, of no force, powerless to excite sense. But lest haply you suppose that only those idols of things which go off from things and no others wander about, there are likewise those which are spontaneously begotten and are formed by themselves in this lower heaven which is called air: these fashioned in many ways are borne along on high and being in a fluid state cease not to alter their appearance and change it into the outline of shapes of every possible
ut nubes facile interdum concrescere in alto
cernimus et mundi speciem violare serenam
aera mulcentes motu. nam saepe Gigantum
ora volare videntur et umbram ducere late,
interdum magni montes avolsaque saxa
montibus anteire et solem succedere praeter,
inde alios trahere atque inducere belua nimbos.]
Nunc ea quam facili et celeri ratione genantur
perpetuoque fluant ab rebus lapsaque cedant
semper enim summum quicquid de rebus abundat
quod iaculentur. et hoc alias cum pervenit in res,
transit, ut in primis vitrum. sed ubi aspera saxa
aut in materiam ligni pervenit, ibi iam
scinditur ut nullum simulacrum reddere possit,
at cum splendida quae constant opposta fuerunt
densaque, ut in primis speculum est, nil accidit horum;
nam neque, uti vitrum, potis est transire, neque autem
scindi; quam meminit levor praestare salutem.
quapropter fit ut hinc nobis simulacra redundent.
et quamvis subito quovis in tempore quamque
rem contra speculum ponas, apparat imago;

kind; as we see clouds sometimes gather into masses on high and blot
the calm clear face of heaven, fanning the air with their motion. Thus
often the faces of giants are seen to fly along and draw after them a far-
spreading shadow; sometimes great mountains and rocks torn from the
mountains are seen to go in advance and pass across the sun; and then
some huge beast is observed to draw with it and bring on other storm-
clouds.

Now [I will proceed to shew] with what ease and celerity they are
begotten and how incessantly they flow and fall away from things. The
outermost surface is ever streaming off from things and admits of being
discharged: when this reaches some things, it passes through them, glass
especially. But when it reaches rough stones or the matter of wood, it
is then so torn that it cannot give back any idol. But when objects at
once shining and dense have been put in its way, a mirror especially,
none of these results has place: it can neither pass through it, like glass,
nor can it be torn either; such perfect safety the polished surface minds
to ensure. In consequence of this idols stream back to us from such ob-
jects; and however suddenly at any moment you place any thing opposite
a mirror, an image shews itself: hence you may be sure that thin tex-
perseguo fluere ut nostas e corpore summo
texturas rerum tenuis tenuisque figuras.

ergo multa brevi spatio simulacra genuntur,
ut merito celer his rebus dicatur origo.
et quasi multa brevi spatio summittere debet
lumina sol ut perpetuo sint omnia plena,
sic ab rebus item simili ratione necessest
temporis in puncto rerum simulacra ferantur
multa modis multis in cunctas undique partis;
quandoquidem speculum quocumque obvertimus oris,
res ibi respondent simili forma atque colore.

Praeterea modo cum fuerit liquidissima caeli
tempestas, perquam subito fit turbida foede,
undique uti tenebras omnis Acherunta rearis
liquisse et magnas caeli complesse cavernas.
usque adeo taetra nimborum nocte coorta
inpendent atrae formidinis ora superne;
quorum quantula pars sit imago dicere nemost
qui possit neque eam rationem reddere dictis.

Nunc age, quam celeri motu simulacra feruntur
et quae mobilitas ollis tranantibus auras
reddita sit, longo spatio ut brevis hora teratur,
in quem quaeque locum diverso numine tendunt,
suavidicis potius quam multis versibus edam;
parvus ut est cyni melior canor, ille gruum quam clamor in aetherii dispersus nubibus austri.
principio persaepe levis res atque minutis
corporibus factas celeris licet esse videre.
in quo iam genere est solis lux et vapor eius propterea quia quia sunt e primis facta minutis quae quasi cuduntur perque aeris intervallum non dubitant transire sequenti concita plaga.

suppeditatur enim confestim lumine lumen et quasi protelo stimulatur fulgere fulgur.
quapropter simulacra pari ratione necesse est inmemorabile per spatium transcurrere posse temporis in puncto, primum quod parvola causa est procul a tergo quae provehat atque propellat, deinde quod usque adeo textura praedita rara mittuntur, facile ut quasvis penetrare queant res et quasi permanare per aeris intervallum.
praeterea si, quae penitus corpuscula rerum ex altoque foras mittuntur, solis uti lux ac vapor, haec puncto cernuntur lapsa diei per totum caeli spatium diffundere sese

whatever the spot towards which they go with a movement of varied tendency, all this I will tell in sweetly worded rather than in many verses; as the short song of the swan is better than the loud noise of cranes scattered abroad amid the ethereal clouds of the south. First of all we may very often observe that things which are light and made of minute bodies are swift. Of this kind are the light of the sun and its heat, because they are made of minute first things which are knocked forward so to speak and do not hesitate to pass through the space of air between, ever driven on by a blow following behind; for light on the instant is replaced by light and brightness goaded to shew its brightness in what you might call an ever on-moving team. Therefore in like manner idols must be able to scour in a moment of time through space unspeakable, first because they are exceeding small and there is a cause at their back to carry and impel them forward; next because when emitted they are possessed of so rare a texture, that they can readily pass through any things and stream as it were through the space of air between. Again if those minute bodies of things which are given out from the inmost depths of these things, as the light and heat of the sun, are seen in a moment of time to glide and spread themselves through the
length and breadth of heaven, fly over sea and lands and flood the heaven, what then of those which stand ready posted in front rank, when they are discharged and nothing obstructs their egress, where moreover they are borne on with such winged rapidity? do you not see how much faster and farther they must travel, scouring through many times the same amount of space in the same time that the sunlight takes to spread over heaven? This too appears to be an eminently true proof of the velocity with which idols of things are borne along: as soon as ever the brightness of water is set down in the open air, if the heaven is starry, in a moment the clear radiant constellations of ether imaged in the water correspond to those in the heaven. Now do you see in what a moment of time an image drops down from the borders of heaven to the borders of earth? Therefore again and again I repeat you must admit that bodies capable of striking the eyes and of provoking sense [constantly travel] with a marvellous [velocity]. Smells too incessantly stream from certain things; as does cold from rivers, heat from the sun, spray from the waves of the sea, that eater into walls near the shore. Various sounds also cease not to fly through the air. Then too a moist salt flavour often comes into the mouth, when we are moving about beside
cum mare versamur propter, dilutaeque contra
cum tuimur misceri absinthia, tangit amaror.
usque adeo omnibus ab rebus res quaeque fluenter
fertur et in cunctas dimittitur undique partis
nec mora nec reques interdatur ulla fluendi,
perpetuo quoniam sentimus, et omnia semper
cernere odoriam sentimus, et sentire sonare.

Praeterea quoniam manibus tractata figura
in tenebris quaedam cognoscitur esse eadem quae
cernitur in luce et claro candore, necessit
consimili causa tactum visumque moveri.
nunc igitur si quadratum temptamus et id nos
commovet in tenebris, in luci quae poterit res
accidere ad speciem quadrata, nisi eius imago?
esse in imaginibus quapropter causa videtur
cernundi neque posse sine his res ulla videri.
nunc ea quae dico rerum simulacra feruntur
undique et in cunctas iacuntur didita partis;
verum nos oculis quia solis cernere quimus,
propterea fit uti, speciem quo vertimus, omnes
res ibi eam contra feriant forma et colore.
et quantum quaeque ab nobis res absit, imago
efficit ut videamus et internoscere curat;

the sea; and when we look on at the mixing of a decoction of wormwood, its bitterness affects us. In such a constant stream from all these things the several qualities are carried and are transmitted in all directions round, and no delay, no respite in the flow is ever granted, since we constantly have feeling, and may at any time see smell and hear the sound of anything.

Again since a particular figure felt by the hands in the dark is known to be the same which is seen in the bright light of day, touch and sight must be excited by a quite similar cause. Well then if we handle a square thing and it excites our attention in the dark, in the day-light what square thing will be able to fall on our sight, except the image of that thing? Therefore the cause of seeing it is plain lies in images and no thing can be perceived without them. Well the idols of things I speak of are borne along all round and are discharged and transmitted in all directions; but because we can see with the eyes alone, the consequence is that, to whatever point we turn our sight, there all the several things meet and strike it with their shape and colour. And the image gives the power to see and the means to distinguish how far each thing is
nam cum mittitur, extemplo protrudit agitque
aera qui inter se cumque est oculosque locatus,
isque ita per nostras acies perlabitur omnis
et quasi perterget pupillas atque ita transit.

propterea fit uti videamus quam procul absit
res quaeque. et quanto plus aeris ante agitatur
et nostros oculos perterget longior aura,
tam procul esse magis res quaeque remota videtur.
scilicet haec summe celeri ratione geruntur,
que sit ut videamus et una quam procul absit.
illi in his rebus minime mirabile habendumst,
cur, ea quae feriant oculos simulacra videri
singula cum nequeant, res ipsae perspiciantur.
ventus enim quoque paulatim cum verberat et cum
aere fluit frigus, non privam quamque solemus
sed magis unorsum, fierique perinde videmus
corpore tum plagas in nostro tamquam aliquae res
verberet atque sui det sensum corporis extra.
praeterea lapidem digito cum tundimus, ipsum
tangimus extremum saxi summumque colorum,
nec sentimus eum tactu, verum magis ipsam
duritiem penitus saxi sentimus in alto.
Nunc age, cur ultra speculum videatur imago percipe; nam certe penitus semota videtur. quod genus illa foris quae vere transspiciuntur, ianua cum per se transpectum praebet apertum, multa facitque foris ex aedibus ut videantur. is quoque enim duplici geminoque fit aere visus, primus enim citra postes tum cernitur aer, inde fores ipsae dextra laevaque secuntur, post extraria lux oculos perterget et aer alter et illa foris quae vere transspiciuntur. sic ubi se primum speculi proiecit imago, dum venit ad nostras acies, protrudit agitque aera qui inter se cumquest oculosque locatus, et facit ut prius hunc omnem sentire queamus quam speculum. sed ubi speculum quoque sensimus ipsum, continuo a nobis in idem quae fertur imago pervenit et nostros oculos reiecta revisit atque alium prae se propellens aera volvit et facit ut prius hunc quam se videamus, eoque distare ab speculo tantum semota videtur. quare etiam atque etiam minime mirarier est par, illic quor reddant speculorum ex aequore visum, aeribus binis quoniam res confit utraque.

Now mark, and learn why the image is seen beyond the mirror; for without doubt it is seen withdrawn far within. The case is just the same as with things which are viewed in their reality beyond a door, when it offers through it an unobstructed prospect and lets many things outside be seen from a house. That vision too is effected by two separate airs: first there is an air seen in such a case inside the doorway; next come the leaves of the door right and left; next a light outside brushes the eyes, then a second air, then those things outside which are viewed in their reality. Thus when the image of the mirror has first discharged itself, in coming to our sight it pushes forward and impels all the air which lies between it and the eyes, and enables us to see the whole of it before the mirror. But when we have perceived the mirror as well, at once the image which is conveyed from us reaches the mirror and then is reflected and comes back to our eyes, and drives on and rolls in front of it a second air and lets us see this before itself, and for this reason it looks so far withdrawn from the mirror. Wherefore again and again I repeat there is no cause at all to wonder why the images give back the reflexion from the surface of mirrors in the spot they do, since in both the given cases the result is produced by two airs.
nunc ea quae nobis membrorum dextera pars est, in speculis fit ut in laeva videatur eo quod planitiem ad speculi veniens cum offendit imago, non convertitur incolumis, sed recta retrorsum sic eliditur, ut siquis, prius arida quam sit cretea persona, adlidat pilaeve trabive, atque ea continuo rectam si fronte figuram

295

servet et elisam retro sese exprimat ipsa.

fiet ita, ante oculus fuerit qui dexter, ut idem

300

nunc sit laeves, et e laevo sit mutua dexter.

fit quoque de speculo in speculum ut tradatur imago, quinque etiam sexae ut fieri simulacra suërint.

305

nam quaecumque retro parte interiore latebunt, inde tamen, quamvis terte penitusque remota,

omnia per flexos aditus eucta licebit

310

pluribus haec speculis videantur in aedibus esse. usque adeo speculo in speculum translucet imago, et cum laeva data est, fit rursus ut dextera fiat, inde retro rursus redit et convertitur eodem.

315

quin etiam quaecumque latuscula sunt speculorum adsimili lateris flexura praedita nostri, dextera ea propter nobis simulacra remittunt, aut quia de speculo in speculum transfertur imago,

To proceed, the right side of our body is seen in mirrors to be on the left, because when the image comes and strikes on the plane of the mirror, it is not turned back unaltered, but is beaten out in a right line backwards, just as if you were to take a plaster mask before it is dry and dash it on a pillar or beam, and it forthwith were to preserve the lines of its features undistorted in front and were to strike out an exact copy of itself straight backwards. The result will be that the eye which was right will now be left; and conversely the left become the right. An image may also be so transmitted from one mirror to another that five or six idols are often produced. And thus all the things which lurk in the inmost corners of a house, however far they are withdrawn into tortuous recesses, may yet be all brought out through winding passages by the aid of a number of mirrors and be seen to be in the house. So unfailingly does the mirror reflect itself from mirror to mirror; and when the left side is presented, it becomes the right in the new image; then it is changed back again and turns round to its former condition. Moreover all mirrors which form little sides possessing a curvature resembling our side, send back to us idols with their right corresponding to our right either because the image is transmitted from one mirror to
inde ad nos elisa bis advolat, aut etiam quod
340 circum agitur, cum venit, imago propterea quod
dexta figura docet speculi convertier ad nos.
indugredi porro pariter simulacra pedemque
ponere nobiscum credas gestumque imitari
propterea quia, de speculi qua parte recedas,
345 continuo nequeunt illinc simulacra reverti;
omnia quandoquidem cogit natura referri
ac resilire ab rebus ad aqueos reddita flexus.

Splendida porro oculi fugiant vitantque tueri.
329 \[\text{sol etiam caecat, contra si tendere pergas,}
propterea quia vis magnast ipsius et alte
aera per purum graviter simulacra feruntur
et feriunt oculos turbantia composituras.
praeterea splendor quicumque est acer adurit
330 saepe oculos ideo quod semina possidet ignis
multa, dolorem oculis quae gignunt insinuando.
lurida praeterea fiunt quaecumque tuentur
arquati, quia luroris de corpore eorum
335 semina multa fluunt simulacris obvia rerum,
multaque sunt oculis in eorum denique mixta,
quae contage sua palloribus omnia pingunt.

another, and then after it has been twice struck out flies to us, or it may
be because the image, when it has come to the mirror, wheels round,
because the curved shape of the mirror teaches it to turn itself as we are
turned. Again you would think that idols step out and put down their
foot at the same time with us and mimic our action, because from
whatever part of a mirror you draw back, from that part forthwith no
idols can be reflected; since nature constrains all things, when they are
carried back and recoil from things to be given back in postures like to
those of the objects they represent.

Bright things again the eyes eschew and shun to look upon: the sun
even blinds them, if you persist in turning them towards it, because its
power is great and idols are borne through the clear air with great down-
ward force from on high, and strike the eyes and disorder their fastenings.
Moreover any vivid brightness often burns the eyes, because it contains
many seeds of fire which make a way in and beget pain in the eyes.
Again whatever the jaundiced look at, becomes a greenish-yellow, be-
cause many seeds of greenish-yellow stream from their body and meet
the idols of things, and many too are mixed up in their eyes, and these
by their infection tinge all things with sallow hues. Again we see out
e tenebris autem quae sunt in luce tuemur propterea quia, cum propior caliginis aer ater init oculos prior et possedit apertos, 315 insequitur candens confestim lucidus aer qui quasi purgat eos ac nigras discutit umbras aeris illius; nam multis partibus hic est mobilior multisque minutor et mage pollens. qui simul atque vias oculorum luce replevit atque patefecit quas ante obsederat aer ater, continuo rerum simulacra secuntur quae sita sunt in luce, lacessuntque ut videamus. 348 quod contra facere in tenebris e luce nequimus propterea quia posterior caliginis aer crassior insequitur qui cuncta foramina complet obsiditque vias oculorum, ne simulacra possint ullarum rerum coniecta movere. quadratasque procul turris cum cernimus urbis, propterea fit uti videantur saepe rutundae, angulus optusus quia longe cernitur omnis 355 sive etiam potius non cernitur ac perit eius plaga nec ad nostras acies perlabitur ictus, aera per multum quia dum simulacra feruntur, cogit hebescere eum crebris offensibus aer. hoc ubi suffugit sensum simul angulus omnis, of the dark things which are in the light for this reason: when the black air of darkness being the nearer has first entered and taken possession of the open eyes, the bright white air follows straightway after and cleanses them so to say and dispels the black shadows of the other air; for this is a great deal more nimble, a great deal more subtle and more efficacious. As soon as it has filled with light and opened up the passages of the eyes which the black air had before blocked up, forthwith the idols of things which are situated in the light follow and excite them so that we see. This we cannot do conversely in the dark out of the light because the grosser air of darkness follows behind and quite fills all the openings and blocks up the passages of the eyes, not letting the idols of any things at all be thrown into the eyes to move them. Again when we descry far off the square towers of a town they often appear to be round for this reason: all the angles are seen from a distance to look obtuse, or rather are not seen at all, and their blow is lost and their stroke never makes its way to our sight, because while the idols are borne on through much air, the air by repeated collisions blunts the stroke perforce. When in this way all the angles have together eluded the sense, the
stone structures are rounded off as if by the lathe; yet they do not look like the things which are close before us and really round, but somewhat resembling them as in shadowy outline. Our shadow likewise seems to move in the sunshine and to follow our steps and mimic our action; if you think forsooth that air deprived of light can step, imitating the motions and the action of men; for that which we are wont to term shadow can be nothing but air devoid of light. Sure enough because the earth in certain spots successively is deprived of light wherever we intercept it in moving about, while that part of it which we have quitted is filled with light, therefore that which was the shadow of our body, seems to have always followed us unchanged in a direct line with us. For new rays of light ever pour in and the old are lost, just as if wool were drawn into the fire. Therefore the earth is readily stripped of light, and again filled, and cleanses itself from black shadows.

And yet in all this we do not admit that the eyes are cheated one whit. For it is their province to observe in what spot soever light and shade are; but whether the lights are still the same or not, and whether it is the same shadow which was in this spot that is now passing to that, or whether what we said a little before, is not rather the fact, this
hoc animi demum ratio discernere debet, nec possunt oculi naturam noscere rerum.

proinde animi vitium hoc oculis adstringere noli. qua vehimur navi, fertur, cum stare videtur; quae manet in statione, ea praeter creditur ire. et fugere ad puppim colles campique videntur quos agimus praeter navem velisque volamus.

sidera cessare aetheriis adfixa cavernis cuncta videntur, et adsiduo sunt omnia motu, quandoquidem longos obitus exorta revisunt, cum permensa suo sunt caelum corpore claro. solque pari ratione manere et luna videntur in statione, ea quae ferri res indicat ipsa.

exstantisque procul medio de gurgite montis classibus inter quos liber patet exitus ingens, insula conjunctis tamen ex his una videtur. atria versari et circumcursare columnae usque adeo fit uti pueris videantur, ubi ipsi desierunt verti, vix ut iam credere possint non supra sese ruere omnia tecta minari. iamque rubrum tremulis iubar ignibus erigere alte cum coeptat natura supraque extollere montes,

the reason of the mind, and only it, has to determine; nor can the eyes know the nature of things. Do not then impute to the eyes this frailty of the mind. The ship in which we are sailing, moves on, while seeming to stand still; that one which remains at its moorings, is believed to be passing by. The hills and fields seem to be dropping astern, past which we are driving our ship and flying under sail. The stars all seem to be at rest fast fixed to the ethereal vaults, and yet are all in constant motion, since they rise and then go back to their far-off places of setting, after they have traversed the length of heaven with their bright bodies. In like manner sun and moon seem to stay in one place, bodies which simple fact proves are carried on. And though between mountains rising up afar off from amid the waters there opens out for fleets a free passage of wide extent, yet a single island seems to be formed out of them united into one. When children have stopped turning round themselves, the halls appear to them to whirl about and the pillars to course round to such a degree, that they can scarce believe that the whole roof is not threatening to tumble down upon them. And when nature begins to raise on high the sun's beam yet ruddy with bickering fires and to lift it up above the mountains, those hills
quos tibi tum supra sol montis esse videtur
comminus ipse suo contingens fervidus igni,
vix absunt nobis missus bis mille sagittae,
vix etiam cursus quingentos saepe veruti:
inter eos solemque iacent immania ponti
aequora substrata aetheriis ingentibus oris,
interiectaque sunt terrarum milia multa
quae variae retinent gentes et saecla ferarum.
at conectus aquae digitum non altior unum,
quic lapides inter sistit per strata viarum,
despectum praebet sub terras inpete tanto,
a terris quantum caeli patet altus hiatus;
nubila dispicere et caelum ut videare videre,
cetera mirando sub terras abdita caelo.
denique ubi in medio nobis ecus acer obhaesit
flumine et in rapidas amnis despemimus undas,
stantis equi corpus transversum ferre videtur
vis et in adversum flumen contrudere raptim,
et quocumque oculos traiecimus omnia ferri
et fluere adsimili nobis ratione videntur.
porticus aequali quamvis est denique ductu
stantisque in perpetuum paribus suffulta columnis,

above which the sun then seems to you to be, as blazing close at
hand he dyes them with his own fire, are distant from us scarce two
thousand arrow-flights, yea often scarce five hundred casts of a javelin;
yet between them and the sun lie immense levels of sea, spread
out below the huge borders of ether, and many thousands of lands
are between, held by diverse peoples and races of wild beasts. Then
a puddle of water not more than a finger-breadth deep, which stands
between the stones in the streets, offers a prospect beneath the earth
of a reach as vast, as that with which the high yawning mouth of
heaven opens out above the earth; so that you seem to discern clouds
and see the sky and all the other objects far withdrawn into that
wondrous sky beneath the earth. Again when our stout horse has
stuck in the middle of a river and we have looked down on the swift
waters of the stream, some force seems to carry athwart the current the
body of the horse which is standing still and to force it rapidly up the
stream; and to whatever point we cast our eyes about, all things seem
to be carried on and to be flowing in the same way as we are. Again
although a portico runs in parallel lines from one end to the other and
stands supported by equal columns along its whole extent, yet when
longa tamen parte ab summa cum tota videtur,
paulatim trahit angusti fastigia coni,
tecta solo iungens atque omnia dextera laevis
donec in obscurum coni conduxit acumen.
in pelago nautis ex undis ortus in undis
sol fit uti videatur obire et condere lumen;
quippe ubi nil aliud nisi aquam caelumque tuentur;
ne leviter credas labefactari undique sensus.
at maris ignaris in portu clauda videntur
navigia aplustris fractis obnitier undae.
nam quaecumque supra rorem salis edita pars est
remorum, recta est, et recta superne guberna:
quae demersa liquorem obeunt, refracta videntur
omnia converti sursumque supina reverti
et reflexa prope in summo fluitare liquore.
raraque per caelum cum venti nubila portant
tempore nocturno, tum splendida signa videntur
labier adversum nimbos atque ire superne
longe aliam in partem ac vera ratione feruntur.
at si forte oculo manus uni subdita super
pressit eum, quodam sensu fit uti videantur
omnia quae tuimur fieri tum bina tuendo,

from the top of it it is seen in its entire length, it gradually forms the
contracted top of a narrowing cone, until uniting roof with floor and all
the right side with the left it has brought them together into the
vanishing point of a cone. To sailors on the sea the sun appears to rise
out of the waters and in the waters to set and bury his light; just
because they behold nothing but water and sky; that you may not
lightly suppose the credit of the senses to be shaken on all hands. Then
to people unacquainted with the sea ships in harbour seem to be all
askew and with poop-fittings broken to be pressing up against the water.
For whatever part of the oars is raised above the salt water, is straight,
and the rudders in their upper half are straight: the parts which are
sunk below the water-level, appear to be broken and bent round and to
slope up and turn back towards the surface and to be so much twisted
back as wellnigh to float on the top of the water. And when the winds
carry the thinly scattered clouds across heaven in the night-time, then
do the glittering signs appear to glide athwart the ruck and to be
travelling on high in a direction quite different to their real course.
Then if our hand chance to be placed beneath one eye and press it
below, through a certain sensation all things which we look at appear
bina lucernarum florentia lumina flammis
et duplīcis hominum facies et corpora bina.
denique cum suavi devinxit membra sopore
somnus et in summa corpus iacet omne quiete,
tum vigilare tamen nobis et membra movere
nostra videmur, et in noctis caligine caeca
cērnerum censemus solem lumenque diurnum,
concluso loco caelum mare flumina montis
mutare et campos pedibus transire videmur,
et sonitus audire, severa silentia noctis
undique cum content, et reddere dicta tacentes.
cetera de genere hoc mirando multa videmus,
quae violare fidelem quasi sensibus omnia quaeerunt,
nequiquam, quoniam pars horum maxima fallit
propter opinatus animi quos addimus ipsi,
pro visis ut sint quae non sunt sensibus visa.
nam nil aegrius est quam res secernere apertas
ab dubiis, animus quas ab se protinus addit.
Denique nil sciri siquis putat, id quoque nescit
an sciri possit, quoniam nil scire fatetur.
hunc igitur contra mittam contendere causam,
qui capite ipse sua in statuit vestigia sese.

then to become double as we look; the light of lamps brilliant with
flames to be double, double too the furniture through the whole house,
double men’s faces and men’s bodies. Again when sleep has chained
down our limbs in sweet slumber and the whole body is sunk in pro-
found repose, yet then we seem to ourselves to be awake and to be
moving our limbs, and mid the thick darkness of night we think we see
the sun and the daylight; and though in a confined room, we seem to be
passing to new climates seas rivers mountains and to be crossing plains
on foot and to hear noises, though the austere silence of night prevails
all round, and to be uttering speech though quite silent. Many are the
other things of this marvellous sort we see, which all seek to shake as
it were the credit of the senses: quite in vain, since the greatest part of
these cases cheats us on account of the mental suppositions which we
add of ourselves, taking those things as seen which have not been seen
by the senses. For nothing is harder than to separate manifest facts
from doubtful which the mind without hesitation adds on of itself.

Again if a man believe that nothing is known, he knows not whether
this even can be known, since he admits he knows nothing. I will
therefore decline to argue the case against him who places himself with
et tamen hoc quoque uti concedam scire, at id ipsum quaeram, cum in rebus veri nil viderit ante, unde sciat quid sit scire et nescire vicissim, notitiam veri quae res falsique crearet et dubium certo quae res differre probarit. invenies primis ab sensibus esse creatam notitiem veri neque sensus posse refelli. nam maiore fide debet reperiri illud, sponte sua veris quod possit vincere falsa. quid maiore fide por quam sensus haberip debet? an ab sensu falso ratio orta valebit dicere eos contra, quae tota ab sensibus orta est? qui nisi sunt veri, ratio quoque falsa fit omnis. an poterunt oculos aures reprehendere, an aures tactus? an hunc porro tactum sapor arguet oris, an confutabant nares oculive revinent? non, ut opinor, ita est. nam seorsum cuique potestas divisast, sua vis cuiquest, ideoque necesse est et quod molle sit et gelidum fervensve seorsum et seorsum varios rerum sentire colores et quaecumque coloribus sint coniuncta videre.

seorsus item sapor oris habet vim, seorsus odores

head where his feet should be. And yet granting that he knows this, I would still put this question, since he has never yet seen any truth in things, whence he knows what knowing and not knowing severally are, and what it is that has produced the knowledge of the true and the false and what has proved the doubtful to differ from the certain. You will find that from the senses first has proceeded the knowledge of the true and that the senses cannot be refuted. For then that something ought to be discovered which is of greater credit than they, able of itself to refute things false by true things. Well then what can fairly he accounted worthy of greater credit than sense? Shall reason founded on false sense be able to contradict them, wholly founded as it is on the senses? and if they are not true, then all reason as well is rendered false. Or shall the ears be able to take the eyes to task, or the touch the ears? Again shall the taste call in question this touch, or the nostrils refute or the eyes controvert it? Not so I guess; for each apart has its own distinct office, each its own power; and therefore we must perceive what is soft and cold or hot by one distinct faculty, by another perceive the different colours of things and see all the qualities conjoined with colour. Taste too has its faculty apart; smells spring
nascuntur, sorsum sonitus. ideoque necesse est
non possint alios alii convincere sensus.
nec porro poterunt ipsi reprehendere sese,
aequa fides quo quumiam debetur semper haber.
proinde quod in quo quest his visum tempore, verumst.
et si non poterit ratio dissolvere causam,
cur ea quae fuerint iuxtim quadrata, procul sint
visa rutunda, tamen praestat rationis et gentem
reddere mendose causas utriusque figurae,
quam manibus manifesta suis emittre quoquam
et violare fidem primam et convellere tota
fundamenta quibus nixatur vita salusque.
non modo enim ratio ruat omnis, vita quoque ipsa
concidat extemplo, nisi credere sensibus ausis
praecipitisque locos vitare et cetera quae sint
in genere hoc fugienda, sequi contraria quae sint.
illa tibi est igitur verborum copia cessant.
denique ut in fabrica, si pravast regula prima,
normaque si fallax rectis regionibus exit,
et libella aliqua si ex parti claudicat hilum,
omnia mendose fieri atque obstipa necesse est
prava cubantia prona supina atque absona tecta,
from one source, sounds from another. It must follow therefore that any
one sense cannot confute any other. No nor can any sense take itself
to task, since equal credit must be assigned to it at all times. What
therefore has at any time appeared true to each sense, is true. And if
reason shall be unable to explain away the cause why things which
close at hand were square, at a distance looked round, it yet is better, if
you are at a loss for the reason, to state erroneously the causes of each
shape, than to let slip from your grasp on any side things manifest and
ruin the groundwork of belief and wrench up all the foundations on
which rest life and existence. For not only would all reason give way,
life itself would at once fall to the ground, if you dare not trust the
senses and shun precipices and all things else of this sort that are to be
avoided, and pursue the opposite things. All that host of words then is
quite unmeaning, which has been drawn out in array against the senses.
Once more, as in a building, if the rule first applied is wry, and the
square is untrue and swerves from its proper lines, and if there is the
slightest hitch in any part of the level, all the construction must be
faulty, all must be wry crooked sloping, leaning forwards, leaning back-
wards, without symmetry, so that some parts seem ready to fall, others
do fall, ruined all by the first erroneous measurements; so too all reason of things must needs prove to you distorted and false, which is founded on false senses.

And now to explain in what way the other senses do each perceive their several objects, is the likewise arduous task which is still left.

In the first place all sound and voice is heard when they have made their way into the ears and have struck with their body the sense of hearing. For voice too and sound you must admit to be bodily, since they are able to act upon the senses. Again voice often abrades the throat, and shouting in passing forth makes the windpipe more rough: when to wit a larger mass has gathered and the first-beginnings of voices have commenced to pass abroad through their strait passage, you are to know the door of the mouth crammed itself is abraded. There is no doubt then that voices and words consist of bodily first-beginnings, with the power to hurt; nor can you fail to know how much of body is taken away and how much is withdrawn from men’s very sinews and strength by a speech continued without interruption from the dawning brightness of morning to the shadow of black night, above all if it has been poured forth with much loud shouting. Voice therefore must be bodily, since
multa loquens quoniam amittit de corpore partem.

asperitas autem vocis fit ab asperitate
principiorum et item levor levore creatur.

nec simili penetrant auris primordia forma,
cum tuba depressa graviter sub murmu're mugit
et reboat raucum regio cita barbara bombum,
et validis cygni torrentibus ex Heliconis
cum liquidam tollunt lugubri voce querellam.

Hasce igitur penitus voces cum corpore nostro
exprimimus rectoque foras emittimus ore,
formaturaque labororum pro parte figurat.

hoc ubi non longum spatiumst unde una profecta
perveniat vox quaeque, necessest verba quoque ipsa
plane exaudiri discernique articulatim;
servat enim formaturam servatque figuram.
at si interpositum spatium sit longius aequo,
aera per multum confundi verba necessest
et conturbari vocem, dum transvolat auras.
ergo fit, sonitum ut possis sentire neque illam
internoscere, verborum sententia quae sit:
usque adeo confusa venit vox inque pedita.

a man by much speaking loses a portion from his body. Next roughness
of voice comes from roughness of the first-beginnings, as smoothness is
produced from smoothness. Nor are the first-beginnings of like shape
which pierce the ears in these two cases: when the trumpet brays dully
in deep low tones, the barbarian country round, echoing back the hoarse
hollow sound, and when swans from the headstrong torrents of Helicon
raise their clear-toned dirge with plaintive voice.

When therefore we force these voices forth from the depths of our
body and discharge them straight out at the mouth, the pliant tongue
deft fashioner of words gives them articulate utterance and the structure
of the lips does its part in shaping them. Therefore when the distance
is not long between the point from which each several voice has started
and that at which it arrives, the very word too must be plainly heard
and distinguished syllable by syllable; for each voice retains its structure
and retains its shape. But if the space between be more than is suitable,
the words must be huddled together in passing through much air and the
voice be disorganised in its flight through the same. Therefore it is that
you can hear a sound, yet cannot distinguish what the meaning of the
words is: so huddled and hampered is the voice when it comes. Again
praeterea verbum saepe unum perciet auris omnibus in populo, missum praeconis ab ore.
in multas igitur voces vox una repente diffugit, in privas quoniam se dividit auris
obsignans formam verbi clarumque sonorem. at quae pars vocum non auris incidunt ipsas,
praeterlata perit frustra diffusa per auras.
pars solidis adlisa locis reiecta sonorem
reedit et interdum frustratur imagine verbi.
quia bene cum videas, rationem reddere possis tute tibi atque aliis, quo pacto per loca sola
saxa parvis formas verborum ex ordine reddant,
palantis comites quom montis inter opacos quae tibi et magna dispersos voce ciemos.
sex etiam aut septem loca vidi reddere vocis, unam cum iaceres: ita colles collibus ipsi
verba repulsantes iterabant docta referri.
haec loca capripedes satyros nymphasque tenere finitimi fingunt et faunos esse locuntur
quorum noctivago strepitu ludoque iocanti adfirmant volgo taciturna silentia rumpi
chordialumque sonos fieri dulcisque querellas, tibia quas fundit digitis pulsata canentum,
a single word often stirs the ears of a whole assembly of people, when uttered by the crier's mouth. One voice therefore in a moment starts asunder into many voices, since it distributes itself separately into all the ears, stamping upon them the form and distinct sound of the word. But such of the voices as do not fall directly on the ears, are carried past and lost, fruitlessly dispersed in air: some striking upon solid spots are thrown back and give back a sound and sometimes mock by an echo of the word. Now that you fully perceive all this, you may explain to yourself and others how it is that in lonely spots rocks give back in regular succession forms of words like to those sent forth, when we seek our comrades straying about among the darkened hills and with loud voice call upon them scattered abroad. I have seen places give back as many as six or seven voices, when you sent forth one: in such wise did the very hills dash back on hills and repeat the words thus trained to come back. These spots the people round fancy that the goat-footed satyrs and nymphs inhabit, and tell that they are the fauns by whose night-pervading noise and sportive play as they declare the still silence is broken and sounds produced of stringed instruments and sweet plaintive melodies, such as the pipe pours forth when beaten by the fingers of the
et genus agricolum late sentiscere, quom Pan pinea semiferi capitis velamina quassans unco saepe labro calamos percurrit hiantis, fistula silvestrem ne cesset fundere musam. cetera de genere hoc monstra ac portenta loquuntur, ne loca deserta ab divis quoque forte putentur sola tenere. ideo iactant miracula dictis aut aliqua ratione alia ducentur, ut omne humanum genus est avidum nimis auricularum.

Quod superest, non est mirandum qua ratione, per loca quae nequeunt oculi res cernere apertas, haec loca per voces veniant aurisque lacesant. conloquium clausis foribus quoque saepe videmus, nimirum quia vox per flexa foramina rerum incolumis transire potest, simulacra renuant; perscinduntur enim, nisi recta foramina tranunt, qualia sunt vitrei, species qua travolat omnis. praeterea partis in cunctas dividitur vox, ex aliis aliae quoniam gignuntur, ubi una dissuluit semel in multas exorta, quasi ignis saepe solet scintilla suos se spargere in ignis. ergo replentur loca vocibus, abdita retro players; the country-people hearing far and wide, what time Pan nodding the piny covering of his head half a beast's oft runs over the gaping reeds with curved lip, making the pipe without ceasing to pour forth its woodland song. Other such like prodigies and marvels they tell of, that they may not haply be thought to inhabit lonely places, abandoned even by the gods. On this account they vaunt such wonders in their stories or are led on by some other reason; inasmuch as the whole race of man is all too greedy after listening ears.

To proceed, you need not wonder how it is that through places, through which the eyes cannot see plain things, voices come and strike the ears. We often see a conversation go on even through closed doors, sure enough because the voice can pass uninjured through the winding openings of things, while idols refuse to pass: they are torn to shreds, if the openings through which they glide are not straight, like those of glass, through which every image passes. Again a voice distributes itself in all directions, since voices are begotten one out of another, when a single voice has once gone forth and sprung into many, as a spark of fire is often wont to distribute itself into its constituent fires. Therefore places are filled with voices, which though far withdrawn out
omnia quae circum fervunt sonituque cientur. at simulacra viis derectis omnia tendunt ut sunt missa semel; quapropter cernere nemo saepem ultra potis est, et voces accipere extra. et tamen ipsa quoque haec, dum transit clausa domorum, vox optunditur atque auris confusa penetrat et sonitum potius quam verba audire videmur. 

Nec, qui sentimus sucum, lingua atque palatum plusculum habent in se rationis plus operaev. principio sucum sentimus in ore, cibum cum mandendo exprimimus, ceu plenam spongiam aquai siquis forte manu premere ac siccare coept. inde quod exprimimus per caulas omne palati diditur et rarae perplexa foramina linguae. hoc ubi levia sunt manantis corpora suci, suaviter attingunt et suaviter omnia tractant umida linguai circum sudantia templae. at contra pungunt sensum lacerantque coorta, quanto quaque magis sunt asperitate repleta. deinde voluptas est e suco fine palati; cum vero deorsum per fauces praecipitavit, nulla voluptas est, dum diditur omnis in artus.

of view yet are all in commotion and stirred by sound. But idols all proceed in straight courses as soon as they have been discharged; and therefore you can never see beyond a wall, but you may hear voices outside it. And yet this very voice even in passing through the walls of houses is blunted and enters the ears in a huddled state, and we seem to hear the sound rather than the actual words.

