Lucretius Book VI
On the Nature of Things

IN days of yore Athens of famous name first imparted corn-producing crops to suffering mankind, and modeled life anew and passed laws; and first too bestowed sweet solaces of existence, when she gave birth to a man who showed 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 their needs imperiously demand for 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 honors 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 this heart in despite of the understanding plagued life without any respite and was 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 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 flavor 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 along which by a short cross-track we might arrive at it in a straightforward course; he showed 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 encounter 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 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.

Wherefore the more readily I will go on in my verses to complete the web of my design.

And since I have shown 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 unraveled 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 all things can be carried on, above all in regard to those things which are seen overhead in the ethereal 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 on what principle each thing has its powers defined, its deep set boundary mark; and therefore they are led all the farther astray by blind reason.

Now unless you drive from your mind with loathing all these things, and banish far from you all belief in things degrading to the gods and inconsistent with their peace, then often will the holy deities of the gods, having their majesty lessened by you, do you hurt; not that the supreme power of the gods can be so outraged that in their wrath they shall resolve to exact sharp vengeance, but because you will fancy to yourself that they, though they enjoy quiet and calm peace, do roll great billows of wrath; nor will you approach the sanctuaries of the gods with a calm breast, nor will you be able with tranquil peace of mind to take in those idols which are carried from their holy body into the minds of men as heralds of their divine form.

And what kind of life follows after this, may be conceived.

But in order that most veracious reason may drive it far away from us, though much has already gone forth from me, much however still remains and has to be embellished in smooth-polished verses; the law and aspect of heaven have to be grasped; 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 gotten itself out 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 blue of heaven is 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 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 theaters 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 rasping noise of pieces of paper: for this kind of noise too you may observe in thunder: you may observe again the sound which is heard when the winds whirl about with their blows and buffet through the air either a hanging cloth or flying bits of paper.

For sometimes the clouds cannot meet front to front indirect 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, untilt hey 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 crust of body; afterwards when its force and impetuous onset have split it, then the cloud thus rent gives forth a crash with a frightful hurtling noise.

And no wonder, when a small bladder filled with air often emits a hideous sound if suddenly burst.

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 in rapid motion rends the cloud, breaking through it by an assault right in front: what a blast of wind can do there, is shown by facts plain to sense, when hereon 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 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 crashing 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 bright 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 as well: 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 before we hear the thunder, which is discharged at the same time as the fire 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 shown 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 along 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 marvelous 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 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 aloud roaring shut up in the clouds, and bluster in their dens after the fashion of wild beasts: now from this point, now from that the winds send their growlings through the clouds, and seeking a way outwhirl about and roll together seeds of fire out of the clouds and then gather many into a mass and make flame rotate in the hollow furnaces within, until they have burst the cloud and shone forth in forked flashes.

From this cause again yon golden color 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 color.

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 colors of flame to flash out.

It also lightens when the clouds of heaven are rarefied as well.

For when the wind lightly unravels them 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 shown by their strokes and the traces of their heat which have burnt themselves into things and the marks which exhale the noxious vapors of sulfur: 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 with its quivering heat: so much more nimble and overpowering 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 cast down and burn up the monuments of men, to strike men dead, 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 darkness had abandoned Acheron throughout and filled up the great vaults of heaven: in such numbers, gathering up out of the frightful night of storm clouds, 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 darkness afar off and draws down a black tempest big with lightnings and 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 shown 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, and the heat put in motion is carried on traversing all places with flashing lights.

Close upon it falls so heavy a clap that it seems to crush down from above the quarters of heaven which have all at once sprung asunder.

Then a trembling violently seizes the earth and rumblings run through high heaven; 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 set in motion from without falls on a cloud hot with a fully forged thunderbolt; and when it has burst it, forthwith there falls down yon 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 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 too a thing ought to beset 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 set in motion first in all cases collects itself in the clouds and 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 flies with a marvelous moving power, like to that with which missiles are carried when discharged from powerful engines.

Then too the thunderbolt 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 to this a blow is added, the velocity is doubled and yon moving power becomes so intense that the thunderbolt dashes aside more impetuously and swiftly whatever gets in its way and tries to hinder it, and pursues its journey.

Then too 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 vigor 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 itself, and these by their blows kindle apace its velocity.

It passes too through things without 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 heat 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 Tyrrhene 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 gotten itself out 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 he whose conscience is burdened with no foul offense, 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 labor in vain? Or are they then practicing 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 and must happen that, even as it rains and showers fall in many different 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 destroying 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 presters, 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, stirred up 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 put in motion 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, yet 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 a

marvelous 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 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, as soon as clouds 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 they have gathered in a greater mass, 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 they 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 too on them and by condensing as it were weaves a web of clouds below the blue.

Sometimes there come here into heaven from without those bodies which form clouds and the flying storm-rack; for I have shown 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 mountains of clouds seas and lands, as they hang down upon them overhead, since on all sides through all the cavities 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 above 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 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 full many in number in many ways have met in them, augmented from all sides, then the close-packed clouds endeavor to discharge their moisture from two causes: the force of the wind drives them together, and likewise the very abundance of the rain-clouds, when a greater mass than usual has been brought together, 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 color of the rainbow shows itself among the black ,clouds.

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 craggy 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 center.

And with good cause, since buildings beside a road tremble throughout when shaken by a wagon of not such very great weight; and they rock no less, where 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 hangover 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 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 over 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 hollows of the earth, and there chafe 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 Peloponnese, 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 engulfed in the sea together with their burghers.

