On the Nature of Things

by Lucretius

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Author: Titus Lucretius Carus

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OF THE NATURE OF THINGS

By Titus Lucretius Carus

A Metrical Translation

By William Ellery Leonard

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BOOK I

PROEM

Mother of Rome, delight of Gods and men, Dear Venus that beneath the gliding stars Makest to teem the many-voyaged main And fruitful lands—for all of living things Through thee alone are evermore conceived, Through thee are risen to visit the great sun— Before thee, Goddess, and thy coming on, Flee stormy wind and massy cloud away, For thee the daedal Earth bears scented flowers, For thee waters of the unvexed deep Smile, and the hollows of the serene sky Glow with diffused radiance for thee! For soon as comes the springtime face of day, And procreant gales blow from the West unbarred, First fowls of air, smit to the heart by thee, Foretoken thy approach, O thou Divine, And leap the wild herds round the happy fields Or

swim the bounding torrents. Thus amain, Seized with the spell, all creatures follow thee Whithersoever thou walkest forth to lead, And thence through seas and mountains and swift streams, Through leafy homes of birds and greening plains, Kindling the lure of love in every breast, Thou bringest the eternal generations forth, Kind after kind. And since 'tis thou alone Guidest the Cosmos, and without thee naught Is risen to reach the shining shores of light, Nor aught of joyful or of lovely born, Thee do I crave co-partner in that verse Which I presume on Nature to compose For Memmius mine, whom thou hast willed to be Peerless in every grace at every hour— Wherefore indeed, Divine one, give my words Immortal charm. Lull to a timely rest O'er sea and land the savage works of war, For thou alone hast power with public peace To aid mortality; since he who rules The savage works of battle, puissant Mars, How often to thy bosom flings his strength O'ermastered by the eternal wound of love— And there, with eyes and full throat backward thrown, Gazing, my Goddess, open-mouthed at thee, Pastures on love his greedy sight, his breath Hanging upon thy lips. Him thus reclined Fill with thy holy body, round, above! Pour from those lips soft syllables to win Peace for the Romans, glorious Lady, peace! For in a season troublous to the state Neither may I attend this task of mine With thought untroubled, nor mid such events The illustrious scion of the Memmian house Neglect the civic cause. Whilst human kind Throughout the lands lay miserably crushed Before all eyes beneath Religion—who Would show her head along the region skies, Glowering on mortals with her hideous face— A Greek it was who first opposing dared Raise mortal eyes that terror to withstand, Whom nor the fame of Gods nor lightning's stroke Nor threatening thunder of the ominous sky Abashed; but rather chafed to angry zest His dauntless heart to be the first to rend The crossbars at the gates of Nature old. And thus his will and hardy wisdom won; And forward thus he fared afar, beyond The flaming ramparts of the world, until He wandered the unmeasurable All. Whence he to us, a conqueror, reports What things can rise to being, what cannot, And by what law to each its scope prescribed, Its

boundary stone that clings so deep in Time. Wherefore Religion now is under foot, And us his victory now exalts to heaven. I know how hard it is in Latian verse To tell the dark discoveries of the Greeks, Chiefly because our pauper-speech must find Strange terms to fit the strangeness of the thing; Yet worth of thine and the expected joy Of thy sweet friendship do persuade me on To bear all toil and wake the clear nights through, Seeking with what of words and what of song I may at last most gloriously uncloud For thee the light beyond, wherewith to view The core of being at the centre hid. And for the rest, summon to judgments true, Unbusied ears and singleness of mind Withdrawn from cares; lest these my gifts, arranged For thee with eager service, thou disdain Before thou comprehendest: since for thee I prove the supreme law of Gods and sky, And the primordial germs of things unfold, Whence Nature all creates, and multiplies And fosters all, and whither she resolves Each in the end when each is overthrown. This ultimate stock we have devised to name Procreant atoms, matter, seeds of things, Or primal bodies, as primal to the world. I fear perhaps thou deemest that we fare An impious road to realms of thought profane; But 'tis that same religion oftener far Hath bred the foul impieties of men: As once at Aulis, the elected chiefs, Foremost of heroes, Danaan counsellors, Defiled Diana's altar, virgin queen, With Agamemnon's daughter, foully slain. She felt the chaplet round her maiden locks And fillets, fluttering down on either cheek, And at the altar marked her grieving sire, The priests beside him who concealed the knife, And all the folk in tears at sight of her. With a dumb terror and a sinking knee She dropped; nor might avail her now that first 'Twas she who gave the king a father's name. They raised her up, they bore the trembling girl On to the altar—hither led not now With solemn rites and hymeneal choir, But sinless woman, sinfully foredone, A parent felled her on her bridal day, Making his child a sacrificial beast To give the ships auspicious winds for Troy: Such are the crimes to which Religion leads. And there shall come the time when even thou, Forced by the soothsayer's terror-tales, shalt seek To break from us. Ah, many a dream even now

Can they concoct to rout thy plans of life, And trouble all thy fortunes with base fears. I own with reason: for, if men but knew Some fixed end to ills, they would be strong By some device unconquered to withstand Religions and the menacings of seers. But now nor skill nor instrument is theirs, Since men must dread eternal pains in death. For what the soul may be they do not know, Whether 'tis born, or enter in at birth, And whether, snatched by death, it die with us, Or visit the shadows and the vasty caves Of Orcus, or by some divine decree Enter the brute herds, as our Ennius sang, Who first from lovely Helicon brought down A laurel wreath of bright perennial leaves, Renowned forever among the Italian clans. Yet Ennius too in everlasting verse Proclaims those vaults of Acheron to be, Though thence, he said, nor souls nor bodies fare, But only phantom figures, strangely wan, And tells how once from out those regions rose Old Homer's ghost to him and shed salt tears And with his words unfolded Nature's source. Then be it ours with steady mind to clasp The purport of the skies—the law behind The wandering courses of the sun and moon; To scan the powers that speed all life below; But most to see with reasonable eyes Of what the mind, of what the soul is made, And what it is so terrible that breaks On us asleep, or waking in disease, Until we seem to mark and hear at hand Dead men whose bones earth bosomed long ago.

SUBSTANCE IS ETERNAL

This terror, then, this darkness of the mind, Not sunrise with its flaring spokes of light, Nor glittering arrows of morning can disperse, But only Nature's aspect and her law, Which, teaching us, hath this exordium: Nothing from nothing ever yet was born. Fear holds dominion over mortality Only because, seeing in land and sky So much the cause whereof no wise they know, Men think Divinities are working there. Meantime, when once we know from nothing still Nothing can be create, we shall divine More clearly what we seek: those elements From which alone all things

created are, And how accomplished by no tool of Gods. Suppose all sprang from all things: any kind Might take its origin from any thing, No fixed seed required. Men from the sea Might rise, and from the land the scaly breed, And, fowl full fledged come bursting from the sky; The horned cattle, the herds and all the wild Would haunt with varying offspring tilth and waste; Nor would the same fruits keep their olden trees, But each might grow from any stock or limb By chance and change. Indeed, and were there not For each its procreant atoms, could things have Each its unalterable mother old? But, since produced from fixed seeds are all, Each birth goes forth upon the shores of light From its own stuff, from its own primal bodies. And all from all cannot become, because In each resides a secret power its own. Again, why see we lavished o'er the lands At spring the rose, at summer heat the corn, The vines that mellow when the autumn lures, If not because the fixed seeds of things At their own season must together stream, And new creations only be revealed When the due times arrive and pregnant earth Safely may give unto the shores of light Her tender progenies? But if from naught Were their becoming, they would spring abroad Suddenly, unforeseen, in alien months, With no primordial germs, to be preserved From procreant unions at an adverse hour. Nor on the mingling of the living seeds Would space be needed for the growth of things Were life an increment of nothing: then The tiny babe forthwith would walk a man, And from the turf would leap a branching tree— Wonders unheard of; for, by Nature, each Slowly increases from its lawful seed, And through that increase shall conserve its kind. Whence take the proof that things enlarge and feed From out their proper matter. Thus it comes That earth, without her seasons of fixed rains, Could bear no produce such as makes us glad, And whatsoever lives, if shut from food, Prolongs its kind and guards its life no more. Thus easier 'tis to hold that many things Have primal bodies in common (as we see The single letters common to many words) Than aught exists without its origins. Moreover, why should Nature not prepare Men of a bulk to ford the seas afoot, Or rend the mighty mountains with their hands, Or

conquer Time with length of days, if not Because for all begotten things abides The changeless stuff, and what from that may spring Is fixed forevermore? Lastly we see How far the tilled surpass the fields untilled And to the labour of our hands return Their more abounding crops; there are indeed Within the earth primordial germs of things, Which, as the ploughshare turns the fruitful clods And kneads the mould, we quicken into birth. Else would ye mark, without all toil of ours, Spontaneous generations, fairer forms. Confess then, naught from nothing can become, Since all must have their seeds, wherefrom to grow, Wherefrom to reach the gentle fields of air. Hence too it comes that Nature all dissolves Into their primal bodies again, and naught Perishes ever to annihilation. For, were aught mortal in its every part, Before our eyes it might be snatched away Unto destruction; since no force were needed To sunder its members and undo its bands. Whereas, of truth, because all things exist, With seed imperishable, Nature allows Destruction nor collapse of aught, until Some outward force may shatter by a blow, Or inward craft, entering its hollow cells, Dissolve it down. And more than this, if Time, That wastes with eld the works along the world, Destroy entire, consuming matter all, Whence then may Venus back to light of life Restore the generations kind by kind? Or how, when thus restored, may daedal Earth Foster and plenish with her ancient food, Which, kind by kind, she offers unto each? Whence may the water-springs, beneath the sea, Or inland rivers, far and wide away, Keep the unfathomable ocean full? And out of what does Ether feed the stars? For lapsed years and infinite age must else Have eat all shapes of mortal stock away: But be it the Long Ago contained those germs, By which this sum of things recruited lives, Those same infallibly can never die, Nor nothing to nothing evermore return. And, too, the selfsame power might end alike All things, were they not still together held By matter eternal, shackled through its parts, Now more, now less. A touch might be enough To cause destruction. For the slightest force Would loose the weft of things wherein no part Were of imperishable stock. But now Because the fastenings of primordial parts Are put together diversely and

stuff Is everlasting, things abide the same Unhurt and sure, until some power comes on Strong to destroy the warp and woof of each: Nothing returns to naught; but all return At their collapse to primal forms of stuff. Lo, the rains perish which Ether-father throws Down to the bosom of Earth-mother; but then Upsprings the shining grain, and boughs are green Amid the trees, and trees themselves wax big And lade themselves with fruits; and hence in turn The race of man and all the wild are fed; Hence joyful cities thrive with boys and girls; And leafy woodlands echo with new birds; Hence cattle, fat and drowsy, lay their bulk Along the joyous pastures whilst the drops Of white ooze trickle from distended bags; Hence the young scamper on their weakling joints Along the tender herbs, fresh hearts afrisk With warm new milk. Thus naught of what so seems Perishes utterly, since Nature ever Upbuilds one thing from other, suffering naught To come to birth but through some other's death.

And now, since I have taught that things cannot Be born from nothing, nor the same, when born, To nothing be recalled, doubt not my words, Because our eyes no primal germs perceive; For mark those bodies which, though known to be In this our world, are yet invisible: The winds infuriate lash our face and frame, Unseen, and swamp huge ships and rend the clouds, Or, eddying wildly down, bestrew the plains With mighty trees, or scour the mountain tops With forest-crackling blasts. Thus on they rave With uproar shrill and ominous moan. The winds, 'Tis clear, are sightless bodies sweeping through The sea, the lands, the clouds along the sky, Vexing and whirling and seizing all amain; And forth they flow and pile destruction round, Even as the water's soft and supple bulk Becoming a river of abounding floods, Which a wide downpour from the lofty hills Swells with big showers, dashes headlong down Fragments of woodland and whole branching trees; Nor can the solid bridges bide the shock As on the waters whelm: the turbulent stream, Strong with a hundred rains, beats round the piers, Crashes with havoc, and rolls beneath its waves Down-toppled masonry and ponderous stone, Hurling away whatever would oppose.

Even so must move the blasts of all the winds, Which, when they spread, like to a mighty flood, Hither or thither, drive things on before And hurl to ground with still renewed assault, Or sometimes in their circling vortex seize And bear in cones of whirlwind down the world: The winds are sightless bodies and naught else— Since both in works and ways they rival well The mighty rivers, the visible in form. Then too we know the varied smells of things Yet never to our nostrils see them come; With eyes we view not burning heats, nor cold, Nor are we wont men's voices to behold. Yet these must be corporeal at the base, Since thus they smite the senses: naught there is Save body, having property of touch. And raiment, hung by surf-beat shore, grows moist, The same, spread out before the sun, will dry; Yet no one saw how sank the moisture in, Nor how by heat off-driven. Thus we know, That moisture is dispersed about in bits Too small for eyes to see. Another case: A ring upon the finger thins away Along the under side, with years and suns; The drippings from the eaves will scoop the stone; The hooked ploughshare, though of iron, wastes Amid the fields insidiously. We view The rock-paved highways worn by many feet; And at the gates the brazen statues show Their right hands leaner from the frequent touch Of wayfarers innumerable who greet. We see how wearing-down hath minished these, But just what motes depart at any time, The envious nature of vision bars our sight. Lastly whatever days and nature add Little by little, constraining things to grow In due proportion, no gaze however keen Of these our eyes hath watched and known. No more Can we observe what's lost at any time, When things wax old with eld and foul decay, Or when salt seas eat under beetling crags. Thus Nature ever by unseen bodies works.

THE VOID

But yet creation's neither crammed nor blocked About by body: there's in things a void— Which to have known will serve thee many a turn, Nor will not leave thee

wandering in doubt, Forever searching in the sum of all, And losing faith in these pronouncements mine. There's place intangible, a void and room. For were it not, things could in nowise move; Since body's property to block and check Would work on all and at an times the same. Thus naught could evermore push forth and go, Since naught elsewhere would yield a starting place. But now through oceans, lands, and heights of heaven, By divers causes and in divers modes, Before our eyes we mark how much may move, Which, finding not a void, would fail deprived Of stir and motion; nay, would then have been Nowise begot at all, since matter, then, Had staid at rest, its parts together crammed. Then too, however solid objects seem, They yet are formed of matter mixed with void: In rocks and caves the watery moisture seeps, And beady drops stand out like plenteous tears; And food finds way through every frame that lives; The trees increase and yield the season's fruit Because their food throughout the whole is poured, Even from the deepest roots, through trunks and boughs; And voices pass the solid walls and fly Reverberant through shut doorways of a house; And stiffening frost seeps inward to our bones. Which but for voids for bodies to go through 'Tis clear could happen in nowise at all. Again, why see we among objects some Of heavier weight, but of no bulkier size? Indeed, if in a ball of wool there be As much of body as in lump of lead, The two should weigh alike, since body tends To load things downward, while the void abides, By contrary nature, the imponderable. Therefore, an object just as large but lighter Declares infallibly its more of void; Even as the heavier more of matter shows, And how much less of vacant room inside. That which we're seeking with sagacious quest Exists, infallibly, commixed with things— The void, the invisible inane. Right here I am compelled a question to expound, Forestalling something certain folk suppose, Lest it avail to lead thee off from truth: Waters (they say) before the shining breed Of the swift scaly creatures somehow give, And straightway open sudden liquid paths, Because the fishes leave behind them room To which at once the yielding billows stream. Thus things among themselves can yet be moved, And change their

place, however full the Sum— Received opinion, wholly false forsooth. For where can scaly creatures forward dart, Save where the waters give them room? Again, Where can the billows yield a way, so long As ever the fish are powerless to go? Thus either all bodies of motion are deprived, Or things contain admixture of a void Where each thing gets its start in moving on. Lastly, where after impact two broad bodies Suddenly spring apart, the air must crowd The whole new void between those bodies formed; But air, however it stream with hastening gusts, Can yet not fill the gap at once—for first It makes for one place, ere diffused through all. And then, if haply any think this comes, When bodies spring apart, because the air Somehow condenses, wander they from truth: For then a void is formed, where none before; And, too, a void is filled which was before. Nor can air be condensed in such a wise; Nor, granting it could, without a void, I hold, It still could not contract upon itself And draw its parts together into one. Wherefore, despite demur and counter-speech, Confess thou must there is a void in things. And still I might by many an argument Here scrape together credence for my words. But for the keen eye these mere footprints serve, Whereby thou mayest know the rest thyself. As dogs full oft with noses on the ground, Find out the silent lairs, though hid in brush, Of beasts, the mountain-rangers, when but once They scent the certain footsteps of the way, Thus thou thyself in themes like these alone Can hunt from thought to thought, and keenly wind Along even onward to the secret places And drag out truth. But, if thou loiter loth Or veer, however little, from the point, This I can promise, Memmius, for a fact: Such copious drafts my singing tongue shall pour From the large well-springs of my plenished breast That much I dread slow age will steal and coil Along our members, and unloose the gates Of life within us, ere for thee my verse Hath put within thine ears the stores of proofs At hand for one soever question broached.

NOTHING EXISTS per se EXCEPT ATOMS AND THE

VOID

But, now again to weave the tale begun, All nature, then, as self-sustained, consists Of twain of things: of bodies and of void In which they're set, and where they're moved around. For common instinct of our race declares That body of itself exists: unless This primal faith, deep-founded, fail us not, Naught will there be whereunto to appeal On things occult when seeking aught to prove By reasonings of mind. Again, without That place and room, which we do call the inane, Nowhere could bodies then be set, nor go Hither or thither at all—as shown before. Besides, there's naught of which thou canst declare It lives disjoined from body, shut from void— A kind of third in nature. For whatever Exists must be a somewhat; and the same, If tangible, however fight and slight, Will yet increase the count of body's sum, With its own augmentation big or small; But, if intangible and powerless ever To keep a thing from passing through itself On any side, 'twill be naught else but that Which we do call the empty, the inane. Again, whate'er exists, as of itself, Must either act or suffer action on it, Or else be that wherein things move and be: Naught, saving body, acts, is acted on; Naught but the inane can furnish room. And thus, Beside the inane and bodies, is no third Nature amid the number of all things— Remainder none to fall at any time Under our senses, nor be seized and seen By any man through reasonings of mind. Name o'er creation with what names thou wilt, Thou'lt find but properties of those first twain, Or see but accidents those twain produce. A property is that which not at all Can be disjoined and severed from a thing Without a fatal dissolution: such, Weight to the rocks, heat to the fire, and flow To the wide waters, touch to corporal things, Intangibility to the viewless void. But state of slavery, pauperhood, and wealth, Freedom, and war, and concord, and all else Which come and go whilst nature stands the same, We're wont, and rightly, to call accidents. Even time exists not of itself; but sense Reads out of things what happened long ago, What presses now, and what shall follow after: No man, we

must admit, feels time itself, Disjoined from motion and repose of things. Thus, when they say there "is" the ravishment Of Princess Helen, "is" the siege and sack Of Trojan Town, look out, they force us not To admit these acts existent by themselves, Merely because those races of mankind (Of whom these acts were accidents) long since Irrevocable age has borne away: For all past actions may be said to be But accidents, in one way, of mankind,— In other, of some region of the world. Add, too, had been no matter, and no room Wherein all things go on, the fire of love Upblown by that fair form, the glowing coal Under the Phrygian Alexander's breast, Had ne'er enkindled that renowned strife Of savage war, nor had the wooden horse Involved in flames old Pergama, by a birth At midnight of a brood of the Hellenes. And thus thou canst remark that every act At bottom exists not of itself, nor is As body is, nor has like name with void; But rather of sort more fitly to be called An accident of body, and of place Wherein all things go on.

CHARACTER OF THE ATOMS

Bodies, again, Are partly primal germs of things, and partly Unions deriving from the primal germs. And those which are the primal germs of things No power can quench; for in the end they conquer By their own solidness; though hard it be To think that aught in things has solid frame; For lightnings pass, no less than voice and shout, Through hedging walls of houses, and the iron White-dazzles in the fire, and rocks will burn With exhalations fierce and burst asunder. Totters the rigid gold dissolved in heat; The ice of bronze melts conquered in the flame; Warmth and the piercing cold through silver seep, Since, with the cups held rightly in the hand, We oft feel both, as from above is poured The dew of waters between their shining sides: So true it is no solid form is found. But yet because true reason and nature of things Constrain us, come, whilst in few verses now I disentangle how there still exist Bodies of solid, everlasting frame— The seeds of things, the primal germs we

teach, Whence all creation around us came to be. First since we know a twofold nature exists, Of things, both twain and utterly unlike— Body, and place in which an things go on— Then each must be both for and through itself, And all unmixed: where'er be empty space, There body's not; and so where body bides, There not at all exists the void inane. Thus primal bodies are solid, without a void. But since there's void in all begotten things, All solid matter must be round the same; Nor, by true reason canst thou prove aught hides And holds a void within its body, unless Thou grant what holds it be a solid. Know, That which can hold a void of things within Can be naught else than matter in union knit. Thus matter, consisting of a solid frame, Hath power to be eternal, though all else, Though all creation, be dissolved away. Again, were naught of empty and inane, The world were then a solid; as, without Some certain bodies to fill the places held, The world that is were but a vacant void. And so, infallibly, alternate-wise Body and void are still distinguished, Since nature knows no wholly full nor void. There are, then, certain bodies, possessed of power To vary forever the empty and the full; And these can nor be sundered from without By beats and blows, nor from within be torn By penetration, nor be overthrown By any assault soever through the world— For without void, naught can be crushed, it seems, Nor broken, nor severed by a cut in twain, Nor can it take the damp, or seeping cold Or piercing fire, those old destroyers three; But the more void within a thing, the more Entirely it totters at their sure assault. Thus if first bodies be, as I have taught, Solid, without a void, they must be then Eternal; and, if matter ne'er had been Eternal, long ere now had all things gone Back into nothing utterly, and all We see around from nothing had been born— But since I taught above that naught can be From naught created, nor the once begotten To naught be summoned back, these primal germs Must have an immortality of frame. And into these must each thing be resolved, When comes its supreme hour, that thus there be At hand the stuff for plenishing the world.

So primal germs have solid singleness Nor otherwise could they have been

conserved Through aeons and infinity of time For the replenishment of wasted worlds. Once more, if nature had given a scope for things To be forever broken more and more, By now the bodies of matter would have been So far reduced by breakings in old days That from them nothing could, at season fixed, Be born, and arrive its prime and top of life. For, lo, each thing is quicker marred than made; And so whate'er the long infinitude Of days and all fore-passed time would now By this have broken and ruined and dissolved, That same could ne'er in all remaining time Be builded up for plenishing the world. But mark: infallibly a fixed bound Remaineth stablished 'gainst their breaking down; Since we behold each thing soever renewed, And unto all, their seasons, after their kind, Wherein they arrive the flower of their age. Again, if bounds have not been set against The breaking down of this corporeal world, Yet must all bodies of whatever things Have still endured from everlasting time Unto this present, as not yet assailed By shocks of peril. But because the same Are, to thy thinking, of a nature frail, It ill accords that thus they could remain (As thus they do) through everlasting time, Vexed through the ages (as indeed they are) By the innumerable blows of chance. So in our programme of creation, mark How 'tis that, though the bodies of all stuff Are solid to the core, we yet explain The ways whereby some things are fashioned soft— Air, water, earth, and fiery exhalations— And by what force they function and go on: The fact is founded in the void of things. But if the primal germs themselves be soft, Reason cannot be brought to bear to show The ways whereby may be created these Great crags of basalt and the during iron; For their whole nature will profoundly lack The first foundations of a solid frame. But powerful in old simplicity, Abide the solid, the primeval germs; And by their combinations more condensed, All objects can be tightly knit and bound And made to show unconquerable strength. Again, since all things kind by kind obtain Fixed bounds of growing and conserving life; Since Nature hath inviolably decreed What each can do, what each can never do; Since naught is changed, but all things so abide That ever the variegated birds reveal The

spots or stripes peculiar to their kind, Spring after spring: thus surely all that is Must be composed of matter immutable. For if the primal germs in any wise Were open to conquest and to change, 'twould be Uncertain also what could come to birth And what could not, and by what law to each Its scope prescribed, its boundary stone that clings So deep in Time. Nor could the generations Kind after kind so often reproduce The nature, habits, motions, ways of life, Of their progenitors. And then again, Since there is ever an extreme bounding point

Of that first body which our senses now Cannot perceive: That bounding point indeed Exists without all parts, a minimum Of nature, nor was e'er a thing apart, As of itself,—nor shall hereafter be, Since 'tis itself still parcel of another, A first and single part, whence other parts And others similar in order lie In a packed phalanx, filling to the full The nature of first body: being thus Not self-existent, they must cleave to that From which in nowise they can sundered be. So primal germs have solid singleness, Which tightly packed and closely joined cohere By virtue of their minim particles— No compound by mere union of the same; But strong in their eternal singleness, Nature, reserving them as seeds for things, Permitteth naught of rupture or decrease. Moreover, were there not a minimum, The smallest bodies would have infinites, Since then a half-of-half could still be halved, With limitless division less and less. Then what the difference 'twixt the sum and least? None: for however infinite the sum, Yet even the smallest would consist the same Of infinite parts. But since true reason here Protests, denying that the mind can think it, Convinced thou must confess such things there are As have no parts, the minimums of nature. And since these are, likewise confess thou must That primal bodies are solid and eterne. Again, if Nature, creatress of all things, Were wont to force all things to be resolved Unto least parts, then would she not avail To reproduce from out them anything; Because whate'er is not endowed with parts Cannot possess those properties required Of generative stuff—divers connections, Weights, blows, encounters, motions, whereby things Forevermore have being and go on.