The tongue and palate whereby we perceive flavour, have not in them anything that calls for longer explanation or offers more difficulty. In the first place we perceive flavour in the mouth when we press it out in chewing our food, in the same way as when one haply begins to squeeze with his hand and dry a sponge full of water. Next the whole of what we press out distributes itself through the cavities of the palate and the intricate openings of the porous tongue. Therefore when the bodies of oozing flavour are smooth, they pleasantly touch and pleasantly feel all the parts about the moist exuding quarters of the palate. But on the other hand when they are gathered in a mass they puncture and tear the sense according to the degree in which they are pervaded by roughness. Next the pleasure from the flavour reaches as far as the palate; when however it has passed down through the throat, there is no pleasure while it is all distributing itself into the frame. And it
nec refert quicquam quo victu corpus alatur, dummodo quod capias concoctum didere possis artubus et stomachi umidulum servare tenorem.

Nunc aliis alius qui sit cibu' suavis et almus expediam, quareve, aliis quod triste et amarumst, hoc tamen esse aliis possit perdulce videri, tantaque in his rebus distantia differitasque, ut quod ali cibus est aliis fuit acre venenum. esse ita quit serpens, hominis quae tacta salivis disperit ac sese mandendo conficit ipsa. praeterea nobis veratrum est acre venenum, at capris adipes et coturnicibus auget. ut quibus id fiat rebus cognoscere possis, principio meminisse decet quae diximus ante, semina multumis in rebus mixta teneri. porro omnes quaecumque cibum cipiunt animantes, ut sunt dissimiles extrinsecus et generatim extima membrorum circumcaesura coercet, proinde et seminibus constant variante figura. semina cum porro distant, differre necessest intervalla viasque, foramina quae perhibemus, omnibus in membris et in ore ipsoque palato.

makes no matter what the food is with which the body is nurtured, provided you can digest what you take and transmit it into the frame and keep the stomach in an equable condition of moistness.

I will now explain how it is that different food is pleasant and nutritious for different creatures; also why that which to some is nauseous and bitter, may yet to others seem passing sweet; and why in these matters the difference and discrepancy is so great that what to one man is food, to another is rank poison: thus there may exist a serpent which on being touched by a man’s spittle wastes away and destroys itself by gnawing its body. Again hellebore for us is rank poison, but helps to fatten goats and quails. That you may know how this comes to pass, first of all you must remember what we have said before, that the seeds which are contained in things are mixed up in manifold ways. Again all living creatures soever which take food, even as they are unlike on the outside, and differing after the kind of each an exterior contour of limbs bounds them, so likewise are they formed of seeds of varying shape. Again since the seeds differ, there must be a discrepancy in the spaces between and the passages, which we name openings, in all the limbs and mouth and palate as well. Some seeds
esse minora igitur quaedam maioraque debent, 
esse triquetra aliis, aliis quadrata necesset, 
 multa rutunda, modis multis multangula quaedam. 
namque figurarum ratio ut motusque reposcunt, 
proinde foraminibus debent differre figurae, 
et variare viae proinde ac textura coercet.
hoc ubi quod suave est aliis aliis fit amarum, 
illi, cui suave est, levissima corpora debent 
contractabiliter caulas intrare palati, 
at contra quibus est eadem res intus acerba, 
aspera nimirum penetrant hamataque fauces. 
nunc facile est ex his rebus cognoecere quaeque. 
quippe ubi cui febris bili superante coorta est 
aut alia ratione aliquast vis excita morbi, 
perturbatur ibi iam totum corpus et omnes 
commutantur ibi positurae principiorum; 
fit prius ad sensum ut quae corpora conveniebant 
nunc non conveniant, et cetera sint magis apta, 
quae penetrata queunt sensum progignere acerbum; 
utraque enim sunt in mellis commixta sapore; 
id quod iam supera tibi saepe ostendimus ante.

therefore must be smaller, some larger; some things must have three- 
cornered, others square seeds; many seeds must be round, some many- 
angled after many fashions. For as the relation between the shapes of 
seeds and their motions require, the openings also must differ accord- 
gingly in their shapes; and the passages must vary, as varies the texture 
formed by the seeds which bound them. For this reason when that 
which is sweet to some becomes bitter to others, for that creature to 
whom it is sweet the smoothest bodies must enter the cavities of the 
palate with power to feel them all over; but on the other hand in the 
case of those to whom the same thing is bitter within, rough and 
barbed seeds sure enough pass down the throat. It is easy now from 
these principles to understand all particular cases: thus when a fever 
has attacked any one from too great a flow of bile, or a violent disease 
has been excited in any other way, thereupon the whole body is dis- 
ordered and all the arrangements of particles then and there changed; 
the consequence of which is that the bodies which before were suited to 
excite sensation, suit no more; and those fit it better, which are able to 
make their way in and beget a bitter sense. Both kinds for instance 
are mixed up in the flavour of honey: a point we have often proved 
before.
Nunc age quo pacto naris adiectus odoris
tangat agam. primum res multas esse necessest
unde fluens volvat varius se fluctus odorum,
et fluere et mitti volgo spargique putandumst;
verum alis alii magis est animantibus aptus
dissimilis propter formas. ideoque per auras
mellis apes quamvis longe ducentur odore,
volturique cadaveribus. tum fissa ferarum
ungula quo tulerit gressum permissa canum vis
ducit, et humanum longe praesentit odorem
Romulidarum arcis servator candidus anser,
sic aliis alius nidor datus ad sua quemque
pabula ducit et a taetro resilire veneno
cogit, eoque modo servantur saecla ferarum.

Hic odor ipse igitur, naris quicumque lacessit,
est alio ut possit permetti longius alter;
se tamen hauz quisquam tam longe fertur eorum
quam sonitus, quam vox, mitto iam dicere quam res
quae feriunt oculorum acies visumque lacesunt.
errabundus enim tarde venit ac perit ante
paulatim facilis distractus in aeris auras;
ex alto primum quia vix emittitur ex re:

Now mark me, and I will discuss the way in which the contact of
smell affects the nostrils: and first there must be many things from
which a varied flow of smells streams and rolls on; and we must
suppose that they thus stream and discharge and disperse themselves
among all things alike; but one smell fits itself better to one creature,
another to another on account of their unlike shapes; and therefore
bees are drawn on by the smell of honey through the air to a very great
distance, and so are vultures by carcasses. Also the far-reaching power
of scent in dogs leads them on whithersoever the cloven hoof of wild
beasts has carried them in their course; and the smell of man is felt far
away by the saviour of the Romans' citadel, the bright white goose.
Thus different scents assigned to different creatures lead each to its
appropriate food and constrain them to recoil from nauseous poison, and
in this way the races of beasts are preserved.

Of all these different smells then which strike the nostrils one may
reach to a much greater distance than another; though none of them
is carried so far as sound, as voice, to say nothing of things which strike
the eyesight and provoke vision. For in its mazy course each comes
slowly on and is sooner lost, being gradually dispersed into the readily
receiving expanse of air; first because coming out of its depths it with
difficulty discharges itself from the thing: for the fact that all things
are found to have a stronger smell when crushed, when pounded, when
broken up by fire shews that odours stream and withdraw from the
inner parts of things: next you may see that smell is formed of larger
first-beginnings than voice, since it does not pass through stone walls,
through which voice and sound pass without fail. For this reason also
you will find that it is not so easy to trace out in what quarter a thing
which smells is situated; for the blow cools down as it loiters through
the air, and the courier particles of things are no longer hot when
they finish their race to sense; for which reason dogs are often at fault
and lose the scent.

But what I have said is not found in smells and in the class of
flavours only, but also the forms and colours of things are not all so well
suited to the senses of all, but that some will be more distressing to the
sight than others. Moreover ravenous lions cannot face and bear to
gaze upon a cock with flapping wings putting night to rout and wont to
summon morning with shrill voice: in such wise they at once bethink
themselves of flight, because sure enough in the body of cocks are
certain seeds, and these, when they have been discharged into the eyes
of lions, bore into the pupils and cause such sharp pain that fierce
praebent, ut nequeant contra durare feroces; cum tamen haec nostras acies nil laedere possint, aut quia non penetrant aut quod penetrantibus illis exitus ex oculis liber datur, in remorando laedere ne possint ex ulla lumina parte.]

Nunc age quae moveant animum res accipe, et unde quae veniunt veniant in mentem percipe paucis. principio hoc dico, rerum simulacra vagari nulta modis multis in cunctas undique partis tenvia, quae facile inter se iunguntur in auris, obvia cum veniunt, ut aranea bratteaque auri. quippe etenim multo magis haec sunt tenvia textu quam quae percipiunt oculos visumque lacessunt, corporis haec quoniam penetrant per rara ciatunque tenvem animi naturam intus sensumque lacessunt. Centauros itaque et Scyllarum membra videmus Cerbereasque canum facies simulacra eorum quorum morte obita tellus amplectitur ossa; omne genus quoniam passim simulacra feruntur, partem sponte sua quae fiunt aere in ipso, partim quae variis ab rebus cumque recedunt et quae confiunt ex horum facta figuris.

though they be, they cannot continue to face them; while at the same time these things cannot hurt at all our sight, either because they do not enter in or because the moment they enter a free passage out of the eyes is granted them, so that they cannot by staying behind hurt the eyes in any part.

Now mark, and hear what things move the mind, and learn in a few words whence the things which come into it do come. I say first of all that idols of things wander about many in number in many ways in all directions round, extremely thin; and these when they meet, readily unite, like a cobweb or piece of gold-leaf. For these idols are far thinner in texture than those which take possession of the eyes and provoke vision; since these enter in through the porous parts of the body and stir the fine nature of the mind within and provoke sensation. Therefore we see Centaurs and limbs of Scylla and Cerberus-like faces of dogs and idols of those who are dead and whose bones earth holds in its embrace; since idols of every kind are everywhere borne about, partly those which are spontaneously produced within the air, partly all those which withdraw from various things and those which are formed by compounding the shapes of these. For assuredly no image of
nem certe ex vivo Centauri non fit imago, nulla fuit quoniam talis natura animantis; verum ubi equi atque hominis casu convenit imago, haerescit facile extemplo, quod diximus ante, propter subtilem naturam et tenvia texta. cetera de genere hoc eadem ratione creatur. quae cum mobiliter summa levitate feruntur, ut prius ostendi, facile uno commovet ictu quaelibet una animum nobis subtilis imago; tenvis enim mens est et mire mobilis ipsa. Haec fieri ut memoro, facile hinc cognoscere possis. quatenus hoc simile est illi, quod mente videmus atque oculis, simili fieri ratione necesse est. nunc igitur docui quoniam me forte leonem cernere per simulacra, oculos quaecumque lacessunt, scire licet mentem simili ratione moveri, per simulacra leonem et cetera quae videt aequé nec minus atque oculi, nisi quod mage tenvia cernit. nec ratione alia, cum somnus membra profudit, mens animi vigilat, nisi quod simulacra lacessunt haec eadem nostros animos quae cum vigilamus, usque adeo, certe ut videamur cernere eum quem.

Centaur is formed out of a live one, since no such nature of living creature ever existed; but when images of a horse and a man have by chance come together, they readily adhere at once, as we said before, on account of their fine nature and thin texture. All other things of the kind are produced in like fashion. And when these from extreme lightness are borne on with velocity, as I shewed before, any one composite image you like moves the mind by a single stroke; for the mind is fine and is itself wondrously nimble.

That all this is done as I relate you may easily learn from what follows. So far as the one result is like the other, that which we see with the mind and with the eyes, must be produced in a like way. Well then since I have shewn that I perceive for instance a lion by means of idols which provoke the eyes, you may be sure that the mind is moved in a like way, which by means of idols sees a lion or anything else just as well as the eyes, with this difference that it perceives much thinner idols. And when sleep has prostrated the body, for no other reason does the mind's intelligence wake, except because the very same idols provoke our minds which provoke them when we are awake, and to such a degree that we seem without a doubt to perceive him whom
rellicta vita iam mors et terra potitast.
hoc ideo fieri cogit natura, quod omnes
corporis effecti sensus per membra quiescunt
nec possunt falsum veris convincere rebus.
praeterea meminisse iacet languetque sopore
nec dissentit eum mortis letique potitum
iam pridem, quem mens vivom se cernere credit.
quod superest, non est mirum simulacra moveri
brachiaque in numerum iactare et cetera membri;
nam fit ut in somnis facere hoc videatur imago;
quippe ubi prima perit alioque est altera nata
inde statu, prior hic gestum mutasse videtur.
scilicet id fieri celeri ratione putandumst:
tanta est mobilitas et rerum copia tanta
tantaque sensibili quovis est tempore in uno
copia particularum, ut possit suppeditare,
[Multaque in his rebus quaeruntur multaque nobis
clarandumst, plane si res exponere avemus.
quaeritur in primis quare, quod cuique libido
venerit, extemplo mens cogitet eius id ipsum.
anne voluntatem nostram simulacra tuentur
et simul ac volumus nobis occurrit imago,
si mare, si terrast cordi, si denique caelum?

life has left and death and earth gotten hold of. This nature constrains
to come to pass because all the senses of the body are then hampered
and at rest throughout the limbs and cannot refute the unreal by real
things. Moreover memory is prostrate and relaxed in sleep and protests
not that he has long been in the grasp of death and destruction whom
the mind believes it sees alive. Furthermore it is not strange that
idols move and throw about their arms and other limbs in regular mea-
sure: for sometimes in sleep an image is seen to do this: when the first
to wit has gone and a second then been born in another posture, that
former one seems to have altered its attitude. This remember you must
assume to take place with exceeding celerity: so great is the velocity,
so great the store of things; so great in any one unit of time that sense
can seize is the store of particles, out of which the supply may go on.

And here many questions present themselves and many points must
be cleared up by us, if we desire to give a plain exposition of things.
The first question is why, when the wish has occurred to any one to
think of a thing, his mind on the instant thinks of that very thing. Do
idols observe our will, and so soon as we will does an image present
itself to us, if sea, if earth, aye or heaven is what we wish? Assemblies
of men, a procession, feasts, battles, everything in short does nature at command produce and provide? and though to increase the marvel the mind of others in the same spot and room is thinking of things all quite different. What again are we to say, when we see in sleep idols advance in measured tread and move their pliant limbs, pliant I say, when in nimble wise they put out each arm in turn and represent to the eyes over and over again an action with foot that moves in time? Idols to wit are imbued with art and move about well-trained, to be able in the night-time to exhibit such plays. Or will this rather be the truth? because in one unit of time, when we can perceive it by sense and while one single word is uttered, many latent times are contained which reason finds to exist, therefore in any time you please all the several idols are at hand ready prepared in each several place. And because they are so thin, the mind can see distinctly only those which it strains itself to see; therefore all that there are besides are lost, save only such as it has taken to itself. Moreover it makes itself ready and hopes to see that which follows upon each thing; therefore the result does follow. Do you not see that the eyes also, when they essay to discern things which are thin and fine, strain themselves and make themselves ready,
nec sine eo fieri posse ut cernamus acute?
et tamen in rebus quoque apertis noscere possis,
si non advertas animum, proinde esse quasi omni
tempore semotum fuerit longeque remotum.
cur igitur mirumst, animus si cetera perdit
praeterquam quibus est in rebus deditus ipse?
deinde adopinamur de signis maxima parvis
ac nos in fraudem induimus frustraminis ipsi.]
Fit quoque ut interdum non suppeditetur imago
eiusdem generis, sed femina quae fuit ante,
in manibus vir uti factus videatur adesse,
aut alia ex alia facies aetasque sequatur. 820
826 quod ne miremur sopor atque oblivia curant.

[822 [Illud in his rebus vitium vementer avessis
effugere, errorem vitareque praemetuenter,
lumina ne facias oculorum clara creata,
825 prospicere ut possemus, et ut proferre queamus
proceros passus, ideo fastigia posse
surarum ac feminum pedibus fundata plicari,
bracchia tum porro validis ex apta lacertis
esse manusque datas utraque
830 ut facere ad vitam possemus quae foret usus.
cetere de genere hoc inter quaecumque pretantur,
and without that cannot see distinctly? And yet you may observe even
in things which are plain before us, that if you do not attend, it is just
as if the thing were all the time away and far distant. What wonder
then, if the mind loses all other things save those with which it is itself
earnestly occupied? Then too from small indications we draw the
widest inferences and by our own fault entangle ourselves in the meshes
of self-delusion.

Sometimes it happens too that an image of the same kind is not sup-
pied, but what before was a woman, turns out in our hands to have
changed into a man; or a different face and age succeeds to the first.
But sleep and forgetfulness prevent us from feeling surprise at this.

And herein you should desire with all your might to shun the weak-
ness, with a lively apprehension to avoid the mistake of supposing that
the bright lights of the eyes were made in order that we might see; and
that the tapering ends of the shanks and hams are attached to the feet
as a base in order to enable us to step out with long strides; or again
that the forearms were slung to the stout upper arms and ministering
hands given us on each side, that we might be able to discharge the
needful duties of life. Other explanations of like sort which men give,
omnia perversa praepostera sunt ratione,
nil ideo quoniam natumst in corpore ut uti
possemus, sed quod natumst id procreat usum. 835
nec fuit ante videre oculorum lumina nata
nec dictis orare prius quam lingua creatast,
sed potius longe linguae praecessit origo
sermonem multoque creatae sunt prius aures
quam sonus est auditus, et omnia denique membra
ante fuere, ut opinor, eorum quam foret usus;
haud igitur possunt utendi crescere causa.
at contra conferre manu certamina pugnae
et lacerare artus foedareque membra cruore
ante fuit multo quam lucida tela volarent,
et volnus vitare prius natura coegit
quam daret obiectum parmai laeva per artem.
scilicet et fessum corpus mandare quieti
mulo antiquius est quam lecti mollia strata,
et sedare sitim prius est quam pocula natum.
haec igitur possunt utendi cognita causa
credier, ex usu quae sunt vitaque reperta.
illa quidem seorsum sunt omnia quae prius ipsa
nata dedere suae post notitiam utilitatis.
quo genere in primis sensus et membra videmus; 855

one and all put effect for cause through wrongheaded reasoning; since
nothing was born in the body that we might use it, but that which is
born begets for itself a use: thus seeing did not exist before the eyes
were born, nor the employment of speech ere the tongue was made; but
rather the birth of the tongue was long anterior to language and the
ears were made long before sound was heard, and all the limbs, I trow,
existed before there was any employment for them: they could not
therefore have grown for the purpose of being used. But on the other
hand engaging in the strife of battle and mangling the body and staining
the limbs with gore were in vogue long before glittering darts ever flew;
and nature prompted to shun a wound or ever the left arm by the help
of art held up before the person the defence of a shield. Yes and con-
signing the tired body to rest is much older than a soft-cushioned bed,
and the slaking of thirst had birth before cups. These things therefore
which have been invented in accordance with the uses and wants of life,
may well be believed to have been discovered for the purpose of being
used. Far otherwise is it with all those things which first were born,
then afterwards made known the purposes to which they might be put;
at the head of which class we see the senses and the limbs. Wherefore
quare etiam atque etiam procul est ut credere possis utilitatis ob officium potuisse creari.]

[Illud item non est mirandum, corporis ipsa quod natura cibum quaerit cuiusque animantis. quippe etenim fluere atque recedere corpora rebus multa modis multis docui, sed plurima debent ex animalibux quae quia sunt exercita motu, multaque per sudorem ex alto pressa feruntur, multa per os exhalantur, cum languida anhelant, his igitur rebus rarescit corpus et omnis subrruitur natura; dolor quam consequitur rem. propterea capitur cibus ut suffulciat artus et recreet vires interdatus atque patentem per membra ac venas ut amorem opturet edendi. umor item discedit in omnia quae loca cumque poscunt umorem; glomerataque multa vaporis corpora, quae stomacho praebent incendia nostro, dissupat adveniens liquor ac restinguat ut ignem, urere ne possit calor amplius aridus artus.
sic igitur tibi anhela sitis de corpore nostro abluitur, sic expletur ieiuna cupidio.]

Nunc qui fiat uti passus proferre queamus,

again and again I repeat, it is quite impossible to believe that they could have been made for the duties which they discharge.

It ought likewise to cause no wonder that the nature of the body of each living creature absolutely requires food. I have shewn that bodies ebb away and withdraw from things, many in number in many ways; but most numerous must be those which withdraw from living things; for because these are tried by active motion, and many particles are pressed out from the depths of the frame and carried off by sweating, many breathed out through the mouth, when they pant from exhaustion, from such causes the body becomes rarefied and the whole nature undermined; and this state is attended by pain. Food therefore is taken in order to give support to the frame and recruit the strength by its infusion, and to close up the open-mouthed craving for meat throughout limbs and veins. The moisture too passes into all the parts which call for moisture; and many accumulated bodies of heat which cause a burning in our body, the approach of liquid scatters and quenches as if they were fire, so that dry heat can no longer parch the frame. In this way then you see gasping thirst is drenched out of our body, in this way the hungry craving is satisfied.

Now how it comes to pass that we are able to step out when we
cum volumus, varieque datum sit membra movere, et quae res tantum hoc oneris protrudere nostri corporis insuerit, dicam: tu percipe dicta. 880
dico animo nostro primum simulacra meandi accidere atque animum pulsare, ut diximus ante.
inde voluntas fit; neque enim facere incipit ullam rem quisquam, quam mens providit quid velit ante.
id quod providet, illius rei constat imago. 885
ergo animus cum sese ita commovet ut velit ire inque gredi, ferit extemplo quae in corpore toto per membra atque artus animai dissita vis est.
et facilest factu, quoniam coniuncta tenetur.
inde ea proporro corpus ferit, atque ita tota paulatim moles protruditur atque movetur.
praeterea tum rarescit quoque corpus et aer, scilicet ut debet qui semper mobilis extat, per patefacta venit penetratque foramina largus et dispargitur ad partis ita quasque minutas corporis. hic igitur rebus fit utrimque duabus, aeque id ut ac navis velis ventoque feratur. 895
nec tamen illud in his rebus mirabile constat, tantula quod tantum corpus corpuscula possunt

please, and how it is given us to move about our limbs, and what cause is wont to push forward the great load of this our body I will tell: do you take in my words. I say that idols of walking first present themselves to our mind and strike on the mind, as we said before: then the will arises; for no one begins to do anything, until his mind has predetermined what it wills. From the very fact that it predetermines such thing, there is an image of that thing. When therefore the mind bestirs itself in such a way as to will to walk and step out, it strikes at the same moment the force of the soul which is spread over the whole body throughout the limbs and frame; and this is easily done, since the whole is held in close union with the mind. Next the soul in its turn strikes the body, and thus the whole mass by degrees is pushed on and set in motion. Then again the body becomes also rarefied, and the air, as you see its nature is, being always so nimble in moving, comes and passes in great quantity through the opened pores and is thus distributed into the most minute parts of the body. In this way then by these two causes acting in two different ways the body just like a ship is carried on by sails and wind. And herein it need not excite any surprise that such very minute bodies can steer so great a body and turn
contorquere et onus totum convertere nostrum.
quippe etenim ventus suptili corpore tenvis
trudit agens magnam magno molimine navem
et manus una regit quantovis impete euntem
atque gubernaculum contorquet quolibet unum,
multaque per trocleas et tympana pondere magno
commovet atque levi sustollit machina nisu.

Nunc quibus ille modis somnus per membra quietem
inriget atque animi curas e pectore solvat,
suavidicis potius quam multis versibus edam;
parvus ut est cycni melior canor, ille gruum quam
clamor in aetheris dispersus nubibus austri.
tu mihi da tenuis aures animumque sagacem,
ne fieri negites quae dicam posse retroque
vera repulsanti discedas pectore dicta,
tutimet in culpa cum sis neque cernere possis.

principio somnus fit ubi est distracta per artus
vis animae partimque foras eiecta recessit
et partim contrusa magis concessit in altum;
dissoluuntur enim tum demum membra fluuntque.

sensus hic in nobis, quem cum sopor inpedit esse,

about the whole of this our load; for wind though fine with subtle body
drives and pushes on a large ship of large moving mass and one hand
directs it however great the speed at which it is going and one rudder
steers it to any point you like; and by means of blocks of pulleys and
tread-wheels a machine stirs many things though of great weight and
raises them up with slight effort.

Now by what means sleep lets a stream of repose over the limbs and
dispels from the breast the cares of the mind, I will tell in sweetly
worded rather than in many verses; as the short song of the swan is
better than the loud noise of cranes scattered abroad amid the ethereal
clouds of the south. Do you lend me a nice ear and a keen mind, that
you may not deny what I say to be possible and secede with breast dis-
dainfully rejecting the words of truth, you yourself being in fault the
while and unable to discern. Sleep mainly takes place when the force of
the soul has been scattered about through the frame, and in part has
been forced abroad and taken its departure, and in part has been thrust
back and has withdrawn into the depths of the body: after that the
limbs are relaxed and droop. For there is no doubt that this sense
exists in us by the agency of the soul; and when sleep obstructs the
tum nobis animam perturbatam esse putandum est; non omnem; namque iaceret aeterno corpus perfusum frigore leti.
quippe ubi nulla latens animai pars remaneret in membris, cinere ut multa latet obrutus ignis, unde reconflari sensus per membrum repente posset, ut ex igni caeco consurgere flamma?
Sed quibus haec rebus novitas confiat et unde perturbari anima et corpus languescere possit, expediam: tu fac ne ventis verba profundam, principio externa corpus de parte necessum est, aeris quoniam vicinum tangitur auris, tundier atque eius crebro pulsarier ictu, proptereaque fere res omnes aut corio sunt aut etiam conchis aut callo aut cortice tectae. interiorem etiam partem spirantibus aer verberat hic idem, cum ducitur atque reflatur. quare utrimque secus cum corpus vapulet et cum perveniant plagae per parva foramina nobis corporis ad primas partis elementaque prima, fit quasi paulatim nobis per membra ruina, conturbantur enim positurae principiorum, corporis atque animi. fit uti pars inde animal

action of this sense, then we must assume that our soul has been disordered and forced abroad; not indeed all; for then the body would lie steeped in the everlasting chill of death. Where no part of the soul remained behind concealed in the limbs, as fire remains concealed when buried under much ash, whence could sense be suddenly rekindled through the limbs, as flame can spring up from hidden fire?

But by what means this change of condition is accomplished and from what the soul can be disordered and the body grow faint, I will explain: do you mind that I waste not my words on the wind. In the first place the body in its outer side, since it is next to and is touched by the air, must be thumped and beaten by its repeated blows; and for this reason all things as a rule are covered either by a hide or else by shells or by a callous skin or by bark. When creatures breathe, this air at the same timebuffets the inner side also, as it is inhaled and exhaled. Therefore since the body is beaten on both sides alike and blows arrive by means of the small apertures at the primal parts and primal elements of our body, there gradually ensues a sort of breaking up throughout our limbs, the arrangements of the first-beginnings of body and mind being disordered. Then next a part of the soul
eiciatur et introrsum pars abdita cedat, pars etiam distracta per artus non queat esse coniuncta inter se neque motu mutua fungi; inter enim saepit coetus natura viasque; ergo sensus abit mutatis motibus alte.

et quoniam non est quasi quod suffulciat artus, debile fit corpus languescuntque omnia membra, bracchia palpebraeque cadunt poplitesque cubanti saepe tamen summittuntur virisque resolvunt.
deinde cibum sequitur somnus, quia, quae facit aer, haec eadem cibus, in venas dum diditur omnis, efficit. et multo sopor ille gravissimus exstat quem satur aut lassus capias, quia plurima tum se corpora conturbant magno contusa labore.

fit ratione eadem coniectus partim animal altior atque foras eictus largior eius, et divisior inter se ac distractior in test.

Et quo quisque fere studio devinctus adhaeret aut quibus in rebus multum sumus ante morati atque in ea ratione fuit contenta magis mens, in somnis eadem plerumque videmur obire; causidici causas agere et componere leges,

is forced out and a part withdraws into the inner recesses; a part too scattered about through the frame cannot get united together and so act and be acted upon by motion; for nature intercepts all communication and blocks up all the passages; and therefore sense retires deep into the frame as the motions are all altered. And since there is nothing as it were to lend support to the frame, the body becomes weak and all the limbs are faint, the arms and eyelids droop and the hams even in bed often give way under you and relax their powers. Then sleep follows on food, because food produces just the same effects as air, while it is distributed into all the veins; and that sleep is much the heaviest which you take when full or tired, because then the greatest number of bodies fall into disorder; bruised by much exertion. On the same principle the soul comes in part to be forced more deeply into the frame, and there is also a more copious emission of it abroad, and at the same time it is more divided and scattered in itself within you.

And generally to whatever pursuit a man is closely tied down and strongly attached, on whatever subjects we have previously much dwelt, the mind having been put to a more than usual strain in it, in sleep we for the most part fancy that we are engaged in the same; lawyers think.
they plead causes and draw up covenants of sale, generals that they fight
and engage in battle, sailors that they wage and carry on war with the
winds, we think we pursue our task and investigate the nature of things
constantly and consign it when discovered to writings in our native
tongue. So all other pursuits and arts are seen for the most part during
sleep to occupy and mock the minds of men. And whenever men have
given during many days in succession undivided attention to games, we
generally see that after they have ceased to perceive these with their
senses, there yet remain passages open in the mind through which the
same idols of things may enter. Thus for many days those same objects
present themselves to the eyes, so that even when awake they see
dancers as they think moving their pliant limbs, and receive into the
ears the clear music of the harp and speaking strings, and behold the
same spectators and at the same time the varied decorations of the stage
in all their brilliancy. So great is the influence of zeal and inclination,
so great is the influence of the things in which men have been habitually
engaged, and not men only but all living creatures. Thus you will see
stout horses, even when their bodies are lying down, yet in their sleep
sweat and pant without ceasing and strain their powers to the utmost as
et quasi de palma summas contendere viris
aut quasi carceribus patefactis
venantumque canes in molli saepe quie\te
iactant crura tamen subito vocisque repente
mittunt et crebro redducunt naribus auras,
ut vestigia si teneant inventa ferarum,
expergefactique secuntur inania saepe
cervorum simulacra, fugae quasi dedita cernant,
donec discussis redeant erroribus ad se.
at consueta domi catulorum blanda propago
discutere et corpus de terra corripere instant
proinde quasi ignotas facies atque ora tuantur.
et quo quaeque magis sunt aspera seminiorum,
tam magis in somnis eadem saevire necessust.
at variae fugiunt volucres pinnisque repente
sollicitant divom nocturno tempore lucos,
accipitres somno in leni si proelia pugnas
edere sunt persectantes visaeque volantes.
porro hominum mentes, magnis quae motibus edunt
magna, itidem saepe in somnis faciuntque geruntque,
reges expugnant, capiuntur, proelia miscent,
tollunt clamorem quasi si iugulentur ibidem.
multi depugnant gemitusque doloribus edunt
et quasi pantherae morsu saevive leonis

if for the prize, or as if the barriers were thrown open *. And often during soft repose the dogs of hunters do yet all at once throw about their legs and suddenly utter cries and repeatedly sniff the air with their nostrils, as though they had found and were on the tracks of wild-beasts; and after they are awake often chase the shadowy idols of stags, as though they saw them in full flight, until they have shaken off their delusions and come to themselves again. And the fawning brood of dogs brought up tame in the house haste to shake their body and raise it up from the ground, as if they beheld unknown faces and features. And the fiercer the different breeds are, the greater rage they must display in sleep. But the various kinds of birds flee and suddenly in the night time trouble with their wings the groves of the gods, when in gentle sleep hawks have appeared to fly in pursuit and to shew fight and offer battle. Again the minds of men which pursue great aims under great emotions, often during sleep pursue and carry on the same in like manner; kings take by storm, are taken, join battle, raise a loud cry as if stabbed on the spot. Many struggle hard and utter groans in pain, and as if mangled by the bite of panther or cruel lion fill all the place with
mandantur magnis clamoribus omnia compleunt.
multi de magnis per somnum rebu' loquuntur
indicioque sui facti persaepe fuere.
multi mortem obeunt. multi, de montibus altis
ut qui praecipitent ad terram corpore toto,
externantur et ex somno quasi mentibu' capti
vix ad se redeunt permoti corporis aëstu.
flumen item sitiens aut fontem propter amoenum
adsidet et totum prope faucibus occupat amnem.
puri saepe lacum propter si ac dolia curta
somno devincti credunt se extollere vestem,
totius umorem saccatum corpori' fundunt,
cum Babylonica magnifico splendore rigantur.
tum quibus aetatis freta primitus insinuatur
semen, ubi ipsa dies membris matura creavit,
conveniunt simulacra foris e corpore quoque
nuntia praeclari voltus pulchrique coloris,
qui ciet iritans loca turgida semine multo,
ut quasi transactis saepe omnibu' rebu' profundant
fluminis ingentis fluctus vestemque cruentent.
Sollicitatur id in nobis, quod diximus ante,
semen, adulta actas cum primum roborat artus.
namque alias aliud res commovet atque laecssit;

loud cries. Many during sleep speak of important affairs and have often and often disclosed their own guilt. Many meet death; many as if tumbling down from high precipices to the ground with their whole body, are scared with terour and after sleep as if they were out of their judgment scarce come to themselves again, quite disordered by their body's turmoil. Again a thirsty man sits down beside a river or a pleasant spring and swallows down wellnigh all the stream. Cleanly people often, when sound asleep, believing that they are lifting their dress beside a urinal or the public vessels, pour forth the filtered liquid of their whole body, and the Babylonian coverlets of surpassing brilliancy are drenched. Then too those, into the boiling currents of whose age seed is for the first time passing, when the ripe fulness of days has produced it in their limbs, idols encounter from without from what body soever, harbingers of a glorious face and a beauteous bloom, which stir and excite the appropriate portions of the frame and often occasion fruitless anticipations of the pleasures of love.

That seed we have spoken of before is stirred up in us, as soon as mature age fortifies the frame. For as different causes set in motion
ex homine humanum semen ciet una hominis vis. quod simul atque suis eiectum sedibus exit, per membra atque artus decedit corpore toto in loca conveniens nervorum certa cietque continuo partis genitalis corporis ipsas.
inritata tument loca semine fitque voluntas eicere id quo se contendit dira lubido, idque petit corpus, mens unde est saucia amore.
namque omnes plerumque cadunt in vulnus et illam emicat in partem sanguis unde icimur ictu, et si comminus est, hostem ruber occupat umor. sic igitur Veneris qui telis accipit ictus, sive puer membris muliebribus hunc iaculatur seu mulier toto iactans e corpore amorem, unde feritur, eo tendit gestitque coire et iacere umorem in corpus de corpore ductum; namque voluptatem praesagit muta cupidio.

Haec Venus est nobis; hinc autemst nomen amoris, hinc illaec primum Veneris dulcedinis in cor stillavit gutta et successit frigida cura. nam si abest quod aves, praesto simulacra tamen suut illius et nomen dulce obversatur ad auris.

and excite different things, so from man the sole influence of man draws forth human seed. As soon then as it has been forced out from and quits its proper seats, throughout the limbs and frame it withdraws itself from the whole body and meets together in appropriate places and rouses forthwith the appropriate parts of the body. The places are excited and swell with seed, and the inclination arises to emit that seed towards that to which the fell desire all tends, and the body seeks that object from which the mind is wounded by love; for all as a rule fall towards their wound and the blood spirits out in that direction whence comes the stroke by which we are struck; and if he is at close quarters, the red stream covers the foe. Thus then he who gets a hurt from the weapons of Venus, whatever be the object that hits him, be it a woman breathing love from her whole body, he inclines to the quarter whence he is wounded, and yearns to unite with it and join body with body; for a mute desire gives a presage of the pleasure.

This pleasure is for us Venus; from that desire is the Latin name of love, from that desire has first trickled into the heart yon drop of Venus’ honeyed joy and soon is replaced by chilly care; for though that which you yearn for is away, yet idols of it are at hand and its sweet name is
sed fugitare decet simulacra et pabula amoris
absterrere sibi atque alio convertere mentem
et iacere umorem conlectum in corpora quaeque
nec retinere, semel conversum unius amore,
et servare sibi curam certumque dolorem.
ulcus enim vivescit et inveterascit alendo
inque dies gliscit furor atque aerumna gravescit,
si non prima novis conturbes volnera plagis
volgivagaque vagus Venere ante recentia cures
aut alio possis animi traducere motus.

Nec Veneris fructu caret is qui vitat amorem,
sed potius quae sunt sine poena commoda sumit;
nam certe purast sunt inde voluptas
quam miseris. etenim potiundi tempore in ipso
fluctuat incertis erroribus ardor amantum
nec constat quid primum oculis manibusque fruantur.
quad petiere, premunt arte faciuntque dolorem
corporis et dentes inlidunt saepe labellis
osculaque adfigunt, quia non est pura voluptas
et stimuli subsunt qui instigant laedere id ipsum
quodcumque est, rabies unde illaec germina surgunt.

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osculaque adfigunt, quia non est pura voluptas
et stimuli subsunt qui instigant laedere id ipsum
quodcumque est, rabies unde illaec germina surgunt.

Nor is he who shuns love without the fruits of Venus, but rather
enjoys those blessings which are without any pain: doubtless the
pleasure from such things is more unalloyed for the healthy-minded than
for the love-sick; for in the very moment of enjoying the burning
desire of lovers wavers and wanders undecided, and they cannot tell
what first to enjoy with eyes and hands. What they have sought, they
ightly squeeze and cause pain of body and often imprint their teeth on
the lips and clash mouth to mouth in kissing, because the pleasure is
not pure and there are hidden stings which stimulate to hurt even that
whatever it is from which spring those germs of frenzy. But Venus with
light hand breaks the force of these pains during love, and the fond
pleasure mingled therein reins in the bites. For in this there is hope, that from the same body whence springs their burning desire, their flame may likewise be quenched; the direct contrary of which nature protests to be the case; and this is the one thing of all, in which, when we have most of it, then all the more the breast burns with fell desire. Meat and drink are taken into the body; and as they can fill up certain fixed parts, in this way the craving for drink and bread is easily satisfied; but from the face and beauteous bloom of man nothing is given into the body to enjoy save flimsy idols; a sorry hope which is often snatched off by the wind. As when in sleep a thirsty man seeks to drink and water is not given to quench the burning in his frame, but he seeks the idols of waters and toils in vain and thirsts as he drinks in the midst of the torrent stream, thus in love Venus mocks lovers with idols, nor can bodies satisfy them by all their gazing upon them nor can they with their hands rub aught off the soft limbs, wandering undecided over the whole body. At last when they have united and enjoy the flower of age, when the body now has a presage of joys and Venus is in the mood to sow the fields of woman, they greedily clasp each other’s body and
oris et inspirant pressantes dentibus ora,  
nequiquam, quoniam nil inde abradere possunt  
nec penetrare et abire in corpus corpore toto;  
nam facere interdum velle et certare videntur:  
usque adeo cupide in Veneris compagibus haerent,  
membra voluptatis dum vi labefacta liquescunt.  
tandem ubi se erupit nervis conlecta cupidio,  
parva fit ardoris violenti pausa parumper.  
inde reedit rabies eadem et furor ille revisit,  
cum sibi quid cupiant ipsi contingere quae,  
nec reperire malum id possunt quae machina vincat:  
usque adeo incerti tabescunt vulnere caeco.  