And if they do not break out, still the impetuous fury of the air and the fierce violence of the wind spread over 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 twofold 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 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 shown that the clouds take off much moisture too imbibed from the great 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 flows together to the river-heads, and then passes anew over the lands in afresh 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 neighboring 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, or else attacks the eyes; the holy fire breaks out and creeping over 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 gigantic."

Yes, and so any river you like is 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 gigantic, 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 yon flame roused to fury in a moment blazes forth from the huge furnaces of Aetna. And first the nature of the whole mountain is hollow underneath, underpropped 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 extent breaks its waves and sucks back its surf at the roots of that mountain.

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 things too not a few for which it is not sufficient to assign one 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 every 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 its channel full and force the river 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 against the opposing waves, 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 Avemian 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 sulfur, 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 four-footed 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.

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 shown 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, 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 are 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 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 gay work drops out of her soft hands, if she has smelt 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 do 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 violently it has filled the chambers of a house, the fumes of the virulent substance act on the nerves like a murderous blow.

See you not too that even within the earth sulfur 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 do they reduce men's faces and what a complexion they produce!

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 a bird as soon as ever it is borne on its wings into 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 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 soul through all the openings of their body.

Again during summer the water in wells becomes colder, because the earth is rarefied by heat and rapidly sends out into the air whatever seeds of 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, then, you are to know, while it contracts, it 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 has not been able to make it hot on its upper side, though his light above possesses such great heat, how can he below the earth which is of so dense a body boil the water and glut it with heat? Above all, when he can scarcely with his burning rays force his heat through the walls of houses.

What then is the cause? This sure enough: the earth is more porous and warmer round the fountain than the rest of the earth, and there are many seeds of fire near the body of water.

For this reason when night has buried the earth in its dewy shadows, the earth at once becomes quite cold and contracts: in this way just as if it were squeezed by the hand it forces out into the fountain whatever seeds of fire it has; and these make the water hot to the touch and taste.

Next when the sun has risen and with his rays has loosened the earth and has rarefied it as his heat waxes stronger, the first-beginnings of fire return back to their ancient seats and all the heat of the water withdraws into the earth: for this reason the fountain becomes cold in the daylight.

Again the liquid of water is played upon by the sun's rays and in the daytime is rarefied by his throbbing heat; and therefore it gives up whatever seeds of 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 in like manner 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 reasons 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; and when they are met together in the tow 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 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, before the fire in actual contact infects them.

This therefore you must suppose to take place in that fountain as well.

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 succession 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 continued 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 approached 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 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 eats into walls near the shore.

Various sounds too cease not to stream through the air.

Then a moist salt flavor 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 things the several qualities of things 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 anytime 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 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 passthrough 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 when a storm has gathered in earth and heaven, and when along with it the influence of disease makes its way in from without, they both withdraw respectively to heaven and

earth and there work their wills, 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 and draws together hides and flesh.

The liquid of water after fire hardens steel, but softens hides and flesh hardened by heat.

The wild olive delights the bearded she-goats as much as if the flavor it yielded were of ambrosia and steeped in nectar; but nothing that puts forth leaf is more bitter to man than this food.

Again a swine eschews marjoram-oil and dreads all perfumes; for they are rank poison to bristly swine, though they are found at times to give us as it were fresh life.

But on the other hand though mire is to us the nastiest filth, it is found to be so welcome to swine that they wallow in it all over with a craving not to be satisfied.

There is still one point left which it seems proper to mention, before I come to speak of the matter in hand.

Since many pores are assigned to various things, they must possess natures differing the one from the other and must have each its own nature, its own direction: thus there are in living creatures various senses, each of which takes into it in its own peculiar way its own special object; for we see that sounds pass into one thing, taste from different flavors into another thing, smells into another.

Again one thing is seen to stream through stones and another thing to pass through woods, another through gold, and another still to go out 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 shown a little above, owing to the unlike nature and textures of things.

Therefore now that these points have all been established and arranged for us as premisses ready to our hand, for what remains, the law will easily 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 andiron.

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 mass, 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 connection 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 ring following.

This it does do, and follows on until it has quite reached the stone and fastened on it with unseen bonds of connection.

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 act 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 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 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 circuitous 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 beg into 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 all at once either fall 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 also and a distemper too on the silly sheep.

And it makes no difference whether we travel to places unfavorable to us and change the atmosphere which wraps us round, or whether nature without our choice brings to us a tainted atmosphere 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 floating 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 aglare diffused over; the livid throat within would exude blood and the passage of the voice be clogged and choked with 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 even 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 carcases 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 despondency was the constant attendant on insufferable 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, for wearying 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, like unto the holy fire as it spreads over the frame.

The inward parts of the men however would burn to the very bones, a flame would bum 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 straight 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-color, 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 upward.

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 come upon them.

And some were seized with such utter loss of memory that they did not know themselves.

And though bodies lay in heaps above bodies unburied on the ground, yet would the race of birds and beasts either scour faraway, to escape the acrid stench, or where anyone 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 general 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 all heaped death on death: whenever any refused to attend their own sick, killing neglect soon after 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 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 by them, would perish by infection and the labor 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 plow 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 places and buildings: wherefore all the more the heat would [destroy them and] thus close-packed death would pile them up in heaps.

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 carcases: 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 uproar they would place their own kinsfolk upon the funeral piles of others, and apply torches, quarreling often with much bloodshed sooner than abandon the bodies.

THE END