CONFUTATION OF OTHER PHILOSOPHERS

And on such grounds it is that those who held The stuff of things is fire, and out of fire Alone the cosmic sum is formed, are seen Mightily from true reason to have lapsed. Of whom, chief leader to do battle, comes That Heraclitus, famous for dark speech Among the silly, not the serious Greeks Who search for truth. For dolts are ever prone That to bewonder and adore which hides Beneath distorted words, holding that true Which sweetly tickles in their stupid ears, Or which is rouged in finely finished phrase. For how, I ask, can things so varied be, If formed of fire, single and pure? No whit 'Twould help for fire to be condensed or thinned, If all the parts of fire did still preserve But fire's own nature, seen before in gross. The heat were keener with the parts compressed, Milder, again, when severed or dispersed— And more than this thou canst conceive of naught That from such causes could become; much less Might earth's variety of things be born From any fires soever, dense or rare. This too: if they suppose a void in things, Then fires can be condensed and still left rare; But since they see such opposites of thought Rising against them, and are loath to leave An unmixed void in things, they fear the steep And lose the road of truth. Nor do they see, That, if from things we take away the void, All things are then condensed, and out of all One body made, which has no power to dart Swiftly from out itself not anything— As throws the fire its light and warmth around, Giving thee proof its parts are not compact. But if perhaps they think, in other wise, Fires through their combinations can be quenched And change their substance, very well: behold, If fire shall spare to do so in no part, Then heat will perish utterly and all, And out of nothing would the world be formed. For change in anything from out its bounds Means instant death of that which was before; And thus a somewhat must persist unharmed Amid the world, lest all return to naught, And, born from naught, abundance thrive anew. Now since indeed there are those surest bodies Which keep their nature evermore the same, Upon whose going out

and coming in And changed order things their nature change, And all corporeal substances transformed, 'Tis thine to know those primal bodies, then, Are not of fire. For 'twere of no avail Should some depart and go away, and some Be added new, and some be changed in order, If still all kept their nature of old heat: For whatsoever they created then Would still in any case be only fire. The truth, I fancy, this: bodies there are Whose clashings, motions, order, posture, shapes Produce the fire and which, by order changed, Do change the nature of the thing produced, And are thereafter nothing like to fire Nor whatso else has power to send its bodies With impact touching on the senses' touch. Again, to say that all things are but fire And no true thing in number of all things Exists but fire, as this same fellow says, Seems crazed folly. For the man himself Against the senses by the senses fights, And hews at that through which is all belief, Through which indeed unto himself is known The thing he calls the fire. For, though he thinks The senses truly can perceive the fire, He thinks they cannot as regards all else, Which still are palpably as clear to sense— To me a thought inept and crazy too. For whither shall we make appeal? for what More certain than our senses can there be Whereby to mark asunder error and truth? Besides, why rather do away with all, And wish to allow heat only, then deny The fire and still allow all else to be?— Alike the madness either way it seems. Thus whosoe'er have held the stuff of things To be but fire, and out of fire the sum, And whosoever have constituted air As first beginning of begotten things, And all whoever have held that of itself Water alone contrives things, or that earth Createth all and changes things anew To divers natures, mightily they seem A long way to have wandered from the truth. Add, too, whoever make the primal stuff Twofold, by joining air to fire, and earth To water; add who deem that things can grow Out of the four—fire, earth, and breath, and rain; As first Empedocles of Acragas, Whom that three-cornered isle of all the lands Bore on her coasts, around which flows and flows In mighty bend and bay the Ionic seas, Splashing the brine from off their gray-green waves. Here, billowing onward through the narrow straits, Swift ocean cuts her

boundaries from the shores Of the Italic mainland. Here the waste Charybdis; and here Aetna rumbles threats To gather anew such furies of its flames As with its force anew to vomit fires, Belched from its throat, and skyward bear anew Its lightnings' flash. And though for much she seem The mighty and the wondrous isle to men, Most rich in all good things, and fortified With generous strength of heroes, she hath ne'er Possessed within her aught of more renown, Nor aught more holy, wonderful, and dear Than this true man. Nay, ever so far and pure The lofty music of his breast divine Lifts up its voice and tells of glories found, That scarce he seems of human stock create. Yet he and those forementioned (known to be So far beneath him, less than he in all), Though, as discoverers of much goodly truth, They gave, as 'twere from out of the heart's own shrine, Responses holier and soundlier based Than ever the Pythia pronounced for men From out the tripod and the Delphian laurel, Have still in matter of first-elements Made ruin of themselves, and, great men, great Indeed and heavy there for them the fall: First, because, banishing the void from things, They yet assign them motion, and allow Things soft and loosely textured to exist, As air, dew, fire, earth, animals, and grains, Without admixture of void amid their frame. Next, because, thinking there can be no end In cutting bodies down to less and less Nor pause established to their breaking up, They hold there is no minimum in things; Albeit we see the boundary point of aught Is that which to our senses seems its least, Whereby thou mayst conjecture, that, because The things thou canst not mark have boundary points, They surely have their minimums. Then, too, Since these philosophers ascribe to things Soft primal germs, which we behold to be Of birth and body mortal, thus, throughout, The sum of things must be returned to naught, And, born from naught, abundance thrive anew— Thou seest how far each doctrine stands from truth. And, next, these bodies are among themselves In many ways poisons and foes to each, Wherefore their congress will destroy them quite Or drive asunder as we see in storms Rains, winds, and lightnings all asunder fly. Thus too, if all things are create of four, And all again dissolved into the four, How can

the four be called the primal germs Of things, more than all things themselves be thought, By retroversion, primal germs of them? For ever alternately are both begot, With interchange of nature and aspect From immemorial time. But if percase Thou think'st the frame of fire and earth, the air, The dew of water can in such wise meet As not by mingling to resign their nature, From them for thee no world can be create— No thing of breath, no stock or stalk of tree: In the wild congress of this varied heap Each thing its proper nature will display, And air will palpably be seen mixed up With earth together, unquenched heat with water. But primal germs in bringing things to birth Must have a latent, unseen quality, Lest some outstanding alien element Confuse and minish in the thing create Its proper being. But these men begin From heaven, and from its fires; and first they feign That fire will turn into the winds of air, Next, that from air the rain begotten is, And earth created out of rain, and then That all, reversely, are returned from earth— The moisture first, then air thereafter heat— And that these same ne'er cease in interchange, To go their ways from heaven to earth, from earth Unto the stars of the aethereal world— Which in no wise at all the germs can do. Since an immutable somewhat still must be, Lest all things utterly be sped to naught; For change in anything from out its bounds Means instant death of that which was before. Wherefore, since those things, mentioned heretofore, Suffer a changed state, they must derive From others ever unconvertible, Lest an things utterly return to naught. Then why not rather presuppose there be Bodies with such a nature furnished forth That, if perchance they have created fire, Can still (by virtue of a few withdrawn, Or added few, and motion and order changed) Fashion the winds of air, and thus all things Forevermore be interchanged with all? "But facts in proof are manifest," thou sayest, "That all things grow into the winds of air And forth from earth are nourished, and unless The season favour at propitious hour With rains enough to set the trees a-reel Under the soak of bulking thunderheads, And sun, for its share, foster and give heat, No grains, nor trees, nor breathing things can grow." True—and unless hard food and moisture soft Recruited

man, his frame would waste away, And life dissolve from out his thews and bones; For out of doubt recruited and fed are we By certain things, as other things by others. Because in many ways the many germs Common to many things are mixed in things, No wonder 'tis that therefore divers things By divers things are nourished. And, again, Often it matters vastly with what others, In what positions the primordial germs Are bound together, and what motions, too, They give and get among themselves; for these Same germs do put together sky, sea, lands, Rivers, and sun, grains, trees, and breathing things, But yet commixed they are in divers modes With divers things, forever as they move. Nay, thou beholdest in our verses here Elements many, common to many worlds, Albeit thou must confess each verse, each word From one another differs both in sense And ring of sound—so much the elements Can bring about by change of order alone. But those which are the primal germs of things Have power to work more combinations still, Whence divers things can be produced in turn. Now let us also take for scrutiny The homeomeria of Anaxagoras, So called by Greeks, for which our pauper-speech Yieldeth no name in the Italian tongue, Although the thing itself is not o'erhard For explanation. First, then, when he speaks Of this homeomeria of things, he thinks Bones to be sprung from littlest bones minute, And from minute and littlest flesh all flesh, And blood created out of drops of blood, Conceiving gold compact of grains of gold, And earth concreted out of bits of earth, Fire made of fires, and water out of waters, Feigning the like with all the rest of stuff. Yet he concedes not any void in things, Nor any limit to cutting bodies down. Wherefore to me he seems on both accounts To err no less than those we named before. Add too: these germs he feigns are far too frail— If they be germs primordial furnished forth With but same nature as the things themselves, And travail and perish equally with those, And no rein curbs them from annihilation. For which will last against the grip and crush Under the teeth of death? the fire? the moist? Or else the air? which then? the blood? the bones? No one, methinks, when every thing will be At bottom as mortal as whate'er we mark To

perish by force before our gazing eyes. But my appeal is to the proofs above That things cannot fall back to naught, nor yet From naught increase. And now again, since food Augments and nourishes the human frame, 'Tis thine to know our veins and blood and bones And thews are formed of particles unlike To them in kind; or if they say all foods Are of mixed substance having in themselves Small bodies of thews, and bones, and also veins And particles of blood, then every food, Solid or liquid, must itself be thought As made and mixed of things unlike in kind— Of bones, of thews, of ichor and of blood. Again, if all the bodies which upgrow From earth, are first within the earth, then earth Must be compound of alien substances. Which spring and bloom abroad from out the earth. Transfer the argument, and thou may'st use The selfsame words: if flame and smoke and ash Still lurk unseen within the wood, the wood Must be compound of alien substances Which spring from out the wood. Right here remains A certain slender means to skulk from truth, Which Anaxagoras takes unto himself, Who holds that all things lurk commixed with all While that one only comes to view, of which The bodies exceed in number all the rest, And lie more close to hand and at the fore— A notion banished from true reason far. For then 'twere meet that kernels of the grains Should oft, when crunched between the might of stones, Give forth a sign of blood, or of aught else Which in our human frame is fed; and that Rock rubbed on rock should yield a gory ooze. Likewise the herbs ought oft to give forth drops Of sweet milk, flavoured like the uddered sheep's; Indeed we ought to find, when crumbling up The earthy clods, there herbs, and grains, and leaves, All sorts dispersed minutely in the soil; Lastly we ought to find in cloven wood Ashes and smoke and bits of fire there hid. But since fact teaches this is not the case, 'Tis thine to know things are not mixed with things Thuswise; but seeds, common to many things, Commixed in many ways, must lurk in things. "But often it happens on skiey hills" thou sayest, "That neighbouring tops of lofty trees are rubbed One against other, smote by the blustering south, Till all ablaze with bursting flower of flame." Good sooth—yet fire

is not ingraft in wood, But many are the seeds of heat, and when Rubbing together they together flow, They start the conflagrations in the forests. Whereas if flame, already fashioned, lay Stored up within the forests, then the fires Could not for any time be kept unseen, But would be laying all the wildwood waste And burning all the boscage. Now dost see (Even as we said a little space above) How mightily it matters with what others, In what positions these same primal germs Are bound together? And what motions, too, They give and get among themselves? how, hence, The same, if altered 'mongst themselves, can body Both igneous and ligneous objects forth— Precisely as these words themselves are made By somewhat altering their elements, Although we mark with name indeed distinct The igneous from the ligneous. Once again, If thou suppose whatever thou beholdest, Among all visible objects, cannot be, Unless thou feign bodies of matter endowed With a like nature,—by thy vain device For thee will perish all the germs of things: 'Twill come to pass they'll laugh aloud, like men, Shaken asunder by a spasm of mirth, Or moisten with salty tear-drops cheeks and chins.

THE INFINITY OF THE UNIVERSE

Now learn of what remains! More keenly hear! And for myself, my mind is not deceived How dark it is: But the large hope of praise Hath strook with pointed thyrsus through my heart; On the same hour hath strook into my breast Sweet love of the Muses, wherewith now instinct, I wander afield, thriving in sturdy thought, Through unpathed haunts of the Pierides, Trodden by step of none before. I joy To come on undefiled fountains there, To drain them deep; I joy to pluck new flowers, To seek for this my head a signal crown From regions where the Muses never yet Have garlanded the temples of a man: First, since I teach concerning mighty things, And go right on to loose from round the mind The tightened coils of dread religion; Next, since, concerning themes so dark, I frame Songs so pellucid, touching all

throughout Even with the Muses' charm—which, as 'twould seem, Is not without a reasonable ground: But as physicians, when they seek to give Young boys the nauseous wormwood, first do touch The brim around the cup with the sweet juice And yellow of the honey, in order that The thoughtless age of boyhood be cajoled As far as the lips, and meanwhile swallow down The wormwood's bitter draught, and, though befooled, Be yet not merely duped, but rather thus Grow strong again with recreated health: So now I too (since this my doctrine seems In general somewhat woeful unto those Who've had it not in hand, and since the crowd Starts back from it in horror) have desired To expound our doctrine unto thee in song Soft-speaking and Pierian, and, as 'twere, To touch it with sweet honey of the Muse— If by such method haply I might hold The mind of thee upon these lines of ours, Till thou see through the nature of all things, And how exists the interwoven frame. But since I've taught that bodies of matter, made Completely solid, hither and thither fly Forevermore unconquered through all time, Now come, and whether to the sum of them There be a limit or be none, for thee Let us unfold; likewise what has been found To be the wide inane, or room, or space Wherein all things soever do go on, Let us examine if it finite be All and entire, or reach unmeasured round And downward an illimitable profound. Thus, then, the All that is is limited In no one region of its onward paths, For then 'tmust have forever its beyond. And a beyond 'tis seen can never be For aught, unless still further on there be A somewhat somewhere that may bound the same— So that the thing be seen still on to where The nature of sensation of that thing Can follow it no longer. Now because Confess we must there's naught beside the sum, There's no beyond, and so it lacks all end. It matters nothing where thou post thyself, In whatsoever regions of the same; Even any place a man has set him down Still leaves about him the unbounded all Outward in all directions; or, supposing A moment the all of space finite to be, If some one farthest traveller runs forth Unto the extreme coasts and throws ahead A flying spear, is't then thy wish to think It goes, hurled off amain, to where 'twas sent And

shoots afar, or that some object there Can thwart and stop it? For the one or other Thou must admit and take. Either of which Shuts off escape for thee, and does compel That thou concede the all spreads everywhere, Owning no confines. Since whether there be Aught that may block and check it so it comes Not where 'twas sent, nor lodges in its goal, Or whether borne along, in either view 'Thas started not from any end. And so I'll follow on, and whereso'er thou set The extreme coasts, I'll query, "what becomes Thereafter of thy spear?" 'Twill come to pass That nowhere can a world's-end be, and that The chance for further flight prolongs forever The flight itself. Besides, were all the space Of the totality and sum shut in With fixed coasts, and bounded everywhere, Then would the abundance of world's matter flow Together by solid weight from everywhere Still downward to the bottom of the world, Nor aught could happen under cope of sky, Nor could there be a sky at all or sun— Indeed, where matter all one heap would lie, By having settled during infinite time. But in reality, repose is given Unto no bodies 'mongst the elements, Because there is no bottom whereunto They might, as 'twere, together flow, and where They might take up their undisturbed abodes. In endless motion everything goes on Forevermore; out of all regions, even Out of the pit below, from forth the vast, Are hurtled bodies evermore supplied. The nature of room, the space of the abyss Is such that even the flashing thunderbolts Can neither speed upon their courses through, Gliding across eternal tracts of time, Nor, further, bring to pass, as on they run, That they may bate their journeying one whit: Such huge abundance spreads for things around— Room off to every quarter, without end. Lastly, before our very eyes is seen Thing to bound thing: air hedges hill from hill, And mountain walls hedge air; land ends the sea, And sea in turn all lands; but for the All Truly is nothing which outside may bound. That, too, the sum of things itself may not Have power to fix a measure of its own, Great nature guards, she who compels the void To bound all body, as body all the void, Thus rendering by these alternates the whole An infinite; or else the one or other, Being unbounded by the other, spreads, Even by its single

nature, ne'ertheless Immeasurably forth.... Nor sea, nor earth, nor shining vaults of sky, Nor breed of mortals, nor holy limbs of gods Could keep their place least portion of an hour: For, driven apart from out its meetings fit, The stock of stuff, dissolved, would be borne Along the illimitable inane afar, Or rather, in fact, would ne'er have once combined And given a birth to aught, since, scattered wide, It could not be united. For of truth Neither by counsel did the primal germs 'Stablish themselves, as by keen act of mind, Each in its proper place; nor did they make, Forsooth, a compact how each germ should move; But since, being many and changed in many modes Along the All, they're driven abroad and vexed By blow on blow, even from all time of old, They thus at last, after attempting all The kinds of motion and conjoining, come Into those great arrangements out of which This sum of things established is create, By which, moreover, through the mighty years, It is preserved, when once it has been thrown Into the proper motions, bringing to pass That ever the streams refresh the greedy main With river-waves abounding, and that earth, Lapped in warm exhalations of the sun, Renews her broods, and that the lusty race Of breathing creatures bears and blooms, and that The gliding fires of ether are alive— What still the primal germs nowise could do, Unless from out the infinite of space Could come supply of matter, whence in season They're wont whatever losses to repair. For as the nature of breathing creatures wastes, Losing its body, when deprived of food: So all things have to be dissolved as soon As matter, diverted by what means soever From off its course, shall fail to be on hand. Nor can the blows from outward still conserve, On every side, whatever sum of a world Has been united in a whole. They can Indeed, by frequent beating, check a part, Till others arriving may fulfil the sum; But meanwhile often are they forced to spring Rebounding back, and, as they spring, to yield, Unto those elements whence a world derives, Room and a time for flight, permitting them To be from off the massy union borne Free and afar. Wherefore, again, again: Needs must there come a many for supply; And also, that the blows themselves shall be Unfailing ever, must there ever

be An infinite force of matter all sides round. And in these problems, shrink, my Memmius, far From yielding faith to that notorious talk: That all things inward to the centre press; And thus the nature of the world stands firm With never blows from outward, nor can be Nowhere disparted—since all height and depth Have always inward to the centre pressed (If thou art ready to believe that aught Itself can rest upon itself); or that The ponderous bodies which be under earth Do all press upwards and do come to rest Upon the earth, in some way upside down, Like to those images of things we see At present through the waters. They contend, With like procedure, that all breathing things Head downward roam about, and yet cannot Tumble from earth to realms of sky below, No more than these our bodies wing away Spontaneously to vaults of sky above; That, when those creatures look upon the sun, We view the constellations of the night; And that with us the seasons of the sky They thus alternately divide, and thus Do pass the night coequal to our days, But a vain error has given these dreams to fools, Which they've embraced with reasoning perverse For centre none can be where world is still Boundless, nor yet, if now a centre were, Could aught take there a fixed position more Than for some other cause 'tmight be dislodged. For all of room and space we call the void Must both through centre and non-centre yield Alike to weights where'er their motions tend. Nor is there any place, where, when they've come, Bodies can be at standstill in the void, Deprived of force of weight; nor yet may void Furnish support to any,—nay, it must, True to its bent of nature, still give way. Thus in such manner not at all can things Be held in union, as if overcome By craving for a centre. But besides, Seeing they feign that not all bodies press To centre inward, rather only those Of earth and water (liquid of the sea, And the big billows from the mountain slopes, And whatsoever are encased, as 'twere, In earthen body), contrariwise, they teach How the thin air, and with it the hot fire, Is borne asunder from the centre, and how, For this all ether quivers with bright stars, And the sun's flame along the blue is fed (Because the heat, from out the centre flying, All gathers there), and how, again, the boughs Upon

the tree-tops could not sprout their leaves, Unless, little by little, from out the earth For each were nutriment...

Lest, after the manner of the winged flames, The ramparts of the world should flee away, Dissolved amain throughout the mighty void, And lest all else should likewise follow after, Aye, lest the thundering vaults of heaven should burst And splinter upward, and the earth forthwith Withdraw from under our feet, and all its bulk, Among its mingled wrecks and those of heaven, With slipping asunder of the primal seeds, Should pass, along the immeasurable inane, Away forever, and, that instant, naught Of wrack and remnant would be left, beside The desolate space, and germs invisible. For on whatever side thou deemest first The primal bodies lacking, lo, that side Will be for things the very door of death: Wherethrough the throng of matter all will dash, Out and abroad. These points, if thou wilt ponder, Then, with but paltry trouble led along...

For one thing after other will grow clear, Nor shall the blind night rob thee of the road, To hinder thy gaze on nature's Farthest-forth. Thus things for things shall kindle torches new.

BOOK II

PROEM

'Tis sweet, when, down the mighty main, the winds Roll up its waste of waters, from the land To watch another's labouring anguish far, Not that we joyously delight that man Should thus be smitten, but because 'tis sweet To mark what evils we ourselves be spared; 'Tis sweet, again, to view the mighty strife Of armies embattled yonder o'er the plains, Ourselves no sharers in the peril; but naught There is more goodly than to hold the high Serene plateaus, well fortressed by the wise, Whence thou may'st look below on other men And see them ev'rywhere wand'ring, all dispersed

In their lone seeking for the road of life; Rivals in genius, or emulous in rank, Pressing through days and nights with hugest toil For summits of power and mastery of the world. O wretched minds of men! O blinded hearts! In how great perils, in what darks of life Are spent the human years, however brief!— O not to see that nature for herself Barks after nothing, save that pain keep off, Disjoined from the body, and that mind enjoy Delightsome feeling, far from care and fear! Therefore we see that our corporeal life Needs little, altogether, and only such As takes the pain away, and can besides Strew underneath some number of delights. More grateful 'tis at times (for nature craves No artifice nor luxury), if forsooth There be no golden images of boys Along the halls, with right hands holding out The lamps ablaze, the lights for evening feasts, And if the house doth glitter not with gold Nor gleam with silver, and to the lyre resound No fretted and gilded ceilings overhead, Yet still to lounge with friends in the soft grass Beside a river of water, underneath A big tree's boughs, and merrily to refresh Our frames, with no vast outlay—most of all If the weather is laughing and the times of the year Besprinkle the green of the grass around with flowers. Nor yet the quicker will hot fevers go, If on a pictured tapestry thou toss, Or purple robe, than if 'tis thine to lie Upon the poor man's bedding. Wherefore, since Treasure, nor rank, nor glory of a reign Avail us naught for this our body, thus Reckon them likewise nothing for the mind: Save then perchance, when thou beholdest forth Thy legions swarming round the Field of Mars, Rousing a mimic warfare—either side Strengthened with large auxiliaries and horse, Alike equipped with arms, alike inspired; Or save when also thou beholdest forth Thy fleets to swarm, deploying down the sea: For then, by such bright circumstance abashed, Religion pales and flees thy mind; O then The fears of death leave heart so free of care. But if we note how all this pomp at last Is but a drollery and a mocking sport, And of a truth man's dread, with cares at heels, Dreads not these sounds of arms, these savage swords But among kings and lords of all the world Mingles undaunted, nor is overawed By gleam of gold nor by the splendour

bright Of purple robe, canst thou then doubt that this Is aught, but power of thinking?—when, besides The whole of life but labours in the dark. For just as children tremble and fear all In the viewless dark, so even we at times Dread in the light so many things that be No whit more fearsome than what children feign, Shuddering, will be upon them in the dark. This terror then, this darkness of the mind, Not sunrise with its flaring spokes of light, Nor glittering arrows of morning can disperse, But only nature's aspect and her law.

ATOMIC MOTIONS

Now come: I will untangle for thy steps Now by what motions the begetting bodies Of the world-stuff beget the varied world, And then forever resolve it when begot, And by what force they are constrained to this, And what the speed appointed unto them Wherewith to travel down the vast inane: Do thou remember to yield thee to my words. For truly matter coheres not, crowds not tight, Since we behold each thing to wane away, And we observe how all flows on and off, As 'twere, with age-old time, and from our eyes How eld withdraws each object at the end, Albeit the sum is seen to bide the same, Unharmed, because these motes that leave each thing Diminish what they part from, but endow With increase those to which in turn they come, Constraining these to wither in old age, And those to flower at the prime (and yet Biding not long among them). Thus the sum Forever is replenished, and we live As mortals by eternal give and take. The nations wax, the nations wane away; In a brief space the generations pass, And like to runners hand the lamp of life One unto other. But if thou believe That the primordial germs of things can stop, And in their stopping give new motions birth, Afar thou wanderest from the road of truth. For since they wander through the void inane, All the primordial germs of things must needs Be borne along, either by weight their own, Or haply by another's blow without. For, when, in their incessancy so oft They meet and clash, it comes to pass

amain They leap asunder, face to face: not strange— Being most hard, and solid in their weights, And naught opposing motion, from behind. And that more clearly thou perceive how all These mites of matter are darted round about, Recall to mind how nowhere in the sum Of All exists a bottom,—nowhere is A realm of rest for primal bodies; since (As amply shown and proved by reason sure) Space has no bound nor measure, and extends Unmetered forth in all directions round. Since this stands certain, thus 'tis out of doubt No rest is rendered to the primal bodies Along the unfathomable inane; but rather, Inveterately plied by motions mixed, Some, at their jamming, bound aback and leave Huge gaps between, and some from off the blow Are hurried about with spaces small between. And all which, brought together with slight gaps, In more condensed union bound aback, Linked by their own all inter-tangled shapes,— These form the irrefragable roots of rocks And the brute bulks of iron, and what else Is of their kind... The rest leap far asunder, far recoil, Leaving huge gaps between: and these supply For us thin air and splendour-lights of the sun. And many besides wander the mighty void— Cast back from unions of existing things, Nowhere accepted in the universe, And nowise linked in motions to the rest. And of this fact (as I record it here) An image, a type goes on before our eyes Present each moment; for behold whenever The sun's light and the rays, let in, pour down Across dark halls of houses: thou wilt see The many mites in many a manner mixed Amid a void in the very light of the rays, And battling on, as in eternal strife, And in battalions contending without halt, In meetings, partings, harried up and down. From this thou mayest conjecture of what sort The ceaseless tossing of primordial seeds Amid the mightier void—at least so far As small affair can for a vaster serve, And by example put thee on the spoor Of knowledge. For this reason too 'tis fit Thou turn thy mind the more unto these bodies Which here are witnessed tumbling in the light: Namely, because such tumblings are a sign That motions also of the primal stuff Secret and viewless lurk beneath, behind. For thou wilt mark here many a speck, impelled By viewless blows, to change its little

course, And beaten backwards to return again, Hither and thither in all directions round. Lo, all their shifting movement is of old, From the primeval atoms; for the same Primordial seeds of things first move of self, And then those bodies built of unions small And nearest, as it were, unto the powers Of the primeval atoms, are stirred up By impulse of those atoms' unseen blows, And these thereafter goad the next in size: Thus motion ascends from the primevals on, And stage by stage emerges to our sense, Until those objects also move which we Can mark in sunbeams, though it not appears What blows do urge them. Herein wonder not How 'tis that, while the seeds of things are all Moving forever, the sum yet seems to stand Supremely still, except in cases where A thing shows motion of its frame as whole. For far beneath the ken of senses lies The nature of those ultimates of the world; And so, since those themselves thou canst not see, Their motion also must they veil from men— For mark, indeed, how things we can see, oft Yet hide their motions, when afar from us Along the distant landscape. Often thus, Upon a hillside will the woolly flocks Be cropping their goodly food and creeping about Whither the summons of the grass, begemmed With the fresh dew, is calling, and the lambs, Well filled, are frisking, locking horns in sport: Yet all for us seem blurred and blent afar— A glint of white at rest on a green hill. Again, when mighty legions, marching round, Fill all the quarters of the plains below, Rousing a mimic warfare, there the sheen Shoots up the sky, and all the fields about Glitter with brass, and from beneath, a sound Goes forth from feet of stalwart soldiery, And mountain walls, smote by the shouting, send The voices onward to the stars of heaven, And hither and thither darts the cavalry, And of a sudden down the midmost fields Charges with onset stout enough to rock The solid earth: and yet some post there is Up the high mountains, viewed from which they seem To stand—a gleam at rest along the plains. Now what the speed to matter's atoms given Thou mayest in few, my Memmius, learn from this: When first the dawn is sprinkling with new light The lands, and all the breed of birds abroad Flit round the trackless forests, with liquid

notes Filling the regions along the mellow air, We see 'tis forthwith manifest to man How suddenly the risen sun is wont At such an hour to overspread and clothe The whole with its own splendour; but the sun's Warm exhalations and this serene light Travel not down an empty void; and thus They are compelled more slowly to advance, Whilst, as it were, they cleave the waves of air; Nor one by one travel these particles Of the warm exhalations, but are all Entangled and enmassed, whereby at once Each is restrained by each, and from without Checked, till compelled more slowly to advance. But the primordial atoms with their old Simple solidity, when forth they travel Along the empty void, all undelayed By aught outside them there, and they, each one Being one unit from nature of its parts, Are borne to that one place on which they strive Still to lay hold, must then, beyond a doubt, Outstrip in speed, and be more swiftly borne Than light of sun, and over regions rush, Of space much vaster, in the self-same time The sun's effulgence widens round the sky.

Nor to pursue the atoms one by one, To see the law whereby each thing goes on. But some men, ignorant of matter, think, Opposing this, that not without the gods, In such adjustment to our human ways, Can nature change the seasons of the years, And bring to birth the grains and all of else To which divine Delight, the guide of life, Persuades mortality and leads it on, That, through her artful blandishments of love, It propagate the generations still, Lest humankind should perish. When they feign That gods have stablished all things but for man, They seem in all ways mightily to lapse From reason's truth: for ev'n if ne'er I knew What seeds primordial are, yet would I dare This to affirm, ev'n from deep judgment based Upon the ways and conduct of the skies— This to maintain by many a fact besides— That in no wise the nature of the world For us was builded by a power divine— So great the faults it stands encumbered with: The which, my Memmius, later on, for thee We will clear up. Now as to what remains Concerning motions we'll unfold our thought. Now is the place, meseems, in these affairs To prove for thee this too: nothing corporeal Of its own force can e'er be upward borne, Or upward go—nor let the

bodies of flames Deceive thee here: for they engendered are With urge to upwards, taking thus increase, Whereby grow upwards shining grains and trees, Though all the weight within them downward bears. Nor, when the fires will leap from under round The roofs of houses, and swift flame laps up Timber and beam, 'tis then to be supposed They act of own accord, no force beneath To urge them up. 'Tis thus that blood, discharged From out our bodies, spurts its jets aloft And spatters gore. And hast thou never marked With what a force the water will disgorge Timber and beam? The deeper, straight and down, We push them in, and, many though we be, The more we press with main and toil, the more The water vomits up and flings them back, That, more than half their length, they there emerge, Rebounding. Yet we never doubt, meseems, That all the weight within them downward bears Through empty void. Well, in like manner, flames Ought also to be able, when pressed out, Through winds of air to rise aloft, even though The weight within them strive to draw them down. Hast thou not seen, sweeping so far and high, The meteors, midnight flambeaus of the sky, How after them they draw long trails of flame Wherever Nature gives a thoroughfare? How stars and constellations drop to earth, Seest not? Nay, too, the sun from peak of heaven Sheds round to every quarter its large heat, And sows the new-ploughed intervales with light: Thus also sun's heat downward tends to earth. Athwart the rain thou seest the lightning fly; Now here, now there, bursting from out the clouds, The fires dash zig-zag—and that flaming power Falls likewise down to earth. In these affairs We wish thee also well aware of this: The atoms, as their own weight bears them down Plumb through the void, at scarce determined times, In scarce determined places, from their course Decline a little—call it, so to speak, Mere changed trend. For were it not their wont Thuswise to swerve, down would they fall, each one, Like drops of rain, through the unbottomed void; And then collisions ne'er could be nor blows Among the primal elements; and thus Nature would never have created aught. But, if perchance be any that believe The heavier bodies, as more swiftly borne Plumb down the void, are

able from above To strike the lighter, thus engendering blows Able to cause those procreant motions, far From highways of true reason they retire. For whatsoever through the waters fall, Or through thin air, must quicken their descent, Each after its weight—on this account, because Both bulk of water and the subtle air By no means can retard each thing alike, But give more quick before the heavier weight; But contrariwise the empty void cannot, On any side, at any time, to aught Oppose resistance, but will ever yield, True to its bent of nature. Wherefore all, With equal speed, though equal not in weight, Must rush, borne downward through the still inane. Thus ne'er at all have heavier from above Been swift to strike the lighter, gendering strokes Which cause those divers motions, by whose means Nature transacts her work. And so I say, The atoms must a little swerve at times— But only the least, lest we should seem to feign Motions oblique, and fact refute us there. For this we see forthwith is manifest: Whatever the weight, it can't obliquely go, Down on its headlong journey from above, At least so far as thou canst mark; but who Is there can mark by sense that naught can swerve At all aside from off its road's straight line? Again, if ev'r all motions are co-linked, And from the old ever arise the new In fixed order, and primordial seeds Produce not by their swerving some new start Of motion to sunder the covenants of fate, That cause succeed not cause from everlasting, Whence this free will for creatures o'er the lands, Whence is it wrested from the fates,—this will Whereby we step right forward where desire Leads each man on, whereby the same we swerve In motions, not as at some fixed time, Nor at some fixed line of space, but where The mind itself has urged? For out of doubt In these affairs 'tis each man's will itself That gives the start, and hence throughout our limbs Incipient motions are diffused. Again, Dost thou not see, when, at a point of time, The bars are opened, how the eager strength Of horses cannot forward break as soon As pants their mind to do? For it behooves That all the stock of matter, through the frame, Be roused, in order that, through every joint, Aroused, it press and follow mind's desire; So thus thou seest initial motion's gendered From out the heart, aye,

verily, proceeds First from the spirit's will, whence at the last 'Tis given forth through joints and body entire. Quite otherwise it is, when forth we move, Impelled by a blow of another's mighty powers And mighty urge; for then 'tis clear enough All matter of our total body goes, Hurried along, against our own desire— Until the will has pulled upon the reins And checked it back, throughout our members all; At whose arbitrament indeed sometimes The stock of matter's forced to change its path, Throughout our members and throughout our joints, And, after being forward cast, to be Reined up, whereat it settles back again. So seest thou not, how, though external force Drive men before, and often make them move, Onward against desire, and headlong snatched, Yet is there something in these breasts of ours Strong to combat, strong to withstand the same?— Wherefore no less within the primal seeds Thou must admit, besides all blows and weight, Some other cause of motion, whence derives This power in us inborn, of some free act.— Since naught from nothing can become, we see. For weight prevents all things should come to pass Through blows, as 'twere, by some external force; But that man's mind itself in all it does Hath not a fixed necessity within, Nor is not, like a conquered thing, compelled To bear and suffer,—this state comes to man From that slight swervement of the elements In no fixed line of space, in no fixed time. Nor ever was the stock of stuff more crammed, Nor ever, again, sundered by bigger gaps: For naught gives increase and naught takes away; On which account, just as they move to-day, The elemental bodies moved of old And shall the same hereafter evermore. And what was wont to be begot of old Shall be begotten under selfsame terms And grow and thrive in power, so far as given To each by Nature's changeless, old decrees. The sum of things there is no power can change, For naught exists outside, to which can flee Out of the world matter of any kind, Nor forth from which a fresh supply can spring, Break in upon the founded world, and change Whole nature of things, and turn their motions about.