Adde quod absumunt viris pereuntque labore,  
adde quod alterius sub nutu degitur aetas.  
labitur interea res et Babylonica fiunt,  
languent officia atque aegrotat fama vacillans.  
huic lenta et pulchra in pedibus Sicyonia rident  
scilicet et grandes viridi cum luce zmaragdi  
auro includuntur teriturque thalassina vestis  
adsidue et Veneris sudorem exercita potat.  
et bene parta patrum fiunt anademata, mitrae,  
tandem in pallam atque alideusia Ciaque vertunt.

suck each other's lips and breathe in, pressing meanwhile teeth on each other's mouth; all in vain, since they can rub nothing off nor enter and pass each with his whole body into the other's body; for so sometimes they seem to will and strive to do: so greedily are they held in the chains of Venus, while their limbs melt overpowered by the might of the pleasure. At length when the gathered desire has gone forth, there ensues for a brief while a short pause in the burning desire; and then returns the same frenzy, then comes back the old madness, when they are at a loss to know what they really desire to get, and cannot find what device is to conquer that mischief: in such utter uncertainty they pine away by a hidden wound.

Then too they waste their strength and ruin themselves by the labour, then too their life is passed at the beck of another. Meanwhile their estate runs away and is turned into Babylonian coverlets; duties are neglected and their good name staggerers and sickens. On her feet laugh elastic and beautiful Sicyonian shoes, yes, and large emeralds with green light are set in gold and the sea-coloured dress is worn constantly and much used drinks in the sweat. The noble earnings of their fathers are turned into hair-bands, head-dresses; sometimes are changed into a sweeping robe and alideusian and Cean dresses. Feasts set out with
eximia veste et victu convivia, ludi,
pocula crebra, unguenta coronae serta parantur,
nequiquam, quoniam medio de fonte leporum
surgit amari aliquit quod in ipsis floribus angat,
aut cum conscient ipse animus se forte remordet
desidiose agere aetatem lustrisque perire,
aut quod in ambiguo verbum iaculata, reliquit
quod cupido adfixum cordi vivescit ut ignis,
aut nimium iactare oculos aliumve tueri
quod putat in volatuque videt vestigia risus.

Atque in amore mala haec proprio summeque secundo
inveniuntur; in adverso vero atque inopi sunt,
prendere quae possis oculorum lumine operto,
innumerabilia; ut melius vigilare sit ante,
qua docui ratione, cavereque ne inliciaris.
nam vitare, plagas in amoris ne iaciamur,
non ita difficile est quam captum retibus ipsis
exire et validos Veneris perrumpere nodos.
et tamen implicitus quoque possis inque peditus
effugere infestum, nisi tute tibi obvius obstes
aut quae corpori' sunt eius, siquam petis ac vis.

rich coverlets and viands, games, numerous cups, perfumes crowns
garlands are prepared; all in vain, since out of the very well-spring of
delights rises up something of bitter, to pain amid the very flowers;
either when the conscience-stricken mind haply gnaws itself with remorse
to think that it is passing a life of sloth and ruining itself in brothels, or
because she has launched forth some word and left its meaning in doubt
and it cleaves to the love-sick heart and burns like living fire, or because
it fancies she casts her eyes too freely about or looks on another, and it
sees in her face traces of a smile.

And these evils are found in love returned and highly prosperous;
but in crossed and hopeless love are ills such as you may seize with
closed eyes, past numbering; so that it is better to watch beforehand in
the manner I have prescribed, and be on your guard not to be drawn in.
For to avoid falling into the toils of love is not so hard as, after you are
caught, to get out of the nets you are in and to break through the strong
meshes of Venus. And yet even when you are entangled and held fast
you may escape the mischief, unless you stand in your own way and
begin by overlooking all the defects of her mind or those of her body,
whoever it is whom you court and woo. For this men usually do,
nam faciunt homines plerumque cupidine caeci et tribuunt ea quae non sunt his commoda vere. multimodi igitur pravas turpisque videmus esse in deliciis summoque in honore vigere. atque alios alii inrident Veneremque súadent ut placent, quoniam foedo adfllictentur amore, nec sua respiciunt miseri mala maxima saepe. nigra melichrus est, inmunda et fetida acosmos, caesia Palladium, nervosa et lignea dorcas, parvula, pumilio, chariton mia, tota merum sal, magna atque inmannis cataplexis plenaque honoris. balba loqui non quit, traulizi, muta pudens est; at flagrans odiosa loquacula Lampadium fit. ischnon eromenion tum fit, cum vivere non quit prae macie; rhadine verost iam mortua tussi. at tumida et mammosa Ceres est ipsa ab Iaccho, simula Silena ac saturast, laboosa philema. cetera de genere hoc longum est si dicere coner. sed tamen esto iam quantovis oris honore, cui Veneris membris vis omnibus exoriatur: nempe aliae quoque sunt; nempe hac sine viximus ante; nempe eadem facit, et scimus facere, omnia turpi, blinded by passion, and attribute to the beloved those advantages which are not really theirs. We therefore see women in ways manifold deformed and ugly to be objects of endearment and held in the highest admiration. And one lover jeers at others and advises them to propitiate Venus, since they are troubled by a disgraceful passion, and often, poor wretches, give no thought to their own ills greatest of all. The black is a brune, the filthy and rank has not the love of order; the cat-eyed is a miniature Pallas, the stringy and wizened a gazelle; the dumpy and dwarfish is one of the graces, from top to toe undiluted esprit; the big and overgrown is awe-inspiring and full of dignity. She is tongue-tied, cannot speak, then she has a lisp; the dumb is bashful; then the fire-spit, the teasing, the gossiping turns to a shining lamp. One becomes a slim darling then when she cannot live from want of flesh; and she is only spare, who is half-dead with cough. Then the fat and big-breasted is a Ceres' self big-breasted from Iacchus; the pug-nosed is a she Silenus and a satyress; the thick-lipped a very kiss. It were tedious to attempt to report other things of the kind. Let her however be of ever so great dignity of appearance; such that the power of Venus goes forth from all her limbs; yet there are others too; yet have we lived without her before; yet does she do, and we know that she does, in all things the
et miseram taetris se suffit odoribus ipsa
quam famulae longe fugitant furtimque cachinnant.
at lacrimans exclusus amator limina saepe
floribus et sertis operit postisque superbos
unguit amaracino et foribus miser oscula figit;
quem si, iam ammissum, venientem offenderit aura
una modo, causas abeundi quaerat honestas,
et meditata diu cadat alte sumpta querella,
stultitiaeque ibi se damnet, tribuisse quod illi
plus videat quam mortali concedere par est.
nec Veneres nostras hoc fallit; quo magis ipsae
omnia summo opere hos vitae poscaenia celant
quos retinere volunt adstrictosque esse in amore,
nequiquam, quoniam tu animo tamen omnia possis
protrahere in lucem atque omnis inquirere risus
et, si bello animost et non odiosa, vicissim
praetermittere et humanis concedere rebus.
Nec mulier semper ficto suspirat amore
quae complexa viri corpus cum corpore iungit
et tenet adsuctis umectans oscula labris.
nam facit ex animo saepe et communia quae
gaudia sollicitat spatium decurrere amoris.

same as the ugly woman; and fumigates herself, poor wretch, with
auseous perfumes, her very maids running from her and giggling
secretly. But the lover, when shut out, often in tears covers the thres-
hold with flowers and wreaths and anoints the haughty door-posts with
oil of marjoram and imprints kisses, poor wretch, on the doors. When
however he has been admitted, if on his approach but one single breath
should come in his way, he would seek specious reasons for departing,
and the long-conned deep-drawn complaint would fall to the ground;
and then he would blame his folly, on seeing that he had attributed to
her more than it is right to concede to a mortal. Nor is this unknown
to our Venuses; wherefore all the more they themselves hide with the
utmost pains all that goes on behind the scenes of life from those whom
they wish to retain in the chains of love; but in vain, since you may yet
draw forth from her mind into the light all these things and search into
all her smiles; and if she is of a fair mind and not troublesome, overlook
them in your turn and make allowance for human failings.

Nor does the woman sigh always with fictitious love, when she locks
in her embrace and joins with her body the man's body and holds it,
sucking his lips into her lips and drinking in his kisses. Often she does
it from the heart, and seeking mutual joys courts him to run the complete
nec ratione alia volucres armenta feraeque
et pecudes et equae maribus subsidere possent,
si non, ipsa quod illorum subat ardet abundans
natura et Venerem salientum laeta retractat.
nonne vides etiam quos mutua saepe voluptas
vinxit, ut in vinulis communibus excrucientur?
in triviis quam saepe canes, discedere aventis,
divorsi cupide summis ex viribus tendunt,
quom interea validis Veneris compagibus haerent:
quod facerent numquam nisi mutua gaudia nossent
quae iacere in fraudem possent vinctosque tenere.
quare etiam atque etiam, ut dico, est communi voluptas.
Et commiscendo quom semine forte virili
femina vim vicit subita vi corripuitque,
tum similes matrum materno semine fiunt,
ut patribus patrio. sed quos utriusque figurae
esse vides, iuxtim miscenses vulta parentum,
corpore de patrio et materno sanguine crescent,
semina cum Veneris stimulis excita per artus
obvia conflxiiit conspirans mutuus ardor,
et neque utrum superavit eorum nec superatumst.

race of love. And in no other way could birds cattle wild-beasts sheep
and mares submit to bear the males, except because the very exuberance
of nature in the females is in heat and burns and joyously draws in the
Venus of the covering males. See you not too how those whom mutual
pleasure has chained are often tortured in their common chains? How
often in the highways do dogs, desiring to separate, eagerly pull different
ways with all their might, while all the time they are held fast in the
strong fetters of Venus! This they would never do, unless they
experienced mutual joys, strong enough to force them into the snare and
hold them in its meshes. Wherefore again and again I repeat there is a
common pleasure.

And when haply in mixing her seed with the man's the woman by
sudden force has overpowered and seized for herself his force, then
children are formed from the mothers' seed like to the mothers, as from
the fathers' seed like to the fathers. But those whom you see with a
share of both forms, blending equally the features of the parents, grow
from the union of the father's body and the mother's blood, when the
mutual ardour of desire working in concert has brought and clashed
together the seeds roused throughout the frame by the goads of Venus;
and neither of the two has gotten the mastery nor has been mastered.
Sometimes too the children may spring up like their grandfathers and often resemble the forms of their grandfathers' fathers, because the parents often keep concealed in their bodies many first-beginnings mixed in many ways, which first proceeding from the original stock one father hands down to the next father; and then from these Venus produces forms after a manifold chance and repeats not only the features, but the voices and hair of forefathers. And the female sex equally springs from the father's seed and males go forth equally formed from the mother's body; since these distinctions no more proceed from the fixed seed of one or other parent than our faces and bodies and limbs: the birth is always formed out of the two seeds; and whichever parent that which is produced more resembles, of that parent it has more than an equal share; as you may equally observe, whether it is a male child or a female birth.

Nor do the divine powers debar anybody from the power of begetting, forbidding him ever to receive the name of father from sweet children and forcing him to pass his life in a barren wedlock; as men commonly fancy when in sorrow they drench the altars with much blood and pile the raised altars with offerings, to make their wives pregnant with abundant seed. In vain they weary the divinity of the
nam sterriles nimium crasso sunt semine partim
et liquido praeter iustum tenuique vicissim.
tenve locis quia non potis est adfigere adhaesum,
liquitur extemplo et revocatum cedit abortu.
crassius his porro quoniam concretius aequo
mittitur, aut non tam prolixo provolat ictu
aut penetrare locos aequre nequit aut penetratum
aegre admiscetur muliebri semine semen.
nam multum harmoniae Veneris differre videntur.
atque alias alii complent magis ex aliiisque
succipiunt aliae pondus magis inque gravescunt.
et multae steriles Hymenaeis ante fuerunt
pluribus et nactae post sunt tamen unde pueiios
suscipere et parti possent ditesere dulci.
et quibus ante domi fecundae saepe nequissent
uxores parere, inventast illis quoque compar
natura, ut possent gnatis munire senectam.
usque adeo magni refert, ut semina possint
semimbus commisceri genitaliter apta,
crassane conveniant liquidis et liquida crassis.
atque in eo refert quo victu vita colatur;
gods and the in sacred lots. They are barren sometimes from the too
great thickness of the seed, sometimes from its undue fluidity and thin-
ness: because the thin is unable to get a firm hold on the right spots, it
at once passes away and is repelled and withdrawn abortively: since by
others again a too thick seed is discharged in a state more solid than is
suitable, it either does not fly forth with so prolonged a stroke or can-
ot equally pass into the proper spots or when it has passed in with
difficulty mixes with the woman’s seed. For well-assorted matches are
found to be of great importance; and some males impregnate some
females more readily than others, and other females conceive and be-
come pregnant more readily from other males. And many women have
hitherto been barren during several marriages and have yet in the end
found mates from whom they could conceive children and be enriched
with a sweet offspring. And often even for those, to whom hitherto
wives however fruitful had been unable in their house to bear, has been
found a compatible nature, enabling them to fortify their age with sons.
Of such great importance is it, in order that seeds may agree and blend
with seeds in a way to promote birth, whether the thick comes into
contact with the fluid and the fluid with the thick. And on this point
it matters much on what diet life is supported; for by some foods seed
is thickened in the limbs, and by others again is thinned and wasted.
And in what modes the intercourse goes on, is likewise of very great
moment; for women are commonly thought to conceive more readily
after the manner of wild-beasts and quadrupeds, because the seeds in
this way can find the proper spots, in consequence of the position of the
body. Nor have wives the least use for effeminate motions: a woman
hinders and stands in the way of her own conceiving, when thus she
acts; for she drives the furrow out of the direct course and path of the
share and turns away from the proper spots the stroke of the seed.
And thus for their own ends harlots are wont to move, in order not to
conceive and lie in child-bed frequently, and at the same time to render
Venus more attractive to men. This our wives would seem to have no
need for.

Sometimes too by no divine grace and arrows of Venus a sorry
woman of inferior beauty comes to be loved; for the woman sometimes
by her own acts and accommodating manners and by elegant neatness of
person readily habituates you to pass your life with her. Moreover
custom renders love attractive; for that which is struck by oft-repeated
blows however lightly, yet after long course of time is overpowered and gives way. See you not too that drops of water falling on rocks after long course of time scoop a hole through these rocks?
Quis potis est dignum pollenti pectore carmen condere pro rerum maiestate hisque repertis? quisve valet verbis tantum qui fingere laudes pro meritis eius possit qui talia nobis pectore parta suo quae sitaque praemia liquit? nemo, ut opinor, erit mortali corpore cretus. nam si, ut ipsa petit maiestas cognita rerum, dicendum est, deus ille fuit, deus, inclyte Memmi, qui princeps vitae rationem invenit eam quae nunc appellatur sapientia, quique per artem fluctibus et tantis vitam tantisque tenebris in tam tranquillo et tam clara luce locavit. confer enim divina aliorum antiqua reperta. namque Ceres fertur fruges Liberque liquoris vitigeni laticem mortalibus instituisse; cum tamen his posset sine rebus vita manere, ut fama est aliquas etiam nunc vivere gentis.

Who is able with powerful genius to frame a poem worthy of the grandeur of the things and these discoveries? or who is so great a master of words as to be able to devise praises equal to his merits who left to us such prizes won and earned by his own genius? None methinks who is formed of mortal body. For if we must speak as the acknowledged grandeur of the things itself demands, a god he was, a god, most noble Memmius, who first found out that plan of life which is now termed wisdom, and who by trained skill rescued life from such great billows and such thick darkness and moored it in so perfect a calm and in so brilliant a light. Compare the godlike discoveries of others in old times: Ceres is famed to have pointed out to mortals corn, and Liber the vine-born juice of the grape; though life might well have subsisted without these things, as we are told some nations even now live without
at bene non poterat sine puro pectore vivi;
quod magis hic merito nobis deus esse videtur,
ex quo nunc etiam per magnas didita gentis
20
dulcia permulcent animos solacia vitae.
Herculis antistare autem si facta putabis,
longius a vera multo ratione ferère.
quid Nemeaeus enim nobis nunc magnus hiatus
ille leonis obsetet et horrens Arcadius sus?
denique quid Cretae taurus Lernaeaque pestis
25
hydra venenatis posset vallata colubris?
quidve tripectora tergemini vis Geryonai
30
\[\text{tanto opere officerent nobis Stymphala colentes}\
29
\text{et Diomedis equi spirantes naribus ignem}\
30
\text{Thracis Bistoniasque plagas atque Ismara propter?}\
aureaque Hesperidum servans fulgentia mala,
asper, acerba tuens, immani corpore serpens
arboris amplexus stirpem quid denique obsetet
propter Atlanteum litus pelageque severa,
quo neque noster adit quisquam nec barbarus audet?
cetera de genere hoc quae sunt portenta perempta,
seì non victa forent, quid tandem viva nocerent?
nil, ut opinor: ita ad satiatem terra ferarum
\]
nunc etiam scatit et trepido terroe repleta est
per nemora ac montes magnos silvasque profundas;
quae loca vitandi plerumque est nostra potestas.
at nisi purgatumst pectus, quae proelia nobis
atque pericula tumst ingratis insinuandum!
quantae tum scindunt hominem cuppedinis acres
sollicitum curae quantique perinde timores!
quidve superbia spurcitia ac petulantia? quantas
efficient clades! quid luxus desidiaeque?
haec igitur qui cuncta subegerit ex animoque
expulerit dictis, non armis, nonne decebit
hunc hominem numero divom dignarier esse?
cum bene praesertim multa ac divinitus ipsis
immortalibu' de divis dare dicta suerit
atque omnem rerum naturam pandere dictis.
Cuius ego ingressus vestigia dum rationes
persequor ac doceo dictis, quo quaeque creata
foedere sint, in eq quam sit durare necessum
nec validas valeant aevi rescindere leges,
quo genere in primis animi natura reperta est
nativo primum consistere corpore creta
nec posse incolumis magnum durare per aevom,
now so abounds to repletion in wild beasts and is filled with troubulous
terrou throughout woods and great mountains and deep forests; places
which we have it for the most part in our own power to shun. But
unless the breast is cleared, what battles and dangers must then find
their way into us in our own despite! what poignant cares inspired by
lust then rend the distressful man, and then also what mighty fears!
and pride, filthy lust and wantonness? what disasters they occasion! and
luxury and all sorts of sloth? He therefore who shall have subdued all
these and banished them from the mind by words, not arms, shall he not
have a just title to be ranked among the gods? and all the more so that
he was wont to deliver many precepts in beautiful and godlike phrase
about the immortal gods themselves and to open up by his writings all
the nature of things.

While walking in his footsteps I follow out his reasonings and teach
by my verses, by what law all things are made, what necessity there is
then for them to continue in that law, and how impotent they are to
annul the binding statutes of time: foremost in which class of things
the nature of the mind has been proved to be formed of a body that had
birth and to be unable to endure unscathed through great time, mere idols
sed simulacra solere in somnis fallere mentem, cernere cum videamur eum quem vita reliquit, quod superest, nunc huc rationis detulit ordo, ut mihi mortali consistere corpore mundum nativomque simul ratio reddunda sit esse; et quibus ille modis congressus materiæ fundarit terram caelum mare sidera solem lunæque globum; tum quae tellure animantes extiterint, et quae nullo sint tempore natae; quove modo genus humanum variante loqualla coeperit inter se vesci per nomina rerum; et quibus ille modis divom metus insinuarit pectora, terrarum qui in orbi sancta tuestur fana lacus lucos aras simulacraque divom. praeterea solis cursus lunaæque meatus expediam qua vi flectat natura gubernans; ne forte haec inter caelum terramque reamur libera sponte sua cursus lustrare perennis morigera ad fruges augendas atque animantis, neve aliqua divom volvi ratione putemus. nam bene qui didicere deos securum agere aevom, si tamen interea mirantur qua ratione quaeque geri possint, praesertim rebus in illis

being wont to mock the mind in sleep, when we seem to see him whom life has abandoned: to continue, the order of my design has now brought me to this point, where I must proceed to shew that the world is formed of a mortal body and at the same time had birth; to shew too in what ways that union of matter founded earth heaven sea stars sun and the ball of the moon; also what living creatures sprang out of the earth, as well as those which never at any time were born; in what way too mankind began to use with one another varied speech by the names conferred on things; and also in what ways you fear of the gods gained an entry into men's breasts, and now throughout the world maintains as holy fanes lakes groves altars and idols of the gods. Furthermore I shall make clear by what force piloting nature guides the courses of the sun and the wanderings of the moon; lest haply we imagine that these of their own free will between heaven and earth traverse their everlasting orbits, graciously furthering the increase of crops and living creatures, or think they roll on by any forethought of the gods. For they who have been rightly taught that the gods lead a life without care, if nevertheless they wonder by what plan all things can be carried on, above all in regard to those things which are seen overhead in the
quae supera caput aetheriis cernuntur in oris,  
rursus in antiquas referuntur religiones  
et dominos acris adsciscunt, omnia posse  
quos miserī credunt, ignari quid queat esse,  
quid nequeat, finita potestas denique cuique  
quanam sit ratione atque alte terminus haerens.  

Quod superest, ne te in promissis plura moremur,  
principio maria ac terras caelumque tuere;  
quorum naturam triplicem, tria corpora, Memmi,  
tris species tam dissimilis, tria talia texta,  
una dies dabit exitio, multosque per annos  
sustentata ruet moles et machina mundi.  
nec me animi fallit quam res nova miraque monti  
accidat exitium caeli terraeque futurum,  
et quam difficīle id mihi sit pervincere dictis;  
ut fit ubi insolitam rem adportes auribus ante  
nec tamen hanc possis oculorum subdere visu  
nec iacere indu manus, via qua munita fidei  
proxima fert humanum in pectus templaque mentis.  
se d tamen effabor. dictis dabit ipsa fidem res  
forsitan et graviter terrarum motibus ortis  
omnia conquassari in parvo tempore cernes.  
quod procul a nobis flectat fortuna gubernans,  

eternal borders, are borne back again into their old religious scruples and  
take unto themselves hard taskmasters, whom they poor wretches believe  
to be almighty, not knowing what can, what cannot be, in short by what  
system each thing has its powers defined, its deep-set boundary mark.

Well then not to detain you any longer by mere promises, look be-  
fore all on seas and lands and heaven: their threefold nature, their three  
odies, Memmius, three forms so unlike, three such wondrous textures a  
single day shall give over to destruction; and the mass and fabric of the  
world upheld for many years shall tumble to ruin. Nor can I fail to  
perceive with what a novel and strange effect it falls upon the mind,  
this destruction of heaven and earth that is to be, and how hard it is  
for me to produce a full conviction of it by words; as is the case when  
you bring to the ears a thing hitherto unexampled, and yet you cannot  
submit it to the eyesight nor put it into the hands; through which the  
straightest highway of belief leads into the human breast and quarters  
of the mind. But yet I will speak out: it well may be that the reality  
itself will bring credit to my words and that you will see earthquakes  
arise and all things grievously shattered to pieces in a short time. But  
this may pilot fortune guide far away from us, and may reason rather
et ratio potius quam res persuadeat ipsa succidere horrisono posse omnia victa fragore.

[Qua prius adgrediar quam de re fundere fata sanctius et multo certa ratione magis quam Pythia quae tripode a Phoebi lauroque profatur, multa tibi expediam doctis solacia dictis; religione refrenatus ne forte rearis terras et solem et caelum, mare sidera lunam, corpore divino debere aeterna manere, proptereaque putes ritu par esse Gigantum pendere eos poenas inmani pro scelere omnis qui ratione sua disturbent moenia mundi praeclarumque velint caeli restinguere solem inmortalia mortali sermone notantes; quae procul usque adeo divino a numine distent, inque deum numero quae sint indigna videri, notitiam potius praebere ut posse putentur quid sit vitali motu sensuque remotum. quippe etenim non est, cum quovis corpore ut esse posse animi natura putetur consiliumque; sicut in aethere non arbor, non aequore salso nubes esse queunt neque pisces vivere in arvis nec cruor in lignis neque saxis sucus inesse.

than the reality convince that all things may be overpowered and tumble in with a frightful crash.

But before I shall begin on this question to pour forth decrees of fate with more sanctity and much more certainty than the Pythia who speaks out from the tripod and laurel of Phoebus, I will clearly set forth many comforting topics in learned language; lest held in the yoke of religion you haply suppose that earth and sun and heaven, sea stars moon must last for ever with divine body; and therefore think it right that they after the fashion of the giants should all suffer punishment for their monstrous guilt, who by their reasoning displace the walls of the world and seek to quench the glorious sun of heaven, branding immortal things in mortal speech; though in truth these things are so far from possessing divinity and are so unworthy of being reckoned in the number of gods, that they may be thought to afford a notable instance of what is quite without vital motion and sense. For it is quite impossible to suppose that the nature and judgment of the mind can exist with any body whatever; even as a tree cannot exist in the ether nor clouds in the salt sea nor can fishes live in the fields nor blood exist in woods nor
certum ac dispositumst ubi quicquit crescat et insit. sic animi natura nequit sine corpore oriri sola neque a nervis et sanguine longiter esse. quod si (posset enim multo prius) ipsa animi vis in capite aut umeris aut imis calcibus esse posset et innasci quavis in parte, soleret tandem in eodem homine atque in eodem vase manere. quod quoniam nostro quoque constat corpore certum dispositumque videtur ubi esse et crescere possit seorsum anima atque animus, tanto magis inftiandum totum posse extra corpus formamque animalem putribus in glebis terrarum aut solis igni aut in aqua durare aut altis aetheris oris. haud igitur constant divino praedita sensu, quandoquidem nequeunt vitaliter esse animata.

Illud item non est ut possis credere, sedes esse deum sanctas in mundi partibus ullis. tenvis enim natura deum longeque remota sensibus ab nostris animi vix mente videtur; quae quoniam manuum tactum suffugit et ictum, tactile nil nobis quod sit contingere debet. tangere enim non quit quod tangi non licet ipsum.

sap in stones. Where each thing can grow and abide is fixed and ordained. Thus the nature of the mind cannot come into being alone without the body nor exist far away from the sinews and blood. But if (for this would be much more likely to happen than that) the force itself of the mind might be in the head or shoulders or heels or might be born in any other part of the body, it would after all be wont to abide in one and the same man or vessel. But since in our body even it is fixed and seen to be ordained where the soul and the mind can severally be and grow, it must still more strenuously be denied that it can abide out of the body and the living form altogether in crumbling clods of earth or in the fire of the sun or in water or in the high borders of ether. These things therefore are not possessed of divine sense, since they cannot be quickened with the vital feeling.

This too you may not possibly believe, that the holy seats of the gods exist in any parts of the world: the fine nature of the gods far withdrawn from our senses is hardly seen by the thought of the mind; and since it has ever eluded the touch and stroke of the hands, it must touch nothing which is tangible for us; for that cannot touch which does not admit of being touched in turn. And therefore their seats as
quare etiam sedes quoque nostris sedibus esse dissimiles debent, tenues pro corpore eorum; quae tibi posterius largo sermone probabo. dicere porro hominum causa voluisse parare praeclaram mundi naturam proptereaque adlaudabile opus divum laudare decere aeternumque putare atque inmortale futurum nec fas esse, deum quod sit ratione vetusta gentibus humanis fundatum perpetuo aevum, solicitare suis ulla vi ex sedibus umquam nec verbis vexare et ab imo evertere summa, cetera de genere hoc adtingere et addere, Memmi, desperest. quid enim immortalibus atque beatis gratia nostra queat largirier emolumenti, ut nostra quicquam causa gerere adgrediantur? quidve novi potuit tanto post quietos indicere ut superent vitam mutare priorem? at, credo, in tenebris vita ac maerore iacebat, donec diluxit rerum genitalis origo. nam gaudere novis rebus debere videtur cui veteres obsunt; sed cui nil accidit aegri tempore in anteacto, cum pulchre degeret aevom, well must be unlike our seats, and fine in proportion to their bodies. All which I will prove to you later in copious argument. To say again that for the sake of men they have willed to set in order the glorious nature of the world and therefore it is meet to praise the work of the gods calling as it does for all praise, and to believe that it will be eternal and immortal, and that it is an unholy thing ever to shake by any force from its fixed seats that which by the forethought of the gods in ancient days has been established on everlasting foundations for mankind, or to assail it by speech and utterly overturn it from top to bottom; and to invent and add other figments of the kind, Memmius, is all sheer folly. For what advantage can our gratitude bestow on immortal and blessed beings, that for our sakes they should take in hand to administer aught? And what novel incident could have induced them hitherto at rest so long after to desire to change their former life? But then life it would seem lay grovelling in darkness and sorrow, until the first dawn of the birth-time of things; for it seems natural he should rejoice in a new state of things, whom old things annoy; but for him whom no ill has befallen in time gone by, when he passed a pleasant existence, what could have kindled in such a one a love of
quid potuit novitatis amorem accendere tali? 175

quidve mali fuerat nobis non esse creatis?

natus enim debet quicumque est velle manere in vita, donec retinebit blanda voluptas.

qui numquam vero vitae gustavit amorem nec fuit in numero, quid obest non esse creatum? 180

exemplum porro gignundis rebus et ipsa notitiae divis hominum unde est insita primum, quid vellent facere ut scirent animoque viderent, quove modest umquam vis cognita principiorum quidque inter se esse permutato ordine possent, si non ipsa dedit specimen natura creandi? namque ita multa modis multis primordia rerum ex infinito iam tempore percita pláxis ponderibusque suis consuerunt concita ferri omnimodisque coire atque omnia pertemptare, 190

quaecumque inter se possent congressa creare, ut non sit mirum si in talis disposituras decidérent quoque et in talis venere meatus, qualibus haec rerum geritur nunc summa novando.

Quod si iam rerum ignarem primordia quae sint, 195

hoc tamen ex ipsis caeli rationibus ausim confirmare alisque ex rebus reddere multis,

change? or what evil had it been for us never to have been born? whoever has been born must want to continue in life, so long as fond pleasure shall keep him; but for him who has never tasted the love, never been on the lists, of life, what harm never to have been born? Whence again was first implanted in the gods a pattern for begetting things in general as well as the preconception of what men are, so that they knew and saw in mind what they wanted to make; and in what way was the power of first-beginnings ever ascertained, and what they could effect by a change in their mutual arrangements, unless nature herself gave the model for making things? For in suchwise the first-beginnings of things many in number in many ways impelled by blows for infinite ages back and kept in motion by their own weights have been wont to be carried along and to unite in all manner of ways and thoroughly test every kind of production possible by their mutual combinations; that it is not strange if they have also fallen into arrangements and have come into courses like to those out of which this sum of things is now carried on by constant renewing.

But if I did not know what first-beginnings of things are, yet this judging by the very arrangements of heaven I would venture to affirm,
and led by many other facts to maintain, that the nature of things has
by no means been made for us by divine power: so great are the defects
with which it is encumbered. In the first place of all the space which
the vast reach of heaven covers, a portion greedy mountains and forests
of wild-beasts have occupied, rocks and wasteful pools take up and the
sea which holds wide apart the coasts of different lands. Next of
nearly two thirds burning heat and the constant fall of frost mortals.
What is left for tillage, even that nature by its power would overrun
with thorns, unless the force of man made head against it, accustomed
for the sake of a livelihood to groan beneath the strong hoe and to cut
through the earth by pressing down the plough. Unless by turning up
the fruitful clods with the share and labouring the soil of the earth we
stimulate things to rise, they could not spontaneously come up into
the clear air; and even then sometimes when things earned with
great toil now put forth their leaves over the earth and are all in
blossom, either the ethereal sun burns them up with excessive heats
or sudden showers and cold frosts cut them off, and the blasts of the
winds waste them by a furious hurricane. Again why does nature give
food and increase to the frightful race of wild-beasts dangerous to man-
kind both by sea and land? Why do the seasons of the year bring diseases in their train? Why stalks abroad untimely death? Then too the baby, like to a sailor cast away by the cruel waves, lies naked on the ground, speechless, wanting every furtherance of life, when nature first by the throes of birth has shed him forth from his mother's womb into the borders of light: he fills the room with a rueful wailing, as well he may whose destiny it is to go through in life so many ills. But the different flocks herds and wild-beasts grow up; they want no rattles; to none of them need be addressed the fond broken accents of the fostering nurse; they ask not different dresses according to the season; no nor do they want arms or lofty walls, whereby to protect their own, the earth itself and nature manifold in her works producing in plenty all things for all.

First of all, since the body of the earth and water and the light breath of air and burning heats, out of which this sum of things is seen to be formed, do all consist of a body that had a birth and is mortal, the whole nature of the world must be accounted of a like body. For those things whose parts and members we see to be of a body that had a birth and of forms that are mortal, we perceive to be likewise without
haec eadem ferme mortalia cernimus esse et nativa simul. quapropter maxima mundi cum videam membra ac partis consumpta regigni, scire licet caeli quoque item terraequeuisse principiale aliquod tempus clademque futuram.

Illud in his rebus ne corripuiisse rearis me mihi, quod terram atque ignem mortalia sumpsi esse neque umorem dubitavi auurasque perire atque eadem gigni rursusque augescere dixi, principio pars terrai nonnulla, perusta solibus adsiduis, multa pulsata pedum vi, pulversis exhalat nebulam nubesque volantis quas validi toto dispergunt aere venti. pars etiam glebarum ad diluviem revocatur imbribus et ripas radentia flumina rodunt. praeterea pro parte sua, quodcumque alid auget, redditur; et quoniam dubio procul esse videtur omnipares eadem rerum commune sepulcrum, ergo terra tibi libatur et aucta recrescit.

Quod superest, umore novo mare flumina fontes semper abundare et latices manare perennis nil opus est verbis: magnus decursus aquarum exception mortal, and at the same time to have had a birth. Since therefore I see that the chiefest members and parts of the world are destroyed and begotten anew, I may be sure that for heaven and earth as well there has been a time of beginning and there will be a time of destruction.

And herein that you may not think that I have unfairly seized on this point for myself, because I have assumed that earth and fire are mortal and have not doubted that water and air perish, and have said that these are likewise begotten and grow afresh, mark the proofs: first of all some portion of the as burnt up by constant suns, trampled by a multitude of feet, sends forth a cloud and flying eddies of dust, which the strong winds disperse over the whole air. Part too of the soil is again put under water by rains, and rivers graze against and eat into the banks. Again whatever increases something else, is in its turn replenished; and since beyond a doubt earth the universal mother is found at the same time to be the general tomb of things, therefore you see she is lessened and increases and grows again.

Furthermore, that sea rivers fountains always stream over with new moisture and that waters well up without ceasing, it needs no words to prove: the great flow of waters from all sides clearly shows it. But
then the water on the surface is always taken off, and thus it is that on
the whole there is no overflow, partly because the seas are lessened
by the strong winds sweeping over them and by the ethereal sun decom-
posing them with his rays; partly because the water is diffused below
the surface over all lands; for the salt is strained off and the matter of
liquid streams back again to the source and all meets together at the
river-heads, and then flows over the lands in a fresh current, where a
channel once scooped out has carried down the waters with liquid foot.

And next I will speak of the air which is changed over its whole
body every hour in countless ways. For whatever ebbs from things, is
all borne always into the great sea of air; and unless it in return were
to give back bodies to things and to recruit them as they ebb, all things
erie now would have been dissolved and changed into air. It therefore
cesses not to be begotten from things and to go back again into things,
since it is a fact that all things constantly ebb.

Likewise the abundant source of clear light, the ethereal sun, con-
tantly floods heaven with fresh brightness and replaces on the instant
light by new light; for every previous emission of brightness is quite
lost, wherever it falls. This you may know from the following examples:
quod simul ac primum nubes succedere soli
coeopere et radios inter quasi rumpere lucis, 290
exemplo inferior pars horum disperit omnis
terraque inumbratur qua nimbi cumque feruntur;
ut noscas splendore novo res semper egere 295
et primum iactum fulgoris quemque perire
 nec ratione alia res posse in sole videri,
perpetuo ni suppeditet lucis caput ipsum.
quid etiam nocturna tibi, terrestria quae sunt,
lumina, pendentes lychni claraeque coruscis
fulguribus pingues multa caligine taedae
consimili properant ratione, ardore ministro,
 suppeditare novom lumen, tremere ignibus instant,
 instant, nec loca lux inter quasi rupta relinquit:
usque adeo properanter ab omnibus ignibus ei
exitium celeri celatur origine flammæ.
sic igitur solem lunam stellasque putandum st
ex alio atque alio lucem iactare subortu
et primum quicquid flammarum perdere semper;
 inviolabilia haec ne credas forte vigere.

Denique non lapides quoque vinci cernis ab aevo,
non altas turris ruere et putrescere saxa,
non delubra deum simulacraque fessa fatisci,
nec sanctum numen fati protollere finis
posse neque adversus naturae foedera niti?
denique non monimenta virum dilapsa videmus,
aeraque proporro solidumque senescere ferrum,
non ruere avolsos silices a montibus altis
nec validas aevi vires perferre patique
finiti? neque enim caderent avolsa repente,
ex infinito quac tempore pertolerassent
omnia tormenta aetatis, privata fragore.

Denique iam tuere hoc, circum supraque quod omnem
continet amplexu terram: si procreat ex se
omnia, quod quidam memorant, recipitque perempta,
totum nativum mortali corpore constat.
nam quodcumque alias ex se res auget alitque,
deminui debet, recreari, cum recipit res.

Praeterea si nulla fuit genitalis origo
terrarum et caeli semperque aeterna fuere,
cur supera bellum Thebanum et funera Troiae
non alias ilii quoque res cecinere poetae?
quo tot facta virum totiens cecidere neque usquam
aeternis famae monimentis insita florent?
verum, ut opinor, habet novitatem summa reeensque
naturast mundi neque pridem exordia cepit.

bounds of fate or struggle against the fixed laws of nature? Then too
see we not the monuments of men fall to ruin, and furthermore brass
and solid iron grow old? basalt-rocks tumble down riven away from high
mountains and unable to endure and suffer the strong might of finite
age? surely they would never fall suddenly riven away, if for infinite
time past they had held out against all the batteries of age without
a crash.

Again gaze on this, which about and above holds in its embrace all
the earth: if it begets all things out of itself, as some say, and takes
them back when they are destroyed, then the whole of it has had a birth
and is of a mortal body; for whatever gives increase and food out of
itself to other things, must be lessened; and must be replenished, when
it takes things back.

Again if there was no birth-time of earth and heaven and they have
been from everlasting, why before the Theban war and the destruction
of Troy have not other poets as well sung other themes? whither have
so many deeds of men so often passed away and nowhere live embodied
in lasting records of fame? The truth methinks is that the sun has but
a recent date and the nature of the world is new and has but lately had
quare etiam quaedam nunc artes expoliuntur, nunc etiam augescunt; nunc addita navigiis sunt multa, modo organici melicos peperere sonores. denique natura haec rerum ratioque repertast nuper, et hanc primus cum primis ipse reportus nunc ego sum in patrias qui possim vertere voces. quod si forte fuisse antehac eadem omnia credis, sed perisse hominum torrenti saecla vapore, aut cecidisse urbis magno vexamine mundi, aut ex imribus adsiduis exisse rapaces per terras amnes atque oppida cooperuisse, tanto quique magis victus fateare necessest exitium quoque terrarum caelique futurum. nam cum res tantis morbis tantisque periclis temptarentur, ibi si tristior incubuisset causa, darent late cladem magnasque ruinas. nec ratione alia mortales esse videmur, inter nos nisi quod morbis aegrescimus isdem atque illi quos a vita natura removit. Praeterea quaecumque manent aeterna necessust aut, quia sunt solido cum corpore, respueric tict nec penetrare pati sibi quicquam quod queat artas its commencement. Wherefore even now some arts are receiving their last polish, some are even in course of growth; just now many improvements have been made in ships; only yesterday musicians have given birth to tuneful melodies; then too this nature and system of things has been discovered lately, and I the very first of all have only now been found able to transfer it into native words. But if haply you believe that before this all things have existed just the same, but that the generations of men have perished by burning heat, or that cities have fallen by some great concussion of the world, or that after constant rains devouring rivers have gone forth over the earth and have whelmed towns, so much the more you must yield and admit that there will be entire destruction too of earth and heaven; for when things were tried by so great distempers and so great dangers, at that time had a more disastrous cause pressed upon them, they would far and wide have gone to destruction and mighty ruin. And in no other way are we proved to be mortals, except because we all alike in turn fall sick of the same diseases which those had whom nature has withdrawn from life.

Again whatever things last for ever, must either, because they are of solid body, repel strokes and not suffer aught to pass into them,
sufficient to disunite the closely massed parts within: such are the bodies of matter whose nature we have shewn before: or they must be able to endure through all time for this reason, because they are exempt from blows, as void is which remains untouched and suffers not a jot from any stroke; or else because there is no extent of room around, into which things so to say may depart and be broken up: in this way the sum of sums is eternal and there is no place outside into which things may spring asunder, nor are there any bodies which can fall upon them and dissolve them by a powerful blow. But the nature of the world, as I have shewn, is neither of solid body, since void is mixed up in all things, nor is it again like void, no nor is there lack of bodies that may haply rise up in mass out of the infinite and overthrow this sum of things with furious tornado or bring upon them some other perilous disaster; nor further is the nature of room and the space of deep void wanting, into which the walls of the world may be scattered abroad; or they may be assailed and perish by some other force. Therefore the gate of death is not closed against heaven or sun or earth or deep waters of the sea, but stands open and looks towards them with a huge wide-gaping maw. And therefore also you must admit that these things
haec eadem; neque enim, mortali corpore quae sunt, ex infinito iam tempore adhuc potuissent inmensi validis aevi contemnere vires.

Denique tantopere inter se cum maxima mundi pugnent membra, pio nequaquam concita bello, nonne vides aliquam longi certaminis ollis posse dari finem? vel cum sol et vapor omnis omnibus epotis umoribus exsuperarint: quod facere intendunt, neque adhuc conata patrantur: tantum suppeditant amnes ultraque minantur omnia diluviare ex alto gurgite ponti, nequiquam, quoniam verrentes aequora venti diminuunt radiisque retexens aetherius sol, et siccare prius confidunt omnia posse quam liquor incepti possit contingere finem. tantum spirantes aequo certamine bellum magnis inter se de rebus cernere certant, cum semel interea fuerit superantior ignis et semel, ut fama est, umor regnarit in arvis. ignis enim superat et lambens multa perussit, avia cum Phaethonta rapax vis solis equorum aethere raptavit toto terraque per omnis.

likewise had a birth; for things which are of mortal body could not for an infinite time back up to the present have been able to set at nought the puissant strength of immeasurable age.

Again since the chiefest members of the world fight so hotly together, fiercely stirred by no hallowed civil warfare, see you not that some limit may be set to their long struggle? either when the sun and all heat shall have drunk up all the waters and gotten the mastery: this they are ever striving to do, but as yet are unable to accomplish their endeavours: such abundant supplies the rivers furnish, and threaten to turn aggressors and flood all things with a deluge from the deep gulph of ocean; all in vain, since the winds sweeping over the seas and the ethereal sun decomposing them with his rays lessen them, and trust to be able to dry all things up before water can attain the end of its endeavours. Such a war do they breathe out with undecided issue, and strive with each other to determine it for mighty ends; though once by the way fire got the upper hand and once, as the story goes, water reigned dominant in the fields. Fire gained the mastery and licked and burnt up many things, when the headstrong might of the horses of the sun dashed from the course and hurried Phaethon through the whole sky
at pater omnipotens ira tum percitus acri
magnanimum Phaethonta repenti fulminis ictu
deturbavit equis in terram, solque cadenti
obvius aeternam succedit lampada mundi
disiectosque redegit equos iunxitque trementis,
inde suum per iter recreavit cuncta gubernans,
scilicet ut veteres Graium cecinere poetae.

quod procul a vera nimis est ratione repulsum.
ignis enim superare potest ubi materia
ex infinito sunt corpora plura coorta;
inde cadunt vires aliqua ratione revictae,
aut pereunt res exustae torrentibus auris.

umor item quondam coepit superare coortus,
ut fama est, hominum multas quando obruit urbis.
inde ubi vis aliqua ratione aversa recessit,
ex infinito fuerat quaecumque coorta,
constiterunt imbres et flumina vim minuerunt.

Sed quibus ille modis coniectus materiai
fundarit terram et caelum pontique profunda,
solis lunai cursus, ex ordine ponam,

nam certe neque consilio primordia rerum
ordine se suo quaeque sagaci mente locarunt

and over all lands. But the almighty father then stirred to fierce wrath
with a sudden thunderstroke dashed Phaethon down from his horses to
earth, and the sun meeting him as he fell caught from him the ever-
burning lamp of the world and got in hand the scattered steeds and
yoked them shaking all over; then guided them on his proper course
and gave fresh life to all things. Thus to wit have the old poets of the
Greeks sung; though it is all too widely at variance with true reason.
Fire may gain the mastery when more bodics of matter than usual have
gathered themselves up out of the infinite; and then its powers decay,
vanquished in some way or other, or else things perish burnt up by the
torrid air. Water too of yore gathered itself and began to get the
mastery, as the story goes, when it whelmed many cities of men; and
then when all that force that had gathered itself up out of the infinite,
by some means or other was turned aside and withdrew, the rains were
stayed and the rivers moderated their fury.

But in what ways yon concourse of matter founded earth and
heaven and the deeps of the sea, the courses of sun and moon, I will
next in order describe. For verily not by design did the first-begin-
nings of things station themselves each in its right place by keen-
sighted intelligence, nor did they bargain sooth to say what motions each should assume, but because the first-beginnings of things many in number in many ways impelled by blows for infinite ages back and kept in motion by their own weights have been wont to be carried along and to unite in all manner of ways and thoroughly to test every kind of production possible by their mutual combinations, therefore it is that spread abroad through great time after trying unions and motions of every kind they at length meet together in those masses which suddenly brought together become often the rudiments of great things, of earth sea and heaven and the race of living things.

At this time then neither could the sun's disk be discerned flying aloft with its abundant light, nor sea nor heaven, nor earth nor air, nor could any thing be seen like to our things, but only a strange stormy crisis and medley, gathered together out of first-beginnings of every kind, whose state of discord joining battle disordered their interspaces passages conusions weights blows clashings motions, because by reason of their unlike forms and varied shapes they could not all remain thus joined together nor fall into mutually harmonious motions. Then next the several parts began to fly asunder and things to be joined like with like
cum paribus iungi res et discludere mundum
membraque dividere et magnas disponere partes,
hoc est, a terris altum secernere caelum,
et sorsum mare uti secreto umore pateret,
seorsus item puro secretaque aetheris ignes.

Quippe etenim primum terrai corpora quaeque,
propertea quod erant gravior et perplexa, coibant
in medio atque imas capiebant omnia sedes;
quae tanto magis inter se perplexa coibant,
tam magis expressere ea quae mare sidera solem
lunamque efficerent et magni moenia mundi.
omnia enim haec e levibus atque rutundis
seminibus multoque minoribus sunt elementis
quam tellus. ideo, per rara foramina, terrae
partibus erumpentis primus se sustulit aether
ignifer et multos secum levis abstulit ignis,
non alia longe ratione ac saepe videmus,
aurea cum primum gemmantis rore per herbas
matutina rubent radiati lumina solis
exhalantque lacus nebulam fluvique perennes,
ipsaque ut interdum tellus fumare videtur;
onia quae sursum cum conciliantur, in alto
corpore concreto subtexunt nubila caelum.

and to mark off the world and portion out its members and arrange its
mighty parts, that is to say, to separate high heaven from earth, and let
the sea spread itself out apart with its unmixed water, and likewise let
the fires of ether spread apart pure and unmixed.

For first the several bodies of earth, because they were heavy and
closely entangled, met together in the middle and took up all of them
the lowest positions; and the more they got entangled and the closer
their union, the more they squeezed out those particles which were to
make up sea stars sun and moon and the walls of the great world. All
these are of smooth and round seeds and of much smaller elements than
the earth. Therefore the fire-laden ether first burst out from the
different parts of the earth through all the porous openings and lightly
bore off with itself many fires; much in the same way as we often see,
so soon as the morning light of the beaming sun blushes golden over
the grass jewelled with dew, and the pools and the ever-running rivers
exhale a mist, and even as the earth itself is sometimes seen to smoke;
and when all these are gathered together aloft, then do clouds on high
with a now cohering body weave a covering beneath heaven. In this
way therefore then the light and expansive ether with its now cohering body swept round and arched itself on all sides and expanding widely in all directions round in this way fenced all other things in with its greedy grasp. After it followed the rudiments of sun and moon, whose spheres turn round in air midway between earth and ether: these neither earth has taken unto itself nor greatest ether, because they were neither heavy enough to sink and settle down nor light enough to glide along the uppermost borders; they yet however are so placed between the two as to wheel along their life-like bodies and yet to be parts of the whole world; just as in us some members may be at rest, while others at the same time are in motion. These things then being withdrawn, the earth in those parts where the vast azure level of ocean now spreads, in a moment sank in and drenched with salt flood the hollows. And every day the more the heats of ether round and the rays of the sun on all sides compressed the earth into a close mass by oft-repeated blows on all its outer edges, so that thus buffeted it was condensed and drawn together about its centre, ever the more did the salt sweat squeezed out of its body increase by its oozings the sea and floating fields, and ever
corpora multa vaporis et aeris altaque caeli
densebant procul a terris fulgentia templta.
sidebant campi, crescebant montibus altis
corporibus liquidis sunt omnia pura relicta,
et leviora aliiis alia, et liquidissimus aether
atque levisissimus aerias super influit auras,
nec liquidum corpus turbantibus aeris auris
commiscet; sinit haec violentis omnia verti
turbinibus, sinit incertis turbare procellis,
ipsa sue ignis certo fert impete labens.

Thus then the ponderous mass of earth was formed with close-co-
hering body and all the slime of the world so to speak slid down by its
weight to the lowest point and settled at the bottom like dregs. Then
the sea, then the air, then the fire-laden ether itself, all are left unmixed
with their clear bodies; and some are lighter than others, and clearest
and lightest of all ether floats upon the airy currents, and blends not its
clear body with the troubled airs; it suffers all these things below to be
upset with furious hurricanes, suffers them to be troubled by wayward
storms; while it carries along its own fires gliding with a changeless
onward sweep. For that ether may stream on gently and with one
uniform effort the Pontos shews, a sea which streams with a changeless
current, ever keeping due on its uniform gliding course.

Let us now sing what causes the motions of the stars. In the first
place, if the great sphere of heaven revolves, we must say that an air
presses on the pole at each end and confines it on the outside and closes
inde alium supra fluere atque intendere eodem quo volvenda micant aeterni sidera mundi; aut alium supter, contra qui subvehat orbem, ut fluvios versare rotas atque haus tra videmus. est etiam quoque uti possit caelum omne manere in statione, tamen cum lucida signa ferantur; sive quod inclusi rapidi sunt aetheris aestus quaerentesque viam circum versantur et ignes passim per caeli volvunt immania templ a; sive aliunde fluens alicunde extrinsecus aer versat agens ignis; sive ipsi serpere possunt quo cuiusque cibus vocat atque invitat euntis, flammea per caelum pascentis corpora passim. nam quid in hoc mundo sit eorum ponere certum difficile est; sed quid possit fiatque per omne in variis mundis varia ratione creatis, id doceo plurisque sequor disponere causas, motibus astrorum quae possint esse per omne; e quibus una tamen sit in hoc quoque causa necessest quae vegeat motum signis; sed quae sit earum praecipere hautquaquamst pedetemtim progradientis.]

it in at both ends; and then that a third air streams above and moves in the same direction in which roll on as they shine the stars of the eternal world; or else that this third air streams below in order to carry up the sphere in the contrary direction; just as we see rivers turn wheels and water-scoops. It is likewise quite possible too that all the heaven remains at rest, while at the same time the glittering signs are carried on; either because rapid heats of ether are shut in and whirl round while seeking a way out and roll their fires in all directions through heaven's vast quarters; or else an air streaming from some part from another source outside drives and whirls the fires; or else they may glide on of themselves going whithersoever the food of each calls and invites them, feeding their flamy bodies everywhere throughout heaven. For which of these causes is in operation in this world, it is not easy to affirm for certain; but what can be and is done throughout the universe in various worlds formed on various plans, this I teach, and I go on to set forth several causes which may exist throughout the universe for the motions of stars; one of which however must in this world also be the cause that imparts lively motion to the signs; but to settle absolutely which of them it is, is by no means the duty of the man who advances step by step.
Terraque ut in media mundi regioane quiescat, evanescere paulatim et decrescere pondus conventit, atque aliam naturam supter habere ex ineunte aevi coniunctam atque uniter aptam partibus aeris mundi quibus insita vivit. propterea non est oneri neque deprimit auras; ut sua cuique homini nullo sunt pondere membra nec caput est oneri collo nec denique totum corporis in pedibus pondus sentimus inesse; at quaecumque foris veniunt inpostaque nobis pondera sunt laedunt, permulto saepe minora. usque adeo magni refert quid quaeque obeat res. sic igitur tellus non est aliena repente allata atque auris aliunde obiecta alienis, sed pariter prima concepta ab origine mundi certaeque pars eius, quasi nobis membra videntur. praeterea grandi tonitru concussa repente terra supra quae se sunt concutit omnia motu; quod facere haut ulla posset ratione, nisi esset partibus aeris mundi caeloque revincta. nam communibus inter se radicibus haerent ex ineunte aevi coniuncta atque uniter apta.

And in order that the earth may rest in the middle of the world, it is proper that its weight should gradually pass away and be lessened, and that it should have another nature underneath it conjoined from the beginning of its existence and formed into one being with the airy portions of the world in which it is embodied and lives. For this reason it is no burden and does not weigh down the air; just as his limbs are of no weight to a man nor is his head a burden to his neck, nor do we feel that the whole weight of the body rests on the feet; but whatever weights come from without and are laid upon us, hurt us though they are often very much smaller; of such very great moment it is what function each thing has to perform. Thus then the earth is not an alien body suddenly brought in and forced from some other quarter on air alien to it, but was conceived together with it, at the first birth of the world and is a fixed portion of that world, just as our limbs are seen to be to us. Again, the earth when suddenly shaken by loud thunder shakes by its motion all the things which are above it; and this it could in no wise do, unless it had been fast bound with the airy portions of the world and with heaven. For they cohere with one another by common roots, conjoined and formed into a single being from
nonne vides etiam quam magno pondere nobis sustineat corpus tenuissima vis animai propterea quia tam coniuncta atque uniter apta est? denique iam saltu pernici tollere corpus quid potis est nisi vis animi quae membra gubernat? 560 iamne vides quantum tenuis natura valere possit, ubi est coniuncta gravi cum corpore, ut aer coniunctus terris et nobis est animi vis?

Nec nimio solis maior rota nec minor ardor esse potest, nostris quam sensibus esse videtur. nam quibus e spatiis cumque ignes lumina possunt adicere et calidum membris adflare vaporem, nil illa his intervallis de corpore libant flammarum, nil ad speciem est contractior ignis. 565

573 proinde, calor quoniam solis lumenque profusum perveniunt nostros ad sensus et loca mulecent, forma quoque hinc solis debet filumque videri, 570 nil adeo ut possis plus aut minus addere, vere. 572 lunaque sive noto fertur loca lumine lustrans sive suam proprio iactat de corpore lucem, 575 quidquid id est, nilo fertur maiore figura quam, nostris oculis qua cernimus, esse videtur.

the beginning of their existence. See you not too that great as is the weight of our body, the force of the soul, though of the extremest tenuity, supports it, because it is so closely conjoined and formed into a single being with it? Then too what is able to lift the body with a nimble bound save the force of the mind which guides the limbs? Now do you see what power a subtle nature may have, when it is conjoined with a heavy body, as the air is conjoined with the earth and the force of the mind with us?

Again the disk of the sun cannot be much larger nor its body of heat much smaller, than they appear to be to our senses. For from whatever distances fires can reach us with their light and breathe on our limbs burning heat, those distances take away nothing by such spaces between from the body of the flames, the fire is not in the least narrowed in appearance. Therefore since the heat of the sun and the light which it sheds reach our senses and stroke the proper places, the form too and size of the sun must be seen from this earth in their real dimensions, so that you may not add anything whatever more or less. And whether the moon as it is borne on illuminates places with a borrowed light, or emits its own light from its own body, whatever that is, the form with which it is thus borne on is not at all larger than the one which it
nam prius omnia, quae longe semota tuemur aera per multum, specie confusa videntur quam minui filum. quapropter luna necesse est, quandoquidem claram speciem certamque figuram praebet, ut est oris extremis cunque notata quantaque quantast hinc nobis videatur in alto.

postremo quoscumque vides hinc aetheris ignes; quandoquidem quoscumque in terris cernimus ignes, dum tremor est clarus, dum cernitur arror eorum, perparvom quiddam interdum mutare videtur alteram utram in partem filum, quo longius absunt;

594 scire licet perquam pauxillo posse minores esse vel exigua maioris parte brevique.

590 Illud item non est mirandum, qua ratione tantulus ille queat tantum sol mittere lumen, quod maria ac terras omnis caelumque rigando compleat et calido perfundat cuncta vapore.

597 nam licet hinc mundi patefactum totius unum largifluum fontem scatere atque erumpere lumen, ex omni mundo quia sic elementa vaporis undique conveniunt et sic coniectus eorum confluit, ex uno capite hic ut profluat arbor.

presents to our eyes seems to us to be. For all things which we see at a great distance through much air, look dimmed in appearance before their size is diminished. Therefore since the moon presents a bright aspect and well-defined form, it must be seen on high by us from this earth precisely as it is in the outline which defines it, and of the size it actually is. Lastly in the case of all those fires of ether which you observe from this earth,—since in the case of fires which we see here on earth, so long as their flickering is distinct, so long as their heat is perceived, their size is seen sometimes to change to a very very small extent either way, according to the distance at which they are,—you may infer that the fires of ether may be smaller than they look in an extremely minute degree, or larger by a very small and insignificant fraction.

This likewise need not excite wonder, how it is that so small a body as yon sun can emit so great a light, enough to flood completely seas and all lands and heaven and to steep all things in its burning heat. It well may be that a single spring for the whole world may open up from this spot and gush out in plenteous stream and shoot forth light, because elements of heat meet together from all sides out of the whole world in such manner and the mass of them thrown together streams to a point
nonne vides etiam quam late parvus aquai
prata riget fons interdum campisque redundet?
est etiam quoque uti non magno solis ab igni
aera percipiat calidis fervoribus arder,
opportunus ita est si forte et idoneus aer,
ut queat accendi parvis ardoribus ictus;
quod genus interdum segetes stipulamque videmus
accedere ex una scintilla incendia passim.
forsitan et rosea sol alte lampade lucens
possidet multum caecis fervoribus ignem
circum se, nullo qui sit fulgere notatus,
aestifer ut tantum radiorum exauseat ictum.
Nec ratio solis simplex et certa patescit,
quo pacto aestivalis et partibus aegocerotis
brumalis adeat flexus atque inde revertens
canci se ut vertat metas ad solstitialis,
lunaque mensibus id spatium videatur obire,
annua sol in quo consumit tempora cursu.
non, inquam, simplex his rebus reddita causast.
nam fieri vel cum primis id posse videtur,
Democriti quod sancta viri sententia ponit,
quanto quaeque magis sint terram sidera propter,
in such manner, that this heat wells forth from a single source. See
you not too what a breadth of meadow-land a small spring of water
sometimes floods, streaming out over the fields? It is likewise possible
that heat from the sun's flame though not at all great may infect the
whole air with fervent fires, if haply the air is in a suitable and suscepti-
ble state, so that it can be kindled when struck by small bodies of heat;
thus we see sometimes a general conflagration from a single spark catch
fields of corn and stubble. Perhaps too the sun as he shines aloft
with rosy lamp has round about him much fire with heats that are not
visible and thus the fire may be marked by no radiance, so that fraught
with heat it increases to such a degree the stroke of the rays.

Nor with regard to the sun is there one single explanation, certain
and manifest, of the way in which he passes from his summer positions
to the midwinter turning-point of capricorn and then turning back from
thence bends his course to the solstitial goal of cancer, and how the
moon is seen once a month to pass over that space, in traversing which
the sun spends the period of a year. No single plain cause, I say, has
been assigned for these things. It seems highly probable that that may
be the truth which the revered judgment of the worthy man Democritus
maintains: the nearer the different constellations are to the earth, the
tanto posse minus cum caeli turbine ferri.  
evanescere enim rapidas illius et acri 
imminui supter viris, ideoque relinqui 
paulatim solem cum posterioribu' signis,  
inferior multo quod sit quam fervida signa. 
et magis hoc lunam: quanto demissior eius 
cursus abest procul a caelo terrisque propinquit,  
tanto posse minus cum signis tendere cursum. 
flaccidiore etenim quanto iam turbine fertur 
inferior quam sol, tanto magis omnia signa 
hanc adipiscuntur circum praeterque feruntur.  
propterea fit ut haec ad signum quoque reverti 
mobilius videatur, ad hanc quia signa revisunt. 
fit quoque ut e mundi transversis partibus aer 
alternis certo fluere alter tempore possit,  
qui queat aestivis solem detrudere signis 
brumalis usque ad flexus gelidumque rigorem,  
et qui reiciat gelidis a frigoris umbris 
aestiferas usque in partis et fervida signa.  
et ratione pari lunam stellasque putandumst,  
quae volvunt magnos in magnis orbibus annos,  
aeribus posse alternis e partibus ire.  
nonne vides etiam diversis nubila ventis 

less they can be carried along with the whirl of heaven; for the velocity 
of its force, he says, passes away and the intensity diminishes in the 
lower parts, and therefore the sun is gradually left behind with the 
rearward signs, because he is much lower than the burning signs. And 
the moon more than the sun: the lower her path is and the more distant 
she is from heaven and the nearer she approaches to earth, the less she 
can keep pace with the signs. For the fainter the whirl is in which she 
is borne along, being as she is lower than the sun, so much the more all 
the signs around overtake and pass her. Therefore it is that she ap-
ppears to come back to every sign more quickly, because the signs go 
more quickly back to her. It is quite possible too that from quarters of 
the world crossing the sun's path two airs may stream each in its turn at 
a fixed time; one of which may force the sun away from the summer 
signs so far as his midwinter turning-point and freezing cold, and the 
other may force him back from the freezing shades of cold as far as 
the heat-laden quarters and burning signs. And in like manner we 
must suppose that the moon, and the stars which make revolutions of 
great years in great orbits may pass by means of airs from opposite 
quarters in turn. See you not too that clouds from contrary winds
pass in contrary directions, the upper in a contrary way to the lower?

Why may not yon stars just as well be borne on through their great orbits in ether by currents contrary one to the other?

But night buries the earth in thick darkness, either when the sun after his long course has struck upon the utmost parts of heaven and now exhausted has blown forth all his fires shaken by their journey and weakened by passing through much air; or else because the same force which has carried on his orb above the earth, compels him to change his course and pass below the earth.

At a fixed time too Matuta spreads rosy morning over the borders of ether and opens up her light, either because the same sun, coming back below the earth, seizes heaven before his time trying to kindle it with his rays; or because fires meet together and many seeds of heat are accustomed to stream together at a fixed time, which cause new sunlight to be born every day. Thus they tell that from the high mountains of Ida scattered fires are seen at day-break, that these then unite as it were into a single ball and make up an orb. And herein it ought to cause no surprise that these seeds of fire stream together at a time so surely fixed and reproduce the radiance of the sun.

For we see...
multa videmus enim, certo quae tempore fiunt omnibus in rebus. florescunt tempore certo arbusta et certo dimittunt tempore florem. nec minus in certo dentes cadere imperat aetas tempore et inpubem mollis pubescere veste et pariter mollem malis demittere barbam. fulmina postremo nix imbres nubila venti non nimis incertis fiunt in partibus anni. namque ubi sic fuerunt causarum exordia prima atque ita res mundi cecidere ab origine prima, consequē quoque iam redeunt ex ordine certo.

Crescere itemque dies licet et tabescere noctes, et minui luces, cum sumant augmina noctes, aut quia sol idem sub terras atque superne imparibus currens amfractibus aetheris oras partit et in partis non aequas dividit orbem, et quod ab alterutra detraxit parte, reponit eius in adversa tanto plus parte relatus, donec ad id signum caeli pervenit, ubi anni nodus nocturnas exaequat lucibus umbras. nam, medio cursu flatus aquilonis et austri, distinet aequato caelum discrimine metas propter signiferi posituram totius orbis, many occurrences which take place at a fixed time in the case of all things. At a fixed time trees blossom and at a fixed time shed their blossoms; and at a time no less surely fixed age bids the teeth be shed and the boy put on the soft dress of puberty and let a soft beard fall down equally from each cheek. Lastly lightnings snow rains clouds winds take place at not very irregular seasons of year. For where causes from their very first beginnings have been in this way and things have thus fallen out from the first birth of the world, in due sequence too they now come round after a fixed order.

Likewise days may lengthen and nights wane, and days shorten when the nights receive increase, either because the same sun running his course below the earth and above in curves of unlike length parts the borders of ether and divides his orbit into unequal halves; and as he comes round adds on in the opposite half just as much as he has subtracted from the other of the two halves, until he has arrived at that sign of heaven, where the node of the year makes the shades of night of the same length as the daylight. For when the sun’s course lies midway between the blast of the north and of the south, heaven keeps his two goals apart at distances now rendered exactly equal on account of the
annua sol in quo concludit tempora serpens,
obliquo terras et caelum lumine lustrans,
ut ratio declarat eorum qui loca caeli
omnia dispositis signis ornata notarunt.
aut quia crassior est certis in partibus aer,
sub terris ideo tremulum iubar haesitat ignis
nec penetrare potest facile atque emergere ad ortus.
propterea noctes hiberno tempore longae
cessant, dum veniat radiatum insigne diei.
aut etiam, quia sic alternis partibus anni
tardius et citius consuerunt confluere ignes
qui faciunt solem certa desurgere parte,
propterea fit uti videantur dicere verum 695

Luna potest solis radiis percussa nitere
inque dies magis id lumen convertere nobis
ad speciem, quantum solis secedit ab orbi,
donique eum contra pleno bene lumine fulsit
atque oriens obitus eius super edita vidit;
inde minutatim retro quasi condere lumen
debet item, quanto propius iam solis ad ignem
labitur ex alia signorum parte per orbem; 700

position of the whole starry circle, in gliding through which the sun
takes up the period of a year, lighting with slanting rays earth and
heaven; as is clearly shewn by the plans of those who have mapped out
all the quarters of heaven as they are set off with their array of signs.
Or else because the air is denser in certain parts, therefore the quivering
beam of fire is retarded below the earth and cannot easily pass through
and force its way out to its place of rising: for this reason in winter-
time nights linger long, ere the beamy badge of day arrive. Or else,
because in the way just mentioned at alternate parts of the year fires are
accustomed to stream together more slowly and more quickly, which
cause the sun to rise in a certain point, therefore it is that those appear
to speak the truth [who suppose a fresh sun to be born every day].
The moon may shine because struck by the sun's rays, and turn
that light every day more and more directly towards our sight, in pro-
portion as she recedes from the sun's orb, until just opposite to him she
has shone out with full light and at her rising as she soars aloft has
beheld his setting; and then by slow steps reversing as it were her
course she must in the same way hide her light, the nearer and nearer
she now glides to the sun from a different quarter through the circle of
ut faciunt, lunam qui fingunt esse pilai
consimilem cursusque viam sub sole tenere.
est etiam quare proprio cum lumine possit
volvier et varias splendoris reddere formas.
corpus enim licet esse aliud quod fertur et una
labitur omnimodis occursans officiensque
nec potis est cerni, quia cassum lumine fertur.
versarioque potest, globus ut, si forte, pilai
dimidia ex parti candenti lumine tinctus,
versandoque globum variantis edere formas,
donique eam partem, quaecumque est ignibus aucta,
ad speciem vertit nobis oculosque patentis;
inde minutatim retro contorquet et aufert
luciferam partem glomeraminis atque pilai;
ut Babylonica Chaldaeum doctrina refutans
astrologorum artem contra convincere tendit,
proinde quasi id fieri nequeat quod pugnat uterque
aut minus hoc illo sit cur amplectier ausis.
denique cur nequeat semper nova luna creari
ordine formarum certo certisque figuris
inque dies privos aborisci quaeque creata
atque alia illius reparari in parte locoque,
difficilest ratione docere et vincere verbis,
ordine cum possint tam certo multa creari. it ver et Venus, et veris praenuntiis ante pennatus graditur zephyrus, vestigia propter Flora quibus mater praespargens ante viai cuncta coloribus egregiis et odoribus opplet. 740

inde loci sequitur calor aridus et comes una pulverulenta Ceres et etesian flabra aquilonum. inde autumnus adit, graditur simul Euhius Euan. inde aliae tempestates ventique secuntur, altitonans Voltturnus et auster fulmine pollens. 745
tandem bruma nives adfert pigrumque rigorem, prodit hiemps, sequitur crepitans hanc dentibus algor. quo minus est mirum si certo tempore luna gignitur et certo deletur tempore rusus, cum fieri possint tam certo tempore multa. 750

Solis item quoque defectus lunaeque latebras pluribus e causis fieri tibi posse putandumst. nam cur luna queat terram secludere solis lumine et a terris altum caput obstruere ei, obiciens caecum radiis ardentibus orbem; tempore eodem aliut facere id non posse putetur corpus quod cassum labatur lumine semper?

things can be born in such a regular succession. Spring and Venus go their way, and spring's harbinger winged zephyr steps on before; and along the path they tread mother Flora straws all the way before them and covers it over with the choicest colours and odours. Next in order follows parching heat and in its company dusty Ceres and the etesian blasts of the north winds. Next autumn advances and Euhius Euan steps on together. Then other seasons and winds follow, loud-roaring Volturnus and the southwind stored with lightning. At last midwinter brings with it snows and benumbing cold; winter goes forth; after it follows cold chattering with its teeth. It is therefore the less strange that a moon is begotten at a fixed time and at a fixed time is destroyed again, since many things may take place at a time so surely fixed.

The eclipses of the sun likewise and the obscurations of the moon you may suppose to take place from many different causes. For why should the moon be able to shut the earth out from the sun's light and keep off from the earth his high-exalted head, placing her dark orb before his burning rays; and yet at the same time it be thought that another body gliding on ever without light cannot do the same?
solque suos etiam dimittere languidus ignis
tempore cur certo nequeat recreareque lumen,
cum loca praeterit flammis infesta per auras,
quae faciunt ignis interstingui atque perire?
et cur terra queat lunam spoliare vicissim
lumine et oppressum solem super ipsa tenere,
menstrua dum rigidas coni perlabitur umbras;
tempore eodem aliut nequeat succurrere lunae
corpus vel supra solis perlabier orbem,
quo radios interrumpat lumenque profusum?
et tamen ipsa suo si fulget luna nitore,
cur nequeat certa mundi languescere parte,
dum loca luminibus propriis mimica per exit?

Quod superest, quoniam magni per caerula mundi
qua fieri quicquid posset ratione resolvi,
solis uti varios cursus lunaeque meatus
noscere possemus quae vis et causa cieret,
quove modo possent effecto lumine obire
et neque optimantis tenebris obducere terras,
cum quasi conivent et aperto lumine rursum
omnia convisunt clara loca candida luce,
nunc redeo ad mundi novitatem et mollia terrae

too should not the sun be able, quite exhausted, to lose his fires at
a fixed time, and again reproduce his light when in his journey through
the air he has passed by spots fatal to his flames, which cause his fires to
be quenched and to perish? And why should the earth be able in turn
to rob the moon of light and moreover herself to keep the sun sup-
pressed, while in her monthly course she glides through the well-defined
shadows of the cone; and yet at the same time another body not be
able to pass under the moon or glide above the sun's orb, breaking off its
rays and the light it sheds forth? Yes and if the moon shines with her
own brightness, why should she not be able to grow faint in a certain
part of the world, while she is passing through spots hostile to her own
light.

And now further since I have explained in what way every thing
might take place throughout the azure heights of the great heaven; how
we might know what force and cause set in motion the varied courses of
the sun and wanderings of the moon; and in what way their light might
be intercepted and they be lost to us and spread darkness over the earth
little expecting it, when so to speak they close their eye of light and open-
ing it again do fill all places shining in bright radiance, I now go back
to the infancy of the world and the tender age of the fields of earth and
arva, novo fetu quid primum in luminis oras
tollere et incertis crerint committere ventis.

Principio genus herbarum viridemque nitorem
terra dedit circum collis camposque per omnis,
florida fulserunt viridanti prata colore,
arboribusque datumst variis exinde per auras
crescendi magnum inmissis certamen habenis.

ut pluma atque pili primum saectaeque creantur
quadripedum membris et corpore pennipotentum,
sic nova tum tellus herbas virgultaque primum
sustulit, inde loci mortalia saecla creavit
multa modis multis varia ratione coorta.

nam neque de caelo cecidisse animalia possunt
nec terrestria de salsis exisse lacunis.

linquitur ut merito maternum nomen adepta
terra sit, e terra quoniam sunt cuncta creata.

multaque nunc etiam existunt animalia terris
imbrisbus et calido solis concreta vapore;
quo minus est mirum si tum sunt plura coorta
et maiora, nova tellure atque aethere adulta.

in the beginning the earth gave forth all kinds of herbage and
verdant sheen about the hills and over all the plains; the flowery meadows
glittered with the bright green hue, and to the different trees was given
a strong and emulous desire of growing up into the air with full unbri
dled powers. As feathers and hairs and bristles are first born on the
limbs of four-footed beasts and the body of the strong of wing, thus the
new earth then first put forth grass and bushes, and next gave birth to
the races of mortal creatures springing up many in number in many
ways after diverse fashions. For no living creatures can have dropped
from heaven nor can those belonging to the land have come out of the
salt pools. It follows that with good reason the earth has gotten the
name of mother, since all things have been produced out of the earth.
And many living creatures even now spring out of the earth taking form
by rains and the heat of the sun. It is therefore the less strange if at
that time they sprang up more in number and larger in size, having
come to maturity in the infancy of earth and ether. First of all the
race of fowls and the various birds would leave their eggs, hatched
in the springtime, just as now in summer the cicades leave spontaneously
shew what first in their early essays of production they resolved to raise
into the borders of light and to give in charge to the wayward winds.
their delicate coats in quest of a living and life. Then you must know did the earth first give forth races of mortal men. For much heat and moisture would then abound in the fields; and therefore wherever a suitable spot offered, wombs would grow attached to the earth by roots; and when the warmth of the infants, flying the wet and craving the air, had opened these in the fulness of time, nature would turn to that spot the pores of the earth and constrain it to yield from its opened veins a liquid most like to milk, even as now-a-days every woman when she has borne, is filled with sweet milk, because all that current of nutrient streams towards the breasts. To the children the earth would furnish food, the heat raiment, the grass a bed rich in abundance of soft down. But the fresh youth of the world would give forth neither severe colds nor excessive heats nor gales of great violence; for all things grow and acquire strength in a like proportion.

Wherefore again and again I say the earth with good title has gotten and keeps the name of mother, since she of herself gave birth to man-kind and at a time nearly fixed shed forth every beast that ranges wildly over the great mountains, and at the same time the fowls of the air with
sed quia finem aliquam pariendi debet habere, 
destitit, ut mulier spatio defessa vetusto. 
mutat enim mundi naturam totius aetas 
ex aloioque alius status excipere omnia debet, 
rece manue ulla sui similis res: omnia migratur, 
omnia commutat natura et vertere cogit. 
namque aliut putrescit et aevö debile languet, 
porro aliut clarescit et e contemptibus exit. 
sic igitur mundi naturam totius aetas 
mutat et ex alio terram status excipit alter, 
quod pote uti nequeat, possit quod non tulit ante. 

Multaque tum tellus etiam portenta creare 
conatast mira facie membrisque coorta, 
androgynum, interutraque nec utrum, utrimque remotum, 
orba pedum partim, manuum viduata vicissim, 
muta sine ore etiam, sine voltu caeca reperta, 
vinctae membro vin per totum corpus adhaesu, 
nec facere ut possent quicquam nec cedere quocum 
nec vitare malum nec sumere quod foret usus. 
cetera de genere hoc monstra ac portenta creabat, 
nequiquam, quoniam natura absterruit auctum 
nec potuere cupitum aetatis tangere florem 
all their varied shapes. But because she must have some limit set to 
her bearing, she ceased like a woman worn out by length of days. For 
time changes the nature of the whole world and all things must pass on 
from one condition to another, and nothing continues like to itself: all 
things quit their bounds, all things nature changes and compels to alter. 
One thing crumbles away and is worn and enfeebled with age, then 
another comes unto honour and issues out of its state of contempt. In 
this way then time changes the nature of the whole world and the earth 
passes out of one condition into another, so that now it cannot bear what 
once it could, and now it can bear what before it did not bear. 