ATOMIC FORMS AND THEIR COMBINATIONS

Now come, and next hereafter apprehend What sorts, how vastly different in form, How varied in multitudinous shapes they are— These old beginnings of the universe; Not in the sense that only few are furnished With one like form, but rather not at all In general have they likeness each with each, No marvel: since the stock of them's so great That there's no end (as I have taught) nor sum, They must indeed not one and all be marked By equal outline and by shape the same.

Moreover, humankind, and the mute flocks Of scaly creatures swimming in the streams, And joyous herds around, and all the wild, And all the breeds of birds—both those that teem In gladsome regions of the water-haunts, About the river-banks and springs and pools, And those that throng, flitting from tree to tree, Through trackless woods—Go, take which one thou wilt, In any kind: thou wilt discover still Each from the other still unlike in shape. Nor in no other wise could offspring know Mother, nor mother offspring—which we see They yet can do, distinguished one from other, No less than human beings, by clear signs. Thus oft before fair temples of the gods, Beside the incense-burning altars slain, Drops down the yearling calf, from out its breast Breathing warm streams of blood; the orphaned mother, Ranging meanwhile green woodland pastures round, Knows well the footprints, pressed by cloven hoofs, With eyes regarding every spot about, For sight somewhere of youngling gone from her; And, stopping short, filleth the leafy lanes With her complaints; and oft she seeks again Within the stall, pierced by her yearning still. Nor tender willows, nor dew-quickened grass, Nor the loved streams that glide along low banks, Can lure her mind and turn the sudden pain; Nor other shapes of calves that graze thereby Distract her mind or lighten pain the least— So keen her search for something known and hers. Moreover, tender kids with bleating throats Do know their horned dams, and butting lambs The flocks of sheep, and thus they patter on, Unfailingly each to its proper teat, As nature intends. Lastly, with any

grain, Thou'lt see that no one kernel in one kind Is so far like another, that there still Is not in shapes some difference running through. By a like law we see how earth is pied With shells and conchs, where, with soft waves, the sea Beats on the thirsty sands of curving shores. Wherefore again, again, since seeds of things Exist by nature, nor were wrought with hands After a fixed pattern of one other, They needs must flitter to and fro with shapes In types dissimilar to one another.

Easy enough by thought of mind to solve Why fires of lightning more can penetrate Than these of ours from pitch-pine born on earth. For thou canst say lightning's celestial fire, So subtle, is formed of figures finer far, And passes thus through holes which this our fire, Born from the wood, created from the pine, Cannot. Again, light passes through the horn On the lantern's side, while rain is dashed away. And why?—unless those bodies of light should be Finer than those of water's genial showers. We see how quickly through a colander The wines will flow; how, on the other hand, The sluggish olive-oil delays: no doubt, Because 'tis wrought of elements more large, Or else more crook'd and intertangled. Thus It comes that the primordials cannot be So suddenly sundered one from other, and seep, One through each several hole of anything. And note, besides, that liquor of honey or milk Yields in the mouth agreeable taste to tongue, Whilst nauseous wormwood, pungent centaury, With their foul flavour set the lips awry; Thus simple 'tis to see that whatsoever Can touch the senses pleasingly are made Of smooth and rounded elements, whilst those Which seem the bitter and the sharp, are held Entwined by elements more crook'd, and so Are wont to tear their ways into our senses, And rend our body as they enter in. In short all good to sense, all bad to touch, Being up-built of figures so unlike, Are mutually at strife—lest thou suppose That the shrill rasping of a squeaking saw Consists of elements as smooth as song Which, waked by nimble fingers, on the strings The sweet musicians fashion; or suppose That same-shaped atoms through men's nostrils pierce When foul cadavers burn, as when the stage Is with Cilician saffron sprinkled fresh, And the altar near exhales Panchaean scent; Or

hold as of like seed the goodly hues Of things which feast our eyes, as those which sting Against the smarting pupil and draw tears, Or show, with gruesome aspect, grim and vile. For never a shape which charms our sense was made Without some elemental smoothness; whilst Whate'er is harsh and irksome has been framed Still with some roughness in its elements. Some, too, there are which justly are supposed To be nor smooth nor altogether hooked, With bended barbs, but slightly angled-out, To tickle rather than to wound the sense— And of which sort is the salt tartar of wine And flavours of the gummed elecampane. Again, that glowing fire and icy rime Are fanged with teeth unlike whereby to sting Our body's sense, the touch of each gives proof. For touch—by sacred majesties of Gods!— Touch is indeed the body's only sense— Be't that something in-from-outward works, Be't that something in the body born Wounds, or delighteth as it passes out Along the procreant paths of Aphrodite; Or be't the seeds by some collision whirl Disordered in the body and confound By tumult and confusion all the sense— As thou mayst find, if haply with the hand Thyself thou strike thy body's any part. On which account, the elemental forms Must differ widely, as enabled thus To cause diverse sensations. And, again, What seems to us the hardened and condensed Must be of atoms among themselves more hooked, Be held compacted deep within, as 'twere By branch-like atoms—of which sort the chief Are diamond stones, despisers of all blows, And stalwart flint and strength of solid iron, And brazen bars, which, budging hard in locks, Do grate and scream. But what are liquid, formed Of fluid body, they indeed must be Of elements more smooth and round—because Their globules severally will not cohere: To suck the poppy-seeds from palm of hand Is quite as easy as drinking water down, And they, once struck, roll like unto the same. But that thou seest among the things that flow Some bitter, as the brine of ocean is, Is not the least a marvel... For since 'tis fluid, smooth its atoms are And round, with painful rough ones mixed therein; Yet need not these be held together hooked: In fact, though rough, they're globular besides, Able at once to roll, and rasp the sense. And that the more thou mayst

believe me here, That with smooth elements are mixed the rough (Whence Neptune's salt astringent body comes), There is a means to separate the twain, And thereupon dividedly to see How the sweet water, after filtering through So often underground, flows freshened forth Into some hollow; for it leaves above The primal germs of nauseating brine, Since cling the rough more readily in earth. Lastly, whatso thou markest to disperse Upon the instant—smoke, and cloud, and flame—Must not (even though not all of smooth and round) Be yet co-linked with atoms intertwined, That thus they can, without together cleaving, So pierce our body and so bore the rocks. Whatever we see... Given to senses, that thou must perceive They're not from linked but pointed elements. The which now having taught, I will go on To bind thereto a fact to this allied And drawing from this its proof: these primal germs Vary, yet only with finite tale of shapes. For were these shapes quite infinite, some seeds Would have a body of infinite increase. For in one seed, in one small frame of any, The shapes can't vary from one another much. Assume, we'll say, that of three minim parts Consist the primal bodies, or add a few: When, now, by placing all these parts of one At top and bottom, changing lefts and rights, Thou hast with every kind of shift found out What the aspect of shape of its whole body Each new arrangement gives, for what remains, If thou percase wouldst vary its old shapes, New parts must then be added; follows next, If thou percase wouldst vary still its shapes, That by like logic each arrangement still Requires its increment of other parts. Ergo, an augmentation of its frame Follows upon each novelty of forms. Wherefore, it cannot be thou'lt undertake That seeds have infinite differences in form, Lest thus thou forcest some indeed to be Of an immeasurable immensity—Which I have taught above cannot be proved.

And now for thee barbaric robes, and gleam Of Meliboean purple, touched with dye Of the Thessalian shell... The peacock's golden generations, stained With spotted gaieties, would lie o'erthrown By some new colour of new things more bright; The odour of myrrh and savours of honey despised; The swan's old lyric, and Apollo's

hymns, Once modulated on the many chords, Would likewise sink o'ermastered and be mute: For, lo, a somewhat, finer than the rest, Would be arising evermore. So, too, Into some baser part might all retire, Even as we said to better might they come: For, lo, a somewhat, loathlier than the rest To nostrils, ears, and eyes, and taste of tongue, Would then, by reasoning reversed, be there. Since 'tis not so, but unto things are given Their fixed limitations which do bound Their sum on either side, 'tmust be confessed That matter, too, by finite tale of shapes Does differ. Again, from earth's midsummer heats Unto the icy hoar-frosts of the year The forward path is fixed, and by like law O'ertravelled backwards at the dawn of spring. For each degree of hot, and each of cold, And the half-warm, all filling up the sum In due progression, lie, my Memmius, there Betwixt the two extremes: the things create Must differ, therefore, by a finite change, Since at each end marked off they ever are By fixed point—on one side plagued by flames And on the other by congealing frosts. The which now having taught, I will go on To bind thereto a fact to this allied And drawing from this its proof: those primal germs Which have been fashioned all of one like shape Are infinite in tale; for, since the forms Themselves are finite in divergences, Then those which are alike will have to be Infinite, else the sum of stuff remains A finite—what I've proved is not the fact, Showing in verse how corpuscles of stuff, From everlasting and to-day the same, Uphold the sum of things, all sides around By old succession of unending blows. For though thou view'st some beasts to be more rare, And mark'st in them a less prolific stock, Yet in another region, in lands remote, That kind abounding may make up the count; Even as we mark among the four-foot kind Snake-handed elephants, whose thousands wall With ivory ramparts India about, That her interiors cannot entered be— So big her count of brutes of which we see Such few examples. Or suppose, besides, We feign some thing, one of its kind and sole With body born, to which is nothing like In all the lands: yet now unless shall be An infinite count of matter out of which Thus to conceive and bring it forth to life, It cannot be created and—what's more— It cannot

take its food and get increase. Yea, if through all the world in finite tale Be tossed the procreant bodies of one thing, Whence, then, and where in what mode, by what power, Shall they to meeting come together there, In such vast ocean of matter and tumult strange?— No means they have of joining into one. But, just as, after mighty ship-wrecks piled, The mighty main is wont to scatter wide The rowers' banks, the ribs, the yards, the prow, The masts and swimming oars, so that afar Along all shores of lands are seen afloat The carven fragments of the rended poop, Giving a lesson to mortality To shun the ambush of the faithless main, The violence and the guile, and trust it not At any hour, however much may smile The crafty enticements of the placid deep: Exactly thus, if once thou holdest true That certain seeds are finite in their tale, The various tides of matter, then, must needs Scatter them flung throughout the ages all, So that not ever can they join, as driven Together into union, nor remain In union, nor with increment can grow— But facts in proof are manifest for each: Things can be both begotten and increase. 'Tis therefore manifest that primal germs, Are infinite in any class thou wilt— From whence is furnished matter for all things. Nor can those motions that bring death prevail Forever, nor eternally entomb The welfare of the world; nor, further, can Those motions that give birth to things and growth Keep them forever when created there. Thus the long war, from everlasting waged, With equal strife among the elements Goes on and on. Now here, now there, prevail The vital forces of the world—or fall. Mixed with the funeral is the wildered wail Of infants coming to the shores of light: No night a day, no dawn a night hath followed That heard not, mingling with the small birth-cries, The wild laments, companions old of death And the black rites. This, too, in these affairs 'Tis fit thou hold well sealed, and keep consigned With no forgetting brain: nothing there is Whose nature is apparent out of hand That of one kind of elements consists— Nothing there is that's not of mixed seed. And whatsoe'er possesses in itself More largely many powers and properties Shows thus that here within itself there are The largest number of kinds and differing shapes Of elements. And, chief of all, the earth

Hath in herself first bodies whence the springs, Rolling chill waters, renew forevermore The unmeasured main; hath whence the fires arise— For burns in many a spot her flamed crust, Whilst the impetuous Aetna raves indeed From more profounder fires—and she, again, Hath in herself the seed whence she can raise The shining grains and gladsome trees for men; Whence, also, rivers, fronds, and gladsome pastures Can she supply for mountain-roaming beasts. Wherefore great mother of gods, and mother of beasts, And parent of man hath she alone been named. Her hymned the old and learned bards of Greece

Seated in chariot o'er the realms of air To drive her team of lions, teaching thus That the great earth hangs poised and cannot lie Resting on other earth. Unto her car They've yoked the wild beasts, since a progeny, However savage, must be tamed and chid By care of parents. They have girt about With turret-crown the summit of her head, Since, fortressed in her goodly strongholds high, 'Tis she sustains the cities; now, adorned With that same token, to-day is carried forth, With solemn awe through many a mighty land, The image of that mother, the divine. Her the wide nations, after antique rite, Do name Idaean Mother, giving her Escort of Phrygian bands, since first, they say, From out those regions 'twas that grain began Through all the world. To her do they assign The Galli, the emasculate, since thus They wish to show that men who violate The majesty of the mother and have proved Ingrate to parents are to be adjudged Unfit to give unto the shores of light A living progeny. The Galli come: And hollow cymbals, tight-skinned tambourines Resound around to bangings of their hands; The fierce horns threaten with a raucous bray; The tubed pipe excites their maddened minds In Phrygian measures; they bear before them knives, Wild emblems of their frenzy, which have power The rabble's ingrate heads and impious hearts To panic with terror of the goddess' might. And so, when through the mighty cities borne, She blesses man with salutations mute, They strew the highway of her journeyings With coin of brass and silver, gifting her With alms and largesse, and shower her and shade With flowers of roses falling like the snow Upon

the Mother and her companion-bands. Here is an armed troop, the which by Greeks Are called the Phrygian Curetes. Since Haply among themselves they use to play In games of arms and leap in measure round With bloody mirth and by their nodding shake The terrorizing crests upon their heads, This is the armed troop that represents The arm'd Dictaean Curetes, who, in Crete, As runs the story, whilom did out-drown That infant cry of Zeus, what time their band, Young boys, in a swift dance around the boy, To measured step beat with the brass on brass, That Saturn might not get him for his jaws, And give its mother an eternal wound Along her heart. And 'tis on this account That armed they escort the mighty Mother, Or else because they signify by this That she, the goddess, teaches men to be Eager with armed valour to defend Their motherland, and ready to stand forth, The guard and glory of their parents' years. A tale, however beautifully wrought, That's wide of reason by a long remove: For all the gods must of themselves enjoy Immortal aeons and supreme repose, Withdrawn from our affairs, detached, afar: Immune from peril and immune from pain, Themselves abounding in riches of their own, Needing not us, they are not touched by wrath They are not taken by service or by gift. Truly is earth insensate for all time; But, by obtaining germs of many things, In many a way she brings the many forth Into the light of sun. And here, whoso Decides to call the ocean Neptune, or The grain-crop Ceres, and prefers to abuse The name of Bacchus rather than pronounce The liquor's proper designation, him Let us permit to go on calling earth Mother of Gods, if only he will spare To taint his soul with foul religion. So, too, the wooly flocks, and horned kine, And brood of battle-eager horses, grazing Often together along one grassy plain, Under the cope of one blue sky, and slaking From out one stream of water each its thirst, All live their lives with face and form unlike, Keeping the parents' nature, parents' habits, Which, kind by kind, through ages they repeat. So great in any sort of herb thou wilt, So great again in any river of earth Are the distinct diversities of matter. Hence, further, every creature—any one From out them all—compounded is the same Of bones, blood, veins, heat, moisture, flesh, and

thews— All differing vastly in their forms, and built Of elements dissimilar in shape. Again, all things by fire consumed ablaze, Within their frame lay up, if naught besides, At least those atoms whence derives their power To throw forth fire and send out light from under, To shoot the sparks and scatter embers wide. If, with like reasoning of mind, all else Thou traverse through, thou wilt discover thus That in their frame the seeds of many things They hide, and divers shapes of seeds contain. Further, thou markest much, to which are given Along together colour and flavour and smell, Among which, chief, are most burnt offerings.

Thus must they be of divers shapes composed. A smell of scorching enters in our frame Where the bright colour from the dye goes not; And colour in one way, flavour in quite another Works inward to our senses—so mayst see They differ too in elemental shapes. Thus unlike forms into one mass combine, And things exist by intermixed seed. But still 'tmust not be thought that in all ways All things can be conjoined; for then wouldst view Portents begot about thee every side: Hulks of mankind half brute astarting up, At times big branches sprouting from man's trunk, Limbs of a sea-beast to a land-beast knit, And nature along the all-producing earth Feeding those dire Chimaeras breathing flame From hideous jaws—Of which 'tis simple fact That none have been begot; because we see All are from fixed seed and fixed dam Engendered and so function as to keep Throughout their growth their own ancestral type. This happens surely by a fixed law: For from all food-stuff, when once eaten down, Go sundered atoms, suited to each creature, Throughout their bodies, and, conjoining there, Produce the proper motions; but we see How, contrariwise, nature upon the ground Throws off those foreign to their frame; and many With viewless bodies from their bodies fly, By blows impelled—those impotent to join To any part, or, when inside, to accord And to take on the vital motions there. But think not, haply, living forms alone Are bound by these laws: they distinguished all.

For just as all things of creation are, In their whole nature, each to each unlike, So

must their atoms be in shape unlike— Not since few only are fashioned of like form, But since they all, as general rule, are not The same as all. Nay, here in these our verses, Elements many, common to many words, Thou seest, though yet 'tis needful to confess The words and verses differ, each from each, Compounded out of different elements— Not since few only, as common letters, run Through all the words, or no two words are made, One and the other, from all like elements, But since they all, as general rule, are not The same as all. Thus, too, in other things, Whilst many germs common to many things There are, yet they, combined among themselves, Can form new wholes to others quite unlike. Thus fairly one may say that humankind, The grains, the gladsome trees, are all made up Of different atoms. Further, since the seeds Are different, difference must there also be In intervening spaces, thoroughfares, Connections, weights, blows, clashings, motions, all Which not alone distinguish living forms, But sunder earth's whole ocean from the lands, And hold all heaven from the lands away.

ABSENCE OF SECONDARY QUALITIES

Now come, this wisdom by my sweet toil sought Look thou perceive, lest haply thou shouldst guess That the white objects shining to thine eyes Are gendered of white atoms, or the black Of a black seed; or yet believe that aught That's steeped in any hue should take its dye From bits of matter tinct with hue the same. For matter's bodies own no hue the least— Or like to objects or, again, unlike. But, if percase it seem to thee that mind Itself can dart no influence of its own Into these bodies, wide thou wand'rest off. For since the blind-born, who have ne'er surveyed The light of sun, yet recognise by touch Things that from birth had ne'er a hue for them, 'Tis thine to know that bodies can be brought No less unto the ken of our minds too, Though yet those bodies with no dye be smeared. Again, ourselves whatever in the dark We touch, the same we do not find to be Tinctured with any colour. Now that here I win the argument, I next will teach

Now, every colour changes, none except, And every... Which the primordials ought nowise to do. Since an immutable somewhat must remain, Lest all things utterly be brought to naught. For change of anything from out its bounds Means instant death of that which was before. Wherefore be mindful not to stain with colour The seeds of things, lest things return for thee All utterly to naught. But now, if seeds Receive no property of colour, and yet Be still endowed with variable forms From which all kinds of colours they beget And vary (by reason that ever it matters much With what seeds, and in what positions joined, And what the motions that they give and get), Forthwith most easily thou mayst devise Why what was black of hue an hour ago Can of a sudden like the marble gleam,— As ocean, when the high winds have upheaved Its level plains, is changed to hoary waves Of marble whiteness: for, thou mayst declare, That, when the thing we often see as black Is in its matter then commixed anew, Some atoms rearranged, and some withdrawn, And added some, 'tis seen forthwith to turn Glowing and white. But if of azure seeds Consist the level waters of the deep, They could in nowise whiten: for however Thou shakest azure seeds, the same can never Pass into marble hue. But, if the seeds— Which thus produce the ocean's one pure sheen— Be now with one hue, now another dyed, As oft from alien forms and divers shapes A cube's produced all uniform in shape, 'Twould be but natural, even as in the cube We see the forms to be dissimilar, That thus we'd see in brightness of the deep (Or in whatever one pure sheen thou wilt) Colours diverse and all dissimilar. Besides, the unlike shapes don't thwart the least The whole in being externally a cube; But differing hues of things do block and keep The whole from being of one resultant hue. Then, too, the reason which entices us At times to attribute colours to the seeds Falls quite to pieces, since white things are not Create from white things, nor are black from black, But evermore they are create from things Of divers colours. Verily, the white Will rise more readily, is sooner born Out of no colour, than of black or aught Which stands in hostile opposition thus. Besides, since colours cannot be, sans light, And the primordials come not

forth to light, 'Tis thine to know they are not clothed with colour— Truly, what kind of colour could there be In the viewless dark? Nay, in the light itself A colour changes, gleaming variedly, When smote by vertical or slanting ray. Thus in the sunlight shows the down of doves That circles, garlanding, the nape and throat: Now it is ruddy with a bright gold-bronze, Now, by a strange sensation it becomes Green-emerald blended with the coral-red. The peacock's tail, filled with the copious light, Changes its colours likewise, when it turns. Wherefore, since by some blow of light begot, Without such blow these colours can't become. And since the pupil of the eye receives Within itself one kind of blow, when said To feel a white hue, then another kind, When feeling a black or any other hue, And since it matters nothing with what hue The things thou touchest be perchance endowed, But rather with what sort of shape equipped, 'Tis thine to know the atoms need not colour, But render forth sensations, as of touch, That vary with their varied forms. Besides, Since special shapes have not a special colour, And all formations of the primal germs Can be of any sheen thou wilt, why, then, Are not those objects which are of them made Suffused, each kind with colours of every kind? For then 'twere meet that ravens, as they fly, Should dartle from white pinions a white sheen, Or swans turn black from seed of black, or be Of any single varied dye thou wilt. Again, the more an object's rent to bits, The more thou see its colour fade away Little by little till 'tis quite extinct; As happens when the gaudy linen's picked Shred after shred away: the purple there, Phoenician red, most brilliant of all dyes, Is lost asunder, ravelled thread by thread; Hence canst perceive the fragments die away From out their colour, long ere they depart Back to the old primordials of things. And, last, since thou concedest not all bodies Send out a voice or smell, it happens thus That not to all thou givest sounds and smells. So, too, since we behold not all with eyes, 'Tis thine to know some things there are as much Orphaned of colour, as others without smell, And reft of sound; and those the mind alert No less can apprehend than it can mark The things that lack some other qualities. But think not haply that the primal

bodies Remain despoiled alone of colour: so, Are they from warmth dissevered and from cold And from hot exhalations; and they move, Both sterile of sound and dry of juice; and throw Not any odour from their proper bodies. Just as, when undertaking to prepare A liquid balm of myrrh and marjoram, And flower of nard, which to our nostrils breathes Odour of nectar, first of all behooves Thou seek, as far as find thou may and can, The inodorous olive-oil (which never sends One whiff of scent to nostrils), that it may The least debauch and ruin with sharp tang The odorous essence with its body mixed And in it seethed. And on the same account The primal germs of things must not be thought To furnish colour in begetting things, Nor sound, since pow'rless they to send forth aught From out themselves, nor any flavour, too, Nor cold, nor exhalation hot or warm.

The rest; yet since these things are mortal all— The pliant mortal, with a body soft; The brittle mortal, with a crumbling frame; The hollow with a porous-all must be Disjoined from the primal elements, If still we wish under the world to lay Immortal ground-works, whereupon may rest The sum of weal and safety, lest for thee All things return to nothing utterly. Now, too: whate'er we see possessing sense Must yet confessedly be stablished all From elements insensate. And those signs, So clear to all and witnessed out of hand, Do not refute this dictum nor oppose; But rather themselves do lead us by the hand, Compelling belief that living things are born Of elements insensate, as I say. Sooth, we may see from out the stinking dung Live worms spring up, when, after soaking rains, The drenched earth rots; and all things change the same: Lo, change the rivers, the fronds, the gladsome pastures Into the cattle, the cattle their nature change Into our bodies, and from our body, oft Grow strong the powers and bodies of wild beasts And mighty-winged birds. Thus nature changes All foods to living frames, and procreates From them the senses of live creatures all, In manner about as she uncoils in flames Dry logs of wood and turns them all to fire. And seest not, therefore, how it matters much After what order are set the primal germs, And with what other germs they all are mixed, And what the

motions that they give and get? But now, what is't that strikes thy sceptic mind, Constraining thee to sundry arguments Against belief that from insensate germs The sensible is gendered?—Verily, 'Tis this: that liquids, earth, and wood, though mixed, Are yet unable to gender vital sense. And, therefore, 'twill be well in these affairs This to remember: that I have not said Senses are born, under conditions all, From all things absolutely which create Objects that feel; but much it matters here Firstly, how small the seeds which thus compose The feeling thing, then, with what shapes endowed, And lastly what they in positions be, In motions, in arrangements. Of which facts Naught we perceive in logs of wood and clods; And yet even these, when sodden by the rains, Give birth to wormy grubs, because the bodies Of matter, from their old arrangements stirred By the new factor, then combine anew In such a way as genders living things. Next, they who deem that feeling objects can From feeling objects be create, and these, In turn, from others that are wont to feel

When soft they make them; for all sense is linked With flesh, and thews, and veins—and such, we see, Are fashioned soft and of a mortal frame. Yet be't that these can last forever on: They'll have the sense that's proper to a part, Or else be judged to have a sense the same As that within live creatures as a whole. But of themselves those parts can never feel, For all the sense in every member back To something else refers—a severed hand, Or any other member of our frame, Itself alone cannot support sensation. It thus remains they must resemble, then, Live creatures as a whole, to have the power Of feeling sensation concordant in each part With the vital sense; and so they're bound to feel The things we feel exactly as do we. If such the case, how, then, can they be named The primal germs of things, and how avoid The highways of destruction?—since they be Mere living things and living things be all One and the same with mortal. Grant they could, Yet by their meetings and their unions all, Naught would result, indeed, besides a throng And hurly-burly all of living things— Precisely as men, and cattle, and wild beasts, By mere conglomeration each with each Can still beget not anything of new. But if by

chance they lose, inside a body, Their own sense and another sense take on, What, then, avails it to assign them that Which is withdrawn thereafter? And besides, To touch on proof that we pronounced before, Just as we see the eggs of feathered fowls To change to living chicks, and swarming worms To bubble forth when from the soaking rains The earth is sodden, sure, sensations all Can out of non-sensations be begot. But if one say that sense can so far rise From non-sense by mutation, or because Brought forth as by a certain sort of birth, 'Twill serve to render plain to him and prove There is no birth, unless there be before Some formed union of the elements, Nor any change, unless they be unite. In first place, senses can't in body be Before its living nature's been begot,— Since all its stuff, in faith, is held dispersed About through rivers, air, and earth, and all That is from earth created, nor has met In combination, and, in proper mode, Conjoined into those vital motions which Kindle the all-perceiving senses—they That keep and guard each living thing soever. Again, a blow beyond its nature's strength Shatters forthwith each living thing soe'er, And on it goes confounding all the sense Of body and mind. For of the primal germs Are loosed their old arrangements, and, throughout, The vital motions blocked,—until the stuff, Shaken profoundly through the frame entire, Undoes the vital knots of soul from body And throws that soul, to outward wide-dispersed, Through all the pores. For what may we surmise A blow inflicted can achieve besides Shaking asunder and loosening all apart? It happens also, when less sharp the blow, The vital motions which are left are wont Oft to win out—win out, and stop and still The uncouth tumults gendered by the blow, And call each part to its own courses back, And shake away the motion of death which now Begins its own dominion in the body, And kindle anew the senses almost gone. For by what other means could they the more Collect their powers of thought and turn again From very doorways of destruction Back unto life, rather than pass whereto They be already well-nigh sped and so Pass quite away? Again, since pain is there Where bodies of matter, by some force stirred up, Through vitals and through joints, within their seats

Quiver and quake inside, but soft delight, When they remove unto their place again: 'Tis thine to know the primal germs can be Assaulted by no pain, nor from themselves Take no delight; because indeed they are Not made of any bodies of first things, Under whose strange new motions they might ache Or pluck the fruit of any dear new sweet. And so they must be furnished with no sense. Once more, if thus, that every living thing May have sensation, needful 'tis to assign Sense also to its elements, what then Of those fixed elements from which mankind Hath been, by their peculiar virtue, formed? Of verity, they'll laugh aloud, like men, Shaken asunder by a spasm of mirth, Or sprinkle with dewy tear-drops cheeks and chins, And have the cunning hardihood to say Much on the composition of the world, And in their turn inquire what elements They have themselves,—since, thus the same in kind As a whole mortal creature, even they Must also be from other elements, And then those others from others evermore— So that thou darest nowhere make a stop. Oho, I'll follow thee until thou grant The seed (which here thou say'st speaks, laughs, and

thinks) Is yet derived out of other seeds Which in their turn are doing just the same. But if we see what raving nonsense this, And that a man may laugh, though not, forsooth, Compounded out of laughing elements, And think and utter reason with learn'd speech, Though not himself compounded, for a fact, Of sapient seeds and eloquent, why, then, Cannot those things which we perceive to have Their own sensation be composed as well Of intermixed seeds quite void of sense?