And many monsters too the earth at that time essayed to produce, 
things coming up with with strange face and limbs, the man-woman, a thing 
between the two and neither the one sex nor the other, widely differing 
from both; some things deprived of feet, others again destitute of hands, 
others too proving dumb without mouth, or blind without eyes, and things 
bound fast by the adhesion of their limbs over all the body, so that they 
could not do anything nor go anywhere nor avoid the evil nor take what 
their needs required. Every other monster and portent of this kind she 
would produce, but all in vain, since nature set a ban on their increase 
and they could not reach the coveted flower of age nor find food nor be
nec reperire cibum nec iungi per Veneris res.
multa videmus enim rebus concurrere debere, 850
ut propagando possint procudere saecla;
pabula primum ut sint, genitalia deinde per artus
semina qua possint membris manare remissis;
feminaque ut maribus coniungi posit, habere
mutua qui mutent inter se gaudia uterque.

Multaque tum interiisse animantium saecla necessest 855
nec potuisse propagando procudere prolem.
nam quaecumque vides vesci vitalibus auris,
aut dolus aut virtus aut denique mobilitas est
ex ineunte aevo genus id tutata reservans.
multa sunt, nobis ex utilitate sua quae 860
commendata manent, tutelae tradita nostrae.
principio genus acre leonum saevaque saecla
tutatast virtus, volpes dolus et fuga cervos.
at levisomna canum fido cum pectore corda
et genus omne quod est veterino semine partum 865
lanigeraeque simul pecudes et bucera saecla
omnia sunt hominum tutelae tradita, Memmi.
nam cupide fugere feras pacemque secuta
sunt et larga suo sine pabula parta labore,

united in marriage. For we see that many conditions must meet together
in things in order that they may beget and continue their kinds; first a
supply of food, then a way by which the birth-producing seeds through-
out the frame may stream from the relaxed limbs; also in order that the
woman may be united with the male, the possession of organs whereby
they may each interchange mutual joys.

And many races of living things must then have died out and been
unable to beget and continue their breed. For in the case of all things
which you see breathing the breath of life, either craft or courage or else
speed has from the beginning of its existence protected and preserved
each particular race. And there are many things which, recommended
to us by their useful services, continue to exist consigned to our protec-
tion. In the first place the fierce breed of lions and the savage races
their courage has protected, foxes their craft and stags their proneness to
flight. But light-sleeping dogs with faithful heart in breast and every
kind which is born of the seed of beasts of burden and at the same time
the woolly flocks and the horned herds are all consigned, Memmius, to
the protection of man. For they have ever fled with eagerness from
wild-beasts and have ensued peace, and plenty of food has been obtained
for love ecus, puer hautquaquam; nam saepe etiam nunc ubera mammarum in somnis lactantia quaeret. post ubi ecum validae vires aetate senecta membraque deficiunt fugienti languida vita, tum demum puero illi aevo florente iuventas occipit et molli vestit lanugine malas, ne forte ex homine et veterino semine equorum confieri credas Centauros posse neque esse, without their own labour, as we give it in requital of their useful services. But those to whom nature has granted none of these qualities, so that they could neither live by their own means nor perform for us any useful service in return for which we should suffer their kind to feed and be safe under our protection, those, you are to know, would lie exposed as a prey and booty of others, hampered all in their own death-bringing shackles, until nature brought that kind to utter destruction.

But Centaurs never have existed, and at no time can there exist things of twofold nature and double body formed into one frame out of limbs of alien kinds, such that the faculties and powers of this and that portion cannot be sufficiently like. This however dull of understanding you may learn from what follows. To begin, a horse when three years have gone round is in the prime of his vigour, far different the boy: often even at that age he will call in his sleep for the milk of the breast. Afterwards when in advanced age his lusty strength and limbs now faint from ebbing life fail the horse, then and not till then youth in the flower of age commences for that boy and clothes his cheeks in soft down; that you may not haply believe that out of a man and the burden-carrying seed of horses Centaurs can be formed and have being; or that Scyllas with
aut rabidis canibus succinctas semimarinis
corporibus Scyllas et cetera de genere horum,
inter se quorum discordia membra videmus;
quae neque florescunt pariter nec roborae sumunt
corporibus neque proiciunt aetate senecta
nec simili Venere ardescunt nec moribus unis
conveniunt, neque sunt cadem iucunda per artus.
quippe videre licet pinguescere saepe cicuta
barbigeras pecudes, homini quae est acre venenum.
flamma quidem vero cum corpora fulva leonum
tam soleat torrere atque urere quam genus omne
visceris in terris quodcumque et sanguinis extet,
qui fieri potuit, triplici cum corpore ut una,
prima leo, postrema draco, media ipsa, Chimaera
ore foras acrem flaret de corpore flammam?
quare etiam tellure nova caeloque recenti
talia qui fingit potuisse animalia gigni,
nixus in hoc uno novitatis nomine inani,
multa licet simili ratione effutiat ore,
aurea tum dicat per terras flumina vulgo
fluxisse et gemmis florere arbusta suesse
aut hominem tanto membrorum esse impete natum,
trans maria alta pedum nisus ut ponere posset

bodies half those of fishes girdled round with raving dogs can exist, and
all other things of the kind, whose limbs we see cannot harmonise toge-
ther; as they neither come to their flower at the same time nor reach the
fulness of their bodily strength nor lose it in advanced old age, nor burn
with similar passions nor have compatible manners, nor feel the same
things give pleasure throughout their frames. Thus we may see bearded
goats often fatten on hemlock which for man is rank poison. Since flame
moreover is wont to scorch and burn the tawny bodies of lions just as
much as any other kind of flesh and blood existing on earth, how could
it be that a single chimera with triple body, in front a lion, behind a
dragon, in the middle the goat whose name it bears, could breathe out
at the mouth fierce flame from its body? Wherefore also he who fables
that in the new time of the earth and the fresh youth of heaven such
living creatures could have been begotten, resting upon this one futile
term new, may babble out many things in like fashion, may say that
rivers ran with gold over all parts of the earth, and that trees were wont
to blossom with precious stones, or that man was born with such giant
force of frame that he could wade on foot through deep seas and whirl
et manibus totum circum se vertere caelum. nam quod multa fuere in terris semina rerum
tempore quo primum tellus animalia fudit, nil tamen est signi mixtas potuisse creari
inter se pecudes compactaque membra animantium, propterea quia quae de terris nunc quoque abundat 920
herbarum genera ac fruges arbustaque laeta
non tamen inter se possunt complexa creari, sed res quaeque suo ritu procedit et omnes
foedere naturae certo discrimina servant.

At genus humanum multo fuit illud in arvis 925
durius, ut decuit, tellus quod dura creasset,
et maioribus et solidis magis ossibus intus
fundatum, validis aptum per viscera nervis,
nec facile ex aestu nec frigore quod caperetur
nec novitate cibi nec labi corporis ulla.
 multaque per caelum solis volventia lustra
volgivago vitam tractabant more ferarum.
nec robustus erat curvi moderator aratri
quisquam, nec scibat ferro molirier arva
nec nova defodere in terram virgulta neque altis 930
arboribus veteres decidere falcibu' ramos.
quod sol atque imbres dederant, quod terra crearat

the whole heaven about him with his hands. For the fact that there
were many seeds of things in the earth what time it first shed forth
living creatures, is yet no proof that there could have been produced
beasts of different kinds mixed together, and limbs of different living
things formed into a single frame, because the kinds of herbage and corn
and joyous trees which now also spring in plenty out of the earth yet
cannot be produced with the several sorts plaited together into one
whole, but each thing goes on after its own fashion, and all preserve their
distinctive differences according to a fixed law of nature.

But the race of man then in the fields was much hardier, as beseemed
it to be, since the hard earth had produced it; and built on a ground-
work of larger and more solid bones within, knit with powerful sinews
throughout the frame of flesh; not lightly to be disabled by heat or cold
or strange kinds of food or any malady of body. And during the revolu-
tion of many lustres of the sun through heaven they led a life after the
roving fashion of wild-beasts. No one then was a sturdy guider of the
bent plough or knew how to labour the fields with iron or plant in the
ground young saplings or lop with pruning-hooks old boughs from the
high trees. What the sun and rains had given, what the earth had
sponte sua, satis id placabat pectora donum. glandiferas inter curabant corpora quercus plerumque; et quae nunc hiberno tempore cernis arbita puniceo fieri matura colore, plurima tum tellus etiam maiora ferebat. multaque praeterea novitas tum florida mundi pabula dura tulit, miseris mortalibus ampla. at sedare sitim fluvii fontesque vocabant, ut nunc montibus e magnis decursus aquai claru' citat late sitientia saecla ferarum. denique nota vagi silvestria templ a tenebant nympha rurum, quibus e scibant umori' fluenta lubrica proluvie larga lavere umida saxa, umida saxa, super viridi stillantia musco, et partim plano scatere atque erumpere campo. necdum res igni scibant tractare neque uti pellibus et spoliis corpus vestire ferarum, sed nemora atque cavos montis silvasque colebant et frutices inter condebant squalida membra verbera ventorum vitare imbrisque coacti. nec commune bonum poterant spectare neque ullis moribus inter se scibant nec legibus uti

produced spontaneously, was guerdon sufficient to content their hearts. Among acorn-bearing oaks they would refresh their bodies for the most part; and the arbute-berries which you now see in the winter-time ripen with a bright scarlet hue, the earth would then bear in greatest plenty and of a larger size; and many coarse kinds of food besides the teeming freshness of the world then bare, more than enough for poor wretched men. But rivers and springs invited to slake thirst, even as now a rush of water down from the great hills summons with clear plash far and wide the thirsty races of wild-beasts. Then too as they ranged about they would occupy the well-known woodland temples of the nymphs, out of which they knew that smooth-gliding streams of water with a copious gush bathed the dripping rocks, the dripping rocks, trickling down over the green moss; and in parts welled and bubbled out over the level plain. And as yet they knew not how to apply iron to their purposes or to make use of skins and clothe their body in the spoils of wild-beasts, but they would dwell in woods and mountain-caves and forests and shelter in the brushwood their squalid limbs when driven to shun the buffeting of the winds and the rains. And they were unable to look to the general weal and knew not how to make a common use of any
quod cuique obtulerat praedae fortuna, ferebat sponte sua sibi quisque valere et vivere doctus. et Venus in silvis iunegat corpora amantium; concilivat enim vel mutua quamque cupidio vel violenta viri vis atque impensa libido vel pretium, glandes atque arbita vel pira lecta. et manuum mira virtute pedumque consectabatur silvestria saeclara ferarum missilibus saxis et magno pondere clavae.; multaque vincebant, vitabant pauca latebris; (saetigerisque pares subu' sic silvestria membra) nuda dabant terrae nocturno tempore capti, circum se foliis ac frondibus involventes. nec plangore diem magno solemque per agros quaebant pavides palantes noctis in umbris, sed taciti respectabunt somnoque sepulti, dum rosea face sol inferret lumina caelo. a parvis quod enim consuerant cernere semper alterno tenebras et lucem tempore gigni, non erat ut fieri posset mirarier umquam nec diffidere ne terras aeterna teneret nox in perpetuum detracto lumine solis.

customs or laws. Whatever prize fortune threw in his way, each man would bear off, trained at his own discretion to think of himself and live for himself alone. And Venus would join the bodies of lovers in the woods; for each woman was gained over either by mutual desire or the headstrong violence and vehement lust of the man or a bribe of some acorns and arbute-berries or choice pears. And trusting to the marvellous powers of their hands and feet they would pursue the forest-haunting races of wild-beasts with showers of stones and club of ponderous weight; and many they would conquer, a few they would avoid in hiding-places; and like to bristly swine just as they were they would throw their savage limbs all naked on the ground, when overtaken by night, covering themselves up with leaves and boughs. Yet never with loud wailings would they call for the daylight and the sun, wandering terror-stricken over the fields in the shadows of night, but silent and buried in sleep they would wait, till the sun with rosy torch carried light into heaven; for accustomed as they had been from childhood always to see darkness and light begotten time about, never could any wonder come over them, nor any misgiving that never-ending night would cover the earth and the light of the sun be withdrawn for evermore. But what gave them
sed magis illud erat curae, quod saecla ferarum infestam miseris faciebant saepe quietem. eiectique domo fugiebant saxe aucta spumigeri suis adventu validive leonis atque intempesta cedebant nocte paventes hospitibus saevis instrata cubilia fronde.

Nec nimio tum plus quam nunc mortalia saecla dulcia linquebant labentis lumina vitae. unus enim tum quisque magis deprensus eorum pabula viva feris praebebat, dentibus haustus, et nemora ac montis gemitu silvasque replebat viva videns vivo sepeliri viscera busto. at quos effugium servarat corpore adeso, posterius tremulas super ulcera taetra tenentes palmas horriferis accibant vocibus Orcum, donique eos vita privarant vermina saeva expertis opis, ignaros quid volnera vellent. at non multa virum sub signis milia ducta una dies dabat exitio nec turbida ponti aequora fligebant navis ad saxa virosque. hic temere incassum frustra mare saepe coortum saevibat leviterque minas ponebat inanis, nec poterat quemquam placidi pellacia ponti

trouble was rather the races of wild-beasts which would often render repose fatal to the poor wretches. And driven from their home they would fly from their rocky shelters on the approach of a foaming boar or a strong lion, and in the dead of night they would surrender in terror to their savage guests their sleeping-places strawn with leaves.

Nor then much more than now would the races of mortal men leave the sweet light of ebbing life. For then this one or that other one of them would be seized, and torn open by their teeth would furnish to the wild-beasts a living food, and would fill with his moaning woods and mountains and forests as he looked on his living flesh buried in a living grave. But those whom flight had saved with body eaten into, holding ever after their quivering palms over the noisome sores would summon death with appalling cries, until cruel gripings had rid them of life, forlorn of help, unwitting what wounds wanted. But then a single day gave not over to death many thousands of men marching with banners spread, nor the stormy waters of the sea dashed on the rocks men and ships. At this time the sea would often rise up and rage without aim, without purpose, without result, and just as lightly put off its empty threats; nor could the winning wiles of the calm sea treacherously
subdola pellicere in fraudem ridentibus undis. 1005

improba navigii ratio tum caeca iacebat
tum penuria deinde cibi languentia leto
membra dabat, contra nunc rerum copia mersat.
illi imprudentes ipsi sibi saepe venenum
vergebant, nunc dant aliis sollertius ipsi. 1010

Inde casas postquam ac pellis ignemque pararunt,
et mulier coniuncta viro concessit in unum
conubium, prolemque ex se videre creatam,
tum genus humanum primum mollescere coepit.
ignis enim curavit ut alsia corpora frigus 1015
non ita iam possent caeli sub tegmine ferre,
et Venus inminuit viris puerique parentum
blanditiis facile ingenium fregere superbum.
tunc et amicitiem coeperunt iungere aventes
finitimi inter se nec laedere nec violari,
et pueros commendarunt muliebreque saeculum,
vocibus et gestu cum balbe significarent
imbecillorum esse aecum misererier omnis,
nec tamen omnimodis poterat concordia gigni,
seg bona magnaque pars servabat foedera caste; 1020
aut genus humanum iam tum foret omne peremptum
nec potuisset adhuc perducere saecla propago.

entice any one to his ruin with laughing waters. Then too want of food
would consign to death their fainting frames, now on the contrary tis
plenty sinks into ruin. They unwittingly would often pour out poison
for themselves; now with nicer skill men give it purposely to others.

Next after they had got themselves huts and skins and fire, and the
woman united with the man passed into the bonds of marriage with one,
and they saw an offspring born from them, then first mankind began to
soften. For fire made their chilled bodies less able now to bear the
frost beneath the canopy of heaven, and Venus impaired their strength
and children with their caresses soon broke down the haughty temper of
parents. Then too neighbours began to join in a league of friendship
mutually desiring neither to do nor suffer harm; and asked for indul-
gence to children and womankind, when with cries and gestures they
declared in stammering speech that meet it is for all to have mercy
on the weak. And though harmony could not be established without
exception, yet a very large portion observed their agreements with good
faith, or else the race of man would then have been wholly cut off, nor
could the breed have continued their generations to this day.
At varios linguae sonitus natura subegit mittere et utilitas expressit nomina rerum, non alia longe ratione atque ipsa videtur protrahere ad gestum pueros infantia linguae, cum facit ut digito quae sint praesentia monstrent. sentit enim quisque suam quoad possit abuti. cornua nata prius vitulo quam frontibus extent, illis iratus petit atque infestus inurget. at catuli pantherarum scymnique leonum unguibus ac pedibus iam tum morsuque repugnant, vix etiam cum sunt dentes unguesque creati. alituum porro genus alis omne videmus fidere et a pinnis tremulum petere auxiliatum. proinde putare aliquem tum nomina distribuisse rebus et inde homines didicisse vocabula prima, desiperest. nam cur hic posset cuncta notare vocibus et varios sonitus emittere linguae, tempore eodem alii facere id non quisse putentur? praeterea si non alii quoque vocibus usi inter se fuerant, unde insita notities est utilitatis et unde data est huic prima potestas, quid vellet facere ut sciret animoque videret?

But nature impelled them to utter the various sounds of the tongue and use struck out the names of things, much in the same way as the inability to speak is seen in its turn to drive children to the use of gestures, when it forces them to point with the finger at the things which are before them. For every one feels how far he can make use of his peculiar powers. Ere the horns of a calf are formed and project from his forehead, he butts with it when angry and pushes out in his rage. Then whelps of panthers and cubs of lions fight with claws and feet and teeth at a time when teeth and claws are hardly yet formed. Again we see every kind of fowl trust to wings and seek from pinions a fluttering succour. Therefore to suppose that some one man at that time apportioned names to things and that men from him learnt their first words, is sheer folly. For why should this particular man be able to denote all things by words and to utter the various sounds of the tongue, and yet at the same time others be supposed not to have been able to do so? Again if others as well as he had not made use of words among themselves, whence was implanted in this man the previous conception of its use and whence was given to him the original faculty, to know and perceive in mind what he wanted to do? Again one man could not
cogere item pluris unus victosque domare
non poterat, rerum ut perdiscere nomina vellent.
nec ratione docere ulla suadereque surdis,
quid sit opus facto, facilest; neque enim paterentur
nec ratione ulla sibi ferrent amplius auris
vocis inauditos sonitus obtundere frustra.
postremo quid in hac mirabile tantoperest re,
si genus humanum, cui vox et lingua vigeret,
pro vario sensu varia res voce notaret?
cum pecudes mutae, cum denique saecla ferarum
dissimilis soleant voces variasque ciere,
cum metus aut dolor est et cum iam gaudia gliscunt.
quippe etenim licet id rebus cognoscere apertis.
inritata canum cum primum magna Molossum
mollia ricta fremunt duros nudantia dentes,
longe alio sonitu rabie restricta minantur,
et cum iam latrant et vocibus omnia complent,
et catulos blande cum lingua lambere temptant
aut ubi eos iactant pedibus morsuque petentes
suspensis teneros imitantur dentibus haustus,
longe alio pacto gannitu vocis adulant,
et cum deserti baubantur in aedibus aut cum

constrain subjugate and force many to choose to learn the names of things. It is no easy thing in any way to teach and convince the deaf of what is needful to be done; for they never would suffer nor in any way endure sounds of voice hitherto unheard to continue to be dinned fruitlessly into their ears. Lastly what is there so passing strange in this circumstance, that the race of men whose voice and tongue were in full force, should denote things by different words according to their different meanings? since dumb brutes, yes and the races of wild-beasts are accustomed to give forth distinct and varied sounds, when they have fear or pain and when joys are rife. This you may learn from facts plain to sense: when the large spongy opened lips of Molossian dogs begin to growl enraged and bare their hard teeth, thus drawn back in rage they threaten in a tone far different from that in which they bark outright and fill with sounds all the places round. Again when they essay fondly to lick their whelps with their tongue or when they toss them with their feet and snapping at them make a feint with lightly closing teeth of swallowing though with gentle forbearance, they caress them with a yelping sound of a sort greatly differing from that which they utter when left alone in a house they bay or when they sink away howling from
plorantis fugiunt summisso corpore plagas,
denique non hinnitus item differre videtur,
inter equas ubi equus florenti aetate iuvencus
pinnigeri saevit calcaribus ictus amoris,
et fremitum patulis ubi naribus edit ad arma,
et cum sic alias concussis artibus hinnit?
postremo genus alituum variaeque volucres,
accipitres atque ossifragae mergique marinis
fluctibus in salso victum vitamque petentes,
longe alias alio iaciunt in tempore voces,
et quom de victu certant praedaeque repugnant.
et partim mutant cum tempestatibus una
raucisnos cantus, cornicum ut saeca vetusta
corvorumque greges ubi aquam dicuntur et imbris
poscere et interdum ventos aurasque vocare.

ergo si variis sensus animalia cogunt,
muta tamen cum sint, varias emittere voces,
quanto mortalis magis acustum tum potuisse
dissimilis alia atque alia res voce notare!

[Ille in his rebus tacitus ne forte requiras,
fulmen detulit in terram mortalibus ignem
primitus, inde omnis flammarum diditur ardur.

blows with a crouching body. Again is not the neigh too seen to differ,
when a young stallion in the flower of age rages among the mares smitten
by the goads of winged love, and when with wide-stretched nostrils
he snorts out the signal to arms, and when as it chances on any other
occasion he neighs with limbs all shaking? Lastly the race of fowls
and the different winged creatures, hawks and osprays and gulls seeking
their living in the salt water mid the waves of the sea, utter at a different
time noises widely differing from those they make when they are
fighting for food and struggling with their prey. And some of them
change together with the weather their harsh croakings, as the long-
lived races of crows and flocks of rooks when they are said to be calling
for water and rain and sometimes to be summoning winds and gales.
Therefore if different sensations compel creatures, dumb though they be,
to utter different sounds, how much more natural it is that mortal men
in those times should have been able to denote dissimilar things by many
different words!

And lest haply on this head you ask in silent thought this question, it
was lightning that brought fire down on earth for mortals in the beginning;
thence the whole heat of flames is spread abroad. Thus we see
many things shine dyed in flames of heaven, when the stroke from heaven has stored them with its heat. Ay and besides this when a branching tree sways to and fro and tosses about under the buffeting of the winds, pressing against the boughs of another tree, fire is forced out by the power of the violent friction, and sometimes the burning heat of flame flashes out, the boughs and stems rubbing against each other. Now either of these accidents may have given fire to men. Next the sun taught them to cook food and soften it with the heat of flame, since they would see many things grow mellow, when subdued by the strokes of the rays and by heat throughout the fields.

And more and more every day men who excelled in intellect and were of vigorous understanding, would kindly show them how to exchange their former way of living for new methods. Kings began to build towns and lay out a citadel as a place of strength and of refuge for themselves, and divided cattle and lands and gave to each man in proportion to his personal beauty and strength and intellect; for beauty and vigorous strength were much esteemed. Afterwards wealth was discovered and gold found out, which soon robbed of their honours strong and beautiful alike; for men however valiant and beautiful of person...
generally follow in the train of the richer man. But were a man to order his life by the rules of true reason, a frugal subsistence joined to a contented mind is for him great riches; for never is there any lack of a little. But men desired to be famous and powerful, in order that their life might rest on a firm foundation and they might be able by their wealth to lead a tranquil life; but in vain, since in their struggle to mount up to the highest dignities they rendered their path one full of danger; and even if they reach it, yet envy like a thunderbolt sometimes strikes and dashes men down from the highest point with ignominy into noisome Tartarus; since the highest summits and those elevated above the level of other things are mostly blasted by envy as by a thunderbolt; so that far better it is to obey in peace and quiet than to wish to rule with power supreme and be the master of kingdoms. Therefore let men wear themselves out to no purpose and sweat drops of blood, as they struggle on along the straight road of ambition, since they gather their knowledge from the mouths of others and follow after things from hearsay rather than their own apprehension; and this prevails not now nor will prevail by and bye any more than it has prevailed before.

Kings therefore being slain the old majesty of thrones and proud sceptres were overthrown and laid in the dust, and the glorious badge of
et capitis summi praeclarum insigne cruentum
sub pedibus vulgi magnum lugebat honorem;
nam cupide conculcatur nimis ante metutum. 1140
res itaque ad summam faecem turbasque redibat,
imperium sibi cum ac summatum quique petebat.
inde magistratum partim docuere creare
iuaraque constituere, ut vellent legis uti.

nam genus humanum, defessum vi colere aevum,
ex inimiciiis languebat; quo magis ipsum
sponte sua cecidit sub leges artaque iura.
acrius ex ira quod enim se quisque parabat
ulcisci quam nunc concessum legibus aequis,
hanc ob rem est homines pertaesum vi colere aevum. 1150
inde metus maculat poenarum praeclarae vitae.
circumretit enim vis atque iniuria quemque
atque, unde exortast, ad eum plerumque revertit,
nec facilest placidam ac pacatam degere vitam
qui violat factis communia foedera pacis.

etsi fallit enim divum genus humanumque,
perpetuo tamen id fore clam diffidere debet;
quippe ubi se multi per somnia saepe loquentes
aut morbo delirantes protraxe ferantur
et celata mala in medio et peccata dedisse.] 1160

the sovereign head bloodstained beneath the feet of the rabble mourned
for its high prerogative; for that is greedily trampled on which before
was too much dreaded. Power therefore would fall to the lowest dregs
and to unruly mobs, each man seeking for himself empire and sovereignty.
Then a portion of them taught men to elect legal officers, and drew up
codes, to induce men to obey the laws. For mankind, tired out with a
life of brute force, lay exhausted from its feuds; and therefore the more
readily it submitted of its own free will to laws and stringent codes. For
as each one moved by anger took measures to avenge himself with
more severity than is now permitted by equitable laws, for this reason
men grew sick of a life of brute force. Thence fear of punishment mars
the prizes of life; for violence and wrong enclose all who commit them in
their meshes and do mostly recoil on him from whom they began; and
it is not easy for him who transgresses the terms of the public peace to
pass a tranquil and a peaceful existence. For though he eludes God and
man, yet he cannot but feel a misgiving that his secret can be kept for
ever; seeing that many by speaking in their dreams or in the wanderings
of disease have often we are told betrayed themselves and have disclosed
their hidden deeds of evil and their sins.
Nunc quae causa deum per magnas numina gentis pervulgarit et ararum compleverit urbis suscipiendraque curarit sollemnia sacra, quae nunc in magnis florent sacra rebu' locisque, unde etiam nunc est mortalibus insitus horror qui delubra deum nova toto suscitat orbi terrarum et festis cogit celebrare diebus, non ita difficilest rationem reddere verbis. quippe etenim iam tum divom mortalia saecla egregias animo facies vigilante videbant et magis in somnis mirando corporis auctu. his igitur sensum tribuebant propterqua quod membra movere videbantur vocesque superbas mittere pro facie praeclara et viribus amplis. aeternamque dabant vitam, quia semper eorum subpeditabatur facies et forma manebat, et tamen omnino quod tantis viribus auctos non temere ulla vi convinci posse putabant. fortunisque ideo longe praestare putabant, quod mortis timor haut quemquam vexaret eorum, et simul in somnis quia multa et mira videbant efficere et nullum capere ipsos inde laborem. praeterea caeli rationes ordine certo

And now what cause has spread over great nations the worship of the divinities of the gods and filled towns with altars and led to the performance of stated sacred rites, rites now in fashion on solemn occasions and in solemn places, from which even now is implanted in mortals a shuddering awe which raises new temples of the gods over the whole earth and prompts men to crowd them on festive days, all this it is not so difficult to explain in words. Even then in sooth the races of mortal men would see in waking mind glorious forms, would see them in sleep of yet more marvellous size of body. To these then they would attribute sense, because they seemed to move their limbs and to utter lofty words suitable to their glorious aspect and surpassing powers. And they would give them life everlasting, because their face would ever appear before them and their form abide; yes and yet without all this, because they would not believe that beings possessed of such powers could lightly be overcome by any force. And they would believe them to be preeminent in bliss, because none of them was ever troubled with the fear of death, and because at the same time they would see them perform many miracles, yet feel on their part no fatigue from the effort. Again they would see the system of heaven and the different seasons of the years
et varia annorum cernebant tempora verti
nec poterant quibus id fieret cognoscere causis. 1185
ergo perfugium sibi habebant omnia divis
tradere et illorum nutu facere omnia flecti.
in caeloque deum sedes et templar locarunt,
per caelum volvi quia nox et luna videtur,
luna dies et nox et noctis signa severa
noctivagaeque faces caeli flammaeque volantes,
nubila sol imbres nix venti fulmina grando
et rapidi fremitus et murmura magna minarum.

O genus infelix humanum, talia divis
cum tribuit facta atque iras adiunxit acerbas! 1195
quantos tum gemitus ipsi sibi, quantaque nobis
volnera, quas lacrimas peperere minoribus nostris!
nec pietas ullast velatum saepe videri
vertier ad lapidem atque omnis accedere ad aras
nec procumbere humi prostratum et pandere palmas 1200
ante deum delubra nec aras sanguine multo
spargere quadrupedum nec votis nectere vota,
sed mage pacata posse omnim mente tueri.
nam cum suspicimus magni caelestia mundi
templa, super stellisque micantibus aethera fixum,
et venit in mentem solis lunaeque viarum,

come round in regular succession, and could not find out by what causes this was done; therefore they would seek a refuge in handing over all things to the gods and supposing all things to be guided by their nod. And they placed in heaven the abodes and realms of the gods, because night and moon are seen to roll through heaven, moon day and night and night's austere constellations and night-wandering meteors of the sky and flying bodies of flame, clouds sun rains snow winds lightnings hail and rapid rumblings and loud threatful thunder-claps.

O hapless race of men, when that they charged the gods with such acts and coupled with them bitter wrath! what groanings did they then beget for themselves, what wounds for us, what tears for our posterity! Nor is it any act of piety to be often seen with veiled head to turn to a stone and approach every altar and fall prostrate on the ground and to spread out the palms before the statues of the gods and sprinkle the altars with much blood of beasts and nail up vow after vow, but rather to be able to look on all things with a mind at peace. For when we turn our gaze on the heavenly quarters of the great upper world and ether fast above the glittering stars, and direct our thoughts to the courses of the
tunc aliis oppressa malis in pectora cura
illa quoque expergexit caput erigere inquit,
nequae forte deum nobis inmensa potestas
sit, vario motu quae candida sidera verset.

temptat enim dubiam mentem rationis egestas,
ecquaenam fuerit mundi genitalis origo,
et simul ecqua sit finis, quao moenia mundi
solliciti motus hunc possint ferre laborem,
an divinitus aeterna donata salute

perpetuo possint aevi labentia tracru
inmensi validas aevi contemnere viris.
praeterea cui non animus formidine divum
corruptitur, cui non corrupunt membra pavore,
fulminis horribili cum plaga torrida tellus
contremit et magnum percurrent murmura caelum?
non populi gentesque tremunt, regesque superbi
poenarum grave sit solvendi tempus adultum?
summa etiam cum vis violenti per mare venti
induperatorem classis super aequora verrit
cum validis pariter legionibus atque elephantis,
non divom pacem votis adit ac prece quaesit

sun and moon, then into our breasts burdened with other ills that fear
as well begins to exalt its reawakened head, the fear that we may haply
find the power of the gods to be unlimited, able to wheel the bright stars
in their varied motion; for lack of power to solve the question troubles
the mind with doubts, whether there was ever a birth-time of the world,
and whether likewise there is to be any end; how far the walls of the
world can endure this strain of restless motion; or whether gifted by
the grace of the gods with an everlasting existence they may glide on
through a never-ending tract of time and defy the strong powers of im-
measurable ages. Again who is there whose mind does not shrink into
itself with fear of the gods, whose limbs do not cower in terrour, when
the parched earth rocks with the appalling stroke and rattlings run
through the great heaven? Do not peoples and nations quake, and proud
monarchs shrink into themselves smitten with fear of the gods, lest for
any foul transgression or overweening word the heavy time of reckoning
has arrived at its fulness? When too the utmost fury of the headstrong
wind passes over the sea and sweeps over its waters the commander of
a fleet together with his mighty legions and elephants, does he not
solicit with vows the mercy of the gods and ask in prayer with fear and
ventorum pavidus paces animasque secundas, nequiquam, quoniam violento turbine saepe correptus nilo fertur minus ad vada leti? usque adeo res humanas vis abdita quaedam opterit et pulchros fascis saevasque secures proculcare ac ludibrio sibi habere videtur. denique sub pedibus tellus cum tota vacillat concussaque cadunt urbes dubiaeque minantur, quid mirum si se temnunt mortalia saecla atque potestatis magnas mirasque relinqunt in rebus viris divum, quae cuncta gubernent? Quod superest, aes atque aurum ferrumque repertumst et simul argentii pondus plumbique potestas, ignis ubi ingentis silvas ardore cremarat montibus in magnis, ceu caeli fulmine misso, sive quod inter se bellum silvestre gerentes hostibus intulerant ignem formidinis ergo, sive quod inducti terrae bonitate volebant pandere agros pinguis et pascua reddere rura, sive feras interficere et ditescere praeda, nam fovea atque igni prius est venariar ortum quam saepire plagis saltum canibusque ciere.

trembling a lull in the winds and propitious gales; but all in vain, since often caught up in the furious hurricane he is borne none the less to the shoals of death? so constantly does some hidden power trample on human grandeur and is seen to tread under its heel and make sport for itself of the renowned rods and cruel axes. Again when the whole earth rocks under their feet and towns tumble with the shock or doubtfully threaten to fall, what wonder that mortal men abase themselves and make over to the gods in things here on earth high prerogatives and marvellous powers, sufficient to govern all things?

To proceed, copper and gold and iron were discovered and at the same time weighty silver and the substance of lead, when fire had burnt up vast forests on the large mountains, either by a discharge of heaven’s lightning, or else because men waging with one another a forest-war had carried fire among the enemy in order to strike terror, or because drawn on by the goodness of the soil they would wish to clear rich fields and bring the country into pasture, or else to destroy wild-beasts and enrich themselves with the booty; for hunting with the pitfall and with fire came into use before the practice of enclosing the lawn with toils and starting the game with dogs. Whatever the fact is, from whatever cause
quidquid id est, quamcumque e causa flammeus ardor horribili sonitu silvas exederat altis
ab radicibus et terram percozerat igni,
manabat venis ferventibus in loca terrae
concava venis ferventibus in loca terrae
venis ferventibus in loca terrae
couvea conveniens argenti rivus et auris
tollevabat nitido capti levique lepore
et simili formata videbant esse figura
tum penetrabat eos posse haec liquefacta calore
quamlibet in formam et faciem decurrere rerum
et prosurrum quamvis in acuta ac tenvia posse
mucronum duci fastigia procedendo,
utter tela darent, silvasque ut caedere possent
materiemque dolore et levia radere tigna
et terebrare etiam ac pertundere perque forare.
nec minus argento facere haec auroque parabant
quam validi primum violentis viribus aeris,
nequiquam, quoniam cedebat victa potestas
nec poterat pariter durum sufferre laborem.
tum fuit in pretio magis aes aurumque iacebat propter inutilitatem hebeti mucrone retusum.

the heat of flame had swallowed up the forests with a frightful crackling from their very roots and had thoroughly baked the earth with fire, there would run from the boiling veins and collect into the hollows of the ground a stream of silver and gold, as well as of copper and lead. And when they saw these afterwards cool into lumps and glitter on the earth with a brilliant gleam, they would lift them up attracted by the bright and polished lustre, and they would see them to be moulded in a shape the same as the outline of the cavities in which each lay. Then it would strike them that these might be melted by heat and cast in any form or shape soever, and might by hammering out be brought to tapering points of any degree of sharpness and fineness, so as to furnish them with tools and enable them to cut the forests and hew timber and plane smooth the planks, and also to drill and pierce and bore. And they would set about these works just as much with silver and gold at first as with the overpowering strength of stout copper, but in vain, since their force would fail and give way and not be able like copper to stand the severe strain. At that time copper was in higher esteem and gold would lie neglected on account of its uselessness, with its dull blunted edge: now copper
nunc iacet aes, aurum in summum successit honorem. 1275
sic volvenda aetas commutat tempora rerum.
quod fuit in pretio, fit nullo denique honore;
porro aliut succedit et e contemptibus exit
inque dies magis adipetitur floretque repertum
laudibus et miro est mortalis inter honore. 1280

Nunc tibi quo pacto ferri natura reperta
sit facilest ipsi per te cognoscere, Memmi.
arma antqua manus ungues dentesque fuerunt
et lapides et item silvarum fragmina rami,
et flamma atque ignes, postquam sunt cognita primum. 1285
posterius ferri vis est aerisque reperta.
et prior aeris erat quam ferri cognitus usus,
quo facilis magis est natura et copia maior.
aere solum terrae tractabant, aerque belli
miscebant fluctus et vulnera vasta serebant
et pecus atque agros adimenebant; nam facile ollis
omnia cedebant armatis nuda et inerma.
inde minutatim processit ferreus ensis
versaque in obprobium species est falcis athenae,
et ferro coepere solum prosindere terrae
exaequataque sunt creperi certamina belli.

lies neglected, gold has mounted up to the highest place of honour. Thus
time as it goes round changes the seasons of things. That which was in
esteem, falls at length into utter disrepute; and then another thing
mounts up and issues out of its degraded state and every day is more
and more coveted and blossoms forth high in honour when discovered
and is in marvellous repute with men. △

And now, Memmius, it is easy for you to find out by yourself in what
way the nature of iron was discovered. Arms of old were hands nails
and teeth and stones and boughs broken off from the forests, and flame
and fire, as soon as they had become known. Afterwards the force of
iron and copper was discovered; and the use of copper was known before
that of iron, as its nature is easier to work and it is found in greater
quantity. With copper they would labour the soil of the earth, with
copper stir up the billows of war and deal about wide-gaping wounds
and seize cattle and lands; for every thing defenceless and unarmed
would readily yield to them with arms in hand. Then by slow steps the
sword of iron gained ground and the make of the copper sickle became a
byword; and with iron they began to plough through the earth's soil,
and the struggles of wavering war were rendered equal. And the custom
et prius est armatum in equi conscendere costas
et moderarier hunc frenis dextraque vigere
quam biiugo curru bellì tempta pericila.
et biiugos prius est quam bis coniungere binos
et quam falciferos armatum escendere currus.
inde boves luctas turrito corpore, taetras,
anguimanus, belli docuerunt volnera Poeni
sufferre et magnas Martis turbare catervas.
sic alid ex alio peperit discordia tristis,
horrible humanis quod gentibus esset in armis,
inque dies belli terroribus addidit augmen.
Temptarunt etiam tauros in moenere belli
expertique sues saevos sunt mittere in hostis.
et validos partim prae se misere leones
cum doctoribus armatis saevisque magistris
qui moderarier his possent vinclisque tenere,
nequiquam, quoniam permixta caede calentes
turbabant saevi nullo discrimine turmas,
\textit{terrificas capitum quatientes undique cristas}
nec poterant equites fremitu perterrita equorum
pectora mulcere et frenis convertere in hostis.
inritata leae iaciebant corpora saltu
undique et adversum venientibus ora petebant
et nec opinantis a tergo deripiebant
of mounting in arms on the back of a horse and guiding him with reins
and shewing prowess with the right hand is older than that of tempting
the risks of war in a two-horsed chariot; and yoking a pair of horses is
older than yoking four or mounting in arms scythed chariots. Next
the Poeni taught the lucan kine with towered body, hideous of aspect,
with snake-like hand, to endure the wounds of war and to disorder the
mighty ranks of Mars. Thus sad discord begat one thing after another,
to affright nations of men under arms, and every day made some addition
to the terrours of war.
They made trial of bulls too in the service of war and essayed to send
savage boars against the enemy. And some sent before them valorous
lions with armed trainers and courageous keepers to guide them and to
hold them in chains; but in vain, since heated with promiscuous slaughter
they would disorder in their rage the troops without distinction; and
the horsemen were not able to calm the breasts of the horses scared by
the roaring and turn them with the bridle upon the enemy. The lionesses
with a spring would throw their enraged bodies on all sides and would
attack in the face those who met them and others off their guard they
deplexaeque dabant in terram volnere victos, morsibus adfixae validis atque unguibus uncis, iactabantque suos tauri pedibusque terebant et latera ac ventres hauribant sупter equorum cornibus et terram minitanti fronte ruebant. et validis socios caedebant dentibus apri tela infracta suo tinguentes sanguine saevi, in se fracta suo tinguentes sanguine tela, permixtasque dabant equitum peditumque ruinas. nam transversa feros exibant dentis adactus iumenta aut pedibus ventos erecta petebant, nequiquam, quoniam ab nervis succisa videres concidere atque gravi terram consternere casu. siquis ante domi domitos satîs esse putabant, effervescere cernebant in rebus agundis volneribus clamore fuga terrore tumultu, nec poterant ullam partem reddere eorum; diffugiebat enim varium genus omne ferarum; ut nunc saepe boves lucae ferro male mactae diffugiant, fera fata suis cum multa dedere. SI FUIT UT FACERENT SED VIX ADDUCOR UT ANTE NON QUIERINT ANIMO PRAESENTIRE ATQUE VIDERE QUAM COMMUNE MALUM FIERET FOEDUMQUE FUTURUM ET MAGIS ID POSSIS FACTUM CONTENDERE IN OMNI
IN VARIIS MUNDIS VARIA RATIONE CREATIS
sed facere id non tam vincendi spe voluerunt,
quia numero diffidebant armisque vacabant.

Nexilis ante fuit vestis quam textile tegmen,
A garment tied on the body was in use before a dress of woven stuff.
Woven stuff comes after iron, because the loom is fitted with iron; and
in no other way can such finely polished things be made, as heddles and
spindles, shuttles and ringing yarn-beams. And nature impelled men
to work up the wool before womankind: for the male sex in general far
excels the other in skill and is much more ingenious: until the rugged
countrypeople so upbraided them with it, that they were glad to give it
over into the hands of the women and take their share in supporting
hard toil, and in such hard work hardened body and hands.

But nature parent of things was herself the first model of sowing and
first gave rise to grafting, since berries and acorns dropping from the
trees would put forth in due season swarms of young shoots underneath;
and hence also came the fashion of inserting grafts in their stocks and
planting in the ground young saplings over the fields. Next they would
try another and yet another kind of tillage for their loved piece of land...
and would see the earth better the wild fruits through genial fostering and kindly cultivation. And they would force the forests to recede every day higher and higher up the hill-side and yield the ground below to tilth, in order to have on the uplands and plains meadows tanks runnels cornfields and glad vineyards, and allow a green strip of olives to run between and mark the divisions, spreading itself over hillocks and valleys and plains; just as you now see richly dight with varied beauty all the ground which they lay out and plant with rows of sweet fruit-trees and enclose all round with plantations of other goodly trees.

But imitating with the mouth the clear notes of birds was in use long before men were able to sing in tune smooth-running verse and give pleasure to the ear. And the whistlings of the zephyr through the hollows of reeds first taught peasants to blow into hollow stalks. Then step by step they learned sweet plaintive ditties, which the pipe pours forth pressed by the fingers of the players, heard through pathless woods and forests and lawns, through the unfrequented haunts of shepherds and abodes of unearthly calm. These things would soothe and gratify their minds when sated with food; for then all things of this kind are welcome. Often therefore stretched in groups on the soft grass beside
propter aquae rivom sub ramis arboris altae
non magnis opibus iucunde corpora habebant,
praesertim cum tempestas ridebat et anni
tempora pingeabant viridantis floribus herbas.
tum ioca, tum sermo, tum dulces esse cachinni
consuerant. agrestis enim tum musa vigebat;
tum caput atque umeros plexis redimire corônis
floribus et foliis lascivia laeta monebat,
atque extra numerum procedere membra moventes
duriter et duro terram pede pellere matrem;
unde oriebantur risus dulcesque cachinni,
omnia quod nova tum magis haec et mira vigebant.
et vigilantibus hinc aderant solacia somni,
ducere multimodis voces et flectere cantus
et supra calamos unco percurrere labro;
unde etiam vigiles nunc haec accepta tuentur
et numerum servare recens didicere, neque hilo
maiorum interea capiunt dulcedini' fructum
quam silvestre genus capiebat terrigenarum.
nam quod adest praesto, nisi quid cognovimus ante
suavius, in primis placet et pollere videtur,
posteriorque fere melior res illa reperta
perdit et immutat sensus ad pristina quaeque.
a stream of water under the boughs of a high tree at no great cost they
would pleasantly refresh their bodies, above all when the weather smiled
and the seasons of the year painted the green grass with flowers. Then
went round the jest, the tale; the peals of merry laughter; for the peasan
t muse was then in its glory; then frolic mirth would prompt to en-
twine head and shoulders with garlands plaited with flowers and leaves,
and to advance in the dance out of step and move the limbs clumsily
and with clumsy foot beat mother earth'; which would occasion smiles
and peals of merry laughter, because all these things then from their
greater novelty and strangeness were in high repute. And the wakeful
found a solace for want of sleep in this, in drawing out a variety of
notes and going through tunes and running over the reeds with curving
lip; whence even at the present day watchmen observe these traditions
and have lately learned to keep the proper tune; and yet for all this re-
ceive not a jot more of enjoyment, than erst the rugged race of sons of
earth received. For that which we have in our hands, if we have known
before nothing pleasanter, pleases above all and is thought to be the
best; and as a rule the later discovery of something better spoils the
taste for the former things and changes the feelings in regard to all that
sic odium coepit glandis, sic illa relictæ
strata cubilia sunt herbis et frondibus aucta.
pellis item cecidit vestis contempta ferinae;
quam reor invidia tali tunc esse repertam,
ut letum insidiis qui gessit primus obiret;
et tamen inter eos distinctam sanguine multo
disperiisse neque in fructum convertere quisse.
tunc igitur pelles, nunc aurum et purpuræ curis
exercent hominum vitam belloque fatigant;
quo magis in nobis, ut opinor, culpa resedit.
frigus enim nudos sine pellibus excruciabat
terrigenas; at nos nil laedit veste carere
purpurea atque auro signisque ingentibus apta,
dum plebeia tamen sit quae defendere possit.
ergo hominum genus incassum frustraque laborat
semper et in curis consumit inanibus aevom,
nimirum quia non cognovit quae sit habendi
finis et omnino quoad crescat vera voluptas.
idque minutatim vitam provexit in altum
et belli magnos commovit funditus aestus.

At vigiles mundi magnum versatile templum
sol et luna suo lustrantes lumine circum

has gone before. Thus began distaste for the acorn, thus were abandoned those sleeping-places strawn with grass and enriched with leaves. The dress too of wild-beasts' skin fell into neglect; though I can fancy that in those days it was found to arouse such jealousy that he who first wore it met his death by an ambuscade, and after all it was torn in pieces mid the crowd and drenched in blood was utterly destroyed and could not be turned to any use. In those times therefore skins, now gold and purple plague men's lives with cares and wear them out with war. And in this methinks the greater blame rests with us; for cold would torture the naked sons of earth without their skins; but us it harms not in the least to do without a robe of purple, spangled with gold and large figures, if only we have a dress of the people to protect us. Mankind therefore ever toils vainly and to no purpose and wastes life in groundless cares, because sure enough he has not learnt what is the true end of getting and up to what point genuine pleasure goes on increasing: this by slow degrees has carried life out into the deep sea and stirred up from their lowest depths the mighty billows of war.

But those watchful guardians sun and moon traversing with their light all round the great revolving sphere of heaven taught men that the
perdocuere homines annorum tempora verti
et certa ratione geri rem atque ordine certo.

Iam validis saepti degebant turribus aevom
et divisa celebatur discretaque tellus,
iam mare velivolis florebat puppibus; urbes
auxilia ac socios iam pacto foedere habebant,
carinibus cum res gestas coepercere poetae
tradere; nec multo priu' sunt elementa reperta.

propterea quid sit prius actum respicere aetas
 nostra nequit, nisi qua ratio vestigia monstrat.

Navigia atque agri culturas moenia leges
arma vias vestes et cetera de genere horum,
praemia, delicias quoque vitae funditus omnis,
carmina picturas, et daedala signa polire,
usus et impigrae simul experientia mentis
paulatim docuit pedetemtim progredientis.
sic unumquicquid paulatim protrahit aetas
in medium ratioque in luminis erigit oras.

namque alid ex alio clarescere et ordine debet
artibus, ad summum donec venere cacumen.

seasons of the year came round and that the system was carried on after
a fixed plan and fixed order.

Already they would pass their life fenced about with strong towers,
and the land, portioned out and marked off by boundaries, be tilled;
the sea would be filled with ships scudding under sail; towns have
auxiliaries and allies as stipulated by treaty, when poets began to con-
sign the deeds of men to verse; and letters had not been invented long
before. For this reason our age cannot look back to what has gone
before, save where reason points out any traces.

Ships and tillage, walls, laws, arms, roads, dress and all such like things,
all the prizes, all the elegancies too of life without exception, poems
pictures, and the chiselling fine-wrought statues, all these things practice
together with the acquired knowledge of the untiring mind taught men
by slow degrees as they advanced on the way step by step. Thus time
by degrees brings each several thing forth before men's eyes and reason
raises them up into the borders of light; for things must be brought to
light one after the other and in due order in the different arts, until
these have reached their highest point of development.
Primae frugiparos fetus mortalibus aegris
diderunt quondam praeclaro nomine Athenae
et recreaverunt vitam legesque rogarunt,
et primae dederunt solacia dulcia vitae,
cum genuere virum tali cum corde repertum,
omnia veridico qui quondam ex ore profudit;
cuius et extincti propter divina reperta
divulgata vetus iam ad caelum gloria fertur.
nam cum vidit hic ad victum quae flagitat usus
omnia iam ferme mortalibus esse parata
et, proquam possit, vitam consistere tutam,
divitiis homines et honore et laude potentis
affluere atque bona gnatorum excellere fama,
nec minus esse domi cuiquam tamen anxia corda,
atque animi ingratis vitam vexare sine ulla

In days of yore Athens of famous name first imparted corn-producing
crops to suffering mankind, and modelled life anew and passed laws;
and first too bestowed sweet solaces of existence, when she gave birth to
a man who shewed himself gifted with such a genius and poured forth
all knowledge of old from his truth-telling mouth; whose glory, even
now that he is dead, on account of his godlike discoveries confirmed by
length of time is spread abroad among men and reaches high as heaven.
For when he saw that the things which life imperiously demands for its
subsistence, had all without exception been already provided for men,
and that life, so far as was possible, was placed on a sure footing, that
men were great in affluence of riches and honours and glory and
swelled with pride in the high reputation of their children, and yet that
none of them at home for all that had a heart the less disquieted, and
that it in despite of the mind plagued life without any respite and was
paua atque infestis coge saevire querellis, 
intellegit ibi vitium vas efficere ipsum
omniaque illius vitio corrupier intus
quae conlata foris et commoda cunque venirent;
partim quod fluxum pertusumque esse videbat,
ut nulla posset ratione explerier umquam;
partim quod taetro quasi conspurcare sapore
omnia cernebat, quaecumque receperat, intus.
veridicas igitur purgavit pectora dictis
et finem statuit cuppedinis atque timoris
exposuitque bonum summum quo tendimus omnes
quid foret, atque viam monstravit, tramite parvo
qua possemus ad id recto contendere cursu,
quidve mali foret in rebus mortalibu' passim,
quod fieret naturali varieque volaret
seu casu seu vi, quod sic natura parasset,
et quibus e portis occurri cuique decret,
et genus humanum frustra plerumque probavit
volvere curarum tristis in pectore fluctus.

vi

constrained to rave with distressful complainings, he then perceived that
the vessel itself did cause the corruption and that by its corruption all
the things that came into it and were gathered together from abroad
however salutary, were spoilt within it; partly because he saw it to be
leaky and full of holes so that it could never by any means be filled full;
partly because he perceived that it befouled so to say with a nauseous
flavour everything within it, which it had taken in. He therefore
cleansed men's breasts with truth-telling precepts and fixed a limit to
lust and fear and explained what was the chief good which we all strive
to reach, and pointed out the road by which along a narrow track we
might arrive at it in a straightforward course; he shewed too what evils
existed in mortal affairs throughout, rising up and manifoldly flying
about by a natural—call it chance or force, because nature had so
brought it about; and from what gates you must sally out duly to en-
counter each; and he proved that mankind mostly without cause arouse
in their breast the melancholy tumbling billows of cares. For even as
children are flurried and dread all things in the thick darkness, thus we
in the daylight fear at times things not a whit more to be dreaded than
what children shudder at in the dark and fancy sure to be. This terrou
hunc igitur terrorem animi tenebrasque necessest
non radii solis nec lucida tela diei
discutiant, sed naturae species ratioque.
quo magis inceptum pergam pertexere dictis.

Et quoniam docui mundi mortalia templo
esse et nativo consistere corpore caelum,
et quaecumque in eo funt fierique necessest,
pleraque resolui, quae restant percipe porro,
quandoquidem semel insignem conscendere currum

ventorum, ex ira ut placentur, ut omina rursum
quae fuerint sint placato conversa furore:
cetera quae fieri in terris caeloque tuentur
mortales, pavidis cum pendent mentibu' saepe,
et faciunt animos humilis formidine divom
depressosque premunt ad terram propterea quod
ignorantia causarum conferre deorum cogit ad imperium res et concedere regnum,
nam bene qui didicere deos securum agere aevom,
si tamen interea mirantur qua ratione

therefore and darkness of mind must be dispelled not by the rays of the
sun and glittering shafts of day, but by the aspect and law of nature.
Wherefore the more readily I will go on in my verses to complete the
web of my design.

And since I have shewn that the quarters of ether are mortal and
that heaven is formed of a body that had a birth, and since of all the
things which go on and must go on in it, I have unravelled most, hear
further what remains to be told; since once for all [I have willed] to
mount the illustrious chariot [of the muses, and ascending to heaven to
explain the true law of winds and storms, which men foolishly lay to
the charge of the gods, telling how when they are angry, they raise
fierce tempests; and, when there is a lull in the fury] of the winds, how
that anger is appeased, how the omens which have been, are again
changed when their fury has thus been appeased: [I have willed at the
same time] to explain all the other things which mortals observe to go
on upon earth and in heaven, when often they are in anxious suspense
of mind, and which abase their souls with fear of the gods and weigh
and press them down to earth, because ignorance of the causes constrains
them to submit things to the empire of the gods and to make over to
them the kingdom. For they who have been rightly taught that the
gods lead a life without care, if nevertheless they wonder on what plan
quaeque geri possint, praeertim rebus in illis
quae supera caput aetheriis cernuntur in oris,
rursus in antiquas referuntur religionis
et dominos acris adsciscunt, omnia posse
quos miseri credunt, ignari quid queat esse,
quid nequeat, finita potestas denique cuique
quanam sit rationi atque alte terminus haerens;
quos magis errantes caeca ratione feruntur.
quae nisi respuis ex animo longeque remittis
dis indigna putare alienaque pacis eorum,
delibata deum per te tibi numina sancta
saepe oberunt; non quo violari summa deum vis
possit, ut ex ira poenas petere inbibat acris,
sed quia tute tibi placida cum pace quietos
constitues magnos irarum volvere fluctus,
nec delubra deum placido cum pectore adibis,
nec de corpore quae sancto simulacra feruntur
in mentes hominum divinae nuntia formae,
suscipere haec animi tranquilla pace valebis.
inde videre licet qualis iam vita sequatur.
quam quidem ut a nobis ratio verissima longe
reiciat, quamquam sunt a me multa profecta,
multa tamen restant et sunt ornanda politis versibus; est ratio caeli *speciesque tenenda*, sunt tempestatibus et fulmina clara canenda, quid faciant et qua de causa cumque ferantur; ne trepides caeli divisis partibus amens, unde volans ignis pervenerit aut in utram se verterit hinc partim, quo pacto per loca saepta insinuari, et hinc dominatus ut extulerit se. tu mihi supremae praescribta ad candida calcis currenti spatio praemonstra, callida musa Calliope, requies hominum divomque voluptas, te duce ut insigni capiam cum laude coronam.

Principio tonitru quatiuntur caerula caeli propterea quia concurrunt sublime volantes aetheriae nubes contra pugnantibus’ ventis. nec fit enim sonitus caeli de parte serena, verum ubicumque magis denso sunt agmine nubes, tam magis hinc magno fremitus fit murmurae saepe. praeterne neque tam condensu corpore nubes esse queunt quam sunt lapides ac tigna, neque autem tam tenues quam sunt nebulae funique volantes; nam cadere aut bruto deberent pondere pressae

however still remains and has to be embellished in smooth-polished verses; the law and aspect of heaven has to be apprehended; storms and bright lightnings, what they do and from what cause they are borne along, all this has to be sung; that you may not mark out the heaven into quarters and be startled and distracted on seeing from which of them the volant fire has come or to which of the two halves it has betaken itself, in what way it has gained an entrance within walled places, and how after lording it with tyrant sway it has extricated itself from these. Do thou, deft muse Calliope, solace of men and joy of gods, point out the course before me as I race to the white boundary-line of the final goal, that under thy guidance I may win the crown with signal applause.

In the first place the azure heights of heaven are shaken with thunder, because the ethereal clouds clash together as they fly aloft when the winds combat from opposite quarters. For no sound ever comes from a cloudless part of heaven, but wheresoever the clouds are gathered in a denser mass, from that part with greater frequency comes a clap with a loud growl. Again clouds cannot be either of so dense a body as stones and timbers, nor again so fine as mists and flying bodies of smoke; for then they must either fall borne down by their dead
ut lapides, aut ut fumus constare nequirent
nec cohibere nives gelidas et grandinis imbris,
dant etiam sonitum malos inter iactata trabesque,
interdum perscissa fuit petulantibus auris
et fragilis sonitus chartarum commeditatur.
id quoque enim genus in tonitru cognoscere possis,
aut ubi suspensam vestem chartas ve volantis
verberibus venti versant planguntque per auras.
fit quoque enim interdum ut non tam concurrere nubes
frontibus adversis possint quam de latere ire
diverso motu radentes corpora tractim,
aridus unde auris terget sonus ille diuque
ducitur, exierunt donec regionibus artis.

Hoc etiam pacto tonitru concussa videntur
omnia saepe gravi tremere et divolsa repente
maxima dissiluisse capacis moenia mundi,
cum subito validi venti conlecta procella
nubibus intorsit sese conclusaque ibidem
turbine versanti magis ac magis undique nubem

weight like stones, or like smoke they would be unable to keep together
and hold within frozen snows and hail-showers. They also give forth a
sound over the levels of the wide-stretching upper world, just as at
times a canvas-awning stretched over large theatres makes a creaking
noise, when it tosses about among the poles and beams; sometimes too
rent by the boisterous gales it madly howls and closely imitates the
crackling noise of pieces of paper: this kind of noise too you may notice
in thunder, when the winds whirl about with their blows and buffet
through the air a hanging cloth or flying bits of paper. For sometimes
too the clouds cannot meet front to front in direct collision, but must
rather move from the flank and so with contrary motions graze leisurely
along each other's bodies; whence comes that dry sound which brushes
the ears and is long drawn out, until they have made their way out of
their confined positions.

In this way also all things appear to quake often from the shock of
heavy thunder, and the mighty walls of the far-stretching ether seem in
an instant to have been riven and to have sprung asunder; when a
storm of violent wind has suddenly gathered and worked itself into the
clouds and, there shut in, with its whirling eddy ever more and more on
all sides forces the cloud to become hollow with a thick surrounding
cogit uti fiat spissio cava corpore circum, 
post ubi communuit vis eius et impetus acer, 
tum perterricrepore sonitu dat scissa fragorem. 
nec mirum, cum plena animae vensicula parva 
saepe ita dat magnum sonitum displosa repente.

Est etiam ratio, cum venti nubila perflant, 
ut sonitus facient. etenim ramosa videmus 
nubila saepe modis multis atque aspera ferri; 
scilicet ut, crebram silvam cum flamina cauri 
perflant, dant sonitum frondes ramique fragorem. 
fit quoque ut interdum validi vis incita venti 
perscindat nubem perfringens impete recto. 
nam quid possit ibi flatus manifesta docet res, 
hic, ubi lenior est, in terra cum tamen alta 
arbusta evolvens radicibus haurit ab imis, 
sunt etiam fluctus per nubila, qui quasi murmur 
dant in frangendo graviter; quod item fit in altis 
fluminibus magnoque mari, cum frangitur aestus. 
fit quoque, ubi e nubi in nubem vis incidit ardens 
fulminis, haec multo si forte umore recepit 
ignem, continuo ut magno clamore trucidet; 
ut calidis candens ferrum e fornacibus olim 

It can also be explained how the winds, when they blow through the 
clouds, make noises: we see branching and rough clouds often borne 
along in many ways; thus, you are to know, when the blasts of the 
northwest blow through a dense forest, the leaves give forth a rustling 
and the boughs a crashing. Sometimes too the force of the strong wind 
when aroused rends the cloud, breaking through it by an assault right 
in front: what a blast of wind can do there, is shewn by facts plain to 
sense, when here on earth where it is gentler it yet twists out tall trees 
and tears them up from their deepest roots. There are also waves 
among the clouds and they give a kind of roar as they break heavily; 
just as in deep rivers and on the great sea when the surf breaks. Sometimes too when the burning force of thunder has fallen out of one cloud 
into another, if haply the latter contains much moisture when it has 
taken the fire into it, it drowns it at once with a loud noise; just so iron 
glowing hot from the fiery furnaces sometimes hisses, when we have
stridit, ubi in gelidum propere demersimus imbrem. aridior porro si nubes accipit ignem, uritur ingenti sonitu succensa repente; lauricomas ut si per montis flamma vagetur turbine ventorum comburens impete magno; nec res ulla magis quam Phoebi Delphica laurus terribili sonitu flamma crepitante crematur. denique saepe geli multus fragor atque ruina grandinis in magnis sonitum dat nubibus alte. ventus enim cum confercit, franguntur, in artum, concreti montes nimborum et grandine mixti. Fulgit item, nubes ignis cum semina multa excussere suo concursu; ceu lapidem si percutiat lapis aut ferrum; nam tum quoque lumen exilit et claras scintillas dissipat ignis. sed tonitrum fit uti post auribus accipiamus, fulgere quam cernant oculi, quia semper ad auris tardius adveniunt quam visum quae moveant res. id licet hinc etiam cognoscere: caedere si quem ancipiti videos ferro procul arboris auctum, ante fit ut cernas ictum quam plaga per auris det sonitum; sic fulgorem quoque cernimus ante plunged it quickly into cold water. Again if the cloud which receives the fire is drier, it is set on fire in an instant and burns with a loud noise; just as if a flame should range over the laurel-covered hills through a whirlwind and burn them up with its impetuous assault; and there is not anything that burns in the crackling flame with a more startling sound than the Delphic laurel of Phoebus. Then often too much crushing of ice and tumbling in of hail make a noise in the great clouds on high; for when the wind packs them together into a confined space, the mountains of storm-clouds congealed and mixed with hail break up.

It lightens too, when the clouds have struck out by their collision many seeds of fire; just as if a stone were to strike another stone or a piece of iron; for then too light bursts out and fire scatters about many sparks. But we hear the thunder with our ears after the eyes see the flash of lightning, because things always travel more slowly to the ears than those which excite vision travel to the eyes. This you may perceive from the following instance too: when you see a man at a distance cutting with a double-edged axe a large tree, you perceive the stroke before the blow carries the sound to the ear: thus we see lightning too
quam tonitrum accipimus, pariter qui mittitur igni e simili causa, concursu natus eodem.

Hoc etiam pacto volucri loca lumine tingunt nubes et tremulo tempestas impetris fulgit. ventus ubi invasit nubem et versatus ibidem fecit ut ante cavam docui spissescere nubem, mobilitate sua fervescit; ut omnia motu percalefacta vides ardescere, plumbea vero glans etiam longa 'cursu volvenda liquescit. ergo fervidus hic nubem cum perscidit atram, dissipat ardoris quasi per vim expressa repente semina quae faciunt nictantia fulgura flammæ; inde sonus sequitur qui tardius adficit auris quam quae perveniunt oculorum ad lumina nostra. scilicet hoc densis fit nubibus et simul alte extractis aliis alias super impete miro; ne tibi sit frudi quod nos inferne videmus quam sint lata magis quam sursum extracta quid extent. contemplator enim, cum montibus adsimulata nubila portabunt venti transversa per auras, aut ubi per magnos montis cumulata videbis insuper esse aliis alia atque urguere superne before we hear the thunder, which is discharged at the same time from the same cause, being born indeed from the same collision.

Also in the following manner clouds dye places with winged light and the storm flashes out with a rapid quivering movement. When the wind has made its way into a cloud and whirling about in it has, as I have shewn above, made the cloud hollow with a dense crust, it becomes hot by its own velocity: thus you see all things thoroughly heated and fired by motion; nay a leaden ball in whirling through a long course even melts. When therefore this wind now on fire has rent the black cloud, it scatters abroad at once seeds of fire pressed out by force so to speak, and these produce the throbbing flashes of flame; then follows a sound which strikes on the ears more slowly than the things which travel to our eyes strike on them. This you are to know takes place when the clouds are dense and at the same time piled up on high one above the other in marvellous accumulation; that you be not led into error, because we see how great their breadth is below, rather than to how great a height they are piled up. Observe, at a time when the winds shall carry clouds like to mountains with a slanting course through the air, or when you shall see them piled on the sides of great mountains one on the top of the other and pressing down from above perfectly at
in statione locata sepultis undique ventis: tum poteris magnas moles cognoscere eorum speluncasque velut saxis pendentibus structas cernere, quas venti cum tempestate coorta conplerunt, magno indignantur murmure clausi nubibus in caveisque ferarum more minantur; nunc hinc nunc illinc fremitus per nubila mittunt quaerentesque viam circum versantur et ignis semina convolvunt e nubibus atque ita cogunt multa rotantque cavis flammam fornacibus intus, donec divolsa fulserunt nube corusci.

Hac etiam fit uti de causa mobilis ille devote in terram liquidi color aureus ignis, semina quod nubes ipsas permulta necessitant ignis habere; etenim cum sunt umore sine ullo, flammeus est plerumque colos et splendidus ollis. quin etiam solis de lumine multa necessit concipere, ut merito rubeant ignesque profundant. hasce igitur cum ventus agens contrusit in unum compressitque locum cogens, expressa profundunt semina quae faciunt flammam fulgere colores. fulgit item, cum rarescunt quoque nubila caeli. nam cum ventus eas leviter diducit euntis rest the winds being buried on all sides: you will then be able to observe their great masses and to see caverns as it were built of hanging rocks; and when a storm has gathered and the winds have filled these, they chafe with a loud roaring shut up in the clouds, and bluster in their dens after the fashion of wild beasts: now from this point, now from that they send their growlings through the clouds, and seeking a way out whirl about and roll together seeds of fire out of the clouds and then gather many into a mass and make them rotate in the hollow furnaces within, until they have burst the cloud and shone forth in forked flashes.

From this cause again your golden colour of clear bright fire flies down with velocity to the earth: the clouds must themselves have very many seeds of fire; for when they are without any moisture, they are mostly of a brilliant flame-colour. Moreover they must take in many from the sun's light, so that with good cause they are ruddy and shed forth fires. When therefore the wind has driven thrust squeezed together and collected into one spot these clouds, they press out and shed forth seeds which cause the colours of flame to flash out. It also lightens, when the clouds of heaven are rarefied as well. For when the wind lightly un-
dissoluitque, cadant ingratis illa necessost
semina quae faciunt fulgorem. tum sine taetro
terore et sonitu fulgit nulloque tumultu.

Quod superest, quali natura praedita constant
fulmina, declarant ictus et inusta vaporis
signa notaeque gravis halantis sulphuris auras.
ignis enim sunt haec non venti signa neque imbris.
praeterea saepe accendunt quoque tecta domorum
et celeri flamma dominantur in aedibus ipsis.
hunc tibi subtilem cum primis ignibus ignem
constituit natura minutis mobilibusque
corporibus, cui nil omnino obsistere possit.
transit enim validum fulmen per saepta domorum,
clamor ut ac voces, transit per saxa, per aera,
et liquidum puncto facit aes in tempore et aurum,
curat item vasis integris vina repente
diffugiant, quia nimirum facile omnia circum
conlaxat rareque facit lateramina vasis
adveniens calor eius et insinuatus in ipsum
mobiliter soluens differt primordia vini.

quod solis vapor aetatem non posse videtur
efficere usque adeo pellens fervore corusco:

ravels and breaks them up as they move, those seeds which produce the
lightning must fall perforce; and then it lightens without a hideous
startling noise and without any uproar.

Well, to proceed, what kind of nature thunderbolts possess, is shewn
by their strokes and the traces of their heat which have burnt themselves
into things and the marks which exhale the noxious vapours of sulphur:
all these are signs of fire, not of wind or rain. Again they often set on
fire even the roofs of houses and with swift flame rule resistless within
the house. This fire subtle above all fires nature, you are to know, forms
of minute and lightly moving bodies, and it is such as nothing whatever
can withstand. The mighty thunderbolt passes through the walls of
houses, like a shout and voices, passes through stones, through brass,
and in a moment of time melts brass and gold; and causes wine too in
an instant to disappear, while the vessels are untouched, because sure
enough its heat on reaching it readily loosens and rarefies all the earthen
material of the vessel on every side and forcing a way within lightly
separates and disperses the first-beginnings of the wine. This the sun's heat
would be unable to accomplish in an age, though beating on it incessantly
tanto mobilior vis et dominantior haec est.

Nunc ea quo pacto gignantur et impete tanto
fiant ut possint icu discludere turris,
disturbare domos, avellere tigna trabesque,
et monimenta virum demoliri atque cremare,
exanimare homines, pecudes prosternere passim,
cetera de genere hoc qua vi facere omnia possint,
expediam, neque te in promissis plura morabor.

Fulmina gignier e crassis alteque putandumst
nubibus extractis; nam caelo nulla sereno
nec leviter densis mittuntur nubibus umquam.
nam dubio procul hoc fieri manifesta docet res;
quad tum per totum concrescunt aera nubes,
undiique uti tenebras omnis Acherunta reamur
liquisse et magnas caeli complesse cavernas:
usque adeo taetra nimborum nocte coorta
inpendent atrae formidinis ora superne:
cum commoliri tempestas fulmina coeptat.
praeterea persaepe niger quoque per mare nimbus,
us picis e caelo demissum flumen, in undas
sic cadit effertus tenebris procul et trahit atram
fulminibus gravidam tempestatem atque procellis,

with its quivering heat: so much more nimble and puissant is this other
force.

And now in what way these are begotten and are formed with a
force so resistless as to be able with their stroke to burst asunder towers,
throw down houses, wrench away beams and rafters, and demolish and
burn up the monuments of men, to strike men dead, to prostrate cattle
far and near, by what force they can do all this and the like, I will
make clear and will not longer detain you with mere professions.

Thunderbolts we must suppose to be begotten out of dense clouds
piled up high; for they are never sent forth at all when the sky is clear
or when the clouds are of a slight density. That this is so beyond all
question is proved by facts evident to sense: clouds at such times form
so dense a mass over the whole sky that we might imagine all its dark-
ness had abandoned Acheron throughout and filled up the great vaults
of heaven: in such numbers, mid the frightful night of storm-clouds that
has gathered, do faces of black horror hang over us on high; what
time the storm begins to forge its thunderbolts. Very often again a
black storm-cloud too out at sea, like a stream of pitch sent down from
heaven, falls in such wise upon the waters heavily charged with dark-
ness afar off and draws down a black tempest big with lightnings and
ignibus ac ventis cum primis ipse repletus,
in terra quoque ut horrescunt ac tecta requirant.
sic igitur suprema nostrum caput esse putandum
tempestatem altam. neque enim caligine tanta
obruerent terras, nisi inaedificata superne
multa foresent multis exempto nubila sole;
nec tanto possent venientes opprimere imbri,
flumina abundare ut facerent camposque natare,
si non extractis foret alte nubibus aether.
hic igitur ventis atque ignibus omnia plena
sunt; ideo passim fremitus et fulgura fiunt.
quippe etenim supra docui permulta vaporis
semina habere cavas nubes et multa necessest
concipere ex solis radiis ardoreque eorum.
hoc ubi ventus eas idem qui cogit in unum
forte locum quemvis, expressit multa vaporis
semina seque simul cum eo commiscuit igni,
insinuatus ibi vortex versatur in arto
et calidis acuit fulmen fornacibus intus.

nam duplici ratione accenditur, ipse sua cum
mobilitate calescit et e contagibus ignis.
inde ubi percaluit venti vis et gravis ignis
impetus incessit, maturum tum quasi fulmen

storms, itself so fraught above all the rest with fires and winds, that
even on land men shudder and seek shelter. Thus then we must suppose
that the storm above our head reaches high up; for the clouds would
never bury the earth in such thick darkness, unless they were built up
high heap upon heap, the sunlight totally disappearing; nor could the
clouds when they descend drown it with so great a rain, as to make
rivers overflow and put fields under water, if they were not piled high up
in the sky. In this case then all things are filled with winds and fire;
therefore thunderings and lightnings go on all about. For I have shewn
above that hollow clouds have very many seeds of heat, and they must
also take many in from the sun’s rays and their heat. On this account
when the same wind which happens to collect them into any one place,
has forced out many seeds of heat and has mixed itself up with that fire,
then the eddy of wind forces a way in and whirls about in the straitened
room and points the thunderbolt in the fiery furnaces within; for it is
kindled in two ways at once: it is heated by its own velocity and from
the contact of fire. After that when the force of the wind has been
thoroughly heated and the impetuous power of the fire has entered in,
then the thunderbolt fully forged as it were suddenly rends the cloud,
perscindit subito nubem, ferturque coruscis
omnia luminibus lustrans loca percitus ardor.
quam gravis insequitur sonitus, displosa repente
opprimere ut caeli videatur templum superne.
inde tremor terras graviter pertemptat et altum
murmura percurrunt caelum; nam tota fere tum
tempestas concussa tremit fremitusque moventur.
quo de concussu sequitur gravis imber et uber,
omnis uti videatur in imbrem vertier aether
atque ita praecipitans ad diluvium revocari:
tantus discidio nubis ventique procella
mittitur, ardenti sonitus cum provolat ictu.
est etiam cum vis extrinsecus incita venti
incidit in calidam maturo fulmine nubem;
quam cum perscindit, extemplo cadit igneus ille
vertex quem patrio vocitamus nomine fulmen.
hoc fit idem in partis alias, quocumque tulit vis.
fit quoque ut interdum venti vis missa sine igui
igniscat tamen in spatio longoque meatu,
dum venit, amittens in cursu corpora quaedam
grandia quae nequeunt pariter penetrare per auras;
atque alia ex ipso conradens aere portat

and their heat put in motion is carried on traversing all places with
flashing lights. Close upon it follows so heavy a clap that it seems to
crush down from above the quarters of heaven which have suddenly
sprung asunder. Then a trembling violently seizes the earth and rum-
blings run through the sky; for the whole body of the storm then without
exception quakes with the shock and loud roarings are aroused. After this shock follows so heavy and copious a rain that the whole ether seems to be turning into rain and then to be tumbling down and returning to a deluge: so great a flood of it is discharged by the bursting of the cloud and the storm of wind, when the sound flies forth from the burning stroke. At times too the force of the wind aroused from without falls on a cloud hot with a fully forged thunderbolt; and when it has burst it, forthwith there falls down this fiery eddying whirl which in our native speech we call a thunderbolt. The same takes place on every other side towards which the force in question has borne down. Sometimes too the power of the wind though discharged without fire, yet catches fire in the course of its long travel, and while it is passing on, it loses on the way some large bodies which cannot like the rest get through the air; and gathers together out of the air itself and carries
parvola quae faciunt ignem commixta volando; non alia longe ratione ac plumbea saepe fervida fit glans in cursu, cum multa rigoris corpora dimittens ignem concepit in auris. fit quoque ut ipsius plagae vis excitet ignem, frigida cum venti pepulit vis missa sine igni, nimirum quia, cum vementi percult ictu, confluere ex ipso possunt elementa vaporis et simul ex illa quae tum res excipit ictum; ut, lapidem ferro cum caedimus ignis, nec, quod frigida vis ferrist, hoc setius illi semina concurrunt calidi fulgoris ad ictum.

sic igitur quoque res accendi fulmine debet, opportuna fuit si forte et idonea flammis. nec temere omnino plane vis frigida venti esse potest, ea quae tanta vi missa supernest, quin, prius in cursu si non accenditur igni, at tepefacta tamen veniat commixta calore.

Mobilitas autem fit fulminis et gravis ictus, et celeri ferme percurrunt fulmina lapsu, nubibus ipsa quod omnino prius incita se vis colligit et magnum conamen sumit eundi,

along with it other bodies of very small size which mix with it and produce fire by their flight; very much in the same way as a leaden ball becomes hot during its course, when it loses many bodies of cold and has taken up fire in the air. Sometimes too the force of the blow itself strikes out fire, when the force of wind discharged in a cold state without fire has struck, because sure enough, when it has smitten with a powerful stroke, the elements of heat are able to stream together out of the wind itself and at the same time out of the thing which then encounters the stroke. Thus, when we strike a stone with iron, fire flies out; and none the less, because the force of the iron is cold, do its seeds of fiery brightness meet together upon the stroke. Therefore in the same way a thing ought to be set on fire by the thunderbolt, if it has happened to be in a state suited to receive and susceptible of the flames. At the same time the might of the wind cannot lightly be thought to be absolutely and decidedly cold, seeing that it is discharged with such force from above; but if it is not already set on fire during its course, it yet arrives in a warm state with heat mixed up in it.