INFINITE WORLDS

Once more, we all from seed celestial spring, To all is that same father, from whom earth, The fostering mother, as she takes the drops Of liquid moisture, pregnant bears her broods— The shining grains, and gladsome shrubs and trees, And bears the human race and of the wild The generations all, the while she yields The foods

wherewith all feed their frames and lead The genial life and propagate their kind; Wherefore she owneth that maternal name, By old desert. What was before from earth, The same in earth sinks back, and what was sent From shores of ether, that, returning home, The vaults of sky receive. Nor thus doth death So far annihilate things that she destroys The bodies of matter; but she dissipates Their combinations, and conjoins anew One element with others; and contrives That all things vary forms and change their colours And get sensations and straight give them o'er. And thus may'st know it matters with what others And in what structure the primordial germs Are held together, and what motions they Among themselves do give and get; nor think That aught we see hither and thither afloat Upon the crest of things, and now a birth And straightway now a ruin, inheres at rest Deep in the eternal atoms of the world. Why, even in these our very verses here It matters much with what and in what order Each element is set: the same denote Sky, and the ocean, lands, and streams, and sun; The same, the grains, and trees, and living things. And if not all alike, at least the most— But what distinctions by positions wrought! And thus no less in things themselves, when once Around are changed the intervals between, The paths of matter, its connections, weights, Blows, clashings, motions, order, structure, shapes, The things themselves must likewise changed be. Now to true reason give thy mind for us. Since here strange truth is putting forth its might To hit thee in thine ears, a new aspect Of things to show its front. Yet naught there is So easy that it standeth not at first More hard to credit than it after is; And naught soe'er that's great to such degree, Nor wonderful so far, but all mankind Little by little abandon their surprise. Look upward yonder at the bright clear sky And what it holds—the stars that wander o'er, The moon, the radiance of the splendour-sun: Yet all, if now they first for mortals were, If unforeseen now first asudden shown, What might there be more wonderful to tell, What that the nations would before have dared Less to believe might be?—I fancy, naught— So strange had been the marvel of that sight. The which o'erwearied to behold, to-day None deigns look upward to those lucent

realms. Then, spew not reason from thy mind away, Beside thyself because the matter's new, But rather with keen judgment nicely weigh; And if to thee it then appeareth true, Render thy hands, or, if 'tis false at last, Gird thee to combat. For my mind-of-man Now seeks the nature of the vast Beyond There on the other side, that boundless sum Which lies without the ramparts of the world, Toward which the spirit longs to peer afar, Toward which indeed the swift elan of thought Flies unencumbered forth. Firstly, we find, Off to all regions round, on either side, Above, beneath, throughout the universe End is there none—as I have taught, as too The very thing of itself declares aloud, And as from nature of the unbottomed deep Shines clearly forth. Nor can we once suppose In any way 'tis likely, (seeing that space To all sides stretches infinite and free, And seeds, innumerable in number, in sum Bottomless, there in many a manner fly, Bestirred in everlasting motion there), That only this one earth and sky of ours Hath been create and that those bodies of stuff, So many, perform no work outside the same; Seeing, moreover, this world too hath been By nature fashioned, even as seeds of things By innate motion chanced to clash and cling— After they'd been in many a manner driven Together at random, without design, in vain— And as at last those seeds together dwelt, Which, when together of a sudden thrown, Should alway furnish the commencements fit Of mighty things—the earth, the sea, the sky, And race of living creatures. Thus, I say, Again, again, 'tmust be confessed there are Such congregations of matter otherwhere, Like this our world which vasty ether holds In huge embrace. Besides, when matter abundant Is ready there, when space on hand, nor object Nor any cause retards, no marvel 'tis That things are carried on and made complete, Perforce. And now, if store of seeds there is So great that not whole life-times of the living Can count the tale... And if their force and nature abide the same, Able to throw the seeds of things together Into their places, even as here are thrown The seeds together in this world of ours, 'Tmust be confessed in other realms there are Still other worlds, still other breeds of men, And other generations of the wild. Hence too it happens in

the sum there is No one thing single of its kind in birth, And single and sole in growth, but rather it is One member of some generated race, Among full many others of like kind. First, cast thy mind abroad upon the living: Thou'lt find the race of mountain-ranging wild Even thus to be, and thus the scions of men To be begot, and lastly the mute flocks Of scaled fish, and winged frames of birds. Wherefore confess we must on grounds the same That earth, sun, moon, and ocean, and all else, Exist not sole and single—rather in number Exceeding number. Since that deeply set Old boundary stone of life remains for them No less, and theirs a body of mortal birth No less, than every kind which here on earth Is so abundant in its members found. Which well perceived if thou hold in mind, Then Nature, delivered from every haughty lord, And forthwith free, is seen to do all things Herself and through herself of own accord, Rid of all gods. For—by their holy hearts Which pass in long tranquillity of peace Untroubled ages and a serene life!— Who hath the power (I ask), who hath the power To rule the sum of the immeasurable, To hold with steady hand the giant reins Of the unfathomed deep? Who hath the power At once to roll a multitude of skies, At once to heat with fires ethereal all The fruitful lands of multitudes of worlds, To be at all times in all places near, To stablish darkness by his clouds, to shake The serene spaces of the sky with sound, And hurl his lightnings,—ha, and whelm how oft In ruins his own temples, and to rave, Retiring to the wildernesses, there At practice with that thunderbolt of his, Which yet how often shoots the guilty by, And slays the honourable blameless ones! Ere since the birth-time of the world, ere since The risen first-born day of sea, earth, sun, Have many germs been added from outside, Have many seeds been added round about, Which the great All, the while it flung them on, Brought hither, that from them the sea and lands Could grow more big, and that the house of heaven Might get more room and raise its lofty roofs Far over earth, and air arise around. For bodies all, from out all regions, are Divided by blows, each to its proper thing, And all retire to their own proper kinds: The moist to moist retires; earth gets increase From earthy

body; and fires, as on a forge, Beat out new fire; and ether forges ether; Till nature, author and ender of the world, Hath led all things to extreme bound of growth: As haps when that which hath been poured inside The vital veins of life is now no more Than that which ebbs within them and runs off. This is the point where life for each thing ends; This is the point where nature with her powers Curbs all increase. For whatsoe'er thou seest Grow big with glad increase, and step by step Climb upward to ripe age, these to themselves Take in more bodies than they send from selves, Whilst still the food is easily infused Through all the veins, and whilst the things are not So far expanded that they cast away Such numerous atoms as to cause a waste Greater than nutriment whereby they wax. For 'tmust be granted, truly, that from things Many a body ebbeth and runs off; But yet still more must come, until the things Have touched development's top pinnacle; Then old age breaks their powers and ripe strength And falls away into a worser part. For ever the ampler and more wide a thing, As soon as ever its augmentation ends, It scatters abroad forthwith to all sides round More bodies, sending them from out itself. Nor easily now is food disseminate Through all its veins; nor is that food enough To equal with a new supply on hand Those plenteous exhalations it gives off. Thus, fairly, all things perish, when with ebbing They're made less dense and when from blows without They are laid low; since food at last will fail Extremest eld, and bodies from outside Cease not with thumping to undo a thing And overmaster by infesting blows. Thus, too, the ramparts of the mighty world On all sides round shall taken be by storm, And tumble to wrack and shivered fragments down. For food it is must keep things whole, renewing; 'Tis food must prop and give support to all,— But to no purpose, since nor veins suffice To hold enough, nor nature ministers As much as needful. And even now 'tis thus: Its age is broken and the earth, outworn With many parturitions, scarce creates The little lives—she who created erst All generations and gave forth at birth Enormous bodies of wild beasts of old. For never, I fancy, did a golden cord From off the firmament above let down The mortal generations to the

fields; Nor sea, nor breakers pounding on the rocks Created them; but earth it was who bore— The same to-day who feeds them from herself. Besides, herself of own accord, she first The shining grains and vineyards of all joy Created for mortality; herself Gave the sweet fruitage and the pastures glad, Which now to-day yet scarcely wax in size, Even when aided by our toiling arms. We break the ox, and wear away the strength Of sturdy farm-hands; iron tools to-day Barely avail for tilling of the fields, So niggardly they grudge our harvestings, So much increase our labour. Now to-day The aged ploughman, shaking of his head, Sighs o'er and o'er that labours of his hands Have fallen out in vain, and, as he thinks How present times are not as times of old, Often he praises the fortunes of his sire, And crackles, prating, how the ancient race, Fulfilled with piety, supported life With simple comfort in a narrow plot, Since, man for man, the measure of each field Was smaller far i' the old days. And, again, The gloomy planter of the withered vine Rails at the season's change and wearies heaven, Nor grasps that all of things by sure degrees Are wasting away and going to the tomb, Outworn by venerable length of life.

BOOK III

PROEM

O thou who first uplifted in such dark So clear a torch aloft, who first shed light Upon the profitable ends of man, O thee I follow, glory of the Greeks, And set my footsteps squarely planted now Even in the impress and the marks of thine— Less like one eager to dispute the palm, More as one craving out of very love That I may copy thee!—for how should swallow Contend with swans or what compare could be In a race between young kids with tumbling legs And the strong might of the horse? Our father thou, And finder-out of truth, and thou to us Suppliest a father's precepts; and from out Those scriven leaves of thine, renowned soul (Like bees that sip of all

in flowery wolds), We feed upon thy golden sayings all— Golden, and ever worthiest endless life. For soon as ever thy planning thought that sprang From god-like mind begins its loud proclaim Of nature's courses, terrors of the brain Asunder flee, the ramparts of the world Dispart away, and through the void entire I see the movements of the universe. Rises to vision the majesty of gods, And their abodes of everlasting calm Which neither wind may shake nor rain-cloud splash, Nor snow, congealed by sharp frosts, may harm With its white downfall: ever, unclouded sky O'er roofs, and laughs with far-diffused light. And nature gives to them their all, nor aught May ever pluck their peace of mind away. But nowhere to my vision rise no more The vaults of Acheron, though the broad earth Bars me no more from gazing down o'er all Which under our feet is going on below Along the void. O, here in these affairs Some new divine delight and trembling awe Takes hold through me, that thus by power of thine Nature, so plain and manifest at last, Hath been on every side laid bare to man! And since I've taught already of what sort The seeds of all things are, and how, distinct In divers forms, they flit of own accord, Stirred with a motion everlasting on, And in what mode things be from them create, Now, after such matters, should my verse, meseems, Make clear the nature of the mind and soul, And drive that dread of Acheron without, Headlong, which so confounds our human life Unto its deeps, pouring o'er all that is The black of death, nor leaves not anything To prosper—a liquid and unsullied joy. For as to what men sometimes will affirm: That more than Tartarus (the realm of death) They fear diseases and a life of shame, And know the substance of the soul is blood, Or rather wind (if haply thus their whim), And so need naught of this our science, then Thou well may'st note from what's to follow now That more for glory do they braggart forth Than for belief. For mark these very same: Exiles from country, fugitives afar From sight of men, with charges foul attaint, Abased with every wretchedness, they yet Live, and where'er the wretches come, they yet Make the ancestral sacrifices there, Butcher the black sheep, and to gods below Offer the honours, and in bitter

case Turn much more keenly to religion. Wherefore, it's surer testing of a man In doubtful perils—mark him as he is Amid adversities; for then alone Are the true voices conjured from his breast, The mask off-stripped, reality behind. And greed, again, and the blind lust of honours Which force poor wretches past the bounds of law, And, oft allies and ministers of crime, To push through nights and days with hugest toil To rise untrammelled to the peaks of power— These wounds of life in no mean part are kept Festering and open by this fright of death. For ever we see fierce Want and foul Disgrace Dislodged afar from secure life and sweet, Like huddling Shapes before the doors of death. And whilst, from these, men wish to scape afar, Driven by false terror, and afar remove, With civic blood a fortune they amass, They double their riches, greedy, heapers-up Of corpse on corpse they have a cruel laugh For the sad burial of a brother-born, And hatred and fear of tables of their kin. Likewise, through this same terror, envy oft Makes them to peak because before their eyes That man is lordly, that man gazed upon Who walks begirt with honour glorious, Whilst they in filth and darkness roll around; Some perish away for statues and a name, And oft to that degree, from fright of death, Will hate of living and beholding light Take hold on humankind that they inflict Their own destruction with a gloomy heart— Forgetful that this fear is font of cares, This fear the plague upon their sense of shame, And this that breaks the ties of comradry And oversets all reverence and faith, Mid direst slaughter. For long ere to-day Often were traitors to country and dear parents Through quest to shun the realms of Acheron. For just as children tremble and fear all In the viewless dark, so even we at times Dread in the light so many things that be No whit more fearsome than what children feign, Shuddering, will be upon them in the dark. This terror, then, this darkness of the mind, Not sunrise with its flaring spokes of light, Nor glittering arrows of morning sun disperse, But only nature's aspect and her law.

NATURE AND COMPOSITION OF THE MIND

First, then, I say, the mind which oft we call The intellect, wherein is seated life's Counsel and regimen, is part no less Of man than hand and foot and eyes are parts Of one whole breathing creature. [But some hold] That sense of mind is in no fixed part seated, But is of body some one vital state,— Named "harmony" by Greeks, because thereby We live with sense, though intellect be not In any part: as oft the body is said To have good health (when health, however, 's not One part of him who has it), so they place The sense of mind in no fixed part of man. Mightily, diversly, meseems they err. Often the body palpable and seen Sickens, while yet in some invisible part We feel a pleasure; oft the other way, A miserable in mind feels pleasure still Throughout his body—quite the same as when A foot may pain without a pain in head. Besides, when these our limbs are given o'er To gentle sleep and lies the burdened frame At random void of sense, a something else Is yet within us, which upon that time Bestirs itself in many a wise, receiving All motions of joy and phantom cares of heart. Now, for to see that in man's members dwells Also the soul, and body ne'er is wont To feel sensation by a "harmony" Take this in chief: the fact that life remains Oft in our limbs, when much of body's gone; Yet that same life, when particles of heat, Though few, have scattered been, and through the mouth Air has been given forth abroad, forthwith Forever deserts the veins, and leaves the bones. Thus mayst thou know that not all particles Perform like parts, nor in like manner all Are props of weal and safety: rather those— The seeds of wind and exhalations warm— Take care that in our members life remains. Therefore a vital heat and wind there is Within the very body, which at death Deserts our frames. And so, since nature of mind And even of soul is found to be, as 'twere, A part of man, give over "harmony"— Name to musicians brought from Helicon,— Unless themselves they filched it otherwise, To serve for what was lacking name till then. Whate'er it be, they're welcome to it—thou, Hearken my other maxims. Mind and soul, I say, are held conjoined one with other, And form one single nature of themselves; But chief and regnant through the frame entire Is still that counsel

which we call the mind, And that cleaves seated in the midmost breast. Here leap dismay and terror; round these haunts Be blandishments of joys; and therefore here The intellect, the mind. The rest of soul, Throughout the body scattered, but obeys— Moved by the nod and motion of the mind. This, for itself, sole through itself, hath thought; This for itself hath mirth, even when the thing That moves it, moves nor soul nor body at all. And as, when head or eye in us is smit By assailing pain, we are not tortured then Through all the body, so the mind alone Is sometimes smitten, or livens with a joy, Whilst yet the soul's remainder through the limbs And through the frame is stirred by nothing new. But when the mind is moved by shock more fierce, We mark the whole soul suffering all at once Along man's members: sweats and pallors spread Over the body, and the tongue is broken, And fails the voice away, and ring the ears, Mists blind the eyeballs, and the joints collapse,— Aye, men drop dead from terror of the mind. Hence, whoso will can readily remark That soul conjoined is with mind, and, when 'Tis strook by influence of the mind, forthwith In turn it hits and drives the body too. And this same argument establisheth That nature of mind and soul corporeal is: For when 'tis seen to drive the members on, To snatch from sleep the body, and to change The countenance, and the whole state of man To rule and turn,—what yet could never be Sans contact, and sans body contact fails— Must we not grant that mind and soul consist Of a corporeal nature?—And besides Thou markst that likewise with this body of ours Suffers the mind and with our body feels. If the dire speed of spear that cleaves the bones And bares the inner thews hits not the life, Yet follows a fainting and a foul collapse, And, on the ground, dazed tumult in the mind, And whiles a wavering will to rise afoot. So nature of mind must be corporeal, since From stroke and spear corporeal 'tis in throes. Now, of what body, what components formed Is this same mind I will go on to tell. First, I aver, 'tis superfine, composed Of tiniest particles—that such the fact Thou canst perceive, if thou attend, from this: Nothing is seen to happen with such speed As what the mind proposes and begins; Therefore the same bestirs itself more swiftly Than aught

whose nature's palpable to eyes. But what's so agile must of seeds consist Most round, most tiny, that they may be moved, When hit by impulse slight. So water moves, In waves along, at impulse just the least— Being create of little shapes that roll; But, contrariwise, the quality of honey More stable is, its liquids more inert, More tardy its flow; for all its stock of matter Cleaves more together, since, indeed, 'tis made Of atoms not so smooth, so fine, and round. For the light breeze that hovers yet can blow High heaps of poppy-seed away for thee Downward from off the top; but, contrariwise, A pile of stones or spiny ears of wheat It can't at all. Thus, in so far as bodies Are small and smooth, is their mobility; But, contrariwise, the heavier and more rough, The more immovable they prove. Now, then, Since nature of mind is movable so much, Consist it must of seeds exceeding small And smooth and round. Which fact once known to thee, Good friend, will serve thee opportune in else. This also shows the nature of the same, How nice its texture, in how small a space 'Twould go, if once compacted as a pellet: When death's unvexed repose gets hold on man And mind and soul retire, thou markest there From the whole body nothing ta'en in form, Nothing in weight. Death grants ye everything, But vital sense and exhalation hot. Thus soul entire must be of smallmost seeds, Twined through the veins, the vitals, and the thews, Seeing that, when 'tis from whole body gone, The outward figuration of the limbs Is unimpaired and weight fails not a whit. Just so, when vanished the bouquet of wine, Or when an unguent's perfume delicate Into the winds away departs, or when From any body savour's gone, yet still The thing itself seems minished naught to eyes, Thereby, nor aught abstracted from its weight— No marvel, because seeds many and minute Produce the savours and the redolence In the whole body of the things. And so, Again, again, nature of mind and soul 'Tis thine to know created is of seeds The tiniest ever, since at flying-forth It beareth nothing of the weight away. Yet fancy not its nature simple so. For an impalpable aura, mixed with heat, Deserts the dying, and heat draws off the air; And heat there's none, unless commixed with air: For, since the nature of all heat is rare, Athrough it

many seeds of air must move. Thus nature of mind is triple; yet those all Suffice not for creating sense—since mind Accepteth not that aught of these can cause Sense-bearing motions, and much less the thoughts A man revolves in mind. So unto these Must added be a somewhat, and a fourth; That somewhat's altogether void of name; Than which existeth naught more mobile, naught More an impalpable, of elements More small and smooth and round. That first transmits Sense-bearing motions through the frame, for that Is roused the first, composed of little shapes; Thence heat and viewless force of wind take up The motions, and thence air, and thence all things Are put in motion; the blood is strook, and then The vitals all begin to feel, and last To bones and marrow the sensation comes— Pleasure or torment. Nor will pain for naught Enter so far, nor a sharp ill seep through, But all things be perturbed to that degree That room for life will fail, and parts of soul Will scatter through the body's every pore. Yet as a rule, almost upon the skin These motion aIl are stopped, and this is why We have the power to retain our life. Now in my eagerness to tell thee how They are commixed, through what unions fit They function so, my country's pauper-speech Constrains me sadly. As I can, however, I'll touch some points and pass. In such a wise Course these primordials 'mongst one another With inter-motions that no one can be From other sundered, nor its agency Perform, if once divided by a space; Like many powers in one body they work. As in the flesh of any creature still Is odour and savour and a certain warmth, And yet from all of these one bulk of body Is made complete, so, viewless force of wind And warmth and air, commingled, do create One nature, by that mobile energy Assisted which from out itself to them Imparts initial motion, whereby first Sense-bearing motion along the vitals springs. For lurks this essence far and deep and under, Nor in our body is aught more shut from view, And 'tis the very soul of all the soul. And as within our members and whole frame The energy of mind and power of soul Is mixed and latent, since create it is Of bodies small and few, so lurks this fourth, This essence void of name, composed of small, And seems the very soul of all the soul,

And holds dominion o'er the body all. And by like reason wind and air and heat Must function so, commingled through the frame, And now the one subside and now another In interchange of dominance, that thus From all of them one nature be produced, Lest heat and wind apart, and air apart, Make sense to perish, by disseverment. There is indeed in mind that heat it gets When seething in rage, and flashes from the eyes More swiftly fire; there is, again, that wind, Much, and so cold, companion of all dread, Which rouses the shudder in the shaken frame; There is no less that state of air composed, Making the tranquil breast, the serene face. But more of hot have they whose restive hearts, Whose minds of passion quickly seethe in rage— Of which kind chief are fierce abounding lions, Who often with roaring burst the breast o'erwrought, Unable to hold the surging wrath within; But the cold mind of stags has more of wind, And speedier through their inwards rouses up The icy currents which make their members quake. But more the oxen live by tranquil air, Nor e'er doth smoky torch of wrath applied, O'erspreading with shadows of a darkling murk, Rouse them too far; nor will they stiffen stark, Pierced through by icy javelins of fear; But have their place half-way between the two— Stags and fierce lions. Thus the race of men: Though training make them equally refined, It leaves those pristine vestiges behind Of each mind's nature. Nor may we suppose Evil can e'er be rooted up so far That one man's not more given to fits of wrath, Another's not more quickly touched by fear, A third not more long-suffering than he should. And needs must differ in many things besides The varied natures and resulting habits Of humankind—of which not now can I Expound the hidden causes, nor find names Enough for all the divers shapes of those Primordials whence this variation springs. But this meseems I'm able to declare: Those vestiges of natures left behind Which reason cannot quite expel from us Are still so slight that naught prevents a man From living a life even worthy of the gods. So then this soul is kept by all the body, Itself the body's guard, and source of weal: For they with common roots cleave each to each, Nor can be torn asunder without death. Not easy 'tis from

lumps of frankincense To tear their fragrance forth, without its nature Perishing likewise: so, not easy 'tis From all the body nature of mind and soul To draw away, without the whole dissolved. With seeds so intertwined even from birth, They're dowered conjointly with a partner-life; No energy of body or mind, apart, Each of itself without the other's power, Can have sensation; but our sense, enkindled Along the vitals, to flame is blown by both With mutual motions. Besides the body alone Is nor begot nor grows, nor after death Seen to endure. For not as water at times Gives off the alien heat, nor is thereby Itself destroyed, but unimpaired remains— Not thus, I say, can the deserted frame Bear the dissevering of its joined soul, But, rent and ruined, moulders all away. Thus the joint contact of the body and soul Learns from their earliest age the vital motions, Even when still buried in the mother's womb; So no dissevering can hap to them, Without their bane and ill. And thence mayst see That, as conjoined is their source of weal, Conjoined also must their nature be. If one, moreover, denies that body feel, And holds that soul, through all the body mixed, Takes on this motion which we title "sense," He battles in vain indubitable facts: For who'll explain what body's feeling is, Except by what the public fact itself Has given and taught us?"But when soul is parted, Body's without all sense." True!—loses what Was even in its life-time not its own; And much beside it loses, when soul's driven Forth from that life-time. Or, to say that eyes Themselves can see no thing, but through the same The mind looks forth, as out of opened doors, Is—a hard saying; since the feel in eyes Says the reverse. For this itself draws on And forces into the pupils of our eyes Our consciousness. And note the case when often We lack the power to see refulgent things, Because our eyes are hampered by their light— With a mere doorway this would happen not; For, since it is our very selves that see, No open portals undertake the toil. Besides, if eyes of ours but act as doors, Methinks that, were our sight removed, the mind Ought then still better to behold a thing— When even the door-posts have been cleared away. Herein in these affairs nowise take up What honoured sage, Democritus, lays

down— That proposition, that primordials Of body and mind, each super-posed on each, Vary alternately and interweave The fabric of our members. For not only Are the soul-elements smaller far than those Which this our body and inward parts compose, But also are they in their number less, And scattered sparsely through our frame. And thus This canst thou guarantee: soul's primal germs Maintain between them intervals as large At least as are the smallest bodies, which, When thrown against us, in our body rouse Sense-bearing motions. Hence it comes that we Sometimes don't feel alighting on our frames The clinging dust, or chalk that settles soft; Nor mists of night, nor spider's gossamer We feel against us, when, upon our road, Its net entangles us, nor on our head The dropping of its withered garmentings; Nor bird-feathers, nor vegetable down, Flying about, so light they barely fall; Nor feel the steps of every crawling thing, Nor each of all those footprints on our skin Of midges and the like. To that degree Must many primal germs be stirred in us Ere once the seeds of soul that through our frame Are intermingled 'gin to feel that those Primordials of the body have been strook, And ere, in pounding with such gaps between, They clash, combine and leap apart in turn. But mind is more the keeper of the gates, Hath more dominion over life than soul. For without intellect and mind there's not One part of soul can rest within our frame Least part of time; companioning, it goes With mind into the winds away, and leaves The icy members in the cold of death. But he whose mind and intellect abide Himself abides in life. However much The trunk be mangled, with the limbs lopped off, The soul withdrawn and taken from the limbs, Still lives the trunk and draws the vital air. Even when deprived of all but all the soul, Yet will it linger on and cleave to life,— Just as the power of vision still is strong, If but the pupil shall abide unharmed, Even when the eye around it's sorely rent— Provided only thou destroyest not Wholly the ball, but, cutting round the pupil, Leavest that pupil by itself behind— For more would ruin sight. But if that centre, That tiny part of eye, be eaten through, Forthwith the vision fails and darkness comes, Though in all else the unblemished

ball be clear. 'Tis by like compact that the soul and mind Are each to other bound forevermore.

THE SOUL IS MORTAL

Now come: that thou mayst able be to know That minds and the light souls of all that live Have mortal birth and death, I will go on Verses to build meet for thy rule of life, Sought after long, discovered with sweet toil. But under one name I'd have thee yoke them both; And when, for instance, I shall speak of soul, Teaching the same to be but mortal, think Thereby I'm speaking also of the mind— Since both are one, a substance inter-joined. First, then, since I have taught how soul exists A subtle fabric, of particles minute, Made up from atoms smaller much than those Of water's liquid damp, or fog, or smoke, So in mobility it far excels, More prone to move, though strook by lighter cause Even moved by images of smoke or fog— As where we view, when in our sleeps we're lulled, The altars exhaling steam and smoke aloft— For, beyond doubt, these apparitions come To us from outward. Now, then, since thou seest, Their liquids depart, their waters flow away, When jars are shivered, and since fog and smoke Depart into the winds away, believe The soul no less is shed abroad and dies More quickly far, more quickly is dissolved Back to its primal bodies, when withdrawn From out man's members it has gone away. For, sure, if body (container of the same Like as a jar), when shivered from some cause, And rarefied by loss of blood from veins, Cannot for longer hold the soul, how then Thinkst thou it can be held by any air— A stuff much rarer than our bodies be? Besides we feel that mind to being comes Along with body, with body grows and ages. For just as children totter round about With frames infirm and tender, so there follows A weakling wisdom in their minds; and then, Where years have ripened into robust powers, Counsel is also greater, more increased The power of mind; thereafter, where already The body's shattered by master-powers of eld, And fallen

the frame with its enfeebled powers, Thought hobbles, tongue wanders, and the mind gives way; All fails, all's lacking at the selfsame time. Therefore it suits that even the soul's dissolved, Like smoke, into the lofty winds of air; Since we behold the same to being come Along with body and grow, and, as I've taught, Crumble and crack, therewith outworn by eld. Then, too, we see, that, just as body takes Monstrous diseases and the dreadful pain, So mind its bitter cares, the grief, the fear; Wherefore it tallies that the mind no less Partaker is of death; for pain and disease Are both artificers of death,—as well We've learned by the passing of many a man ere now. Nay, too, in diseases of body, often the mind Wanders afield; for 'tis beside itself, And crazed it speaks, or many a time it sinks, With eyelids closing and a drooping nod, In heavy drowse, on to eternal sleep; From whence nor hears it any voices more, Nor able is to know the faces here Of those about him standing with wet cheeks Who vainly call him back to light and life. Wherefore mind too, confess we must, dissolves, Seeing, indeed, contagions of disease Enter into the same. Again, O why, When the strong wine has entered into man, And its diffused fire gone round the veins, Why follows then a heaviness of limbs, A tangle of the legs as round he reels, A stuttering tongue, an intellect besoaked, Eyes all aswim, and hiccups, shouts, and brawls, And whatso else is of that ilk?—Why this?— If not that violent and impetuous wine Is wont to confound the soul within the body? But whatso can confounded be and balked, Gives proof, that if a hardier cause got in, 'Twould hap that it would perish then, bereaved Of any life thereafter. And, moreover, Often will some one in a sudden fit, As if by stroke of lightning, tumble down Before our eyes, and sputter foam, and grunt, Blither, and twist about with sinews taut, Gasp up in starts, and weary out his limbs With tossing round. No marvel, since distract Through frame by violence of disease.