But the velocity of thunderbolts is great and their stroke powerful, and they run through their course with a rapid descent, because their force when aroused first in all cases collects itself in the clouds and
inde ubi non potuit nubes capere impetis auctum, exprimitur vis atque ideo volat impete miro, ut validis quae de tormentis missa feruntur, adde quod e parvis et levibus est elementis, nec facilest tali naturae opsistere quicquam; inter enim fugit ac penetrat per rara viarum, non igitur multis offensibus in remorando haesitat, hanc ob rem celeri volat impete labens. deinde, quod omnino natura pondera deorsum omnia nituntur, cum plagast addita vero, mobilitas duplicatur et impetus ille gravescit, ut vementius et citius quaecumque morantur obvia discutiat plagis itinerque sequatur. denique quod longo venit impete, sumere debet mobilitatem etiam atque etiam, quae crescit eundo et validas auget viris et roborat ictum. nam facit ut quae sint illius semina cunque e regione locum quasi in unum cuncta feruntur, omnia coniciens in eum volventia cursum. forsitan ex ipso veniens trahat aere quaedam corpora quae plagis incendunt mobilitatem. incolumisque venit per res atque integra transit

gathers itself up for a great effort at starting; then when the cloud is no longer able to hold the increased moving power, their force is pressed out and therefore it flies with a marvellous moving power, like to that with which missiles are carried when discharged from powerful engines. Then too it consists of small and smooth elements, and such a nature it is not easy for anything to withstand; for it flies between and passes in through the porous passages; therefore it is not checked and delayed by many collisions, and for this reason it glides and flies on with a swift moving power. Next, all weights without exception naturally pressing downward, when moreover a blow is added, the velocity is doubled and your moving power becomes so intense that the nature of the thunderbolt dashes aside more impetuously and swiftly whatever gets in its way and tries to hinder it, and pursues its journey. Again as it advances with a long-continued moving power, it must again and again receive new velocity which ever increases as it goes on and augments its powerful might and gives vigour to its stroke; for it forces all the seeds of the thunder to be borne right onward to one spot so to speak, throwing them all together, as on they roll, into that single line. Perhaps too as it goes on it attracts certain bodies out of the air to itself, and these by their blows kindle apace its velocity. It passes too through things with-
multa, foraminibus liquidus quia transvolat ignis. multaque perfringit, cum corpora fulminis ipsa corporibus rerum inciderunt, qua texta tenentur. dissolvit porro facile aes aurumque repente confervefacit, e parvis quia facta minute corporibus vis est et levibus ex elementis, quae facile insinuantur et insinuata repente dissolvunt nodos omnis et vincla relaxant. autumnoque magis stellis fulgentibus apta concutitur caeli domus undique totaque tellus, et cum tempora se veris florentia pandunt. frigore enim desunt ignes ventique calore deficiunt neque sunt tam denso corpore nubes. interutraque igitur cum caeli tempora constant, tum variae causae concurrunt fulminis omnes. nam fretus ipse anni permiscet frigus et aestum, quorum utrumque opus est fabricanda ad fulmina nubi, ut discordia sit rerum magnoque tumultu ignibus et ventis furibundus fluctuet aer. prima caloris enim pars et postrema rigoris, tempus id est vernum; quare pugnare necesset dissimilis res inter se turbareque mixtas.

out injuring them, and leaves many things quite whole after it has gone through, because the clear bright fire flies through by the pores. And it breaks to pieces many things, when the first bodies of the thunderbolt have fallen exactly on the first bodies of these things, at the points where they are intertwined and held together. Again it easily melts brass and fuses gold in an instant, because its force is formed of bodies minutely small and of smooth elements, which easily make their way in and when they are in, in a moment break up all the knots and untie the bonds of union. And more especially in autumn the mansion of heaven studded with glittering stars and the whole earth are shaken on all sides, and also when the flowery season of spring discloses itself. For during the cold fires are wanting and winds fail during the heat, and the clouds then are not of so dense a body. When therefore the seasons of heaven are between the two extremes, the different causes of thunder and lightning all combine; for the very cross-current of the year mixes up cold and heat, both of which a cloud needs for forging thunderbolts; so that there is great discord in things and the air raving with fires and winds heaves in mighty disorder. The first part of heat and the last of cold is the spring-time; therefore unlike things must battle with one another and be turbulent when mixed together. And when the last
et calor extremus primo cum frigore mixtus volvitur, autumni quod fertur nomine tempus, hic quoque confligunt hiemes aestatibus acres. propterea freta sunt haec anni nominitanda, nec mirumst, in eo si tempore plurima fiunt fulmina tempestasque cietur turbida caelo, ancipiti quoniam bello turbatur utrimque, hinc flammis illinc ventis umoreque mixto.

Hoc est igniferi naturam fulminis ipsam perspicere et qua vi faciat rem quamque videre, non Tyrhena retro volventem carmina frustra indicia occultae divum perquirere mentis, unde volans ignis pervenerit aut in utram se vererit hinc partim, quo pacto per loca saepta insinuarit, et hinc dominatus ut extulerit se, quidve nocere queat de caelo fulminis ictus. quod si Iuppiter atque ali fulgentia divi terrifico quatiunt sonitu caelestia templ\n\n\n\n\nheat mixed with the first cold rolls on its course, a time which goes by the name of autumn, then too fierce winters are in conflict with summers. Therefore these seasons are to be called the cross-seas of the year; and it is not wonderful, that in that season thunderbolts are most frequent, and troublous storms are stirred up in heaven; since both sides then engage in the troublous medley of dubious war, the one armed with flames, the other with winds and water commingled.

This is the way to see into the true nature of the thunderbolt and to understand by what force it produces each effect, and not the turning over the scrolls of Tyrhene charms and vainly searching for tokens of the hidden will of the gods, in order to know from what quarter the volant fire has come or to which of the two halves it has betaken itself, in what way it has gained an entrance within walled places, and how after lording it with tyrant sway it has extricated itself from these; also what harm the thunderstroke from heaven can do. But if Jupiter and other gods shake with an appalling crash the glittering quarters of heaven, and hurl their fire whither each is so minded, why strike they not those whoever they be who have recked not of committing some abominable sin and make them give forth the flames of lightning from breast pierced through and through, a sharp lesson to men? and why rather is
et potius nulla sibi turpi conscius in re
volvitur in flammis innoxius inque peditur
turbince caelesti subito correptus et igni?
cur etiam loca sola petunt frustraque laborant?
an tum bracchia consuescunt firmantque lacertos?
in terraque patris cur telum perpetiuntur
optundi? cur ipse sinit neque parcit in hostis?
denique cur numquam caelo iacit undique puro
Iuppiter in terras fulmen sonitusque profundit?
an simul ac nubes successere, ipse in eas tum
descendit, prope ut hinc teli determinet ictus?
in mare qua porro mittit ratione? quid undas
praeterea si vult caveamus fulminis ictum,
cur dubitat facere ut possimus cernere missum?
si nec opinantis autem volt opprimere igni,
cur tonat ex illa parte, ut vitare queamus,
cur tenebras ante et fremitus et murmura concit?
et simul in multas partis qui credere possis
mittere? an hoc ausis numquam contendere factum,
ut fient ictus uno sub tempore plures?
at saepest numero factum fierique necessest,

he whose conscience is burdened with no foul offence, innocent though he be, wrapped and enveloped in the flames, in a moment caught up by the whirlwind and fire of heaven? Why too aim they at solitary spots and spend their labour in vain? or are they then practising their arms and strengthening their sinews? and why do they suffer the father's bolt to be blunted on the earth? why does he allow it himself, and not spare it for his enemies? Why again, when heaven is unclouded on all sides, does Jupiter never hurl a bolt on the earth or send abroad his claps? or does he, so soon as clouds have spread under, then go down in person into them, that from them he may aim the strokes of his bolt near at hand? Ay and for what reason does he hurl into the sea? of what has he to impeach its waters and liquid mass and floating fields? Again if he wills us to avoid the thunderstroke, why fears he to let us see it discharged? or if he wills to crush us off our guard with his fire, why thunders he from that side, to enable us to shun it? why stirs he up beforehand darkness and roarings and rumblings? And how can you believe that he hurls at many points at the same time? or would you venture to maintain that it never has happened that more than one stroke was made at one time? Nay often and often it has happened
ut pluere in multis regionibus et cadere imbris, 415
fulmina sic uno fieri sub tempore multa.
postremo cur sancta deum delubra suasque
discutit infesto praeclaras fulmine sedes
et bene facta deum frangit simulacra suisque
demit imaginibus violento volnere honorem?
altaque cur plerumque petit loca plurimaque eius
montibus in summis vestigia cernimus ignis?

Quod superest, facilest ex his cognoscere rebus,
presteras Grai quos ab re nominitarunt,
in mare qua missi veniant ratione superne.
nam fit ut interdum tamquam demissa columna
in mare de caelo descendat, quam freta circum
fervescunt graviter spirantibus incita flabris,
et quaecumque in eo tum sint depensa tumultu
navigia in summum veniant vexata periclum.
hoc fit ubi interdum non quit vis incita venti
rumpere quam coepit nubem, sed deprimit, ut sit
in mare de caelo tamquam demissa columna,
paulatim, quasi quid pugno bracchique superne
coniectu trudatur et extendatur in undas;
quam cum discidit, hinc prorumpitur in mare venti

and must happen that, even as it rains and showers fall in many dif-
ferent quarters, so many thunderings go on at one time. Once more
why does he dash down the holy sanctuaries of the gods and his own
gorgeous seats with the destructive thunderbolt, and break the fine-
wrought idols of the gods, and spoil his own images of their glory by
an overbearing wound? and why does he mostly aim at lofty spots, and
why do we see most traces of his fire on the mountain tops?

To proceed, it is easy from these facts to understand in what way
those things, which the Greeks from their nature have named presteres,
come down from above into the sea. For sometimes a pillar so to speak
is let down from heaven and descends into the sea, and round about it
the surges boil, roused by heavy blasts of winds; and all ships caught in
that turmoil are dashed about and brought into extreme danger. This
takes place when at times the force of the wind aroused cannot burst
the cloud which it essays to burst, but weighs it down, so that it is like
a pillar let down from heaven into the sea, but gradually, just as if a
thing were thrust down from above and stretched out to the level of
the waters by the fist and push of the arm; and when the force of the
wind has rent this cloud, it bursts out from it into the sea and occasions
vis et fervorem mirum concinnat in undis;
versabundus enim turbo descendit et illam
deducit pariter lento cum corpore nubem;
quam simul ac gravidam detrusit ad aequora ponti,
ille in aquam subito totum se inmittit et omne
excitat ingenti sonitu mare fervere cogens,
fit quoque ut involvat venti se nubibus ipse
vertex conradens ex aere semina nubis
et quasi demissum caelo prestera imitetur.
hic ubi se in terras demisit dissoluitque,
turbinis inmanem vim provomit atque procellae.
shed quia fit raro omnino montisque necessest
officere in terris, appareat crebris idem
prospectu maris in magno caeloque patenti.

Nubila concrescunt, ubi corpora multa volando
hoc supero in caeli spatio coiere repente
asperiora, moris quae possint indupedita
exiguis tamen inter se comprensa teneri.
haec faciunt primum parvas consistere nubes;
inde haec comprehendunt inter se conque gregantur
et coniungendo crescunt ventisque feruntur
usque adeo donec tempestas saeae coortast.

a wondrous boiling in the waters; for the whirling eddy descends and
brings down together with it yon cloud of limber body; and as soon as
it has forced it down full-charged as it is to the levels of the sea, the
eddy in a moment plunges itself entire into the water, and stirs up the
whole sea with a prodigious noise and forces it to boil. Sometimes too
the eddy of wind wraps itself up in clouds and gathers out of the air
seeds of cloud and imitates in a sort the prester let down from heaven.
When this prester has let itself down to the land and has burst, it
belches forth a whirlwind and storm of enormous violence; but as it
seldom takes place at all and as mountains cannot but obstruct it on
land, it is seen more frequently on the sea with its wide prospect and
unobstructed horizon.

Clouds are formed, when in this upper space of heaven many bodies
flying about have in some one instant met together, of a rougher sort,
such as are able, though they have got the very slightest holds of each
other, to catch together and be held in union. These bodies first cause
small clouds to form; and these next catch together and collect into
masses and increase by joining with each other and are carried on by
the winds continually until a fierce storm has gathered. The nearer
fit quoque uti montis vicina cacumina caelo quam sint quoque magis, tanto magis edita fument adsidue furvae nubis caligine crassa properterea quia, cum consistunt nubila primum, ante videre oculi quam possint, tenvia, venti portantes cogunt ad summam cacumina montis. hic demum fit uti turba maiore coorta et condensa queant apparere et simul ipso vertice de montis videantur surgere in aethram. nam loca declarat sursum ventosa patere res ipsa et sensus, montis cum ascendimus altos. praeterea permulta mari quoque tollere toto corpora naturam declarant litore vestes suspensae, cum concipiunt umoris adhaesum. quo magis ad nubis augendas multa videntur posse quoque e salso consurgere momine ponti; nam ratio consanguineast umoribus olfis. praeterea fluviiis ex omnibus et simul ipsa surgere de terra nebulas aestumque videmus, quae velut halitus hinc ita sursum expressa feruntur suffunduntque sua caelum caligine et altas sufficiunt nubis paulatim conveniundo; urget enim quoque signiferi super aetheris aestus too the tops of a mountain in each case are to heaven, the more constantly at this elevation they smoke with the thick darkness of a swarthy cloud, because, when clouds first form, before the eyes can see them, thin as they are, the winds carry and bring them together to the highest summits of a mountain; and then at last when a greater mass of them has gathered together, being now dense they are able to make themselves visible and at the same time they are seen to rise up from the very top of the mountain into the ether: the very fact of the case and our sensations, when we climb high mountains, prove that the regions which stretch up on high are windy. Again clothes hung up on the shore, when they drink in the clinging moisture, prove that nature takes up many bodies over the whole sea as well. This makes it still more plain that many bodies may likewise rise up out of the salt heaving sea to add to the bulk of clouds; for the two liquids are near akin in their nature. Again we see mists and steam rise out of all rivers and at the same time from the earth as well; and these forced out like a breath from these parts are then carried upwards and overcast heaven with their darkness and make up clouds on high as they gradually come together; for the heat of starry ether at the same time presses down on
et quasi densendo subtextit caerula nimbis.
fit quoque ut huc veniant in caelum extrinsecus illa
corpora quae faciunt nubis nimbosque volantis;
innumerabilem enim numerum summamque profundi 
esse infinitam docui, quantaque volarent
corpora mobilitate ostendi quamque repente
inmemorabile per spatium transire solerent.
haut igitur mirumst si parvo tempore saepet
am magnis nimbis tempestas atque tenebrae
coperiunt maria ac terras insensa superne,
undique quandoquidem per caulas aetheris omnis
et quasi per magni circum spiracula mundi
exitus introitusque elementis redditus extat.
Nunc age, quo pacto pluvius concrescat in altis
nubibus umor et in terras demissus ut imber
decidat, expediam. primum iam semina aquai
multa simul vincam consurgere nubibus ipsis
omnibus ex rebus pariterque ita crescere utrumque
et nubis et aquam quaeacumque in nubibus extat,
ut pariter nobis corpus cum sanguine crescit,
sudor item atque umor quicumque est denique membris.
concipiunt etiam multum quoque saepe marinum
umorem, veluti pendentia vellera lanae,
them and by condensing as it were weaves a web of clouds below its
blue expanse. Sometimes there come here into heaven from without
those bodies which form clouds and the flying storm-rack; for I have
shewn that their number passes numbering and that the sum of the deep
is infinite; and I have proved with what velocity bodies fly and how in
a moment of time they are wont to pass through space unspeakable. It
is not therefore strange that a tempest and darkness often in a short
time cover over with such great storm-clouds seas and lands, as they
hang down upon them overhead, since on all sides through all the cavi-
ties of ether and as it were through the vents of the great world around
the power of going out and coming in is accorded to the elements.
Now mark and I will explain in what way the rainy moisture is
formed in the clouds and then is sent down and falls to the earth in the
shape of rain. And first I will prove that many seeds of water rise up
together with the clouds themselves out of all things and that both the
clouds and the water which is in the clouds thus increase together; just
as our body increases together with the blood, as well as the sweat and
all the moisture which is in the frame. The clouds likewise imbibe
much sea-water as well, like hanging fleeces of wool, when the winds
cum supera magnum mare venti nubila portant. 505
consimili ratione ex omnibus annibus umor
tollitur in nubis. quo cum bene semina aquarum
multa modis multis convenere undique adaucta,
confertae nubes umorem mittere certant
dupliciter; nam vis venti contrudit et ipsa
 copia nimborum turba maiore coacta
urget, de supero premit ac facit effluere imbris.
praeterea cum rarescunt quoque nubila ventis
aut dissolvuntur, solis super icta calore,
mittunt umorem pluvium stillantque, quasi igni
cera super calido tabescens multa liquescat.

sed vemens imber fit, ubi vementer utraque
nubila vi cumulata premuntur et impete venti.
atque tenere diu pluviae longumque morari
consuerunt, ubi multa cintent semina aquarum
atque alii aliae nubes nimboque rigantes
insuper atque omni vulgo de parte feruntur,
terraque cum fumans umorem tota redhalat.
hic ubi sol radiis tempestatem inter opacam
adversa fulsit nimborum aspargine contra,
tum color in nigris existit nubibus arqui.

carry them over the great sea. In like manner moisture is taken up out
of all rivers into the clouds; and when the seeds of waters many in
number in many ways have fully met in them, augmented from all
sides, then the close-packed clouds endeavour to discharge their moisture
from two causes: the force of the wind drives them together, and like-
wise the very abundance of the rain-clouds, when a greater mass than
usual has gathered, pushes down, presses from above and forces the
rain to stream out. Again when the clouds are also rarefied by the
winds, or are dispersed, being smitten at the same time by the heat of
the sun, they discharge a rainy moisture and trickle down, just as wax
over a hot fire melts away and turns fast into liquid. But a violent rain
follows, when the clouds are violently pressed upon by both causes, by
their own accumulated weight and by the impetuous assault of the wind.
And rains are wont to hold out and to last long, when many seeds of
waters are stirred to action, and clouds upon clouds and rack upon rack
welling forth from all quarters round about are borne along, and when
the reeking earth steams moisture back again from its whole surface.
When in such a case the sun has shone with his rays amid the murky
tempest right opposite the dripping rain-clouds, then the colour of the
rainbow shews itself among the black clouds.
Cetera quae sorsum crescent sorsumque creantur, et quae concrescunt in nubibus, omnia, prorsum omnia, nix venti grando gelidaeque pruinae et vis magna geli, magnum duramen aquarum, et mora quae fluviis passim refrenat euntis, perfacilest tamen haec reperire animoque videre omnia quo pacto fiant quareve creentur, cum bene cognoris elementis redditia quae sint.

Nunc age quae ratio terrai motibus extet percipe. et in primis terram fac ut esse rearis supter item ut supera ventosis undique plenam speluncis multosque lacus multasque lucunas in gremio gerere et rupes deruptaque saxa; multaque sub tergo terrai flumina tecta volvere vi fluctus summersaque saxa putandumst; undique enim similem esse sui res postulat ipsa. his igitur rebus subiunctis suppositisque terra superne tremit magnis concussa ruinis, subter ubi ingentis speluncas subruit aetas; quippe cadunt toti montes magnoque repente concussu late disserpunt inde tremores. et merito, quoniam plaustri concussa tremescunt

As to the other things which grow by themselves and are formed by themselves, as well as the things which are formed within the clouds, all, without exception all, snow winds hail and cold hoarfrosts and the great force of ice, the great congealing power of waters, and the stop which everywhere curbs running rivers, it is yet most easy to find out and apprehend in mind how all these things take place and in what way they are formed, when you have fully understood the properties assigned to elements.

Now mark and learn what the law of earthquakes is. And first of all take for granted that the earth below us as well as above is filled in all parts with windy caverns and bears within its bosom many lakes and many chasms, cliffs and craggv rocks; and you must suppose that many rivers hidden beneath the crust of the earth roll on with violence waves and submerged stones; for the very nature of the case requires it to be throughout like to itself. With such things then attached and placed below, the earth quakes above from the shock of great falling masses, when underneath time has undermined vast caverns; whole mountains indeed fall in, and in an instant from the mighty shock tremblings spread themselves far and wide from that centre. And with good cause,
tecta viam propter non magno pondere tota, nec minus exultant, scrupus quicunque viai ferratos utrimque rotarum succeuit orbis. fit quoque, ubi in magnas aqüae vastasque lucunas gleba vetustate e terra provolvitur ingens, ut iactetur aquae fluctu quoque terra vacillans; ut vas interdum non quit constare, nisi umor destitit in dubio fluctu iactier intus.

Praeterea ventus cum per loca subcava terrae collectus parte ex una procumbit et urget obnixus magnis speluncas viribus altas, incumbit tellus quo venti prona premit vis. tum supera terram quae sunt extracta domorum ad caelumque magis quanto sunt edita quaeque, inclinata tument in eandem prodira partem protractaeque trabes inpendent ire paratae. et metuunt magni naturam credere mundi exitiale aliquod tempus clademque manere, cum videant tantam terrarum incumbere molem! quod nisi respirent venti, vis nulla refrenet res neque ab exitio possit reprehendere euntis. nunc quia respirant alternis inque gravescunt

since buildings beside a road tremble throughout when shaken by a waggon of not such very great weight; and they rock no less, when any sharp pebble on the road jolts up the iron tires of the wheels on both sides. Sometimes too, when an enormous mass of soil through age rolls down from the land into great and extensive pools of water, the earth rocks and sways with the undulation of the water; just as a vessel at times cannot rest, until the liquid within has ceased to sway about in unsteady undulations.

Again when the wind gathering itself together in the hollow places underground bears down on one point and pushing on presses with great violence the deep caverns, the earth leans over on the side to which the headlong violence of the wind presses. Then all buildings which are above ground, and ever the more, the more they tower up towards heaven, lean over and bulge out yielding in the same direction, and the timbers wrenched from their supports hang over ready to give way. And yet men shrink from believing that a time of destruction and ruin awaits the nature of the great world, though they see so great a mass of earth hang ready to fall! And if the winds did not abate their blowing, no force could rein things in or hold them up on their road to destruction. As it is, because by turns they do abate and then increase in
et quasi collecti redeunt ceduntque repulsi, saepius hanc ob rem minitatur terra ruinas quam facit; inclinatur enim retroque recellit et recipit prolapsa suas in pondere sedes. hac igitur ratione vacillant omnia tecta, summa magis mediis, media imis,ima perhilum.

Est haec eiusdem quoque magni causa tremoris, ventus ubi atque animae subito vis maxima quaedam aut extrinsecus aut ipsa tellure coorta in loca se cava terrai coniecit ibique speluncas inter magnas fremit ante tumultu versabundaque portatur, post incita cum vis exagitata foras erumpitur et simul altam diffindens terram magnum concinnat hiatum. in Syria Sidone quod accidit et fuit Aegi in Peloponneso, quas exitus hic animai disturbat urbes et terrae motus obortus. multaque praeterea ceciderunt moenia magnis motibus in terris et multae per mare pessum subsedere suis pariter cum civibus urbes. quod nisi prorumpit, tamen impetus ipse animai et fera vis venti per crebra foramina terrae

violence, and so to speak rally and return to the charge, and then are defeated and retire, for this reason the earth oftener threatens to fall than really falls: it leans forward and then sways back again, and after tumbling forward recovers in equal poise its fixed position. For this reason the whole house rocks, the top more than the middle, the middle than the bottom, the bottom in a very very slight degree.

The same great quaking likewise arises from this cause, when on a sudden the wind and some enormous force of air gathering either from without or within the earth have flung themselves into the cavities of the earth, and there chase at first with much uproar among the great caverns and are carried on with a whirling motion, and when their force afterwards stirred and lashed into fury bursts abroad and at the same moment cleaves the deep earth and opens up a great yawning chasm. This fell out in Syrian Sidon and took place at Aegium in the Peloponneso two towns which an outbreak of wind of this sort and the ensuing earthquake threw down. And many walled places besides fell down by great commotions on land and many towns sank down engulphed in the sea together with theirburghers. And if they do not break out, still the impetuous fury of the air and the fierce violence of the wind spread over
YI

dispertitur ut horror et incutit inde tremorem; frigus uti nostros penitus cum venit in artus, concutit invitós cogens tremere atque movere. ancipiti trepidant igitur terrore per urbus, tecta superne timent, metuunt inferne cavernas terrai ne dissoluat natura repente, nee distracta suum late dispandat hiatum adque suis confusa velit complere ruinis. proinde licet quamvis caelum terramque reantur incorrupta fore aeternae mandata saluti; et tamen interdum praesens vis ipsa pericli subdit et hunc stimulus quadam de parte timoris, ne pedibus raptim tellus substraet ateratur in barathrum rerumque sequatur prodita summa funditus et fiat mundi confusa ruina.

[Principio mare mirantur non reddere maius naturam, quo sit tantus decursus aquarum, omnia quo veniant ex omni flumina parte adde vagos imbris tempestatesque volantes, omnia quae maria ac terras sparguntque rigantque; adde suos fontis; tamen ad maris omnia summam

the numerous passages of the earth like a shivering-fit and thereby cause a trembling; just as cold when it has pierced into our frames to the very marrow, sets them a-shivering in spite of themselves, forcing them to shake and move. Men are therefore disturbed by a two-edged terror throughout their cities; they fear the roofs above their heads, they dread lest the nature of the earth in a moment break up her caverns underneath; and rent asunder display her own wide-gaping maw and wildly tumbled together seek to fill it up with her own ruins. Let them then fancy as much as they please that heaven and earth shall be incorruptible and consigned to an everlasting exemption from decay; and yet sometimes the very present force of danger applies on some side or other this goad of fear among others, that the earth shall in an instant be withdrawn from under their feet and carried down into the pit, and that the sum of things shall utterly give way and follow after and a jumbled wreck of world ensue.

First of all they wonder that nature does not increase the bulk of the sea, when there is so great a flow of water into it, when all rivers from all quarters fall into it. Add to these passing rains and flying storms, which bespatter every sea and moisten every land; add its own springs; yet all these compared with the sum of the sea will be like an
guttai vix instar erunt unius adaugmen;  
quo minus est mirum mare non augescere magnum.  
praeterea magnam sol partem detrahit aestu,  
quippe videmus enim vestis umore madentis  
exsiccare suis radiis ardentibu' solem:  
at pelage multa et late substrata videmus.  
proinde licet quamvis ex uno quoque loco sol  
umoris parvam delibet ab aequore partem;  
largiter in tanto spatio tamen auferet undis.  
tum porro venti quoque magnam tollere partem  
umoris possunt verrentes aequora, ventis  
siccari mollisque luti concrescere crustas.  
praeterea docui multum quoque tollere nubes  
umorem magno conceptum ex aequore ponti  
et passim toto terrarum spargere in orbi,  
cum pluit in terris et venti nubila portant.  
postremo quoniam raro cum corpore tellus  
est, et coniunctast, oras maris undique cingens,  
debet ut in mare de terris venit umor aquai,  
in terras itidem manare ex aequore salso;  
percolatur enim virus retroque remanat  
materies umoris et ad caput amnibus omnis  
confluit, inde super terras redit agmine dulci

addition of bulk hardly amounting to a single drop; it is therefore the less wonderful that the great sea does not increase. Again the sun absorbs a great deal with his heat: we see him with his burning rays thoroughly dry clothes dripping with wet: but we know seas to be many in number and to stretch over a wide surface. Therefore however small the portion of moisture which the sun draws off the surface from any one spot; it will yet in so vast an expanse take largely from its waters. Then again the winds too may withdraw a great deal of moisture as they sweep over the surface, since we very often see the roads dried by the winds in a single night and the soft mud form into hard crusts. Again I have shewn that the clouds take off much moisture too imbibed from the surface of the sea and scatter it about over the whole earth, when it rains on land and the winds carry on the clouds. Lastly since the earth is of a porous body and is in contact with the sea, girding its shores all round, just as water comes from the earth into the sea, in the same way it must ooze into the land out of the salt sea; for the salt is strained off and the matter of liquid streams back again to the source and all meets together at the river-heads, and then flows over the lands
in a fresh current, where a channel once scooped out has carried down the waters with liquid foot.

And now I will explain why it is that fires breathe forth at times through the gorges of mount Aetna with such hurricane-like fury; for with a destroying force of no ordinary kind the flame-storm gathered itself up and lording it over the lands of the Sicilians drew on itself the gaze of neighbouring nations, when seeing all the quarters of heaven smoke and sparkle men were filled in heart with awe-struck apprehension, not knowing what strange change nature was travailing to work.

In these matters you must look far and deep and make a wide survey in all directions, in order to bear in mind that the sum of things is unfathomable and to perceive how very small, how inconceivably minute a fraction of the whole sum one heaven is, not so large a fraction of it as one man is of the whole earth. If you should clearly comprehend, clearly see this point well put, you would cease to wonder at many things. Does any one among us wonder if he has gotten into his frame a fever that has broken out with burning heat, or into his body the pains of any other disease? the foot suddenly swells, sharp pain often seizes the teeth, attacks even the eyes; the holy fire breaks out and creeping over
existit sacer ignis et urit corpore serpens
quamcumque arripuit partim, repitque per artus,
nimirum quia sunt multarum semina rerum,
et satis haec tellus nobis caelumque mali fert,
unde queat vis immensi procrescere morbi.
sic igitur toti caelo terraeque putandum
ex infinito satis omnia suppeditare,
unde repente queat tellus concussa moveri
perque mare ac terras rapidus procurretur turbo,
ignis abundare Aetnaeus, flammescere caelum;
id quoque enim fit et ardescunt caelestia templa,
et tempestatibus pluviae graviore coortu
sunt, ubi forte ita se tetulerunt semina aquarum.
‘at nimis est ingens incendi turbidus ardor.’
scilicet et fluvius quivis est maximus ei
qui non ante aliquem maiorem vidit, et ingens
arbore homoeque videtur, et omnia de genere omni
maxima quae vidit quisque, haec ingentia fingingit,
cum tamen omnia cum caelo terraeque marique
nil sint ad summam summam totius omnem.
Nunc tamen illa modis quibus irritata repente
flamma foras vastis Aetnae fornacibus efflet,
expediam. primum totius subcava montis

the body burns whatever part it has seized upon, and spreads over the
frame, because sure enough there are seeds of many things, and this
earth and heaven bring to us evil enough to allow of a measureless
amount of disease springing up. In this way then we must suppose
that all things are supplied out of the infinite to the whole heaven and
earth in quantity sufficient to allow the earth in a moment to be shaken
and stirred, and a rapid hurricane to scour over sea and land, the fire of
Aetna to overflow, the heaven to be in flames; for that too is seen and
the heavenly quarters are on fire; and rain-storms gather in a heavier
mass, when the seeds of water have haply come together for such an end.
‘Ay but the stormy rage of the conflagration is too too gigantic.’ Yes and
so any river you like is the greatest to him who has never before seen
any greater, and thus a tree and a man seem gigantic, and in the case of
all things of all kinds the greatest a man has seen he fancies to be gigan¬
tic, though yet all things with heaven and earth and sea included are
nothing to the whole sum of the universal sum.

And now at last I will explain in what ways you flame roused to
fury in a moment blazing forth from the huge furnaces of Aetna. And
first the nature of the whole mountain is hollow underneath, under-
est natura, fere silicum suffulta cavernis. 
omnibus est porro in speluncis ventus et aer; 
ventus enim fit, ubi est agitando percitus aer. 
hic ubi percaluit calefecitque omnia circum 
saxa furens, qua contingit, terramque, et ab ollis 
excussit calidum flammis velocibus ignem, 
tollit se ac rectis ita faucion eicit alte. 
fert itaque ardorem longe longeque favillam 
differt et crassa volvit caligine fumum 
extruditque simul mirando pondere saxa; 
ne dubites quin haec animali turbida sit vis. 
praeterea magna ex parti mare montis ad eius 
radices frangit fluctus aestumque resorbet. 
ex hoc usque mari speluncae montis ad altas 
perveniunt subter fauces. hac ire fatendumst 
et penetrare mari penitus res cogit aperto 
atque efflare foras ideoque extollere flammam 
saxaque subiectare et arenae tollere nimbos. 
in summo sunt vertice enim crateres, ut ipsi 
nominitant; nos quod fauces perhibemus et ora. 
Sunt aliquot quoque res quarum unam dicere causam

propped throughout with caverns of basalt rocks. Furthermore in all 
caves are wind and air; for wind is produced, when the air has been 
stirred and put in motion. When this air has been thoroughly heated 
and raging about has imparted its heat to all the rocks round, wherever 
it comes in contact with them, and to the earth, and has struck out from 
them fire burning with swift flames, it rises up and then forces itself out 
on high straight through the gorges; and so carries its heat far and 
scatters far its ashes and rolls on smoke of a thick pitchy blackness and 
flings out at the same time stones of prodigious weight; leaving no 
doubt that this is the stormy force of air. Again the sea to a great ex-
tent breaks its waves and sucks back its surf at the roots of that moun-
tain. Caverns reach from this sea as far as the deep gorges of the 
mountain below. Through these you must admit [that air mixed up 
with water passes; and] the nature of the case compels [this air to enter 
in from that] open sea and pass right within and then go out in blasts 
and so lift up flame and throw out stones and raise clouds of sand; for 
on the summit are craters, as they name them in their own language; 
what we call gorges and mouths.

There are some things too for which it is not sufficient to assign one
non satis est, verum pluris, unde una tamen sit; corpus ut exanimum siquod procul ipse iacere conspicias hominis, fit ut omnis dicere causas conveniunt leti, dicatur ut illius una. nam neque eum ferro nec frigore vincere possis interiisse neque a morbo neque forte veneno, verum aliquid genere esse ex hoc quod contigit ei scimus. item in multis hoc rebus dicere habemus. Nilus in aestatem crescit campisque redundat, unicus in terris Aegypti totius amnis. is rigat Aegyptum medium per saepe calorem, aut quia sunt aestate aquilones ostia contra, anni tempore eo qui etesiae esse feruntur, et contra fluvium flantes remorantur et undas cogentes sursus replent coguntque manere. nam dubio procul haec adverso flabra feruntur flumine, quae gelidis ab stellis axis aguntur. ille ex aestifera parti venit amnis ab austro, inter nigra virum percoccto saecla colore exoriens penitus media ab regione diei. est quoque uti possit magnus congestus harenæ fluctibus adversis oppilare ostia contra, cause; you must give several, one of which at the same time is the real cause. For instance should you see the lifeless body of a man lying at some distance, it would be natural to mention all the different causes of death, in order that the one real cause of that man's death be mentioned among them. Thus you may be able to prove that he has not died by steel or cold or from disease or haply from poison; yet we know that it is something of this kind which has befallen him; and so in many other cases we may make the same remark.

The Nile rises in summer and overflows the plains, that one sole river throughout the whole land of Egypt. It waters Egypt often in the middle of the hot season, either because in summer there are north winds opposite its mouths, which at that time of year go by the name of Etesian winds. Blowing up the river they retard it and driving the waters backwards fill the channel full and force the waters to stand still; for beyond a doubt these blasts which start from the icy constellations of the pole are carried right up the stream. That river comes from the south out of the heat-fraught country, rising far up from the central region of day among races of men black in their sun-baked complexion. It is quite possible too that the great accumulation of sand may bar up the mouths right across against the descending currents,
when the sea stirred up by the winds throws up the sand within the channel; whereby the outlet of the river is rendered less free and the current of the waters at the same time less rapid in its downward flow. It may be also that the rains are more frequent at its source in that season, because the etesian blasts of the north winds drive all the clouds together into those parts at that time. And, you are to know, when they have been driven on to the central region of day and have gathered together, then the clouds jammed close against the high mountains are massed together and violently compressed. Perhaps too it gets its increase high up from the lofty mountains of the Ethiopians, when the all-surveying sun with his thawing rays constrains the white snows to descend into the plains.

Now mark, and I will make clear to you what kind of nature the several Avernian places and lakes possess. First of all, as to the name Avernian by which they are called, it has been given to them from their real nature, because they are noxious to all birds; for when they have arrived in flight just opposite those spots, they forget to row with their wings, they drop their sails and fall with soft neck outstretched headlong to the earth, if so be that the nature of the ground admit of that, or into the water, if so be that a lake of Avernus spreads below. There
is such a spot at Cumae, where the mountains are charged with acrid sulphur, and smoke enriched with hot springs. Such a spot there also is within the Athenian walls, on the very summit of the citadel, beside the temple of bountiful Tritonian Pallas; which croaking crows never come near on the wing; no not when the high altars smoke with offerings: so constantly they fly not before the sharp wrath of Pallas for the sake of yon vigil kept, as the poets of the Greeks have sung, but the nature of the place suffices by its own proper power. In Syria too as well a spot, we are told, is found to exist of such a sort that as soon as ever even fourfooted beasts have entered in, its mere natural power forces them to fall down heavily, just as if they were felled in a moment as sacrifices to the manes gods. Now all these things go on by a natural law, and it is quite plain whence spring the causes from which they are produced; that the gate of Orcus be not haply believed to exist in such spots; and next we imagine that the manes gods from beneath do haply draw souls down from them to the borders of Acheron; as wing-footed stags are supposed often by their scent to draw out from their holes the savage serpent-tribes. How widely opposed to true reason this is, now learn; for now I essay to tell of the real fact.
Principio hoc dico, quod dixi saepe quoque ante, in terra cuiusque modi rerum esse figurās; multa, cibo quae sunt, vitalia, multaque, morbos incutere et mortem quae possint adcelerare. et magis esse aliis alias animantibus aptas res ad vitali rationem ostendimus ante propter dissimilem naturam dissimilisque texturas inter sese primasque figurās. multa meant inimica per aurīs, multa per ipsas insinuānt naris infesta atque aspera iactu, nec sunt multa parum tactu vitanda neque autem aspectu fugienda saporeque tristia quae sint. Deinde videre licet quam multae sint homini res acriter infesto sensu spurcaeqve gravesque; arboribus primum certis gravis umbra tributa usque adeo, capitis faciant ut saepe dolores, siquis eas supter iacuit prostratus in herbis. est etiam magnis Heliconis montibus arbos floris odore hominem taetra consueta necare, scilicet haec ideo terris ex omnia surgunt, multa modis multis multarum semina rerum quod permixta gerit tellus discretaque tradit.

First of all I say, as I have often said before, that in the earth are elements of things of every kind: many, which serve for food, helpful to life; and many whose property it is to cause diseases and hasten death. And we have shewn before that one thing is more adapted to one, another thing to another living creature for the purposes of life because of their natures and their textures and their primary elements being all unlike the one to the other. Many which are noxious pass through the ears, many make their way too through the nostrils, which are dangerous and harsh when they come in contact; and not a few are to be shunned by the touch, and not a few to be avoided by the sight, and others nauseous in taste.