Confounds, he foams, as if to vomit soul, As on the salt sea boil the billows round Under the master might of winds. And now A groan's forced out, because his limbs are griped, But, in the main, because the seeds of voice Are driven forth and carried

in a mass Outwards by mouth, where they are wont to go, And have a builded highway. He becomes Mere fool, since energy of mind and soul Confounded is, and, as I've shown, to-riven, Asunder thrown, and torn to pieces all By the same venom. But, again, where cause Of that disease has faced about, and back Retreats sharp poison of corrupted frame Into its shadowy lairs, the man at first Arises reeling, and gradually comes back To all his senses and recovers soul. Thus, since within the body itself of man The mind and soul are by such great diseases Shaken, so miserably in labour distraught, Why, then, believe that in the open air, Without a body, they can pass their life, Immortal, battling with the master winds? And, since we mark the mind itself is cured, Like the sick body, and restored can be By medicine, this is forewarning too That mortal lives the mind. For proper it is That whosoe'er begins and undertakes To alter the mind, or meditates to change Any another nature soever, should add New parts, or readjust the order given, Or from the sum remove at least a bit. But what's immortal willeth for itself Its parts be nor increased, nor rearranged, Nor any bit soever flow away: For change of anything from out its bounds Means instant death of that which was before. Ergo, the mind, whether in sickness fallen, Or by the medicine restored, gives signs, As I have taught, of its mortality. So surely will a fact of truth make head 'Gainst errors' theories all, and so shut off All refuge from the adversary, and rout Error by two-edged confutation. And since the mind is of a man one part, Which in one fixed place remains, like ears, And eyes, and every sense which pilots life; And just as hand, or eye, or nose, apart, Severed from us, can neither feel nor be, But in the least of time is left to rot, Thus mind alone can never be, without The body and the man himself, which seems, As 'twere the vessel of the same—or aught Whate'er thou'lt feign as yet more closely joined: Since body cleaves to mind by surest bonds. Again, the body's and the mind's live powers Only in union prosper and enjoy; For neither can nature of mind, alone of self Sans body, give the vital motions forth; Nor, then, can body, wanting soul, endure And use the senses. Verily, as the eye, Alone,

up-rended from its roots, apart From all the body, can peer about at naught, So soul and mind it seems are nothing able, When by themselves. No marvel, because, commixed Through veins and inwards, and through bones and thews, Their elements primordial are confined By all the body, and own no power free To bound around through interspaces big, Thus, shut within these confines, they take on Motions of sense, which, after death, thrown out Beyond the body to the winds of air, Take on they cannot—and on this account, Because no more in such a way confined. For air will be a body, be alive, If in that air the soul can keep itself, And in that air enclose those motions all Which in the thews and in the body itself A while ago 'twas making. So for this, Again, again, I say confess we must, That, when the body's wrappings are unwound, And when the vital breath is forced without, The soul, the senses of the mind dissolve,— Since for the twain the cause and ground of life Is in the fact of their conjoined estate. Once more, since body's unable to sustain Division from the soul, without decay And obscene stench, how canst thou doubt but that The soul, uprisen from the body's deeps, Has filtered away, wide-drifted like a smoke, Or that the changed body crumbling fell With ruin so entire, because, indeed, Its deep foundations have been moved from place, The soul out-filtering even through the frame, And through the body's every winding way And orifice? And so by many means Thou'rt free to learn that nature of the soul Hath passed in fragments out along the frame, And that 'twas shivered in the very body Ere ever it slipped abroad and swam away Into the winds of air. For never a man Dying appears to feel the soul go forth As one sure whole from all his body at once, Nor first come up the throat and into mouth; But feels it failing in a certain spot, Even as he knows the senses too dissolve Each in its own location in the frame. But were this mind of ours immortal mind, Dying 'twould scarce bewail a dissolution, But rather the going, the leaving of its coat, Like to a snake. Wherefore, when once the body Hath passed away, admit we must that soul, Shivered in all that body, perished too. Nay, even when moving in the bounds of life, Often the soul, now tottering from some cause,

Craves to go out, and from the frame entire Loosened to be; the countenance becomes Flaccid, as if the supreme hour were there; And flabbily collapse the members all Against the bloodless trunk—the kind of case We see when we remark in common phrase, "That man's quite gone," or "fainted dead away"; And where there's now a bustle of alarm, And all are eager to get some hold upon The man's last link of life. For then the mind And all the power of soul are shook so sore, And these so totter along with all the frame, That any cause a little stronger might Dissolve them altogether.—Why, then, doubt That soul, when once without the body thrust, There in the open, an enfeebled thing, Its wrappings stripped away, cannot endure Not only through no everlasting age, But even, indeed, through not the least of time? Then, too, why never is the intellect, The counselling mind, begotten in the head, The feet, the hands, instead of cleaving still To one sole seat, to one fixed haunt, the breast, If not that fixed places be assigned For each thing's birth, where each, when 'tis create, Is able to endure, and that our frames Have such complex adjustments that no shift In order of our members may appear? To that degree effect succeeds to cause, Nor is the flame once wont to be create In flowing streams, nor cold begot in fire. Besides, if nature of soul immortal be, And able to feel, when from our frame disjoined, The same, I fancy, must be thought to be Endowed with senses five,—nor is there way But this whereby to image to ourselves How under-souls may roam in Acheron. Thus painters and the elder race of bards Have pictured souls with senses so endowed. But neither eyes, nor nose, nor hand, alone Apart from body can exist for soul, Nor tongue nor ears apart. And hence indeed Alone by self they can nor feel nor be. And since we mark the vital sense to be In the whole body, all one living thing, If of a sudden a force with rapid stroke Should slice it down the middle and cleave in twain, Beyond a doubt likewise the soul itself, Divided, dissevered, asunder will be flung Along with body. But what severed is And into sundry parts divides, indeed Admits it owns no everlasting nature. We hear how chariots of war, areek With hurly slaughter, lop with flashing scythes The limbs away so suddenly

that there, Fallen from the trunk, they quiver on the earth, The while the mind and powers of the man Can feel no pain, for swiftness of his hurt, And sheer abandon in the zest of battle: With the remainder of his frame he seeks Anew the battle and the slaughter, nor marks How the swift wheels and scythes of ravin have dragged Off with the horses his left arm and shield; Nor other how his right has dropped away, Mounting again and on. A third attempts With leg dismembered to arise and stand, Whilst, on the ground hard by, the dying foot Twitches its spreading toes. And even the head, When from the warm and living trunk lopped off, Keeps on the ground the vital countenance And open eyes, until 't has rendered up All remnants of the soul. Nay, once again: If, when a serpent's darting forth its tongue, And lashing its tail, thou gettest chance to hew With axe its length of trunk to many parts, Thou'lt see each severed fragment writhing round With its fresh wound, and spattering up the sod, And there the fore-part seeking with the jaws After the hinder, with bite to stop the pain. So shall we say that these be souls entire In all those fractions?—but from that 'twould follow One creature'd have in body many souls. Therefore, the soul, which was indeed but one, Has been divided with the body too: Each is but mortal, since alike is each Hewn into many parts. Again, how often We view our fellow going by degrees, And losing limb by limb the vital sense; First nails and fingers of the feet turn blue, Next die the feet and legs, then o'er the rest Slow crawl the certain footsteps of cold death. And since this nature of the soul is torn, Nor mounts away, as at one time, entire, We needs must hold it mortal. But perchance If thou supposest that the soul itself Can inward draw along the frame, and bring Its parts together to one place, and so From all the members draw the sense away, Why, then, that place in which such stock of soul Collected is, should greater seem in sense. But since such place is nowhere, for a fact, As said before, 'tis rent and scattered forth, And so goes under. Or again, if now I please to grant the false, and say that soul Can thus be lumped within the frames of those Who leave the sunshine, dying bit by bit, Still must the soul as mortal be confessed; Nor aught it matters whether to wrack it go,

Dispersed in the winds, or, gathered in a mass From all its parts, sink down to brutish death, Since more and more in every region sense Fails the whole man, and less and less of life In every region lingers. And besides, If soul immortal is, and winds its way Into the body at the birth of man, Why can we not remember something, then, Of life-time spent before? why keep we not Some footprints of the things we did of, old? But if so changed hath been the power of mind, That every recollection of things done Is fallen away, at no o'erlong remove Is that, I trow, from what we mean by death. Wherefore 'tis sure that what hath been before Hath died, and what now is is now create. Moreover, if after the body hath been built Our mind's live powers are wont to be put in, Just at the moment that we come to birth, And cross the sills of life, 'twould scarcely fit For them to live as if they seemed to grow Along with limbs and frame, even in the blood, But rather as in a cavern all alone. (Yet all the body duly throngs with sense.) But public fact declares against all this: For soul is so entwined through the veins, The flesh, the thews, the bones, that even the teeth Share in sensation, as proven by dull ache, By twinge from icy water, or grating crunch Upon a stone that got in mouth with bread. Wherefore, again, again, souls must be thought Nor void of birth, nor free from law of death; Nor, if, from outward, in they wound their way, Could they be thought as able so to cleave To these our frames, nor, since so interwove, Appears it that they're able to go forth Unhurt and whole and loose themselves unscathed From all the thews, articulations, bones. But, if perchance thou thinkest that the soul, From outward winding in its way, is wont To seep and soak along these members ours, Then all the more 'twill perish, being thus With body fused—for what will seep and soak Will be dissolved and will therefore die. For just as food, dispersed through all the pores Of body, and passed through limbs and all the frame, Perishes, supplying from itself the stuff For other nature, thus the soul and mind, Though whole and new into a body going, Are yet, by seeping in, dissolved away, Whilst, as through pores, to all the frame there pass Those particles from which created is This nature of mind, now ruler of our

body, Born from that soul which perished, when divided Along the frame. Wherefore it seems that soul Hath both a natal and funeral hour. Besides are seeds of soul there left behind In the breathless body, or not? If there they are, It cannot justly be immortal deemed, Since, shorn of some parts lost, 'thas gone away: But if, borne off with members uncorrupt, 'Thas fled so absolutely all away It leaves not one remainder of itself Behind in body, whence do cadavers, then, From out their putrid flesh exhale the worms, And whence does such a mass of living things, Boneless and bloodless, o'er the bloated frame Bubble and swarm? But if perchance thou thinkest That souls from outward into worms can wind, And each into a separate body come, And reckonest not why many thousand souls Collect where only one has gone away, Here is a point, in sooth, that seems to need Inquiry and a putting to the test: Whether the souls go on a hunt for seeds Of worms wherewith to build their dwelling places, Or enter bodies ready-made, as 'twere. But why themselves they thus should do and toil 'Tis hard to say, since, being free of body, They flit around, harassed by no disease, Nor cold nor famine; for the body labours By more of kinship to these flaws of life, And mind by contact with that body suffers So many ills. But grant it be for them However useful to construct a body To which to enter in, 'tis plain they can't. Then, souls for self no frames nor bodies make, Nor is there how they once might enter in To bodies ready-made—for they cannot Be nicely interwoven with the same, And there'll be formed no interplay of sense Common to each. Again, why is't there goes Impetuous rage with lion's breed morose, And cunning with foxes, and to deer why given The ancestral fear and tendency to flee, And why in short do all the rest of traits Engender from the very start of life In the members and mentality, if not Because one certain power of mind that came From its own seed and breed waxes the same Along with all the body? But were mind Immortal, were it wont to change its bodies, How topsy-turvy would earth's creatures act! The Hyrcan hound would flee the onset oft Of antlered stag, the scurrying hawk would quake Along the winds of air at the coming dove, And men

would dote, and savage beasts be wise; For false the reasoning of those that say Immortal mind is changed by change of body— For what is changed dissolves, and therefore dies. For parts are re-disposed and leave their order; Wherefore they must be also capable Of dissolution through the frame at last, That they along with body perish all. But should some say that always souls of men Go into human bodies, I will ask: How can a wise become a dullard soul? And why is never a child's a prudent soul? And the mare's filly why not trained so well As sturdy strength of steed? We may be sure They'll take their refuge in the thought that mind Becomes a weakling in a weakling frame. Yet be this so, 'tis needful to confess The soul but mortal, since, so altered now Throughout the frame, it loses the life and sense It had before. Or how can mind wax strong Coequally with body and attain The craved flower of life, unless it be The body's colleague in its origins? Or what's the purport of its going forth From aged limbs?—fears it, perhaps, to stay, Pent in a crumbled body? Or lest its house, Outworn by venerable length of days, May topple down upon it? But indeed For an immortal perils are there none. Again, at parturitions of the wild And at the rites of Love, that souls should stand Ready hard by seems ludicrous enough— Immortals waiting for their mortal limbs In numbers innumerable, contending madly Which shall be first and chief to enter in!— Unless perchance among the souls there be Such treaties stablished that the first to come Flying along, shall enter in the first, And that they make no rivalries of strength! Again, in ether can't exist a tree, Nor clouds in ocean deeps, nor in the fields Can fishes live, nor blood in timber be, Nor sap in boulders: fixed and arranged Where everything may grow and have its place. Thus nature of mind cannot arise alone Without the body, nor exist afar From thews and blood. But if 'twere possible, Much rather might this very power of mind Be in the head, the shoulders or the heels, And, born in any part soever, yet In the same man, in the same vessel abide. But since within this body even of ours Stands fixed and appears arranged sure Where soul and mind can each exist and grow, Deny we must the more that they can have

Duration and birth, wholly outside the frame. For, verily, the mortal to conjoin With the eternal, and to feign they feel Together, and can function each with each, Is but to dote: for what can be conceived Of more unlike, discrepant, ill-assorted, Than something mortal in a union joined With an immortal and a secular To bear the outrageous tempests? Then, again, Whatever abides eternal must indeed Either repel all strokes, because 'tis made Of solid body, and permit no entrance Of aught with power to sunder from within The parts compact—as are those seeds of stuff Whose nature we've exhibited before; Or else be able to endure through time For this: because they are from blows exempt, As is the void, the which abides untouched, Unsmit by any stroke; or else because There is no room around, whereto things can, As 'twere, depart in dissolution all,— Even as the sum of sums eternal is, Without or place beyond whereto things may Asunder fly, or bodies which can smite, And thus dissolve them by the blows of might. But if perchance the soul's to be adjudged Immortal, mainly on ground 'tis kept secure In vital forces—either because there come Never at all things hostile to its weal, Or else because what come somehow retire, Repelled or ere we feel the harm they work,

For, lo, besides that, when the frame's diseased, Soul sickens too, there cometh, many a time, That which torments it with the things to be, Keeps it in dread, and wearies it with cares; And even when evil acts are of the past, Still gnaw the old transgressions bitterly. Add, too, that frenzy, peculiar to the mind, And that oblivion of the things that were; Add its submergence in the murky waves Of drowse and torpor.

FOLLY OF THE FEAR OF DEATH

Therefore death to us Is nothing, nor concerns us in the least, Since nature of mind is mortal evermore. And just as in the ages gone before We felt no touch of ill, when all sides round To battle came the Carthaginian host, And the times, shaken by

tumultuous war, Under the aery coasts of arching heaven Shuddered and trembled, and all humankind Doubted to which the empery should fall By land and sea, thus when we are no more, When comes that sundering of our body and soul Through which we're fashioned to a single state, Verily naught to us, us then no more, Can come to pass, naught move our senses then— No, not if earth confounded were with sea, And sea with heaven. But if indeed do feel The nature of mind and energy of soul, After their severance from this body of ours, Yet nothing 'tis to us who in the bonds And wedlock of the soul and body live, Through which we're fashioned to a single state. And, even if time collected after death The matter of our frames and set it all Again in place as now, and if again To us the light of life were given, O yet That process too would not concern us aught, When once the self-succession of our sense Has been asunder broken. And now and here, Little enough we're busied with the selves We were aforetime, nor, concerning them, Suffer a sore distress. For shouldst thou gaze Backwards across all yesterdays of time The immeasurable, thinking how manifold The motions of matter are, then couldst thou well Credit this too: often these very seeds (From which we are to-day) of old were set In the same order as they are to-day— Yet this we can't to consciousness recall Through the remembering mind. For there hath been An interposed pause of life, and wide Have all the motions wandered everywhere From these our senses. For if woe and ail Perchance are toward, then the man to whom The bane can happen must himself be there At that same time. But death precludeth this, Forbidding life to him on whom might crowd Such irk and care; and granted 'tis to know: Nothing for us there is to dread in death, No wretchedness for him who is no more, The same estate as if ne'er born before, When death immortal hath ta'en the mortal life. Hence, where thou seest a man to grieve because When dead he rots with body laid away, Or perishes in flames or jaws of beasts, Know well: he rings not true, and that beneath Still works an unseen sting upon his heart, However he deny that he believes. His shall be aught of feeling after death. For he, I fancy, grants not what he says, Nor what

that presupposes, and he fails To pluck himself with all his roots from life And cast that self away, quite unawares Feigning that some remainder's left behind. For when in life one pictures to oneself His body dead by beasts and vultures torn, He pities his state, dividing not himself Therefrom, removing not the self enough From the body flung away, imagining Himself that body, and projecting there His own sense, as he stands beside it: hence He grieves that he is mortal born, nor marks That in true death there is no second self Alive and able to sorrow for self destroyed, Or stand lamenting that the self lies there Mangled or burning. For if it an evil is Dead to be jerked about by jaw and fang Of the wild brutes, I see not why 'twere not Bitter to lie on fires and roast in flames, Or suffocate in honey, and, reclined On the smooth oblong of an icy slab, Grow stiff in cold, or sink with load of earth Down-crushing from above. "Thee now no more The joyful house and best of wives shall welcome, Nor little sons run up to snatch their kisses And touch with silent happiness thy heart. Thou shalt not speed in undertakings more, Nor be the warder of thine own no more. Poor wretch," they say, "one hostile hour hath ta'en Wretchedly from thee all life's many guerdons," But add not, "yet no longer unto thee Remains a remnant of desire for them" If this they only well perceived with mind And followed up with maxims, they would free Their state of man from anguish and from fear. "O even as here thou art, aslumber in death, So shalt thou slumber down the rest of time, Released from every harrying pang. But we, We have bewept thee with insatiate woe, Standing beside whilst on the awful pyre Thou wert made ashes; and no day shall take For us the eternal sorrow from the breast." But ask the mourner what's the bitterness That man should waste in an eternal grief, If, after all, the thing's but sleep and rest? For when the soul and frame together are sunk In slumber, no one then demands his self Or being. Well, this sleep may be forever, Without desire of any selfhood more, For all it matters unto us asleep. Yet not at all do those primordial germs Roam round our members, at that time, afar From their own motions that produce our senses— Since, when he's startled from his

sleep, a man Collects his senses. Death is, then, to us Much less—if there can be a less than that Which is itself a nothing: for there comes Hard upon death a scattering more great Of the throng of matter, and no man wakes up On whom once falls the icy pause of life. This too, O often from the soul men say, Along their couches holding of the cups, With faces shaded by fresh wreaths awry: "Brief is this fruit of joy to paltry man, Soon, soon departed, and thereafter, no, It may not be recalled."—As if, forsooth, It were their prime of evils in great death To parch, poor tongues, with thirst and arid drought, Or chafe for any lack. Once more, if Nature Should of a sudden send a voice abroad, And her own self inveigh against us so: "Mortal, what hast thou of such grave concern That thou indulgest in too sickly plaints? Why this bemoaning and beweeping death? For if thy life aforetime and behind To thee was grateful, and not all thy good Was heaped as in sieve to flow away And perish unavailingly, why not, Even like a banqueter, depart the halls, Laden with life? why not with mind content Take now, thou fool, thy unafflicted rest? But if whatever thou enjoyed hath been Lavished and lost, and life is now offence, Why seekest more to add—which in its turn Will perish foully and fall out in vain? O why not rather make an end of life, Of labour? For all I may devise or find To pleasure thee is nothing: all things are The same forever. Though not yet thy body Wrinkles with years, nor yet the frame exhausts Outworn, still things abide the same, even if Thou goest on to conquer all of time With length of days, yea, if thou never diest"— What were our answer, but that Nature here Urges just suit and in her words lays down True cause of action? Yet should one complain, Riper in years and elder, and lament, Poor devil, his death more sorely than is fit, Then would she not, with greater right, on him Cry out, inveighing with a voice more shrill: "Off with thy tears, and choke thy whines, buffoon! Thou wrinklest—after thou hast had the sum Of the guerdons of life; yet, since thou cravest ever What's not at hand, contemning present good, That life has slipped away, unperfected And unavailing unto thee. And now, Or ere thou guessed it, death beside thy head Stands—and before thou canst be

going home Sated and laden with the goodly feast. But now yield all that's alien to thine age,— Up, with good grace! make room for sons: thou must." Justly, I fancy, would she reason thus, Justly inveigh and gird: since ever the old Outcrowded by the new gives way, and ever The one thing from the others is repaired. Nor no man is consigned to the abyss Of Tartarus, the black. For stuff must be, That thus the after-generations grow,— Though these, their life completed, follow thee; And thus like thee are generations all— Already fallen, or some time to fall. So one thing from another rises ever; And in fee-simple life is given to none, But unto all mere usufruct. Look back: Nothing to us was all fore-passed eld Of time the eternal, ere we had a birth. And Nature holds this like a mirror up Of time-to-be when we are dead and gone. And what is there so horrible appears? Now what is there so sad about it all? Is't not serener far than any sleep? And, verily, those tortures said to be In Acheron, the deep, they all are ours Here in this life. No Tantalus, benumbed With baseless terror, as the fables tell, Fears the huge boulder hanging in the air: But, rather, in life an empty dread of Gods Urges mortality, and each one fears Such fall of fortune as may chance to him. Nor eat the vultures into Tityus Prostrate in Acheron, nor can they find, Forsooth, throughout eternal ages, aught To pry around for in that mighty breast. However hugely he extend his bulk— Who hath for outspread limbs not acres nine, But the whole earth—he shall not able be To bear eternal pain nor furnish food From his own frame forever. But for us A Tityus is he whom vultures rend Prostrate in love, whom anxious anguish eats, Whom troubles of any unappeased desires Asunder rip. We have before our eyes Here in this life also a Sisyphus In him who seeketh of the populace The rods, the axes fell, and evermore Retires a beaten and a gloomy man. For to seek after power—an empty name, Nor given at all—and ever in the search To endure a world of toil, O this it is To shove with shoulder up the hill a stone Which yet comes rolling back from off the top, And headlong makes for levels of the plain. Then to be always feeding an ingrate mind, Filling with good things, satisfying never— As do the seasons of the

year for us, When they return and bring their progenies And varied charms, and we are never filled With the fruits of life—O this, I fancy, 'tis To pour, like those young virgins in the tale, Waters into a sieve, unfilled forever.

Cerberus and Furies, and that Lack of Light

Tartarus, out-belching from his mouth the surge Of horrible heat—the which are nowhere, nor Indeed can be: but in this life is fear Of retributions just and expiations For evil acts: the dungeon and the leap From that dread rock of infamy, the stripes, The executioners, the oaken rack, The iron plates, bitumen, and the torch. And even though these are absent, yet the mind, With a fore-fearing conscience, plies its goads And burns beneath the lash, nor sees meanwhile What terminus of ills, what end of pine Can ever be, and feareth lest the same But grow more heavy after death. Of truth, The life of fools is Acheron on earth. This also to thy very self sometimes Repeat thou mayst: "Lo, even good Ancus left The sunshine with his eyes, in divers things A better man than thou, O worthless hind; And many other kings and lords of rule Thereafter have gone under, once who swayed O'er mighty peoples. And he also, he— Who whilom paved a highway down the sea, And gave his legionaries thoroughfare Along the deep, and taught them how to cross The pools of brine afoot, and did contemn, Trampling upon it with his cavalry, The bellowings of ocean—poured his soul From dying body, as his light was ta'en. And Scipio's son, the thunderbolt of war, Horror of Carthage, gave his bones to earth, Like to the lowliest villein in the house. Add finders-out of sciences and arts; Add comrades of the Heliconian dames, Among whom Homer, sceptered o'er them all, Now lies in slumber sunken with the rest. Then, too, Democritus, when ripened eld Admonished him his memory waned away, Of own accord offered his head to death. Even Epicurus went, his light of life Run out, the man in genius who o'er-topped The human race, extinguishing all others, As sun, in ether arisen, all the stars. Wilt thou, then, dally, thou complain to go?— For whom already life's as good as dead, Whilst yet thou livest and lookest?—who in sleep Wastest thy life—time's major part, and

snorest Even when awake, and ceasest not to see The stuff of dreams, and bearest a mind beset By baseless terror, nor discoverest oft What's wrong with thee, when, like a sotted wretch, Thou'rt jostled along by many crowding cares, And wanderest reeling round, with mind aswim." If men, in that same way as on the mind They feel the load that wearies with its weight, Could also know the causes whence it comes, And why so great the heap of ill on heart, O not in this sort would they live their life, As now so much we see them, knowing not What 'tis they want, and seeking ever and ever A change of place, as if to drop the burden. The man who sickens of his home goes out, Forth from his splendid halls, and straight—returns, Feeling i'faith no better off abroad. He races, driving his Gallic ponies along, Down to his villa, madly,—as in haste To hurry help to a house afire.—At once He yawns, as soon as foot has touched the threshold, Or drowsily goes off in sleep and seeks Forgetfulness, or maybe bustles about And makes for town again. In such a way Each human flees himself—a self in sooth, As happens, he by no means can escape; And willy-nilly he cleaves to it and loathes, Sick, sick, and guessing not the cause of ail. Yet should he see but that, O chiefly then, Leaving all else, he'd study to divine The nature of things, since here is in debate Eternal time and not the single hour, Mortal's estate in whatsoever remains After great death. And too, when all is said, What evil lust of life is this so great Subdues us to live, so dreadfully distraught In perils and alarms? one fixed end Of life abideth for mortality; Death's not to shun, and we must go to meet. Besides we're busied with the same devices, Ever and ever, and we are at them ever, And there's no new delight that may be forged By living on. But whilst the thing we long for Is lacking, that seems good above all else; Thereafter, when we've touched it, something else We long for; ever one equal thirst of life Grips us agape. And doubtful 'tis what fortune The future times may carry, or what be That chance may bring, or what the issue next Awaiting us. Nor by prolonging life Take we the least away from death's own time, Nor can we pluck one moment off, whereby To minish the aeons of our state of death. Therefore, O man,

by living on, fulfil As many generations as thou may: Eternal death shall there be waiting still; And he who died with light of yesterday Shall be no briefer time in death's No-more Than he who perished months or years before.

BOOK IV

PROEM

I wander afield, thriving in sturdy thought, Through unpathed haunts of the Pierides, Trodden by step of none before. I joy To come on undefiled fountains there, To drain them deep; I joy to pluck new flowers, To seek for this my head a signal crown From regions where the Muses never yet Have garlanded the temples of a man: First, since I teach concerning mighty things, And go right on to loose from round the mind The tightened coils of dread religion; Next, since, concerning themes so dark, I frame Song so pellucid, touching all throughout Even with the Muses' charm—which, as 'twould seem, Is not without a reasonable ground: For as physicians, when they seek to give Young boys the nauseous wormwood, first do touch The brim around the cup with the sweet juice And yellow of the honey, in order that The thoughtless age of boyhood be cajoled As far as the lips, and meanwhile swallow down The wormwood's bitter draught, and, though befooled, Be yet not merely duped, but rather thus Grow strong again with recreated health: So now I too (since this my doctrine seems In general somewhat woeful unto those Who've had it not in hand, and since the crowd Starts back from it in horror) have desired To expound our doctrine unto thee in song Soft-speaking and Pierian, and, as 'twere, To touch it with sweet honey of the Muse— If by such method haply I might hold The mind of thee upon these lines of ours, Till thou dost learn the nature of all things And understandest their utility.