Again you may see how many things are for man of a virulently noxious sensation and are nauseous and oppressive; to certain trees for instance has been given so very oppressive a shade that they often cause headaches when a man has lain down under them extended on the grass. There is a tree too on the great hills of Helicon which has the property of killing a man by the noisome scent of its flower. All these things you are to know rise up out of the earth, because it contains many seeds of many things in many ways mixed up together and gives them out in
nocturnumque recens extinctum lumen ubi acri
nido re offendit nares, consopit ibidem,
concidere et spumas qui morbo mittere suevit.
castoreoque gravi mulier sopitae recumbit
et manibus nitidum teneris opus efflu cruel,
tempore co si odoratast quo menstrua solvit.
 multaque praeterea languentia membra per artus
solvunt atque animam labefactant sedibus intus.
denique si calidis etiam cunctare lavabris
plenior et laveris, solio ferventis aquai
quam facile in medio fit uti des saepe ruinas!
carbonumque gravis vis atque odor insinuatur
quam facile in cerebrum, nisi aquam praecipimus ante!
at cum membra domus percepit fervidior vis,
tum fit odor viri plagae mactabilis instar.
nonne vides etiam terra quoque sulphur in ipsa
gignier et taetro concrescere odore bitumen;
denique ubi argenti venas aurique secuntur,
terrai penitus scrutantes abdita ferro,
qualis expiret Scaptensula subter odores?
quidve mali fit ut exhalent aurata metalla!

a state of separation. Again when a newly extinguished night-light encounters the nostrils with its acrid stench, it sends to sleep then and there a man who from disease is subject to falling down and foaming at the mouth. A woman is put to sleep by oppressive castor and falls back in her seat, and her gaw work drops out of her soft hands, if she has smelled it at the time when she has her monthly discharges. And many things besides relax through all the frame the fainting limbs and shake the soul in its seats within. Then too if you linger long in the hot baths when you are somewhat full and bathe, how liable you are to tumble down in a fit while seated in the midst of the hot water! Again how readily do the oppressive power and fumes of charcoal make their way into the brain, if we have not first taken water! But when burning with more than usual force it has filled the chambers of a house, then the fumes of the virulent substance act like a murderous blow. See you not too that even within the earth sulphur is generated and asphalt forms incrustations of a noisome stench? see you not, when they are following up the veins of silver and gold and searching with the pick quite into the bowels of the earth, what stenches Scaptensula exhales from below? Then what mischief do gold mines exhale! to what state
quas hominum reddunt facies qualisque colores! nonne vides audisce perire in tempore parvo quam soleant et quam vitai copia desit, quos opere in tali cohibet vis magna necessis? hos igitur tellus omnis exaestuat aestus expiratque foras in apertum promptaque caelii.

Sic et Averna loca alitibus summittere debent mortiferam vim, de terra quae surgit in auras, ut spatum caeli quadam de parte venenet; quo simul ac primum pennis delata sit ales, impediatur ibi caeco correpta veneno, ut cadat e regione loci, qua derigit aestus. quo cum conruit, hic eadem vis illius aestus reliquias vitae membris ex omnibus aufert. quippe etenim primo quasi quendam conciet aestum; posterius fit uti, cum iam cecidere veneni in fontis ipsos, ibi sit quoque vita vomenda propterca quod magna mali fit copia circum.

Fit quoque ut interdum vis haec atque aestus Averni aera, qui inter avis cumquest terramque locatus, discutiat, prope uti locus hic linquatur inanis, cuius ubi e regione loci venere volantes, do they reduce men's faces and what a complexion it produces in them! Know you not by sight or hearsay how they commonly perish in a short time and how all vital power fails those whom the hard compulsion of necessity confines in such an employment? All such exhalations then the earth steams forth and breathes out into the open air and light of heaven.

Thus too the Avernian spots must send up some power deadly to birds, which rises up from the earth into the air so as to poison a certain portion of the atmosphere; in such a way that as soon as ever a bird is borne on his wings into it, it is then attacked by the unseen poison and so palsied that it tumbles plump down on the spot where this exhalation has its course. And when it falls into it, then the same power of that exhalation robs all its limbs of the remnants of life: first of all it causes a sort of dizziness; but afterwards, when the birds have tumbled into the very springs of the poison, then life too has to be vomited forth, because all round rises up large store of mischievous matter.

Sometimes too this power and exhalation of Avernus dispels whatever air lies between the birds and earth, so that almost a void is left there. And when the birds have arrived in their flight just opposite
claudicat extemplo pinnarum nisus inanis et conamen utrimque alarum proditur omne. hic ubi nixari nequeunt insistereque alis, scilicet in terram delabi pondere cogit natura, et vacuum prope iam per inane iacentes dispergunt animas per caulas corporis omnis.

frigidior porro in puteis aestate fit umor, rarescit quia terra calore et semina squae forte vaporis habet, propere dimittit in auras, quo magis est igitur tellus effeta calore, fit quoque frigidior qui in terrast abditus umor. frigore cum premitur porro omnis terra coitque et quasi crescescit, fit scilicet ut coeundo exprimat in puteos siquem gerit ipsa calorem.

Esse apud Hammonis fanum fons luce diurna frigidus et calidus nocturno tempore fertur. hunc homines fontem nimis admirantur et acri sole putant supter terras fervescere raptim, nox ubi terras caligine texit, quod nimis a verast longe ratione remotum. quippe ubi sol nudum contractans corpus aquai

this spot, at once the buoyant force of their pinions is crippled and rendered vain and all the sustaining efforts of their wings are lost on both sides. So when they are unable to buoy themselves up and lean upon their wings, nature, you know, compels them by their weight to tumble down to earth, and lying stark through what is now almost a void they disperse their souls through all the openings of their body. * * Again during summer the water in wells becomes colder, because the earth is rarefied by heat and sends out into the air whatever seeds of its own proper heat it happens to have. The more then the earth is drained of heat, the colder becomes the water which is hidden in the earth. Again when all the earth is compressed by cold and contracts and so to say congeals, it then, you are to know, while it contracts, presses out into the wells whatever heat it contains itself.

At the fane of Hammon there is said to be a fountain which is cold in the daylight and hot in the night-time. This fountain men marvel at exceedingly and suppose that it suddenly becomes hot by the influence of the fierce sun below the earth, when night has covered the earth with awful darkness. But this is far far removed from true reason. Why when the sun though in contact with the uncovered body of the water
VI

non quierit calidum supera de reddere parte,
cum superum lumen tanto fervore fruatur,
qui queat hic supter tam crasso corpore terram
percoquere umorem et calido satiare vapore?
praesertim cum vix possit per saepta domorum
insinuare suum radiis ardentibus aestum.

quia ratiost igitur? nimirum terra magis quod
rara tepet circum fontem quam cetera tellus
multaque sunt ignis prope semina corpus aquai.
hoc ubi roriferis terram nox obruit umbris,
extemplo penitus frigescit terra coitque.

hac ratione fit ut, tamquam compressa manu sit,
exprimat in fontem quae semina cumque habet ignis,
quae calidum faciunt aquae tactum atque saporem.
inde ubi sol radiis terram dimovit obortus
et rareficit calido gliscente vapore,
rursus in antiquas redeunt primordia sedes
ignis et in terram cedit calor omnis aquai.
frigidus hanc ob rem fit fons in luce diurna.
praeterea solis radiis iactatur aquai
umor et in lucem tremulo rarescit ab aestu;
propterea fit uti quae semina cumque habet ignis
dimittat; quasi saepe gelum, quod continet in se,
vit et exolvit glaciam nodosque relaxat.
Frigidus est etiam fons, supra quem sita saepe
stuppa iacit flammam concepto protinus igni,
taedaque consimili ratione accensa per undas
conlucet, quocumque natans impellitur auris.
nimirum quia sunt in aqua permulta vaporis
semina de terraque necessest funditus ipsa
ignis corpora per totum consurgere fontem
et simul exspirare foras exireque in auras,
non ita multa tamen, calidus queat ut fieri fons,
propterea dispersa foras erumpere cogit
vis per aquam subito sursumque ea conciliari.
quod genus endo marist Aradi fons, dulcis aquai
qui scatit et salsas circum se dimovet undas;
et multis alis praebet regionibus aequor utilitatem opportunam sitientibus nautilis,
quod dulcis inter salsas intervomit undas.
sic igitur per eum possunt erumpere fontem
et scatere illa foras in stupam semina; quo cum
conveniunt aut in taedai corpore adhaerent,
ardescunt facile extemplo, quia multa quoque in se
semina habent ignis stuppeae taedaeque latentis.

fire it has; just as it often parts with the frost which it holds in itself,
and thaws the ice and loosens its bonds.

There is also a cold fountain of such a nature that tow often when
held over it imbibes fire forthwith and emits flame; a pine torch too is
lighted and shines among the waters, in whatever direction it swims
under the impulse of the winds. Because sure enough there are in the
water very many seeds of heat, and from the earth itself at the bottom
must rise up bodies of fire throughout the whole fountain and at the
same time pass abroad in exhalations and go forth into the air, not in
such numbers however that the fountain can become hot, for these rea-
sons a force compels those seeds to burst out through the water and
disperse abroad and to unite when they have mounted up. In the sea
at Aradus is a fountain of this kind, which wells up with fresh water
and keeps off the salt waters all round it; and in many other quarters
the sea affords a seasonable help in need to thirsting sailors, vomiting
forth fresh waters amid the salt. In this way then those seeds may
burst forth through that fountain and well out into the tow. And when
they meet together in it or cohere in the body of the pine-torch, they at
once readily take fire, because the tow and pinewood contain in them
likewise many seeds of latent fire. See you not too that, when you bring
nonne vides etiam, nocturna ad lumina linum
nuper ubi extinctum advmoveas, accendier ante
quam tetigit flammam, taedamque pari ratione?
multaque praeterea prius ipso tacta vapore
eminus ardescunt quam comminus imbuat ignis.
hoc igitur fieri quoque in illo fonte putandumst.

Quod superest, agere incipiam quo foedere fiat
naturae, lapis hic ut ferrum ducere possit,
quem Magneta vocant patrio de nomine Grai,
Magnetum quia fit patriis in finibus ortus.
hunc homines lapidem mirantur; quippe catenam
saepe ex anellis reddit pendentibus ex se.
quinque etenim licet interdum pluresque videre
ordine demissos levibus iactarier auris,
unus ubi ex uno dependet supter adhaerens
ex alioque alius lapidis vim vinclaque noscit:
usque adeo permananter vis pervolat eius.

Hoc genus in rebus firmandumst multa prius quam
ipsius rei rationem reddere possis,
et nimium longis ambagibus est adeundum;
quo magis attentas auris animumque reposeso.

Principio omnibus ab rebus, quascumque videmus,
a newly extinguished wick near night-lamps, it catches light before it
has touched the flame; and the same with the pinewood? And many
things beside catch fire at some distance touched merely by the heat, be-
fore the fire in actual contact infects them. This therefore you must
suppose to take place in that fountain.

Next in order I will proceed to discuss by what law of nature it
comes to pass that iron can be attracted by that stone which the Greeks
call the Magnet from the name of its native place, because it has its
origin within the bounds of the country of the Magnesians. This stone
men wonder at; as it often produces a chain of rings hanging down
from it. Thus you may see sometimes five and more suspended in suc-
cession and tossing about in the light airs, one always hanging down
from one and attached to its lower side, and each in turn one from the
other experiencing the binding power of the stone: with such a con-
tinued current its force flies through all.

In things of this kind many points must be established before you
can assign the true law of the thing in question, and it must be ap-
proached by a very circuitous road; wherefore all the more I call for an
attentive ear and mind.

In the first place from all things whatsoever which we see there
perpetuo fluere ac mitti spargique necessest
 corpora quae feriant oculos visumque lassant.
 perpetuoque fluunt certis ab rebus odores;
 frigus ut a fluviiis, calor ab sole, aequoris exesor moerorum litora propter.
 nec varii cessant sonitus manare per auras.
 denique in os salsi venit umor saepe saporis,
 cum mare versamur propter, dilutaque contra
 cum tuimur mixeri absinthia, tangit amaror.

usque adeo omnibus ab rebus quaeque fluenter
 fertur et in cunctas dimittitur undique partis
 nec mora nec requies interdatur ualla fluendi,
 perpetuo quoniam sentimus, et omnia semper
 cernere odorari licet et sentire sonare.

Nunc omnis repetam quam raro corpore sint res
 commemorare; quod in primo quoque carmine claret.
 quippe etenim, quamquam multas hoc pertinet ad res
 noscere, cum primis hanc ad rem protinus ipsam,
 qua de disserere adgredior, firmare necessest
 nil esse in promptu nisi mixtum corpus inani.
 principio fit ut in speluncis saxa superne
 sudent umore et guttis manantibus stillent.

must incessantly stream and be discharged and scattered abroad such
bodies as strike the eyes and provoke vision. Smells too incessantly
stream from certain things; as does cold from rivers, heat from the sun,
spray from the waves of the sea, that eater into walls near the shore.
Various sounds too cease not to stream through the air. Then a moist
salt flavour often comes into the mouth, when we are moving about
beside the sea; and when we look on at the mixing of a decoction of
wormwood, its bitterness affects us. In such a constant stream from all
these things the several qualities of things are carried and are trans-
mittted in all directions round, and no delay, no respite in the flow is
ever granted, since we constantly have feeling, and may at any time see
smell and hear the sound of anything.

And now I will state once again how rare a body all things have: a
question made clear in the first part of my poem also: although the
knowledge of this is of importance in regard to many things, above all
in regard to this very question which I am coming to discuss, at the
very outset it is necessary to establish that nothing comes under sense
save body mixed with void. For instance in caves rocks overhead sweat
with moisture and trickle down in oozing drops. Sweat too oozes out
manat item nobis e toto corpore sudor, crescit barba pilique per omnia membra, per artus. diditur in venas cibus omnis, auget alitque corporis extremas quoque partis unguiculosque. frigus item transire per aest calidumque vaporem sentimus, sentimus item transire per aurum atque per argentum, cum pocula plena tenemus. denique per dissaepta domorum saxea voces pervolitant, permanat odor frigusque vaposque ignis, qui ferri quoque vim penetrare suëvit denique qua circum Galli lorica coercet. et tempestates terra caeloque coortae in caelum terrasque remotae iure facessunt, morbida visque simul, cum extrinsecus insinuatur; quandoquidem nil est nisi raro corpori' nexu. Huc accedit uti non omnia, quae iaciuntur corpora cumque ab rebus, eodem praedita sensu atque eodem pacto rebus sint omnibus apta. principio terram sol excoquit et facit are, at glaciem dissolvit et altis montibus altas extructasque nives radiis tabescere cogit, denique cera liquefit in eius posta vapore. ignis item liquidum facit aest aurumque resolvit,

from our whole body; the beard grows and hairs over all our limbs and frame. Food is distributed through all the veins, gives increase and nourishment to the very extremities and nails. We feel too cold and heat pass through brass, we feel them pass through gold and silver, when we hold full cups. Again voices fly through the stone partitions of houses; smell passes through and cold and the heat of fire, which is wont ay to pierce even the strength of iron, where the Gaulish cuirass girds the body round. And storms that have gathered in earth and heaven with good right withdraw and take their departure respectively to heaven and earth, and along with them the influence of disease, when it makes its way in from without; since there is nothing at all that is not of a rare texture of body.

Furthermore all bodies whatever which are discharged from things are not qualified to excite the same sensations nor are adapted for all things alike. The sun for instance bakes and dries up the earth, but thaws ice, and forces the snows piled up high on the high hills to melt away beneath his rays; wax again turns to liquid when placed within reach of his heat. Fire also melts brass and fuses gold, but shrivels up
at coria et carnem trahit et conducit in unum.
umor aquae porro ferrum condurat ab igni,
at coria et carnem mollit durata calore.
barbigeras oleaster eo iuvat usque capellas,
effluat ambrosiae quasi vere et nectaris lincentus;
qua nil est homini quod amariu frondeat esca.
denique amaracimun fugitat sus et timet omne
ungentum; nam saetigeris subus acre venenumst,
quod nos interdum tamquam recreare videtur.
at contra nobis caenum taeterrima cum sit
spurcities, eadem subus haec incunda videtur,
insatiabiliter toti ut volvantur ibidem.

Hoc etiam superest, ipsa quam dicere de re
adgredior quod dicendum prius esse videtur.
multa foramina cum variis sint reddita rebus,
dissimili inter se natura praedita debent
esse et habere suam naturam quaeque viasque.
quippe etenim varii sensus animantibus insunt,
quorum quisque suam proprie rem percipit in se;

nam penetrare alio sonitus alioque saporem
cernimus e sucis, alio nidoris odores.

praeterea manare alius per saxa videtur,
atque alius lignis, alius transire per aurum,
through silver and brass; for form is seen to stream through this passage, heat through that, and one thing is seen to pass through by the same way more quickly than other things. The nature of the passages, you are to know, compels it so to be, varying in manifold wise, as we have shewn a little above, owing to the unlike natures and textures of things.

Therefore now that these points have all been established and arranged for us as premises ready to our hand, for what remains, the law will readily be explained out of them, and the whole cause be laid open which attracts the strength of iron. First of all there must stream from this stone very many seeds or a current if you will which dispels with blows all the air which lies between the stone and iron. When this space is emptied and much room left void between, forthwith the first beginnings of iron fall headlong forward into the void in one body, and in consequence the ring itself follows and then goes on with its whole body. And nothing has its primal elements more intricately entangled or coheres in closer connexion than the nature of stubborn iron and its coldness that makes you shiver. Therefore what I say is the less strange, that from among such elements as these bodies cannot gather in large numbers out of the iron and be carried into the void without the whole
in vacuum ferri, quin anulus ipse sequatur; quod facit, et sequitur, donec pervenit ad ipsum iam lapidem caecisque in eo compagibus haesit. hoc fit idem cunctas in partis, unde vacefit cumque locus, sive e transverso sive superne corpora continuo in vacuum vicina feruntur; quippe agitantur enim plagis aliunde nec ipsa sponte sua sursum possunt consurgere in auras. huc accedit item (quare queat id magis esse, haec quoque res adiumento motuque iuvatur) quod, simul a fronte est anelli rario aer factus inanitusque locus magis ac vacuatus, continuo fit uti qui post est cumque locatus

aer a tergo quasi provehat atque propellat. semper enim circumpositus res verberat aer; sed tali fit uti propellat tempore ferrum, parte quod ex una spatium vacat et capit in se.

hic, tibi quem memoro, per crebra foramina ferri parvas ad partis subtiliter insinuatus trudit et inpellit, quasi navem velaque ventus.

denique res omnes debent in corpore habere aera, quandoquidem raro sunt corpore et aer omnibus est rebus circumdatus adpositusque.

ring following. This it does do, and follows on until it has quite reached the stone and fastened on it with unseen bonds of connexion. The same thing takes place in all directions: on whatever side a void is formed, whether athwart or from above the first bodies next it are at once carried on into the void; for they are set in motion by blows from another source and cannot by their own free will rise up into the air. Moreover (to render it more feasible, this thing also is helped on by external aid and motion) as soon as the air in front of the ring has been made rarer and the space more empty and void, it follows at once that all the air which lies behind, carries and pushes it on as it were at its back. For the air which lies around them always beats on things; but at such a time as this it is able to push on the iron, because on one side a space is void and receives the iron into it. This air of which I am speaking to you makes its way with much subtlety through the frequent pores of the iron to its minute parts and then thrusts and pushes it on, as the wind a ship and its sails. Again all things must have air in their body, since they are of a rare body and air surrounds and is in contact with all things. This air therefore which is in the inmost recesses of the
sollicito motu semper iactatur eoque
verberat anellum dubio procul et ciet intus
scilicet: ille codem fertur quo praeceptavit
iam semel et partem in vacuum conamina sumpsit.

Fit quoque ut a lapide hoc ferri natura recedat
interdum, fugere atque sequi consueta vicissim.
exultare etiam Samothracia ferrea vidi
et ramenta simul ferri furere intus ahenis
in scaphiis, lapis hic Magnes cum subditas esset:
usque adeo fugere ab saxo gestire videtur.
aere interposito discordia tanta creatur
propterea quia nimirum prius aestus ubi aeris
praecipit ferrique vias possedit apertas,
posterior lapidis venit aestus et omnia plena
invenit in ferro neque habet qua tranet ut ante.
cogitur offensare igitur pulsareque fluctu
ferrea texta suo; quo pacto respuit ab se
atque per aes agitat, sine eo quod saepe resorbet.
illud in his rebus mirari mitte, quod aestus
pondere enim fretae partim stant: quod genus aurum;
et partim raro quia sunt cum corpore, ut aestus
iron, is ever stirred in restless motion and therefore beats the ring without a doubt and stirs it within, you know: the ring is carried in the direction in which it has once plunged forward, and into the void part towards which it has made its start.

Sometimes too it happens that the nature of iron is repelled from this stone, being in the habit of flying from and following it in turns. I have seen Samothracian iron rings even jump up, and at the same time filings of iron rave within brass basins, when this Magnet stone had been placed under: such a strong desire the iron seems to have to fly from the stone. So great a disturbance is raised by the interposition of the brass, because sure enough when the current of the brass has first seized on and taken possession of the open passages of the iron, the current of the stone comes after and finds all things full in the iron and has no opening to swim through as before. It is forced therefore to dash against and beat with its wave the iron texture; by which means it repels from it and sets in motion through the brass that which without the brass it often draws to itself. And forbear herein to wonder that the current from this stone is not able to set in motion other things as well as iron: some of these stand still by the power of their own weight; for instance gold; and others, because they are of so rare a body that the current flies through
pervolet intactus, nequeunt inpellier usquam; 1060
lignea materies in quo genere esse videtur.
interutraque igitur ferri natura locata
aeris ubi accept quaedam corpuscula, tum fit,
inpellant ut eam Magnesia flumine saxa.

Nec tamen haec ita sunt aliarum rerum aliena, 1065
ut mihi multa parum genere ex hoc suppidentur
quae memorare quem inter se singlariter apta.
saxa vides primum sola colescere calce.
glutine materies taurino iungitur uno,

ut vitio venae tabularum saepius hiscant 1070
quam laxare queant compages taurea vincla.

vitigeni latices aqüai fontibus audent
misceri, cum pix nequeat gravis et leve olivom.
purpureusque colos conchyli iungitur uno
corpoere cum lanae, dirimi qui non queat usquam,

non si Neptuni fluctu renovare operam des,
non, mare si totum velit eluere omnibus undis.

denique non auro res aurum copulat una
acrique aes plumbo fit uti iungatur ab albo?
cetera iam quam multa licet reperire! quid ergo? 1080
nec tibi tam longis opus est ambagibus usquam,

them uninterrupted, cannot in any case be set in motion; to which class
wood is found to belong. When therefore the nature of iron lying
between the two has received into it certain first bodies of brass, then do
the Magnet stones set it in motion with their stream.

And yet these cases are not so much at variance with other things,
that I have only a scanty store of similar instances to relate of things
mutually fitted one for the other and for nothing else: stones for instance
you see are cemented by mortar alone; wood is united with wood so
firmly by bulls' glue only, that the veins of boards often gape in cracks
before the binding power of the glue can be brought to loosen its hold.

Vine-born juices venture to mix with streams of water, though heavy
pitch and light oil cannot. Again the purple dye of the shellfish so
unites with the body of wool alone, that it cannot in any case be severed,
not were you to take pains to undo what is done with Neptune's wave,
not if the whole sea were willed to wash it out with all its waters. Then
too is there not one thing only that fastens gold to gold, and is not brass
soldered to brass by tin? and how many other cases of the kind might
one find! what then? you have no need whatever of such long cir-
nec me tam multam hic operam consumere par est, sed breviter paucis praestat comprehendere multa. quorum ita texturae ceciderunt mutua contra, ut cava conveniant plenis haec illius illa huiusque inter se, iunctura haec optima constat. est etiam, quasi ut anellis hamisque plicata inter se quaedam possint coplata teneri; quod magis in lapide hoc fieri ferroque videtur. Nunc ratio quae sit morbis aut unde repente mortiferam possess cladem conflare coorta morbida vis hominum generi pecudumque catervis, expediam. primum multarum semina rerum esse supra docui quae sint vitalia nobis, et contra quae sint morbo mortique necessit multa volare. ea cum casu sunt forte coorta et perturbarunt caelum, fit morbidos aer. atque ea vis omnis morborum pestilitasque aut extrinsecus ut nubes nebulaeque superne per caelum veniunt, aut ipsa saepe coortae de terra surgunt, ubi putorem umida nactast intempestivis pluviisque et solibus icta.

nonne vides etiam caeli novitate et aquarum

cuitious roads, nor is it worth my while to spend so much pains on this, but it is better briefly to comprise many things in few words: things whose textures have such a mutual correspondence, that cavities fit solids, the cavities of the first the solids of the second, the cavities of the second the solids of the first, form the closest union. Again some things may be fastened together and held in union with hooks and eyes as it were; and this seems rather to be the case with this stone and iron.

And now I will explain what the law of diseases is and from what causes the force of disease may suddenly gather itself up and bring death-dealing destruction on the race of man and the troops of brute beasts. And first I have shown above that there are seeds of many things helpful to our life; and on the other hand many must fly about conducing to disease and death. When these by chance have happened to gather together and have disordered the atmosphere, the air becomes distempered. And all that force of disease and that pestilence come either from without down through the atmosphere in the shape of clouds and mists, or else do gather themselves up and rise out of the earth, when soaked with wet it has contracted a taint, being beaten upon by unseasonable rains and suns. See you not too that all who come to a place far away from
country and home are affected by the strangeness of climate and water, because there are wide differences in such things? For what a difference may we suppose between the climate of the Briton and that of Egypt where the pole of heaven slants askew, and again between that in Pontus and that of Gades and so on to the races of men black with sun-baked complexion? Now as we see these four climates under the four opposite winds and quarters of heaven all differing from each other, so also the complexions and faces of the men are seen to differ widely and diseases varying in kind are found to seize upon the different races. There is the elephant disease which is generated beside the streams of Nile in the midst of Egypt and nowhere else. In Attica the feet are attacked and the eyes in Achaean lands. And so different places are hurtful to different parts and members: the variations of air occasion that. Therefore when an atmosphere which happens to put itself in motion unsuited to us and a hurtful air begin to advance, they creep slowly on in the shape of mist and cloud and disorder everything in their line of advance and compel all to change; and when they have at length reached our atmosphere, they corrupt it too and make it like to themselves and unsuited to us. This new destroying power and pestilence therefore either fall
aut in aquas cadit aut fruges persidit in ipsas
aut alios hominum pastus pecudumque cibatus,
aut etiam suspensa manet vis aere in ipso
et, cum spirantes mixtas hinc ducimus auras,
illa quoque in corpus pariter sorbere necessest.

consimili ratione venit bubus quoque saepe
pestilitas et iam pigris balantibus aegror.
nec refert utrum nos in loca deveniamus
nobis adversa et caeli mutemus amictum,
an caelum nobis ultro natura alienum
deferat aut aliquid quo non consuevimus uti,
quam nos adventu possit temptare recenti.

Haece ratio quondam morborum et mortifer aestus
finibus in Cecropis funestos reddidit agros
vastavitque vias, exhausit civibus urbem.
nam penitus veniens Aegypti finibus ortus,
aera permensus multum camposque natantis,
icubuit tandem populo Pandionis omnei.
inde catervatim morbo mortique dabantur.
principio caput incensum fervore gerebant
et duplicis oculos suffusa luce rubentes.
sudabant etiam fauces intrinsecus atrae

upon the waters or else sink deep into the corn-crops or other food of
man and provender of beast; or else their force remains suspended
within the atmosphere, and when we inhale from it mixed airs, we must
absorb at the same time into our body those things as well. In like
manner pestilence often falls on kine too and a distemper on the silly
sheep. And it makes no difference whether we travel to places unfa-
vourable to us and change the atmosphere which wraps us round, or
whether nature without our choice brings to us an atmosphere unsuited
to us or something to the use of which we have not been accustomed,
and which is able to attack us on its first arrival.

Such a form of disease and a death-fraught miasm erst within the
borders of Cecrops defiled the whole land with dead, and dispeopled the
streets, drained the town of burghers. Rising first and starting from
the inmost corners of Egypt, after traversing much air and many float-
ing fields, the plague brooded at last over the whole people of Pandion;
and then they were handed over in troops to disease and death. First of
all they would have the head seized with burning heat and both eyes
blood-shot with a glare diffused over: the livid throat within would
exude blood and the passage of the voice be clogged and choked with
sanguine et ulceribus vocis via saepta coibat
atque animi interpres manabat lingua cruore
debilitata malis, motu gravis, aspera tactu.
inde ubi per fauces pectus compleverat et ipsum
morbida vis in cor maestum confluxerat aegris,
omnia tum vero vitali clastra lababant.
spiritus ore foras taetrum volvebat odorem,
rancida quo perolent proiecta cadavera ritu.
atque animi prorsum tum vires totius, omne
languebat corpus leti iam limine in ipso.
intolerabilibusque malis erat anxius angor
adsidue comes et gemitu commixa querella.
singultusque frequens noctem per saepe diemque
corripere adsidue nervos et membra coactans
dissoluebat eos, defessos ante, fatigans.
nec nimio cuiquam posses ardore tueri
corporis in summo summam furnace partem,
sed potius tepidum manibus proponere tactum
et simul ulceribus quasi inustis omne rubere
corpus, ut est per membra sacer dum diditur ignis.
intima pars hominum vero flagrabat ad ossa,
flagrabat stomacho flamma ut fornacibus intus.
il adeo posses cuiquam leve teuque membris

ulcers, and the mind's interpreter the tongue drip with gore, quite
enfeebled with sufferings, heavy in movement, rough to touch. Next
when the force of disease passing down the throat had filled the breast
and had streamed together ever into the sad heart of the sufferers, then
would all the barriers of life give way. The breath would pour out at
the mouth a noisome stench, even as the stench of rotting carcasses
thrown out unburied. And then the powers of the entire mind, the
whole body would sink utterly, now on the very threshold of death.
And a bitter bitter despondency was the constant attendant on insuffer-
able ills and complaining mingled with moaning. An ever-recurring
hiccup often the night and day through, forcing on continual spasms in
sinews and limbs, would break men quite, forwearying those forspent
before. And yet in none could you perceive the skin on the surface of
the body burn with any great heat, but the body would rather offer to
the hand a lukewarm sensation and at the same time be red all over with
ulcers burnt into it so to speak, as happens when the holy fire is spread-
ing over the frame. The inward parts of the men however would burn
to the very bones, a flame would burn within the stomach as within
furnaces. Nothing was light and thin enough to apply to the relief of
the body of any one; ever wind and cold alone. Many would plunge their limbs burning with disease into the cool rivers, throwing their body naked into the water. Many tumbled headforemost deep down into the wells, meeting the water even with mouth wide-agape. Parching thirst with a craving not to be appeased, drenching their bodies, would make an abundant draught no better than the smallest drop. No respite was there of ill: their bodies would lie quite spent. The healing art would mutter low in voiceless fear, as again and again they rolled about their eye-balls wide open, burning with disease, never visited by sleep. And many symptoms of death besides would then be given, the mind disordered in sorrow and fear, the clouded brow, the fierce delirious expression, the ears too troubled and filled with ringings, the breathing quick or else strangely loud and slow-recurring, and the sweat glistening wet over the neck, the spittle in thin small flakes, tinged with a saffron-colour, salt, scarce forced up the rough throat by coughing. The tendons of the hands ceased not to contract, the limbs to shiver, a coldness to mount with slow sure pace from the feet upwards. Then at their very last moments they had nostrils pinched, the tip of the nose sharp, eyes
deep-sunk, temples hollow, the skin cold and hard, on the grim mouth a
grin, the brow tense and swollen; and not long after their limbs would
be stretched stiff in death: about the eighth day of bright sunlight or
else on the ninth return of his lamp they would yield up life. And if
any of them at that time had shunned the doom of death, yet in after
time consumption and death would await him from noisome ulcers and
the black discharge of the bowels, or else a quantity of purulent blood
accompanied by headache would often pass out by the gorged nostrils:
into these the whole strength and substance of the man would stream.
Then too if any one had escaped the acrid discharge of noisome blood,
the disease would yet pass into his sinews and joints and onward even
into the sexual organs of the body; and some from excessive dread of
the gates of death would live bereaved of these parts by the knife; and
some though without hands and feet would continue in life, and some
would lose their eyes: with such force had the fear of death attacked
them. And some were seized with such forgetfulness that they did not
know themselves. And though bodies lay in heaps above bodies un-
buried on the ground, yet would the race of birds and beasts either scour
aut procul apsiliebat, ut acrem exeiret odorem, aut, ubi gustarat, languebat morte propinqua. nec tamen omnino temere illis solibus nulla comparebat avis, nec tristia saeclae ferarum exceibant silvis. languebant pleraque morbo et moriebantur. cum primis fida canum vis strata viis animam ponebat in omnibus aegre; extorquebat enim vitam vis morbida membris. [incomitata rapi certabat funera vasta.] 1225 nec ratio remedi communis certa dabatur; nam quod ali dederat vitalis aeris auras volvere in ore licere et caeli templae tueri, hoc alis erat exitio letumque parabat. illud in his rebus miserandum magnopere unum aerumnabile erat, quod ubi se quisque videbat implicitum morbo, morti damnatus ut esset, deficiens animo maesto cum corde iacebat, funera respectans animam amittebat ibidem. quippe etenim nullo cessabat tempore apisci ex alis alios avidi contagia morbi, 1230 lanigeras tamquam pecudes et bucera saeclae. 1235 idque vel in primis cumulabat funere funus. nam quicumque suos fugitabant visere ad aegros, far away, to escape the acrid stench, or where any one had tasted, it drooped in near-following death. Though hardly at all in those days would any bird appear, or the sullen breeds of wild-beasts quit the forests. Many would droop with disease and die: above all faithful dogs would lie stretched in all the streets and yield up breath with a struggle; for the power of disease would wrench life from their frame. Funerals lonely, unattended, would be hurried on with emulous haste. And no sure and universal method of cure was found; for that which had given to one man the power to inhale the vital air and to gaze on the quarters of heaven, would be destruction to others and would bring on death. But in such times this was what was deplorable and above all eminently heart-rending: when a man saw himself enmeshed by the disease, as though he were doomed to death, losing all spirit he would lie with sorrow-stricken heart, and with his thoughts turned on death would surrender his life then and there. Ay for at no time did they cease to catch from one another the infection of the devouring plague, like to woolly flocks and horned herds. And this above all heaped death on death: whenever any refused to attend their own sick, killing neglect soon after
vital nimium cupidos mortisque timentis

1240 poenibat paulo post turpi morte malaque,

desertos, opis expertis, incuria mactans.

qui fuerant autem praesto, contagibus ibant

atque labore, pudor quem tum cogebat obire

blindaque lassorum vox mixta voce querellae.

1245 optimus hoc leti genus ergo quisque subibat.

inquae aliis alium, populum sepelire suorum
certantes: lacrimis lassi luctuque redibant;

inde bonam partem in lectum maerore dabantur.

nec poterat quisquam reperiri, quem neque morbus

nec mors nec luctus temptaret tempore tali.

Praeterea iam pastor et armentarius omnis

et robustus item curvi moderator aratri

languebat, penitusque casa contrusa iacebant

corpora paupertate et morbo dedita morti.

1250 exanimis pueris super exanimata parentum
corpora nonnumquam posses retroque videre

matribus et patribus natos super edere vitam.

nec minimam partem ex agris is maeror in urbem

confluxit, languens quem contulit agricolarum

copia conveniens ex omni morbida parte.

would punish them for their too great love of life and fear of death by a

foul and evil death, abandoned in turn, forlorn of help. But they who

had stayed by them, would perish by infection and the labour which

shame would then compel them to undergo and the sick man's accents of

affection mingled with those of complaining: this kind of death the most

virtuous would meet. * * and different bodies on different piles, struggling

as they did to bury the multitude of their dead: then spent with tears

and grief they would go home; and in great part they would take to

their bed from sorrow. And none could be found whom at so fearful a

time neither disease nor death nor mourning assailed.

Then too every shepherd and herdsman, ay and sturdy guider of the

bent plough sickened; and their bodies would lie huddled together in

the corners of a hut, delivered over to death by poverty and disease.

Sometimes you might see lifeless bodies of parents above their lifeless

children, and then the reverse of this, children giving up life above their

mothers and fathers. And in no small measure that affliction streamed

from the land into the town, brought thither by the sickening crowd of

peasants meeting plague-stricken from every side. They would fill all
omnia conplebant loca tectaque; quo magis astu
confertos ita acervatim mors accumulabat.
multa siti protracta viam per proque voluta
corpora silanos ad aquarium strata iacebant
interclusa anima nimia ab dulcedine aquarum,
multaque per populi passim loca prompta viasque
languida semanimo cum corpore membra videres
horrida paedore et pannis cooperta perire
corporis inluvie, pelli super ossibus una,
ulceribus taetris prope iam sordique sepulta.
omnia denique sancta deum delubra replerat
corporibus mors exanimis onerataque passim
cuncta cadaveribus caelestum templam manebant,
hospitibus loca quae compleant aedituentes.
nec iam religio divom nec numina magni
pendebantur enim: praesens dolor exsuperabat.
nec mos ille sepulturae remanebat in urbe,
quo pius hic populus semper consuerat humari;
perturbatus enim totus trepidabat, et unus
quisque suum pro re praesenti maestus humabat.
multaque res subita et paupertas horrida suasit;
namque suos consanguineos aliena rogorum

places and buildings: wherefore all the more death would pile them up in heaps as they were thus huddled together in the upper town. Many bodies drawn forth by thirst and tumbled out along the street would lie extended by the fountains of water, the breath of life cut off from their too great delight in water; and over all the open places of the people and the streets you might see many limbs drooping with their half-lifeless body, foul with stench and covered with rags, perish away from filth of body, with nothing but skin on their bones, now nearly buried in noisome sores and dirt. All the holy sanctuaries of the gods too death had filled with lifeless bodies, and all the temples of the heavenly powers in all parts stood burdened with carcasses: all which places the wardens had thronged with guests. For now no longer the worship of the gods or their divinities were greatly regarded: so overmastering was the present affliction. Nor did those rites of sepulture continue in force in the city, with which that pious folk had always been wont to be buried; for the whole of it was in dismay and confusion, and each man would sorrowfully bury as the present moment allowed. And the sudden pressure and poverty prompted to many frightful acts; thus with a loud
insuper extracta ingenti clamore locabant
subdeabantque faces, multo cum sanguine saepes
rixantes potius quam corpora desererentur.

uproar they would place their own kinsfolk upon the funeral piles of others, and apply torches, quarrelling often with much bloodshed sooner than abandon the bodies.
Lucretius Carus, Titus
Titi Lucreti Cari De rerum natura. v. 1