EXISTENCE AND CHARACTER OF THE IMAGES

But since I've taught already of what sort The seeds of all things are, and how distinct In divers forms they flit of own accord, Stirred with a motion everlasting on, And in what mode things be from them create, And since I've taught what the mind's nature is, And of what things 'tis with the body knit And thrives in strength, and by what mode uptorn That mind returns to its primordials, Now will I undertake an argument— One for these matters of supreme concern— That there exist those somewhats which we call The images of things: these, like to films Scaled off the utmost outside of the things, Flit hither and thither through the atmosphere, And the same terrify our intellects, Coming upon us waking or in sleep, When oft we peer at wonderful strange shapes And images of people lorn of light, Which oft have horribly roused us when we lay In slumber—that haply nevermore may we Suppose that souls get loose from Acheron, Or shades go floating in among the living, Or aught of us is left behind at death, When body and mind, destroyed together, each Back to its own primordials goes away. And thus I say that effigies of things, And tenuous shapes from off the things are sent, From off the utmost outside of the things, Which are like films or may be named a rind, Because the image bears like look and form With whatso body has shed it fluttering forth— A fact thou mayst, however dull thy wits, Well learn from this: mainly, because we see Even 'mongst visible objects many be That send forth bodies, loosely some diffused— Like smoke from oaken logs and heat from fires— And some more interwoven and condensed— As when the locusts in the summertime Put off their glossy tunics, or when calves At birth drop membranes from their body's surface, Or when, again, the slippery serpent doffs Its vestments 'mongst the thorns—for oft we see The breres augmented with their flying spoils: Since such takes place, 'tis likewise certain too That tenuous images from things are sent, From off the utmost outside of the things. For why those kinds should drop and part from things, Rather than others tenuous and thin,

No power has man to open mouth to tell; Especially, since on outsides of things Are bodies many and minute which could, In the same order which they had before, And with the figure of their form preserved, Be thrown abroad, and much more swiftly too, Being less subject to impediments, As few in number and placed along the front. For truly many things we see discharge Their stuff at large, not only from their cores Deep-set within, as we have said above, But from their surfaces at times no less— Their very colours too. And commonly The awnings, saffron, red and dusky blue, Stretched overhead in mighty theatres, Upon their poles and cross-beams fluttering, Have such an action quite; for there they dye And make to undulate with their every hue The circled throng below, and all the stage, And rich attire in the patrician seats. And ever the more the theatre's dark walls Around them shut, the more all things within Laugh in the bright suffusion of strange glints, The daylight being withdrawn. And therefore, since The canvas hangings thus discharge their dye From off their surface, things in general must Likewise their tenuous effigies discharge, Because in either case they are off-thrown From off the surface. So there are indeed Such certain prints and vestiges of forms Which flit around, of subtlest texture made, Invisible, when separate, each and one. Again, all odour, smoke, and heat, and such Streams out of things diffusedly, because, Whilst coming from the deeps of body forth And rising out, along their bending path They're torn asunder, nor have gateways straight Wherethrough to mass themselves and struggle abroad. But contrariwise, when such a tenuous film Of outside colour is thrown off, there's naught Can rend it, since 'tis placed along the front Ready to hand. Lastly those images Which to our eyes in mirrors do appear, In water, or in any shining surface, Must be, since furnished with like look of things, Fashioned from images of things sent out. There are, then, tenuous effigies of forms, Like unto them, which no one can divine When taken singly, which do yet give back, When by continued and recurrent discharge Expelled, a picture from the mirrors' plane. Nor otherwise, it seems, can they be kept So well conserved that thus be given back Figures so like

each object. Now then, learn How tenuous is the nature of an image. And in the first place, since primordials be So far beneath our senses, and much less E'en than those objects which begin to grow Too small for eyes to note, learn now in few How nice are the beginnings of all things— That this, too, I may yet confirm in proof: First, living creatures are sometimes so small That even their third part can nowise be seen; Judge, then, the size of any inward organ— What of their sphered heart, their eyes, their limbs, The skeleton?—How tiny thus they are! And what besides of those first particles Whence soul and mind must fashioned be?—Seest not How nice and how minute? Besides, whatever Exhales from out its body a sharp smell— The nauseous absinth, or the panacea, Strong southernwood, or bitter centaury— If never so lightly with thy [fingers] twain Perchance [thou touch] a one of them

Then why not rather know that images Flit hither and thither, many, in many modes, Bodiless and invisible? But lest Haply thou holdest that those images Which come from objects are the sole that flit, Others indeed there be of own accord Begot, self-formed in earth's aery skies, Which, moulded to innumerable shapes, Are borne aloft, and, fluid as they are, Cease not to change appearance and to turn Into new outlines of all sorts of forms; As we behold the clouds grow thick on high And smirch the serene vision of the world, Stroking the air with motions. For oft are seen The giants' faces flying far along And trailing a spread of shadow; and at times The mighty mountains and mountain-sundered rocks Going before and crossing on the sun, Whereafter a monstrous beast dragging amain And leading in the other thunderheads. Now [hear] how easy and how swift they be Engendered, and perpetually flow off From things and gliding pass away....

For ever every outside streams away From off all objects, since discharge they may; And when this outside reaches other things, As chiefly glass, it passes through; but where It reaches the rough rocks or stuff of wood, There 'tis so rent that it cannot give back An image. But when gleaming objects dense, As chiefly mirrors, have been set before it, Nothing of this sort happens. For it can't Go, as through glass, nor

yet be rent—its safety, By virtue of that smoothness, being sure. 'Tis therefore that from them the images Stream back to us; and howso suddenly Thou place, at any instant, anything Before a mirror, there an image shows; Proving that ever from a body's surface Flow off thin textures and thin shapes of things. Thus many images in little time Are gendered; so their origin is named Rightly a speedy. And even as the sun Must send below, in little time, to earth So many beams to keep all things so full Of light incessant; thus, on grounds the same, From things there must be borne, in many modes, To every quarter round, upon the moment, The many images of things; because Unto whatever face of things we turn The mirror, things of form and hue the same Respond. Besides, though but a moment since Serenest was the weather of the sky, So fiercely sudden is it foully thick That ye might think that round about all murk Had parted forth from Acheron and filled The mighty vaults of sky—so grievously, As gathers thus the storm-clouds' gruesome night, Do faces of black horror hang on high— Of which how small a part an image is There's none to tell or reckon out in words. Now come; with what swift motion they are borne, These images, and what the speed assigned To them across the breezes swimming on— So that o'er lengths of space a little hour Alone is wasted, toward whatever region Each with its divers impulse tends—I'll tell In verses sweeter than they many are; Even as the swan's slight note is better far Than that dispersed clamour of the cranes Among the southwind's aery clouds. And first, One oft may see that objects which are light And made of tiny bodies are the swift; In which class is the sun's light and his heat, Since made from small primordial elements Which, as it were, are forward knocked along And through the interspaces of the air To pass delay not, urged by blows behind; For light by light is instantly supplied And gleam by following gleam is spurred and driven. Thus likewise must the images have power Through unimaginable space to speed Within a point of time,—first, since a cause Exceeding small there is, which at their back Far forward drives them and propels, where, too, They're carried with such winged lightness on; And, secondly, since furnished, when

sent off, With texture of such rareness that they can Through objects whatsoever penetrate And ooze, as 'twere, through intervening air. Besides, if those fine particles of things Which from so deep within are sent abroad, As light and heat of sun, are seen to glide And spread themselves through all the space of heaven Upon one instant of the day, and fly O'er sea and lands and flood the heaven, what then Of those which on the outside stand prepared, When they're hurled off with not a thing to check Their going out? Dost thou not see indeed How swifter and how farther must they go And speed through manifold the length of space In time the same that from the sun the rays O'erspread the heaven? This also seems to be Example chief and true with what swift speed The images of things are borne about: That soon as ever under open skies Is spread the shining water, all at once, If stars be out in heaven, upgleam from earth, Serene and radiant in the water there, The constellations of the universe— Now seest thou not in what a point of time An image from the shores of ether falls Unto the shores of earth? Wherefore, again, And yet again, 'tis needful to confess With wondrous...

THE SENSES AND MENTAL PICTURES

Bodies that strike the eyes, awaking sight. From certain things flow odours evermore, As cold from rivers, heat from sun, and spray From waves of ocean, eater-out of walls Around the coasts. Nor ever cease to flit The varied voices, sounds athrough the air. Then too there comes into the mouth at times The wet of a salt taste, when by the sea We roam about; and so, whene'er we watch The wormword being mixed, its bitter stings. To such degree from all things is each thing Borne streamingly along, and sent about To every region round; and nature grants Nor rest nor respite of the onward flow, Since 'tis incessantly we feeling have, And all the time are suffered to descry And smell all things at hand, and hear them sound. Besides, since shape examined by our hands Within the dark is known to be the

same As that by eyes perceived within the light And lustrous day, both touch and sight must be By one like cause aroused. So, if we test A square and get its stimulus on us Within the dark, within the light what square Can fall upon our sight, except a square That images the things? Wherefore it seems The source of seeing is in images, Nor without these can anything be viewed. Now these same films I name are borne about And tossed and scattered into regions all. But since we do perceive alone through eyes, It follows hence that whitherso we turn Our sight, all things do strike against it there With form and hue. And just how far from us Each thing may be away, the image yields To us the power to see and chance to tell: For when 'tis sent, at once it shoves ahead And drives along the air that's in the space Betwixt it and our eyes. And thus this air All glides athrough our eyeballs, and, as 'twere, Brushes athrough our pupils and thuswise Passes across. Therefore it comes we see How far from us each thing may be away, And the more air there be that's driven before, And too the longer be the brushing breeze Against our eyes, the farther off removed Each thing is seen to be: forsooth, this work With mightily swift order all goes on, So that upon one instant we may see What kind the object and how far away. Nor over-marvellous must this be deemed In these affairs that, though the films which strike Upon the eyes cannot be singly seen, The things themselves may be perceived. For thus When the wind beats upon us stroke by stroke And when the sharp cold streams, 'tis not our wont To feel each private particle of wind Or of that cold, but rather all at once; And so we see how blows affect our body, As if one thing were beating on the same And giving us the feel of its own body Outside of us. Again, whene'er we thump With finger-tip upon a stone, we touch But the rock's surface and the outer hue, Nor feel that hue by contact—rather feel The very hardness deep within the rock. Now come, and why beyond a looking-glass An image may be seen, perceive. For seen It soothly is, removed far within. 'Tis the same sort as objects peered upon Outside in their true shape, whene'er a door Yields through itself an open peering-place, And lets us see so many things outside Beyond

the house. Also that sight is made By a twofold twin air: for first is seen The air inside the door-posts; next the doors, The twain to left and right; and afterwards A light beyond comes brushing through our eyes, Then other air, then objects peered upon Outside in their true shape. And thus, when first The image of the glass projects itself, As to our gaze it comes, it shoves ahead And drives along the air that's in the space Betwixt it and our eyes, and brings to pass That we perceive the air ere yet the glass. But when we've also seen the glass itself, Forthwith that image which from us is borne Reaches the glass, and there thrown back again Comes back unto our eyes, and driving rolls Ahead of itself another air, that then 'Tis this we see before itself, and thus It looks so far removed behind the glass. Wherefore again, again, there's naught for wonder

In those which render from the mirror's plane A vision back, since each thing comes to pass By means of the two airs. Now, in the glass The right part of our members is observed Upon the left, because, when comes the image Hitting against the level of the glass, 'Tis not returned unshifted; but forced off Backwards in line direct and not oblique,— Exactly as whoso his plaster-mask Should dash, before 'twere dry, on post or beam, And it should straightway keep, at clinging there, Its shape, reversed, facing him who threw, And so remould the features it gives back: It comes that now the right eye is the left, The left the right. An image too may be From mirror into mirror handed on, Until of idol-films even five or six Have thus been gendered. For whatever things Shall hide back yonder in the house, the same, However far removed in twisting ways, May still be all brought forth through bending paths And by these several mirrors seen to be Within the house, since nature so compels All things to be borne backward and spring off At equal angles from all other things. To such degree the image gleams across From mirror unto mirror; where 'twas left It comes to be the right, and then again Returns and changes round unto the left. Again, those little sides of mirrors curved Proportionate to the bulge of our own flank Send back to us their idols with the right Upon the right; and this is so because

Either the image is passed on along From mirror unto mirror, and thereafter, When twice dashed off, flies back unto ourselves; Or else the image wheels itself around, When once unto the mirror it has come, Since the curved surface teaches it to turn To usward. Further, thou might'st well believe That these film-idols step along with us And set their feet in unison with ours And imitate our carriage, since from that Part of a mirror whence thou hast withdrawn Straightway no images can be returned. Further, our eye-balls tend to flee the bright And shun to gaze thereon; the sun even blinds, If thou goest on to strain them unto him, Because his strength is mighty, and the films Heavily downward from on high are borne Through the pure ether and the viewless winds, And strike the eyes, disordering their joints. So piecing lustre often burns the eyes, Because it holdeth many seeds of fire Which, working into eyes, engender pain. Again, whatever jaundiced people view Becomes wan-yellow, since from out their bodies Flow many seeds wan-yellow forth to meet The films of things, and many too are mixed Within their eye, which by contagion paint All things with sallowness. Again, we view From dark recesses things that stand in light, Because, when first has entered and possessed The open eyes this nearer darkling air, Swiftly the shining air and luminous Followeth in, which purges then the eyes And scatters asunder of that other air The sable shadows, for in large degrees This air is nimbler, nicer, and more strong. And soon as ever 'thas filled and oped with light The pathways of the eyeballs, which before Black air had blocked, there follow straightaway Those films of things out-standing in the light, Provoking vision—what we cannot do From out the light with objects in the dark, Because that denser darkling air behind Followeth in, and fills each aperture And thus blockades the pathways of the eyes That there no images of any things Can be thrown in and agitate the eyes. And when from far away we do behold The squared towers of a city, oft Rounded they seem,—on this account because Each distant angle is perceived obtuse, Or rather it is not perceived at all; And perishes its blow nor to our gaze Arrives its stroke, since through such length of air Are borne along the idols

that the air Makes blunt the idol of the angle's point By numerous collidings. When thuswise The angles of the tower each and all Have quite escaped the sense, the stones appear As rubbed and rounded on a turner's wheel— Yet not like objects near and truly round, But with a semblance to them, shadowily. Likewise, our shadow in the sun appears To move along and follow our own steps And imitate our carriage—if thou thinkest Air that is thus bereft of light can walk, Following the gait and motion of mankind. For what we use to name a shadow, sure Is naught but air deprived of light. No marvel: Because the earth from spot to spot is reft Progressively of light of sun, whenever In moving round we get within its way, While any spot of earth by us abandoned Is filled with light again, on this account It comes to pass that what was body's shadow Seems still the same to follow after us In one straight course. Since, evermore pour in New lights of rays, and perish then the old, Just like the wool that's drawn into the flame. Therefore the earth is easily spoiled of light And easily refilled and from herself Washeth the black shadows quite away. And yet in this we don't at all concede That eyes be cheated. For their task it is To note in whatsoever place be light, In what be shadow: whether or no the gleams Be still the same, and whether the shadow which Just now was here is that one passing thither, Or whether the facts be what we said above, 'Tis after all the reasoning of mind That must decide; nor can our eyeballs know The nature of reality. And so Attach thou not this fault of mind to eyes, Nor lightly think our senses everywhere Are tottering. The ship in which we sail Is borne along, although it seems to stand; The ship that bides in roadstead is supposed There to be passing by. And hills and fields Seem fleeing fast astern, past which we urge The ship and fly under the bellying sails. The stars, each one, do seem to pause, affixed To the ethereal caverns, though they all Forever are in motion, rising out And thence revisiting their far descents When they have measured with their bodies bright The span of heaven. And likewise sun and moon Seem biding in a roadstead,—objects which, As plain fact proves, are really borne along. Between two mountains far

away aloft From midst the whirl of waters open lies A gaping exit for the fleet, and yet They seem conjoined in a single isle. When boys themselves have stopped their spinning round, The halls still seem to whirl and posts to reel, Until they now must almost think the roofs Threaten to ruin down upon their heads. And now, when nature begins to lift on high The sun's red splendour and the tremulous fires, And raise him o'er the mountain-tops, those mountains— O'er which he seemeth then to thee to be, His glowing self hard by atingeing them With his own fire—are yet away from us Scarcely two thousand arrow-shots, indeed Oft scarce five hundred courses of a dart; Although between those mountains and the sun Lie the huge plains of ocean spread beneath The vasty shores of ether, and intervene A thousand lands, possessed by many a folk And generations of wild beasts. Again, A pool of water of but a finger's depth, Which lies between the stones along the pave, Offers a vision downward into earth As far, as from the earth o'erspread on high The gulfs of heaven; that thus thou seemest to view Clouds down below and heavenly bodies plunged Wondrously in heaven under earth. Then too, when in the middle of the stream Sticks fast our dashing horse, and down we gaze Into the river's rapid waves, some force Seems then to bear the body of the horse, Though standing still, reversely from his course, And swiftly push up-stream. And wheresoe'er We cast our eyes across, all objects seem Thus to be onward borne and flow along In the same way as we. A portico, Albeit it stands well propped from end to end On equal columns, parallel and big, Contracts by stages in a narrow cone, When from one end the long, long whole is seen,— Until, conjoining ceiling with the floor, And the whole right side with the left, it draws Together to a cone's nigh-viewless point. To sailors on the main the sun he seems From out the waves to rise, and in the waves To set and bury his light—because indeed They gaze on naught but water and the sky. Again, to gazers ignorant of the sea, Vessels in port seem, as with broken poops, To lean upon the water, quite agog; For any portion of the oars that's raised Above the briny spray is straight, and straight The rudders from above. But other

parts, Those sunk, immersed below the water-line, Seem broken all and bended and inclined Sloping to upwards, and turned back to float Almost atop the water. And when the winds Carry the scattered drifts along the sky In the night-time, then seem to glide along The radiant constellations 'gainst the clouds And there on high to take far other course From that whereon in truth they're borne. And then, If haply our hand be set beneath one eye And press below thereon, then to our gaze Each object which we gaze on seems to be, By some sensation twain—then twain the lights Of lampions burgeoning in flowers of flame, And twain the furniture in all the house, Two-fold the visages of fellow-men, And twain their bodies. And again, when sleep Has bound our members down in slumber soft And all the body lies in deep repose, Yet then we seem to self to be awake And move our members; and in night's blind gloom We think to mark the daylight and the sun; And, shut within a room, yet still we seem To change our skies, our oceans, rivers, hills, To cross the plains afoot, and hear new sounds, Though still the austere silence of the night Abides around us, and to speak replies, Though voiceless. Other cases of the sort Wondrously many do we see, which all Seek, so to say, to injure faith in sense— In vain, because the largest part of these Deceives through mere opinions of the mind, Which we do add ourselves, feigning to see What by the senses are not seen at all. For naught is harder than to separate Plain facts from dubious, which the mind forthwith Adds by itself. Again, if one suppose That naught is known, he knows not whether this Itself is able to be known, since he Confesses naught to know. Therefore with him I waive discussion—who has set his head Even where his feet should be. But let me grant That this he knows,—I question: whence he knows What 'tis to know and not-to-know in turn, And what created concept of the truth, And what device has proved the dubious To differ from the certain?—since in things He's heretofore seen naught of true. Thou'lt find That from the senses first hath been create Concept of truth, nor can the senses be Rebutted. For criterion must be found Worthy of greater trust, which shall defeat Through own authority the false by true; What, then, than

these our senses must there be Worthy a greater trust? Shall reason, sprung From some false sense, prevail to contradict Those senses, sprung as reason wholly is From out the senses?—For lest these be true, All reason also then is falsified. Or shall the ears have power to blame the eyes, Or yet the touch the ears? Again, shall taste Accuse this touch or shall the nose confute Or eyes defeat it? Methinks not so it is: For unto each has been divided off Its function quite apart, its power to each; And thus we're still constrained to perceive The soft, the cold, the hot apart, apart All divers hues and whatso things there be Conjoined with hues. Likewise the tasting tongue Has its own power apart, and smells apart And sounds apart are known. And thus it is That no one sense can e'er convict another. Nor shall one sense have power to blame itself, Because it always must be deemed the same, Worthy of equal trust. And therefore what At any time unto these senses showed, The same is true. And if the reason be Unable to unravel us the cause Why objects, which at hand were square, afar Seemed rounded, yet it more availeth us, Lacking the reason, to pretend a cause For each configuration, than to let From out our hands escape the obvious things And injure primal faith in sense, and wreck All those foundations upon which do rest Our life and safety. For not only reason Would topple down; but even our very life Would straightaway collapse, unless we dared To trust our senses and to keep away From headlong heights and places to be shunned Of a like peril, and to seek with speed Their opposites! Again, as in a building, If the first plumb-line be askew, and if The square deceiving swerve from lines exact, And if the level waver but the least In any part, the whole construction then Must turn out faulty—shelving and askew, Leaning to back and front, incongruous, That now some portions seem about to fall, And falls the whole ere long—betrayed indeed By first deceiving estimates: so too Thy calculations in affairs of life Must be askew and false, if sprung for thee From senses false. So all that troop of words Marshalled against the senses is quite vain. And now remains to demonstrate with ease How other senses each their things perceive. Firstly, a sound and every voice is heard, When, getting

into ears, they strike the sense With their own body. For confess we must Even voice and sound to be corporeal, Because they're able on the sense to strike. Besides voice often scrapes against the throat, And screams in going out do make more rough The wind-pipe—naturally enough, methinks, When, through the narrow exit rising up In larger throng, these primal germs of voice Have thus begun to issue forth. In sooth, Also the door of the mouth is scraped against [By air blown outward] from distended [cheeks].

And thus no doubt there is, that voice and words Consist of elements corporeal, With power to pain. Nor art thou unaware Likewise how much of body's ta'en away, How much from very thews and powers of men May be withdrawn by steady talk, prolonged Even from the rising splendour of the morn To shadows of black evening,—above all If 't be outpoured with most exceeding shouts. Therefore the voice must be corporeal, Since the long talker loses from his frame A part. Moreover, roughness in the sound Comes from the roughness in the primal germs, As a smooth sound from smooth ones is create; Nor have these elements a form the same When the trump rumbles with a hollow roar, As when barbaric Berecynthian pipe Buzzes with raucous boomings, or when swans By night from icy shores of Helicon With wailing voices raise their liquid dirge. Thus, when from deep within our frame we force These voices, and at mouth expel them forth, The mobile tongue, artificer of words, Makes them articulate, and too the lips By their formations share in shaping them. Hence when the space is short from starting-point To where that voice arrives, the very words Must too be plainly heard, distinctly marked. For then the voice conserves its own formation, Conserves its shape. But if the space between Be longer than is fit, the words must be Through the much air confounded, and the voice Disordered in its flight across the winds— And so it haps, that thou canst sound perceive, Yet not determine what the words may mean; To such degree confounded and encumbered The voice approaches us. Again, one word, Sent from the crier's mouth, may rouse all ears Among the populace. And thus one voice

Scatters asunder into many voices, Since it divides itself for separate ears, Imprinting form of word and a clear tone. But whatso part of voices fails to hit The ears themselves perishes, borne beyond, Idly diffused among the winds. A part, Beating on solid porticoes, tossed back Returns a sound; and sometimes mocks the ear With a mere phantom of a word. When this Thou well hast noted, thou canst render count Unto thyself and others why it is Along the lonely places that the rocks Give back like shapes of words in order like, When search we after comrades wandering Among the shady mountains, and aloud Call unto them, the scattered. I have seen Spots that gave back even voices six or seven For one thrown forth—for so the very hills, Dashing them back against the hills, kept on With their reverberations. And these spots The neighbouring country-side doth feign to be Haunts of the goat-foot satyrs and the nymphs; And tells ye there be fauns, by whose night noise And antic revels yonder they declare The voiceless silences are broken oft, And tones of strings are made and wailings sweet Which the pipe, beat by players' finger-tips, Pours out; and far and wide the farmer-race Begins to hear, when, shaking the garmentings Of pine upon his half-beast head, god-Pan With puckered lip oft runneth o'er and o'er The open reeds,—lest flute should cease to pour The woodland music! Other prodigies And wonders of this ilk they love to tell, Lest they be thought to dwell in lonely spots And even by gods deserted. This is why They boast of marvels in their story-tellings; Or by some other reason are led on— Greedy, as all mankind hath ever been, To prattle fables into ears. Again, One need not wonder how it comes about That through those places (through which eyes cannot View objects manifest) sounds yet may pass And assail the ears. For often we observe People conversing, though the doors be closed; No marvel either, since all voice unharmed Can wind through bended apertures of things, While idol-films decline to—for they're rent, Unless along straight apertures they swim, Like those in glass, through which all images Do fly across. And yet this voice itself, In passing through shut chambers of a house, Is dulled, and in a jumble enters ears, And sound

we seem to hear far more than words. Moreover, a voice is into all directions Divided up, since off from one another New voices are engendered, when one voice Hath once leapt forth, outstarting into many— As oft a spark of fire is wont to sprinkle Itself into its several fires. And so, Voices do fill those places hid behind, Which all are in a hubbub round about, Astir with sound. But idol-films do tend, As once sent forth, in straight directions all; Wherefore one can inside a wall see naught, Yet catch the voices from beyond the same. Nor tongue and palate, whereby we flavour feel, Present more problems for more work of thought. Firstly, we feel a flavour in the mouth, When forth we squeeze it, in chewing up our food,— As any one perchance begins to squeeze With hand and dry a sponge with water soaked. Next, all which forth we squeeze is spread about Along the pores and intertwined paths Of the loose-textured tongue. And so, when smooth The bodies of the oozy flavour, then Delightfully they touch, delightfully They treat all spots, around the wet and trickling Enclosures of the tongue. And contrariwise, They sting and pain the sense with their assault, According as with roughness they're supplied. Next, only up to palate is the pleasure Coming from flavour; for in truth when down 'Thas plunged along the throat, no pleasure is, Whilst into all the frame it spreads around; Nor aught it matters with what food is fed The body, if only what thou take thou canst Distribute well digested to the frame And keep the stomach in a moist career. Now, how it is we see some food for some, Others for others....

I will unfold, or wherefore what to some Is foul and bitter, yet the same to others Can seem delectable to eat,—why here So great the distance and the difference is That what is food to one to some becomes Fierce poison, as a certain snake there is Which, touched by spittle of a man, will waste And end itself by gnawing up its coil. Again, fierce poison is the hellebore To us, but puts the fat on goats and quails. That thou mayst know by what devices this Is brought about, in chief thou must recall What we have said before, that seeds are kept Commixed in things in divers modes. Again, As all the breathing creatures which take food Are outwardly unlike, and

outer cut And contour of their members bounds them round, Each differing kind by kind, they thus consist Of seeds of varying shape. And furthermore, Since seeds do differ, divers too must be The interstices and paths (which we do call The apertures) in all the members, even In mouth and palate too. Thus some must be More small or yet more large, three-cornered some And others squared, and many others round, And certain of them many-angled too In many modes. For, as the combination And motion of their divers shapes demand, The shapes of apertures must be diverse And paths must vary according to their walls That bound them. Hence when what is sweet to some, Becomes to others bitter, for him to whom 'Tis sweet, the smoothest particles must needs Have entered caressingly the palate's pores. And, contrariwise, with those to whom that sweet Is sour within the mouth, beyond a doubt The rough and barbed particles have got Into the narrows of the apertures. Now easy it is from these affairs to know Whatever...

Indeed, where one from o'er-abundant bile Is stricken with fever, or in other wise Feels the roused violence of some malady, There the whole frame is now upset, and there All the positions of the seeds are changed,— So that the bodies which before were fit To cause the savour, now are fit no more, And now more apt are others which be able To get within the pores and gender sour. Both sorts, in sooth, are intermixed in honey— What oft we've proved above to thee before. Now come, and I will indicate what wise Impact of odour on the nostrils touches. And first, 'tis needful there be many things From whence the streaming flow of varied odours May roll along, and we're constrained to think They stream and dart and sprinkle themselves about Impartially. But for some breathing creatures One odour is more apt, to others another— Because of differing forms of seeds and pores. Thus on and on along the zephyrs bees Are led by odour of honey, vultures too By carcasses. Again, the forward power Of scent in dogs doth lead the hunter on Whithersoever the splay-foot of wild beast Hath hastened its career; and the white goose, The saviour of the Roman citadel, Forescents afar the odour of mankind. Thus, diversly

to divers ones is given Peculiar smell that leadeth each along To his own food or makes him start aback From loathsome poison, and in this wise are The generations of the wild preserved. Yet is this pungence not alone in odours Or in the class of flavours; but, likewise, The look of things and hues agree not all So well with senses unto all, but that Some unto some will be, to gaze upon, More keen and painful. Lo, the raving lions, They dare not face and gaze upon the cock Who's wont with wings to flap away the night From off the stage, and call the beaming morn With clarion voice—and lions straightway thus Bethink themselves of flight, because, ye see, Within the body of the cocks there be Some certain seeds, which, into lions' eyes Injected, bore into the pupils deep And yield such piercing pain they can't hold out Against the cocks, however fierce they be— Whilst yet these seeds can't hurt our gaze the least, Either because they do not penetrate, Or since they have free exit from the eyes As soon as penetrating, so that thus They cannot hurt our eyes in any part By there remaining. To speak once more of odour; Whatever assail the nostrils, some can travel A longer way than others. None of them, However, 's borne so far as sound or voice— While I omit all mention of such things As hit the eyesight and assail the vision. For slowly on a wandering course it comes And perishes sooner, by degrees absorbed Easily into all the winds of air;— And first, because from deep inside the thing It is discharged with labour (for the fact That every object, when 'tis shivered, ground, Or crumbled by the fire, will smell the stronger Is sign that odours flow and part away From inner regions of the things). And next, Thou mayest see that odour is create Of larger primal germs than voice, because It enters not through stony walls, wherethrough Unfailingly the voice and sound are borne; Wherefore, besides, thou wilt observe 'tis not So easy to trace out in whatso place The smelling object is. For, dallying on Along the winds, the particles cool off, And then the scurrying messengers of things Arrive our senses, when no longer hot. So dogs oft wander astray, and hunt the scent. Now mark, and hear what objects move the mind, And learn, in few, whence unto intellect Do come what come. And first I tell thee

this: That many images of objects rove In many modes to every region round— So thin that easily the one with other, When once they meet, uniteth in mid-air, Like gossamer or gold-leaf. For, indeed, Far thinner are they in their fabric than Those images which take a hold on eyes And smite the vision, since through body's pores They penetrate, and inwardly stir up The subtle nature of mind and smite the sense. Thus, Centaurs and the limbs of Scyllas, thus The Cerberus-visages of dogs we see, And images of people gone before— Dead men whose bones earth bosomed long ago; Because the images of every kind Are everywhere about us borne—in part Those which are gendered in the very air Of own accord, in part those others which From divers things do part away, and those Which are compounded, made from out their shapes. For soothly from no living Centaur is That phantom gendered, since no breed of beast Like him was ever; but, when images Of horse and man by chance have come together, They easily cohere, as aforesaid, At once, through subtle nature and fabric thin. In the same fashion others of this ilk Created are. And when they're quickly borne In their exceeding lightness, easily (As earlier I showed) one subtle image, Compounded, moves by its one blow the mind, Itself so subtle and so strangely quick. That these things come to pass as I record, From this thou easily canst understand: So far as one is unto other like, Seeing with mind as well as with the eyes Must come to pass in fashion not unlike. Well, now, since I have shown that I perceive Haply a lion through those idol-films Such as assail my eyes, 'tis thine to know Also the mind is in like manner moved, And sees, nor more nor less than eyes do see (Except that it perceives more subtle films) The lion and aught else through idol-films. And when the sleep has overset our frame, The mind's intelligence is now awake, Still for no other reason, save that these— The self-same films as when we are awake— Assail our minds, to such degree indeed That we do seem to see for sure the man Whom, void of life, now death and earth have gained Dominion over. And nature forces this To come to pass because the body's senses Are resting, thwarted through the members all, Unable now to conquer false with

true; And memory lies prone and languishes In slumber, nor protests that he, the man Whom the mind feigns to see alive, long since Hath been the gain of death and dissolution. And further, 'tis no marvel idols move And toss their arms and other members round In rhythmic time—and often in men's sleeps It haps an image this is seen to do; In sooth, when perishes the former image, And other is gendered of another pose, That former seemeth to have changed its gestures. Of course the change must be conceived as speedy; So great the swiftness and so great the store Of idol-things, and (in an instant brief As mind can mark) so great, again, the store Of separate idol-parts to bring supplies. It happens also that there is supplied Sometimes an image not of kind the same; But what before was woman, now at hand Is seen to stand there, altered into male; Or other visage, other age succeeds; But slumber and oblivion take care That we shall feel no wonder at the thing. And much in these affairs demands inquiry, And much, illumination—if we crave With plainness to exhibit facts. And first, Why doth the mind of one to whom the whim To think has come behold forthwith that thing? Or do the idols watch upon our will, And doth an image unto us occur, Directly we desire—if heart prefer The sea, the land, or after all the sky? Assemblies of the citizens, parades, Banquets, and battles, these and all doth she, Nature, create and furnish at our word?— Maugre the fact that in same place and spot Another's mind is meditating things All far unlike. And what, again, of this: When we in sleep behold the idols step, In measure, forward, moving supple limbs, Whilst forth they put each supple arm in turn With speedy motion, and with eyeing heads Repeat the movement, as the foot keeps time? Forsooth, the idols they are steeped in art, And wander to and fro well taught indeed,— Thus to be able in the time of night To make such games! Or will the truth be this: Because in one least moment that we mark— That is, the uttering of a single sound— There lurk yet many moments, which the reason Discovers to exist, therefore it comes That, in a moment how so brief ye will, The divers idols are hard by, and ready Each in its place diverse? So great the swiftness, So great, again, the

store of idol-things, And so, when perishes the former image, And other is gendered of another pose, The former seemeth to have changed its gestures. And since they be so tenuous, mind can mark Sharply alone the ones it strains to see; And thus the rest do perish one and all, Save those for which the mind prepares itself. Further, it doth prepare itself indeed, And hopes to see what follows after each— Hence this result. For hast thou not observed How eyes, essaying to perceive the fine, Will strain in preparation, otherwise Unable sharply to perceive at all? Yet know thou canst that, even in objects plain, If thou attendest not, 'tis just the same As if 'twere all the time removed and far. What marvel, then, that mind doth lose the rest, Save those to which 'thas given up itself? So 'tis that we conjecture from small signs Things wide and weighty, and involve ourselves In snarls of self-deceit.

SOME VITAL FUNCTIONS

In these affairs We crave that thou wilt passionately flee The one offence, and anxiously wilt shun The error of presuming the clear lights Of eyes created were that we might see; Or thighs and knees, aprop upon the feet, Thuswise can bended be, that we might step With goodly strides ahead; or forearms joined Unto the sturdy uppers, or serving hands On either side were given, that we might do Life's own demands. All such interpretation Is aft-for-fore with inverse reasoning, Since naught is born in body so that we May use the same, but birth engenders use: No seeing ere the lights of eyes were born, No speaking ere the tongue created was; But origin of tongue came long before Discourse of words, and ears created were Much earlier than any sound was heard; And all the members, so meseems, were there Before they got their use: and therefore, they Could not be gendered for the sake of use. But contrariwise, contending in the fight With hand to hand, and rending of the joints, And fouling of the limbs with gore, was there, O long before the gleaming spears ere flew; And nature prompted man to shun a wound, Before the left arm by the aid of

art Opposed the shielding targe. And, verily, Yielding the weary body to repose, Far ancienter than cushions of soft beds, And quenching thirst is earlier than cups. These objects, therefore, which for use and life Have been devised, can be conceived as found For sake of using. But apart from such Are all which first were born and afterwards Gave knowledge of their own utility— Chief in which sort we note the senses, limbs: Wherefore, again, 'tis quite beyond thy power To hold that these could thus have been create For office of utility. Likewise, 'Tis nothing strange that all the breathing creatures Seek, even by nature of their frame, their food. Yes, since I've taught thee that from off the things Stream and depart innumerable bodies In modes innumerable too; but most Must be the bodies streaming from the living— Which bodies, vexed by motion evermore, Are through the mouth exhaled innumerable, When weary creatures pant, or through the sweat Squeezed forth innumerable from deep within. Thus body rarefies, so undermined In all its nature, and pain attends its state. And so the food is taken to underprop The tottering joints, and by its interfusion To re-create their powers, and there stop up The longing, open-mouthed through limbs and veins, For eating. And the moist no less departs Into all regions that demand the moist; And many heaped-up particles of hot, Which cause such burnings in these bellies of ours, The liquid on arriving dissipates And quenches like a fire, that parching heat No longer now can scorch the frame. And so, Thou seest how panting thirst is washed away From off our body, how the hunger-pang It, too, appeased. Now, how it comes that we, Whene'er we wish, can step with strides ahead, And how 'tis given to move our limbs about, And what device is wont to push ahead This the big load of our corporeal frame, I'll say to thee—do thou attend what's said. I say that first some idol-films of walking Into our mind do fall and smite the mind, As said before. Thereafter will arises; For no one starts to do a thing, before The intellect previsions what it wills; And what it there pre-visioneth depends On what that image is. When, therefore, mind Doth so bestir itself that it doth will To go and step along, it strikes at once That energy of soul that's sown about In all

the body through the limbs and frame— And this is easy of performance, since The soul is close conjoined with the mind. Next, soul in turn strikes body, and by degrees Thus the whole mass is pushed along and moved. Then too the body rarefies, and air, Forsooth as ever of such nimbleness, Comes on and penetrates aboundingly Through opened pores, and thus is sprinkled round Unto all smallest places in our frame. Thus then by these twain factors, severally, Body is borne like ship with oars and wind. Nor yet in these affairs is aught for wonder That particles so fine can whirl around So great a body and turn this weight of ours; For wind, so tenuous with its subtle body, Yet pushes, driving on the mighty ship Of mighty bulk; one hand directs the same, Whatever its momentum, and one helm Whirls it around, whither ye please; and loads, Many and huge, are moved and hoisted high By enginery of pulley-blocks and wheels, With but light strain. Now, by what modes this sleep Pours through our members waters of repose And frees the breast from cares of mind, I'll tell In verses sweeter than they many are; Even as the swan's slight note is better far Than that dispersed clamour of the cranes Among the southwind's aery clouds. Do thou Give me sharp ears and a sagacious mind,— That thou mayst not deny the things to be Whereof I'm speaking, nor depart away With bosom scorning these the spoken truths, Thyself at fault unable to perceive. Sleep chiefly comes when energy of soul Hath now been scattered through the frame, and part Expelled abroad and gone away, and part Crammed back and settling deep within the frame— Whereafter then our loosened members droop. For doubt is none that by the work of soul Exist in us this sense, and when by slumber That sense is thwarted, we are bound to think The soul confounded and expelled abroad— Yet not entirely, else the frame would lie Drenched in the everlasting cold of death. In sooth, where no one part of soul remained Lurking among the members, even as fire Lurks buried under many ashes, whence Could sense amain rekindled be in members, As flame can rise anew from unseen fire? By what devices this strange state and new May be occasioned, and by what the soul Can be confounded and the frame grow faint, I

will untangle: see to it, thou, that I Pour forth my words not unto empty winds. In first place, body on its outer parts— Since these are touched by neighbouring aery gusts— Must there be thumped and strook by blows of air Repeatedly. And therefore almost all Are covered either with hides, or else with shells, Or with the horny callus, or with bark. Yet this same air lashes their inner parts, When creatures draw a breath or blow it out. Wherefore, since body thus is flogged alike Upon the inside and the out, and blows Come in upon us through the little pores Even inward to our body's primal parts And primal elements, there comes to pass By slow degrees, along our members then, A kind of overthrow; for then confounded Are those arrangements of the primal germs Of body and of mind. It comes to pass That next a part of soul's expelled abroad, A part retreateth in recesses hid, A part, too, scattered all about the frame, Cannot become united nor engage In interchange of motion. Nature now So hedges off approaches and the paths; And thus the sense, its motions all deranged, Retires down deep within; and since there's naught, As 'twere, to prop the frame, the body weakens, And all the members languish, and the arms And eyelids fall, and, as ye lie abed, Even there the houghs will sag and loose their powers. Again, sleep follows after food, because The food produces same result as air, Whilst being scattered round through all the veins; And much the heaviest is that slumber which, Full or fatigued, thou takest; since 'tis then That the most bodies disarrange themselves, Bruised by labours hard. And in same wise, This three-fold change: a forcing of the soul Down deeper, more a casting-forth of it, A moving more divided in its parts And scattered more. And to whate'er pursuit A man most clings absorbed, or what the affairs On which we theretofore have tarried much, And mind hath strained upon the more, we seem In sleep not rarely to go at the same. The lawyers seem to plead and cite decrees, Commanders they to fight and go at frays, Sailors to live in combat with the winds, And we ourselves indeed to make this book, And still to seek the nature of the world And set it down, when once discovered, here In these my country's leaves. Thus all pursuits, All arts in general

seem in sleeps to mock And master the minds of men. And whosoever Day after day for long to games have given Attention undivided, still they keep (As oft we note), even when they've ceased to grasp Those games with their own senses, open paths Within the mind wherethrough the idol-films Of just those games can come. And thus it is For many a day thereafter those appear Floating before the eyes, that even awake They think they view the dancers moving round Their supple limbs, and catch with both the ears The liquid song of harp and speaking chords, And view the same assembly on the seats, And manifold bright glories of the stage— So great the influence of pursuit and zest, And of the affairs wherein 'thas been the wont Of men to be engaged-nor only men, But soothly all the animals. Behold, Thou'lt see the sturdy horses, though outstretched, Yet sweating in their sleep, and panting ever, And straining utmost strength, as if for prize, As if, with barriers opened now... And hounds of huntsmen oft in soft repose Yet toss asudden all their legs about, And growl and bark, and with their nostrils sniff The winds again, again, as though indeed They'd caught the scented foot-prints of wild beasts, And, even when wakened, often they pursue The phantom images of stags, as though They did perceive them fleeing on before, Until the illusion's shaken off and dogs Come to themselves again. And fawning breed Of house-bred whelps do feel the sudden urge To shake their bodies and start from off the ground, As if beholding stranger-visages. And ever the fiercer be the stock, the more In sleep the same is ever bound to rage. But flee the divers tribes of birds and vex With sudden wings by night the groves of gods, When in their gentle slumbers they have dreamed Of hawks in chase, aswooping on for fight. Again, the minds of mortals which perform With mighty motions mighty enterprises, Often in sleep will do and dare the same In manner like. Kings take the towns by storm, Succumb to capture, battle on the field, Raise a wild cry as if their throats were cut Even then and there. And many wrestle on And groan with pains, and fill all regions round With mighty cries and wild, as if then gnawed By fangs of panther or of lion fierce. Many amid their slumbers talk

about Their mighty enterprises, and have often Enough become the proof of their own crimes. Many meet death; many, as if headlong From lofty mountains tumbling down to earth With all their frame, are frenzied in their fright; And after sleep, as if still mad in mind, They scarce come to, confounded as they are By ferment of their frame. The thirsty man, Likewise, he sits beside delightful spring Or river and gulpeth down with gaping throat Nigh the whole stream. And oft the innocent young, By sleep o'ermastered, think they lift their dress By pail or public jordan and then void The water filtered down their frame entire And drench the Babylonian coverlets, Magnificently bright. Again, those males Into the surging channels of whose years Now first has passed the seed (engendered Within their members by the ripened days) Are in their sleep confronted from without By idol-images of some fair form— Tidings of glorious face and lovely bloom, Which stir and goad the regions turgid now With seed abundant; so that, as it were With all the matter acted duly out, They pour the billows of a potent stream And stain their garment. And as said before, That seed is roused in us when once ripe age Has made our body strong... As divers causes give to divers things Impulse and irritation, so one force In human kind rouses the human seed To spurt from man. As soon as ever it issues, Forced from its first abodes, it passes down In the whole body through the limbs and frame, Meeting in certain regions of our thews, And stirs amain the genitals of man. The goaded regions swell with seed, and then Comes the delight to dart the same at what The mad desire so yearns, and body seeks That object, whence the mind by love is pierced. For well-nigh each man falleth toward his wound, And our blood spurts even toward the spot from whence The stroke wherewith we are strook, and if indeed The foe be close, the red jet reaches him. Thus, one who gets a stroke from Venus' shafts— Whether a boy with limbs effeminate Assault him, or a woman darting love From all her body—that one strains to get Even to the thing whereby he's hit, and longs To join with it and cast into its frame The fluid drawn even from within its own. For the mute craving doth presage delight.

THE PASSION OF LOVE

This craving 'tis that's Venus unto us: From this, engender all the lures of love, From this, O first hath into human hearts Trickled that drop of joyance which ere long Is by chill care succeeded. Since, indeed, Though she thou lovest now be far away, Yet idol-images of her are near And the sweet name is floating in thy ear. But it behooves to flee those images; And scare afar whatever feeds thy love; And turn elsewhere thy mind; and vent the sperm, Within thee gathered, into sundry bodies, Nor, with thy thoughts still busied with one love, Keep it for one delight, and so store up Care for thyself and pain inevitable. For, lo, the ulcer just by nourishing Grows to more life with deep inveteracy, And day by day the fury swells aflame, And the woe waxes heavier day by day— Unless thou dost destroy even by new blows The former wounds of love, and curest them While yet they're fresh, by wandering freely round After the freely-wandering Venus, or Canst lead elsewhere the tumults of thy mind. Nor doth that man who keeps away from love Yet lack the fruits of Venus; rather takes Those pleasures which are free of penalties. For the delights of Venus, verily, Are more unmixed for mortals sane-of-soul Than for those sick-at-heart with love-pining. Yea, in the very moment of possessing, Surges the heat of lovers to and fro, Restive, uncertain; and they cannot fix On what to first enjoy with eyes and hands. The parts they sought for, those they squeeze so tight, And pain the creature's body, close their teeth Often against her lips, and smite with kiss Mouth into mouth,—because this same delight Is not unmixed; and underneath are stings Which goad a man to hurt the very thing, Whate'er it be, from whence arise for him Those germs of madness. But with gentle touch Venus subdues the pangs in midst of love, And the admixture of a fondling joy Doth curb the bites of passion. For they hope That by the very body whence they caught The heats of love their flames can be put out. But nature protests 'tis all quite otherwise; For this same love it is the one sole thing Of which, the more we have, the fiercer burns The breast

with fell desire. For food and drink Are taken within our members; and, since they Can stop up certain parts, thus, easily Desire of water is glutted and of bread. But, lo, from human face and lovely bloom Naught penetrates our frame to be enjoyed Save flimsy idol-images and vain— A sorry hope which oft the winds disperse. As when the thirsty man in slumber seeks To drink, and water ne'er is granted him Wherewith to quench the heat within his members, But after idols of the liquids strives And toils in vain, and thirsts even whilst he gulps In middle of the torrent, thus in love Venus deludes with idol-images The lovers. Nor they cannot sate their lust By merely gazing on the bodies, nor They cannot with their palms and fingers rub Aught from each tender limb, the while they stray Uncertain over all the body. Then, At last, with members intertwined, when they Enjoy the flower of their age, when now Their bodies have sweet presage of keen joys, And Venus is about to sow the fields Of woman, greedily their frames they lock, And mingle the slaver of their mouths, and breathe Into each other, pressing teeth on mouths— Yet to no purpose, since they're powerless To rub off aught, or penetrate and pass With body entire into body—for oft They seem to strive and struggle thus to do; So eagerly they cling in Venus' bonds, Whilst melt away their members, overcome By violence of delight. But when at last Lust, gathered in the thews, hath spent itself, There come a brief pause in the raging heat— But then a madness just the same returns And that old fury visits them again, When once again they seek and crave to reach They know not what, all powerless to find The artifice to subjugate the bane. In such uncertain state they waste away With unseen wound. To which be added too, They squander powers and with the travail wane; Be added too, they spend their futile years Under another's beck and call; their duties Neglected languish and their honest name Reeleth sick, sick; and meantime their estates Are lost in Babylonian tapestries; And unguents and dainty Sicyonian shoes Laugh on her feet; and (as ye may be sure) Big emeralds of green light are set in gold; And rich sea-purple dress by constant wear Grows shabby and all soaked with Venus' sweat; And the well-earned ancestral

property Becometh head-bands, coifs, and many a time The cloaks, or garments Alidensian Or of the Cean isle. And banquets, set With rarest cloth and viands, are prepared— And games of chance, and many a drinking cup, And unguents, crowns and garlands. All in vain, Since from amid the well-spring of delights Bubbles some drop of bitter to torment Among the very flowers—when haply mind Gnaws into self, now stricken with remorse For slothful years and ruin in baudels, Or else because she's left him all in doubt By launching some sly word, which still like fire Lives wildly, cleaving to his eager heart; Or else because he thinks she darts her eyes Too much about and gazes at another,— And in her face sees traces of a laugh. These ills are found in prospering love and true; But in crossed love and helpless there be such As through shut eyelids thou canst still take in— Uncounted ills; so that 'tis better far To watch beforehand, in the way I've shown, And guard against enticements. For to shun A fall into the hunting-snares of love Is not so hard, as to get out again, When tangled in the very nets, and burst The stoutly-knotted cords of Aphrodite. Yet even when there enmeshed with tangled feet, Still canst thou scape the danger-lest indeed Thou standest in the way of thine own good, And overlookest first all blemishes Of mind and body of thy much preferred, Desirable dame. For so men do, Eyeless with passion, and assign to them Graces not theirs in fact. And thus we see Creatures in many a wise crooked and ugly The prosperous sweethearts in a high esteem; And lovers gird each other and advise To placate Venus, since their friends are smit With a base passion—miserable dupes Who seldom mark their own worst bane of all. The black-skinned girl is "tawny like the honey"; The filthy and the fetid's "negligee"; The cat-eyed she's "a little Pallas," she; The sinewy and wizened's "a gazelle"; The pudgy and the pigmy is "piquant, One of the Graces sure"; the big and bulky O she's "an Admiration, imposante"; The stuttering and tongue-tied "sweetly lisps"; The mute girl's "modest"; and the garrulous, The spiteful spit-fire, is "a sparkling wit"; And she who scarcely lives for scrawniness Becomes "a slender darling"; "delicate" Is she who's nearly dead of coughing-fit;

The pursy female with protuberant breasts She is "like Ceres when the goddess gave Young Bacchus suck"; the pug-nosed lady-love "A Satyress, a feminine Silenus"; The blubber-lipped is "all one luscious kiss"— A weary while it were to tell the whole. But let her face possess what charm ye will, Let Venus' glory rise from all her limbs,— Forsooth there still are others; and forsooth We lived before without her; and forsooth She does the same things—and we know she does— All, as the ugly creature, and she scents, Yes she, her wretched self with vile perfumes; Whom even her handmaids flee and giggle at Behind her back. But he, the lover, in tears Because shut out, covers her threshold o'er Often with flowers and garlands, and anoints Her haughty door-posts with the marjoram, And prints, poor fellow, kisses on the doors— Admitted at last, if haply but one whiff Got to him on approaching, he would seek Decent excuses to go out forthwith; And his lament, long pondered, then would fall Down at his heels; and there he'd damn himself For his fatuity, observing how He had assigned to that same lady more— Than it is proper to concede to mortals. And these our Venuses are 'ware of this. Wherefore the more are they at pains to hide All the-behind-the-scenes of life from those Whom they desire to keep in bonds of love— In vain, since ne'ertheless thou canst by thought Drag all the matter forth into the light And well search out the cause of all these smiles; And if of graceful mind she be and kind, Do thou, in thy turn, overlook the same, And thus allow for poor mortality. Nor sighs the woman always with feigned love, Who links her body round man's body locked And holds him fast, making his kisses wet With lips sucked into lips; for oft she acts Even from desire, and, seeking mutual joys, Incites him there to run love's race-course through. Nor otherwise can cattle, birds, wild beasts, And sheep and mares submit unto the males, Except that their own nature is in heat, And burns abounding and with gladness takes Once more the Venus of the mounting males. And seest thou not how those whom mutual pleasure Hath bound are tortured in their common bonds? How often in the cross-roads dogs that pant To get apart strain eagerly asunder With utmost might?—When all the

while they're fast In the stout links of Venus. But they'd ne'er So pull, except they knew those mutual joys— So powerful to cast them unto snares And hold them bound. Wherefore again, again, Even as I say, there is a joint delight. And when perchance, in mingling seed with his, The female hath o'erpowered the force of male And by a sudden fling hath seized it fast, Then are the offspring, more from mothers' seed, More like their mothers; as, from fathers' seed, They're like to fathers. But whom seest to be Partakers of each shape, one equal blend Of parents' features, these are generate From fathers' body and from mothers' blood, When mutual and harmonious heat hath dashed Together seeds, aroused along their frames By Venus' goads, and neither of the twain Mastereth or is mastered. Happens too That sometimes offspring can to being come In likeness of their grandsires, and bring back Often the shapes of grandsires' sires, because Their parents in their bodies oft retain Concealed many primal germs, commixed In many modes, which, starting with the stock, Sire handeth down to son, himself a sire; Whence Venus by a variable chance Engenders shapes, and diversely brings back Ancestral features, voices too, and hair. A female generation rises forth From seed paternal, and from mother's body Exist created males: since sex proceeds No more from singleness of seed than faces Or bodies or limbs of ours: for every birth Is from a twofold seed; and what's created Hath, of that parent which it is more like, More than its equal share; as thou canst mark,— Whether the breed be male or female stock. Nor do the powers divine grudge any man The fruits of his seed-sowing, so that never He be called "father" by sweet children his, And end his days in sterile love forever. What many men suppose; and gloomily They sprinkle the altars with abundant blood, And make the high platforms odorous with burnt gifts, To render big by plenteous seed their wives— And plague in vain godheads and sacred lots. For sterile are these men by seed too thick, Or else by far too watery and thin. Because the thin is powerless to cleave Fast to the proper places, straightaway It trickles from them, and, returned again, Retires abortively. And then since seed More gross and solid than will suit is

spent By some men, either it flies not forth amain With spurt prolonged enough, or else it fails To enter suitably the proper places, Or, having entered, the seed is weakly mixed With seed of the woman: harmonies of Venus Are seen to matter vastly here; and some Impregnate some more readily, and from some Some women conceive more readily and become Pregnant. And many women, sterile before In several marriage-beds, have yet thereafter Obtained the mates from whom they could conceive The baby-boys, and with sweet progeny Grow rich. And even for husbands (whose own wives, Although of fertile wombs, have borne for them No babies in the house) are also found Concordant natures so that they at last Can bulwark their old age with goodly sons. A matter of great moment 'tis in truth, That seeds may mingle readily with seeds Suited for procreation, and that thick Should mix with fluid seeds, with thick the fluid. And in this business 'tis of some import Upon what diet life is nourished: For some foods thicken seeds within our members, And others thin them out and waste away. And in what modes the fond delight itself Is carried on—this too importeth vastly. For commonly 'tis thought that wives conceive More readily in manner of wild-beasts, After the custom of the four-foot breeds, Because so postured, with the breasts beneath And buttocks then upreared, the seeds can take Their proper places. Nor is need the least For wives to use the motions of blandishment; For thus the woman hinders and resists Her own conception, if too joyously Herself she treats the Venus of the man With haunches heaving, and with all her bosom Now yielding like the billows of the sea— Aye, from the ploughshare's even course and track She throws the furrow, and from proper places Deflects the spurt of seed. And courtesans Are thuswise wont to move for their own ends, To keep from pregnancy and lying in, And all the while to render Venus more A pleasure for the men—the which meseems Our wives have never need of. Sometimes too It happens—and through no divinity Nor arrows of Venus—that a sorry chit Of scanty grace will be beloved by man; For sometimes she herself by very deeds, By her complying ways, and tidy habits, Will easily accustom

thee to pass With her thy life-time—and, moreover, lo, Long habitude can gender human love, Even as an object smitten o'er and o'er By blows, however lightly, yet at last Is overcome and wavers. Seest thou not, Besides, how drops of water falling down Against the stones at last bore through the stones?

BOOK V

PROEM

O WHO can build with puissant breast a song Worthy the majesty of these great finds? Or who in words so strong that he can frame The fit laudations for deserts of him Who left us heritors of such vast prizes, By his own breast discovered and sought out?— There shall be none, methinks, of mortal stock. For if must needs be named for him the name Demanded by the now known majesty Of these high matters, then a god was he,— Hear me, illustrious Memmius—a god; Who first and chief found out that plan of life Which now is called philosophy, and who By cunning craft, out of such mighty waves, Out of such mighty darkness, moored life In havens so serene, in light so clear. Compare those old discoveries divine Of others: lo, according to the tale, Ceres established for mortality The grain, and Bacchus juice of vine-born grape, Though life might yet without these things abide, Even as report saith now some peoples live. But man's well-being was impossible Without a breast all free. Wherefore the more That man doth justly seem to us a god, From whom sweet solaces of life, afar Distributed o'er populous domains, Now soothe the minds of men. But if thou thinkest Labours of Hercules excel the same, Much farther from true reasoning thou farest. For what could hurt us now that mighty maw Of Nemeaean Lion, or what the Boar Who bristled in Arcadia? Or, again, O what could Cretan Bull, or Hydra, pest Of Lerna, fenced with vipers venomous? Or what the triple-breasted power of her The three-fold Geryon... The

sojourners in the Stymphalian fens So dreadfully offend us, or the Steeds Of Thracian Diomedes breathing fire From out their nostrils off along the zones Bistonian and Ismarian? And the Snake, The dread fierce gazer, guardian of the golden And gleaming apples of the Hesperides, Coiled round the tree-trunk with tremendous bulk, O what, again, could he inflict on us Along the Atlantic shore and wastes of sea?— Where neither one of us approacheth nigh Nor no barbarian ventures. And the rest Of all those monsters slain, even if alive, Unconquered still, what injury could they do? None, as I guess. For so the glutted earth Swarms even now with savage beasts, even now Is filled with anxious terrors through the woods And mighty mountains and the forest deeps— Quarters 'tis ours in general to avoid. But lest the breast be purged, what conflicts then, What perils, must bosom, in our own despite! O then how great and keen the cares of lust That split the man distraught! How great the fears! And lo, the pride, grim greed, and wantonness— How great the slaughters in their train! and lo, Debaucheries and every breed of sloth! Therefore that man who subjugated these, And from the mind expelled, by words indeed, Not arms, O shall it not be seemly him To dignify by ranking with the gods?— And all the more since he was wont to give, Concerning the immortal gods themselves, Many pronouncements with a tongue divine, And to unfold by his pronouncements all The nature of the world.

ARGUMENT OF THE BOOK AND NEW PROEM AGAINST A TELEOLOGICAL CONCEPT

And walking now In his own footprints, I do follow through His reasonings, and with pronouncements teach The covenant whereby all things are framed, How under that covenant they must abide Nor ever prevail to abrogate the aeons' Inexorable decrees,—how (as we've found), In class of mortal objects, o'er all else, The mind exists of earth-born frame create And impotent unscathed to abide Across the mighty aeons, and how come In sleep those idol-apparitions, That so befool intelligence when we Do seem to view a man whom life has left. Thus far we've

gone; the order of my plan Hath brought me now unto the point where I Must make report how, too, the universe Consists of mortal body, born in time, And in what modes that congregated stuff Established itself as earth and sky, Ocean, and stars, and sun, and ball of moon; And then what living creatures rose from out The old telluric places, and what ones Were never born at all; and in what mode The human race began to name its things And use the varied speech from man to man; And in what modes hath bosomed in their breasts That awe of gods, which halloweth in all lands Fanes, altars, groves, lakes, idols of the gods. Also I shall untangle by what power The steersman nature guides the sun's courses, And the meanderings of the moon, lest we, Percase, should fancy that of own free will They circle their perennial courses round, Timing their motions for increase of crops And living creatures, or lest we should think They roll along by any plan of gods. For even those men who have learned full well That godheads lead a long life free of care, If yet meanwhile they wonder by what plan Things can go on (and chiefly yon high things Observed o'erhead on the ethereal coasts), Again are hurried back unto the fears Of old religion and adopt again Harsh masters, deemed almighty,—wretched men, Unwitting what can be and what cannot, And by what law to each its scope prescribed, Its boundary stone that clings so deep in Time. But for the rest,—lest we delay thee here Longer by empty promises—behold, Before all else, the seas, the lands, the sky: O Memmius, their threefold nature, lo, Their bodies three, three aspects so unlike, Three frames so vast, a single day shall give Unto annihilation! Then shall crash That massive form and fabric of the world Sustained so many aeons! Nor do I Fail to perceive how strange and marvellous This fact must strike the intellect of man,— Annihilation of the sky and earth That is to be,—and with what toil of words 'Tis mine to prove the same; as happens oft When once ye offer to man's listening ears Something before unheard of, but may not Subject it to the view of eyes for him Nor put it into hand—the sight and touch, Whereby the opened highways of belief Lead most directly into human breast And regions of

intelligence. But yet I will speak out. The fact itself, perchance, Will force belief in these my words, and thou Mayst see, in little time, tremendously With risen commotions of the lands all things Quaking to pieces—which afar from us May she, the steersman Nature, guide: and may Reason, O rather than the fact itself, Persuade us that all things can be o'erthrown And sink with awful-sounding breakage down! But ere on this I take a step to utter Oracles holier and soundlier based Than ever the Pythian pronounced for men From out the tripod and the Delphian laurel, I will unfold for thee with learned words Many a consolation, lest perchance, Still bridled by religion, thou suppose Lands, sun, and sky, sea, constellations, moon, Must dure forever, as of frame divine— And so conclude that it is just that those, (After the manner of the Giants), should all Pay the huge penalties for monstrous crime, Who by their reasonings do overshake The ramparts of the universe and wish There to put out the splendid sun of heaven, Branding with mortal talk immortal things— Though these same things are even so far removed From any touch of deity and seem So far unworthy of numbering with the gods, That well they may be thought to furnish rather A goodly instance of the sort of things That lack the living motion, living sense. For sure 'tis quite beside the mark to think That judgment and the nature of the mind In any kind of body can exist— Just as in ether can't exist a tree, Nor clouds in the salt sea, nor in the fields Can fishes live, nor blood in timber be, Nor sap in boulders: fixed and arranged Where everything may grow and have its place. Thus nature of mind cannot arise alone Without the body, nor have its being far From thews and blood. Yet if 'twere possible?— Much rather might this very power of mind Be in the head, the shoulders, or the heels, And, born in any part soever, yet In the same man, in the same vessel abide But since within this body even of ours Stands fixed and appears arranged sure Where soul and mind can each exist and grow, Deny we must the more that they can dure Outside the body and the breathing form In rotting clods of earth, in the sun's fire, In water, or in ether's skiey coasts. Therefore these things no whit are furnished With sense divine, since never

can they be With life-force quickened. Likewise, thou canst ne'er Believe the sacred seats of gods are here In any regions of this mundane world; Indeed, the nature of the gods, so subtle, So far removed from these our senses, scarce Is seen even by intelligence of mind. And since they've ever eluded touch and thrust Of human hands, they cannot reach to grasp Aught tangible to us. For what may not Itself be touched in turn can never touch. Wherefore, besides, also their seats must be Unlike these seats of ours,—even subtle too, As meet for subtle essence—as I'll prove Hereafter unto thee with large discourse. Further, to say that for the sake of men They willed to prepare this world's magnificence, And that 'tis therefore duty and behoof To praise the work of gods as worthy praise, And that 'tis sacrilege for men to shake Ever by any force from out their seats What hath been stablished by the Forethought old To everlasting for races of mankind, And that 'tis sacrilege to assault by words And overtopple all from base to beam,— Memmius, such notions to concoct and pile, Is verily—to dote. Our gratefulness, O what emoluments could it confer Upon Immortals and upon the Blessed That they should take a step to manage aught For sake of us? Or what new factor could, After so long a time, inveigle them— The hitherto reposeful—to desire To change their former life? For rather he Whom old things chafe seems likely to rejoice At new; but one that in fore-passed time Hath chanced upon no ill, through goodly years, O what could ever enkindle in such an one Passion for strange experiment? Or what The evil for us, if we had ne'er been born?— As though, forsooth, in darkling realms and woe Our life were lying till should dawn at last The day-spring of creation! Whosoever Hath been begotten wills perforce to stay In life, so long as fond delight detains; But whoso ne'er hath tasted love of life, And ne'er was in the count of living things, What hurts it him that he was never born? Whence, further, first was planted in the gods The archetype for gendering the world And the fore-notion of what man is like, So that they knew and pre-conceived with mind Just what they wished to make? Or how were known Ever the energies of primal germs, And what those germs, by

interchange of place, Could thus produce, if nature's self had not Given example for creating all? For in such wise primordials of things, Many in many modes, astir by blows From immemorial aeons, in motion too By their own weights, have evermore been wont To be so borne along and in all modes To meet together and to try all sorts Which, by combining one with other, they Are powerful to create, that thus it is No marvel now, if they have also fallen Into arrangements such, and if they've passed Into vibrations such, as those whereby This sum of things is carried on to-day By fixed renewal. But knew I never what The seeds primordial were, yet would I dare This to affirm, even from deep judgments based Upon the ways and conduct of the skies— This to maintain by many a fact besides— That in no wise the nature of all things For us was fashioned by a power divine— So great the faults it stands encumbered with. First, mark all regions which are overarched By the prodigious reaches of the sky: One yawning part thereof the mountain-chains And forests of the beasts do have and hold; And cliffs, and desert fens, and wastes of sea (Which sunder afar the beaches of the lands) Possess it merely; and, again, thereof Well-nigh two-thirds intolerable heat And a perpetual fall of frost doth rob From mortal kind. And what is left to till, Even that the force of nature would o'errun With brambles, did not human force oppose,— Long wont for livelihood to groan and sweat Over the two-pronged mattock and to cleave The soil in twain by pressing on the plough.

Unless, by the ploughshare turning the fruitful clods And kneading the mould, we quicken into birth, [The crops] spontaneously could not come up Into the free bright air. Even then sometimes, When things acquired by the sternest toil Are now in leaf, are now in blossom all, Either the skiey sun with baneful heats Parches, or sudden rains or chilling rime Destroys, or flaws of winds with furious whirl Torment and twist. Beside these matters, why Doth nature feed and foster on land and sea The dreadful breed of savage beasts, the foes Of the human clan? Why do the seasons bring Distempers with them? Wherefore stalks at large Death, so untimely? Then,

again, the babe, Like to the castaway of the raging surf, Lies naked on the ground, speechless, in want Of every help for life, when nature first Hath poured him forth upon the shores of light With birth-pangs from within the mother's womb, And with a plaintive wail he fills the place,— As well befitting one for whom remains In life a journey through so many ills. But all the flocks and herds and all wild beasts Come forth and grow, nor need the little rattles, Nor must be treated to the humouring nurse's Dear, broken chatter; nor seek they divers clothes To suit the changing skies; nor need, in fine, Nor arms, nor lofty ramparts, wherewithal Their own to guard—because the earth herself And nature, artificer of the world, bring forth Aboundingly all things for all.

THE WORLD IS NOT ETERNAL

And first, Since body of earth and water, air's light breath, And fiery exhalations (of which four This sum of things is seen to be compact) So all have birth and perishable frame, Thus the whole nature of the world itself Must be conceived as perishable too. For, verily, those things of which we see The parts and members to have birth in time And perishable shapes, those same we mark To be invariably born in time And born to die. And therefore when I see The mightiest members and the parts of this Our world consumed and begot again, 'Tis mine to know that also sky above And earth beneath began of old in time And shall in time go under to disaster. And lest in these affairs thou deemest me To have seized upon this point by sleight to serve My own caprice—because I have assumed That earth and fire are mortal things indeed, And have not doubted water and the air Both perish too and have affirmed the same To be again begotten and wax big— Mark well the argument: in first place, lo, Some certain parts of earth, grievously parched By unremitting suns, and trampled on By a vast throng of feet, exhale abroad A powdery haze and flying clouds of dust, Which the stout winds disperse in the whole air. A part, moreover, of

her sod and soil Is summoned to inundation by the rains; And rivers graze and gouge the banks away. Besides, whatever takes a part its own In fostering and increasing [aught]...

Is rendered back; and since, beyond a doubt, Earth, the all-mother, is beheld to be Likewise the common sepulchre of things, Therefore thou seest her minished of her plenty, And then again augmented with new growth. And for the rest, that sea, and streams, and springs Forever with new waters overflow, And that perennially the fluids well, Needeth no words—the mighty flux itself Of multitudinous waters round about Declareth this. But whatso water first Streams up is ever straightway carried off, And thus it comes to pass that all in all There is no overflow; in part because The burly winds (that over-sweep amain) And skiey sun (that with his rays dissolves) Do minish the level seas; in part because The water is diffused underground Through all the lands. The brine is filtered off, And then the liquid stuff seeps back again And all regathers at the river-heads, Whence in fresh-water currents on it flows Over the lands, adown the channels which Were cleft erstwhile and erstwhile bore along The liquid-footed floods. Now, then, of air I'll speak, which hour by hour in all its body Is changed innumerably. For whatso'er Streams up in dust or vapour off of things, The same is all and always borne along Into the mighty ocean of the air; And did not air in turn restore to things Bodies, and thus recruit them as they stream, All things by this time had resolved been And changed into air. Therefore it never Ceases to be engendered off of things And to return to things, since verily In constant flux do all things stream. Likewise, The abounding well-spring of the liquid light, The ethereal sun, doth flood the heaven o'er With constant flux of radiance ever new, And with fresh light supplies the place of light, Upon the instant. For whatever effulgence Hath first streamed off, no matter where it falls, Is lost unto the sun. And this 'tis thine To know from these examples: soon as clouds Have first begun to under-pass the sun, And, as it were, to rend the rays of light In twain, at once the lower part of them Is lost entire, and earth is overcast

Where'er the thunderheads are rolled along— So know thou mayst that things forever need A fresh replenishment of gleam and glow, And each effulgence, foremost flashed forth, Perisheth one by one. Nor otherwise Can things be seen in sunlight, lest alway The fountain-head of light supply new light. Indeed your earthly beacons of the night, The hanging lampions and the torches, bright With darting gleams and dense with livid soot, Do hurry in like manner to supply With ministering heat new light amain; Are all alive to quiver with their fires,— Are so alive, that thus the light ne'er leaves The spots it shines on, as if rent in twain: So speedily is its destruction veiled By the swift birth of flame from all the fires. Thus, then, we must suppose that sun and moon And stars dart forth their light from under-births Ever and ever new, and whatso flames First rise do perish always one by one— Lest, haply, thou shouldst think they each endure Inviolable. Again, perceivest not How stones are also conquered by Time?— Not how the lofty towers ruin down, And boulders crumble?—Not how shrines of gods And idols crack outworn?—Nor how indeed The holy Influence hath yet no power There to postpone the Terminals of Fate, Or headway make 'gainst Nature's fixed decrees? Again, behold we not the monuments Of heroes, now in ruins, asking us, In their turn likewise, if we don't believe They also age with eld? Behold we not The rended basalt ruining amain Down from the lofty mountains, powerless To dure and dree the mighty forces there Of finite time?—for they would never fall Rended asudden, if from infinite Past They had prevailed against all engin'ries Of the assaulting aeons, with no crash. Again, now look at This, which round, above, Contains the whole earth in its one embrace: If from itself it procreates all things— As some men tell—and takes them to itself When once destroyed, entirely must it be Of mortal birth and body; for whate'er From out itself giveth to other things Increase and food, the same perforce must be Minished, and then recruited when it takes Things back into itself. Besides all this, If there had been no origin-in-birth Of lands and sky, and they had ever been The everlasting, why, ere Theban war And obsequies of Troy,

have other bards Not also chanted other high affairs? Whither have sunk so oft so many deeds Of heroes? Why do those deeds live no more, Ingrafted in eternal monuments Of glory? Verily, I guess, because The Sum is new, and of a recent date The nature of our universe, and had Not long ago its own exordium. Wherefore, even now some arts are being still Refined, still increased: now unto ships Is being added many a new device; And but the other day musician-folk Gave birth to melic sounds of organing; And, then, this nature, this account of things Hath been discovered latterly, and I Myself have been discovered only now, As first among the first, able to turn The same into ancestral Roman speech. Yet if, percase, thou deemest that ere this Existed all things even the same, but that Perished the cycles of the human race In fiery exhalations, or cities fell By some tremendous quaking of the world, Or rivers in fury, after constant rains, Had plunged forth across the lands of earth And whelmed the towns—then, all the more must thou Confess, defeated by the argument, That there shall be annihilation too Of lands and sky. For at a time when things Were being taxed by maladies so great, And so great perils, if some cause more fell Had then assailed them, far and wide they would Have gone to disaster and supreme collapse. And by no other reasoning are we Seen to be mortal, save that all of us Sicken in turn with those same maladies With which have sickened in the past those men Whom nature hath removed from life.

gain, Whatever abides eternal must indeed Either repel all strokes, because 'tis made Of solid body, and permit no entrance Of aught with power to sunder from within The parts compact—as are those seeds of stuff Whose nature we've exhibited before; Or else be able to endure through time For this: because they are from blows exempt, As is the void, the which abides untouched, Unsmit by any stroke; or else because There is no room around, whereto things can, As 'twere, depart in dissolution all,— Even as the sum of sums eternal is, Without or place beyond whereto things may Asunder fly, or bodies which can smite, And thus dissolve them by the blows of might. But not of solid body, as I've shown, Exists the nature of the

world, because In things is intermingled there a void; Nor is the world yet as the void, nor are, Moreover, bodies lacking which, percase, Rising from out the infinite, can fell With fury-whirlwinds all this sum of things, Or bring upon them other cataclysm Of peril strange; and yonder, too, abides The infinite space and the profound abyss— Whereinto, lo, the ramparts of the world Can yet be shivered. Or some other power Can pound upon them till they perish all. Thus is the door of doom, O nowise barred Against the sky, against the sun and earth And deep-sea waters, but wide open stands And gloats upon them, monstrous and agape. Wherefore, again, 'tis needful to confess That these same things are born in time; for things Which are of mortal body could indeed Never from infinite past until to-day Have spurned the multitudinous assaults Of the immeasurable aeons old. Again, since battle so fiercely one with other The four most mighty members the world, Aroused in an all unholy war, Seest not that there may be for them an end Of the long strife?—Or when the skiey sun And all the heat have won dominion o'er The sucked-up waters all?—And this they try Still to accomplish, though as yet they fail,— For so aboundingly the streams supply New store of waters that 'tis rather they Who menace the world with inundations vast From forth the unplumbed chasms of the sea. But vain—since winds (that over-sweep amain) And skiey sun (that with his rays dissolves) Do minish the level seas and trust their power To dry up all, before the waters can Arrive at the end of their endeavouring. Breathing such vasty warfare, they contend In balanced strife the one with other still Concerning mighty issues,—though indeed The fire was once the more victorious, And once—as goes the tale—the water won A kingdom in the fields. For fire o'ermastered And licked up many things and burnt away, What time the impetuous horses of the Sun Snatched Phaethon headlong from his skiey road Down the whole ether and over all the lands. But the omnipotent Father in keen wrath Then with the sudden smite of thunderbolt Did hurl the mighty-minded hero off Those horses to the earth. And Sol, his sire, Meeting him as he fell, caught up in hand The

ever-blazing lampion of the world, And drave together the pell-mell horses there And yoked them all a-tremble, and amain, Steering them over along their own old road, Restored the cosmos,—as forsooth we hear From songs of ancient poets of the Greeks— A tale too far away from truth, meseems. For fire can win when from the infinite Has risen a larger throng of particles Of fiery stuff; and then its powers succumb, Somehow subdued again, or else at last It shrivels in torrid atmospheres the world. And whilom water too began to win— As goes the story—when it overwhelmed The lives of men with billows; and thereafter, When all that force of water-stuff which forth From out the infinite had risen up Did now retire, as somehow turned aside, The rain-storms stopped, and streams their fury checked.

FORMATION OF THE WORLD AND ASTRONOMICAL QUESTIONS

But in what modes that conflux of first-stuff Did found the multitudinous universe Of earth, and sky, and the unfathomed deeps Of ocean, and courses of the sun and moon, I'll now in order tell. For of a truth Neither by counsel did the primal germs 'Stablish themselves, as by keen act of mind, Each in its proper place; nor did they make, Forsooth, a compact how each germ should move; But, lo, because primordials of things, Many in many modes, astir by blows From immemorial aeons, in motion too By their own weights, have evermore been wont To be so borne along and in all modes To meet together and to try all sorts Which, by combining one with other, they Are powerful to create: because of this It comes to pass that those primordials, Diffused far and wide through mighty aeons, The while they unions try, and motions too, Of every kind, meet at the last amain, And so become oft the commencements fit Of mighty things—earth, sea, and sky, and race Of living creatures. In that long-ago The wheel of the sun could nowhere be discerned Flying far up with its abounding blaze, Nor constellations of the mighty world, Nor ocean, nor heaven, nor even earth nor air. Nor aught of things like unto things of ours Could then be seen—but only some strange storm And a prodigious hurly-burly mass Compounded of all kinds of primal germs, Whose battling discords

in disorder kept Interstices, and paths, coherencies, And weights, and blows, encounterings, and motions, Because, by reason of their forms unlike And varied shapes, they could not all thuswise Remain conjoined nor harmoniously Have interplay of movements. But from there Portions began to fly asunder, and like With like to join, and to block out a world, And to divide its members and dispose Its mightier parts—that is, to set secure The lofty heavens from the lands, and cause The sea to spread with waters separate, And fires of ether separate and pure Likewise to congregate apart. For, lo, First came together the earthy particles (As being heavy and intertangled) there In the mid-region, and all began to take The lowest abodes; and ever the more they got One with another intertangled, the more They pressed from out their mass those particles Which were to form the sea, the stars, the sun, And moon, and ramparts of the mighty world— For these consist of seeds more smooth and round And of much smaller elements than earth. And thus it was that ether, fraught with fire, First broke away from out the earthen parts, Athrough the innumerable pores of earth, And raised itself aloft, and with itself Bore lightly off the many starry fires; And not far otherwise we often see

And the still lakes and the perennial streams Exhale a mist, and even as earth herself Is seen at times to smoke, when first at dawn The light of the sun, the many-rayed, begins To redden into gold, over the grass Begemmed with dew. When all of these are brought Together overhead, the clouds on high With now concreted body weave a cover Beneath the heavens. And thuswise ether too, Light and diffusive, with concreted body On all sides spread, on all sides bent itself Into a dome, and, far and wide diffused On unto every region on all sides, Thus hedged all else within its greedy clasp. Hard upon ether came the origins Of sun and moon, whose globes revolve in air Midway between the earth and mightiest ether,— For neither took them, since they weighed too little To sink and settle, but too much to glide Along the upmost shores; and yet they are In such a wise midway between the twain As ever to whirl their living bodies round, And ever to dure as parts of the wide Whole;

In the same fashion as certain members may In us remain at rest, whilst others move. When, then, these substances had been withdrawn, Amain the earth, where now extend the vast Cerulean zones of all the level seas, Caved in, and down along the hollows poured The whirlpools of her brine; and day by day The more the tides of ether and rays of sun On every side constrained into one mass The earth by lashing it again, again, Upon its outer edges (so that then, Being thus beat upon, 'twas all condensed About its proper centre), ever the more The salty sweat, from out its body squeezed, Augmented ocean and the fields of foam By seeping through its frame, and all the more Those many particles of heat and air Escaping, began to fly aloft, and form, By condensation there afar from earth, The high refulgent circuits of the heavens. The plains began to sink, and windy slopes Of the high mountains to increase; for rocks Could not subside, nor all the parts of ground Settle alike to one same level there. Thus, then, the massy weight of earth stood firm With now concreted body, when (as 'twere) All of the slime of the world, heavy and gross, Had run together and settled at the bottom, Like lees or bilge. Then ocean, then the air, Then ether herself, the fraught-with-fire, were all Left with their liquid bodies pure and free, And each more lighter than the next below; And ether, most light and liquid of the three, Floats on above the long aerial winds, Nor with the brawling of the winds of air Mingles its liquid body. It doth leave All there—those under-realms below her heights— There to be overset in whirlwinds wild,— Doth leave all there to brawl in wayward gusts, Whilst, gliding with a fixed impulse still, Itself it bears its fires along. For, lo, That ether can flow thus steadily on, on, With one unaltered urge, the Pontus proves— That sea which floweth forth with fixed tides, Keeping one onward tenor as it glides. And that the earth may there abide at rest In the mid-region of the world, it needs Must vanish bit by bit in weight and lessen, And have another substance underneath, Conjoined to it from its earliest age In linked unison with the vasty world's Realms of the air in which it roots and lives. On this account, the earth is not a load, Nor presses down on winds of air beneath; Even as

unto a man his members be Without all weight—the head is not a load Unto the neck; nor do we feel the whole Weight of the body to centre in the feet. But whatso weights come on us from without, Weights laid upon us, these harass and chafe, Though often far lighter. For to such degree It matters always what the innate powers Of any given thing may be. The earth Was, then, no alien substance fetched amain, And from no alien firmament cast down On alien air; but was conceived, like air, In the first origin of this the world, As a fixed portion of the same, as now Our members are seen to be a part of us. Besides, the earth, when of a sudden shook By the big thunder, doth with her motion shake All that's above her—which she ne'er could do By any means, were earth not bounden fast Unto the great world's realms of air and sky: For they cohere together with common roots, Conjoined both, even from their earliest age, In linked unison. Aye, seest thou not That this most subtle energy of soul Supports our body, though so heavy a weight,— Because, indeed, 'tis with it so conjoined In linked unison? What power, in sum, Can raise with agile leap our body aloft, Save energy of mind which steers the limbs? Now seest thou not how powerful may be A subtle nature, when conjoined it is With heavy body, as air is with the earth Conjoined, and energy of mind with us? Now let us sing what makes the stars to move. In first place, if the mighty sphere of heaven Revolveth round, then needs we must aver That on the upper and the under pole Presses a certain air, and from without Confines them and encloseth at each end; And that, moreover, another air above Streams on athwart the top of the sphere and tends In same direction as are rolled along The glittering stars of the eternal world; Or that another still streams on below To whirl the sphere from under up and on In opposite direction—as we see The rivers turn the wheels and water-scoops. It may be also that the heavens do all Remain at rest, whilst yet are borne along The lucid constellations; either because Swift tides of ether are by sky enclosed, And whirl around, seeking a passage out, And everywhere make roll the starry fires Through the Summanian regions of the sky; Or else because some air, streaming along From

an eternal quarter off beyond, Whileth the driven fires, or, then, because The fires themselves have power to creep along, Going wherever their food invites and calls, And feeding their flaming bodies everywhere Throughout the sky. Yet which of these is cause In this our world 'tis hard to say for sure; But what can be throughout the universe, In divers worlds on divers plan create, This only do I show, and follow on To assign unto the motions of the stars Even several causes which 'tis possible Exist throughout the universal All; Of which yet one must be the cause even here Which maketh motion for our constellations. Yet to decide which one of them it be Is not the least the business of a man Advancing step by cautious step, as I. Nor can the sun's wheel larger be by much Nor its own blaze much less than either seems Unto our senses. For from whatso spaces Fires have the power on us to cast their beams And blow their scorching exhalations forth Against our members, those same distances Take nothing by those intervals away From bulk of flames; and to the sight the fire Is nothing shrunken. Therefore, since the heat And the outpoured light of skiey sun Arrive our senses and caress our limbs, Form too and bigness of the sun must look Even here from earth just as they really be, So that thou canst scarce nothing take or add. And whether the journeying moon illuminate The regions round with bastard beams, or throw From off her proper body her own light,— Whichever it be, she journeys with a form Naught larger than the form doth seem to be Which we with eyes of ours perceive. For all The far removed objects of our gaze Seem through much air confused in their look Ere minished in their bigness. Wherefore, moon, Since she presents bright look and clear-cut form, May there on high by us on earth be seen Just as she is with extreme bounds defined, And just of the size. And lastly, whatso fires Of ether thou from earth beholdest, these Thou mayst consider as possibly of size The least bit less, or larger by a hair Than they appear—since whatso fires we view Here in the lands of earth are seen to change From time to time their size to less or more Only the least, when more or less away, So long as still they bicker clear, and still Their glow's perceived. Nor need there be for men

Astonishment that yonder sun so small Can yet send forth so great a light as fills Oceans and all the lands and sky aflood, And with its fiery exhalations steeps The world at large. For it may be, indeed, That one vast-flowing well-spring of the whole Wide world from here hath opened and out-gushed, And shot its light abroad; because thuswise The elements of fiery exhalations From all the world around together come, And thuswise flow into a bulk so big That from one single fountain-head may stream This heat and light. And seest thou not, indeed, How widely one small water-spring may wet The meadow-lands at times and flood the fields? 'Tis even possible, besides, that heat From forth the sun's own fire, albeit that fire Be not a great, may permeate the air With the fierce hot—if but, perchance, the air Be of condition and so tempered then As to be kindled, even when beat upon Only by little particles of heat— Just as we sometimes see the standing grain Or stubble straw in conflagration all From one lone spark. And possibly the sun, Agleam on high with rosy lampion, Possesses about him with invisible heats A plenteous fire, by no effulgence marked, So that he maketh, he, the Fraught-with-fire, Increase to such degree the force of rays. Nor is there one sure cause revealed to men How the sun journeys from his summer haunts On to the mid-most winter turning-points In Capricorn, the thence reverting veers Back to solstitial goals of Cancer; nor How 'tis the moon is seen each month to cross That very distance which in traversing The sun consumes the measure of a year. I say, no one clear reason hath been given For these affairs. Yet chief in likelihood Seemeth the doctrine which the holy thought Of great Democritus lays down: that ever The nearer the constellations be to earth The less can they by whirling of the sky Be borne along, because those skiey powers Of speed aloft do vanish and decrease In under-regions, and the sun is thus Left by degrees behind amongst those signs That follow after, since the sun he lies Far down below the starry signs that blaze; And the moon lags even tardier than the sun: In just so far as is her course removed From upper heaven and nigh unto the lands, In just so far she fails to keep the pace With

starry signs above; for just so far As feebler is the whirl that bears her on, (Being, indeed, still lower than the sun), In just so far do all the starry signs, Circling around, o'ertake her and o'erpass. Therefore it happens that the moon appears More swiftly to return to any sign Along the Zodiac, than doth the sun, Because those signs do visit her again More swiftly than they visit the great sun. It can be also that two streams of air Alternately at fixed periods Blow out from transverse regions of the world, Of which the one may thrust the sun away From summer-signs to mid-most winter goals And rigors of the cold, and the other then May cast him back from icy shades of chill Even to the heat-fraught regions and the signs That blaze along the Zodiac. So, too, We must suppose the moon and all the stars, Which through the mighty and sidereal years Roll round in mighty orbits, may be sped By streams of air from regions alternate. Seest thou not also how the clouds be sped By contrary winds to regions contrary, The lower clouds diversely from the upper? Then, why may yonder stars in ether there Along their mighty orbits not be borne By currents opposite the one to other? But night o'erwhelms the lands with vasty murk Either when sun, after his diurnal course, Hath walked the ultimate regions of the sky And wearily hath panted forth his fires, Shivered by their long journeying and wasted By traversing the multitudinous air, Or else because the self-same force that drave His orb along above the lands compels Him then to turn his course beneath the lands. Matuta also at a fixed hour Spreadeth the roseate morning out along The coasts of heaven and deploys the light, Either because the self-same sun, returning Under the lands, aspires to seize the sky, Striving to set it blazing with his rays Ere he himself appear, or else because Fires then will congregate and many seeds Of heat are wont, even at a fixed time, To stream together—gendering evermore New suns and light. Just so the story goes That from the Idaean mountain-tops are seen Dispersed fires upon the break of day Which thence combine, as 'twere, into one ball And form an orb. Nor yet in these affairs Is aught for wonder that these seeds of fire Can thus together stream at time so fixed And shape anew the splendour of the sun. For many

facts we see which come to pass At fixed time in all things: burgeon shrubs At fixed time, and at a fixed time They cast their flowers; and Eld commands the teeth, At time as surely fixed, to drop away, And Youth commands the growing boy to bloom With the soft down and let from both his cheeks The soft beard fall. And lastly, thunder-bolts, Snow, rains, clouds, winds, at seasons of the year Nowise unfixed, all do come to pass. For where, even from their old primordial start Causes have ever worked in such a way, And where, even from the world's first origin, Thuswise have things befallen, so even now After a fixed order they come round In sequence also. Likewise, days may wax Whilst the nights wane, and daylight minished be Whilst nights do take their augmentations, Either because the self-same sun, coursing Under the lands and over in two arcs, A longer and a briefer, doth dispart The coasts of ether and divides in twain His orbit all unequally, and adds, As round he's borne, unto the one half there As much as from the other half he's ta'en, Until he then arrives that sign of heaven Where the year's node renders the shades of night Equal unto the periods of light. For when the sun is midway on his course Between the blasts of northwind and of south, Heaven keeps his two goals parted equally, By virtue of the fixed position old Of the whole starry Zodiac, through which That sun, in winding onward, takes a year, Illumining the sky and all the lands With oblique light—as men declare to us Who by their diagrams have charted well Those regions of the sky which be adorned With the arranged signs of Zodiac. Or else, because in certain parts the air Under the lands is denser, the tremulous Bright beams of fire do waver tardily, Nor easily can penetrate that air Nor yet emerge unto their rising-place: For this it is that nights in winter time Do linger long, ere comes the many-rayed Round Badge of the day. Or else because, as said, In alternating seasons of the year Fires, now more quick, and now more slow, are wont To stream together,—the fires which make the sun To rise in some one spot—therefore it is That those men seem to speak the truth [who hold A new sun is with each new daybreak born]. The moon she possibly doth shine because Strook by the rays of

sun, and day by day May turn unto our gaze her light, the more She doth recede from orb of sun, until, Facing him opposite across the world, She hath with full effulgence gleamed abroad, And, at her rising as she soars above, Hath there observed his setting; thence likewise She needs must hide, as 'twere, her light behind By slow degrees, the nearer now she glides, Along the circle of the Zodiac, From her far place toward fires of yonder sun,— As those men hold who feign the moon to be Just like a ball and to pursue a course Betwixt the sun and earth. There is, again, Some reason to suppose that moon may roll With light her very own, and thus display The varied shapes of her resplendence there. For near her is, percase, another body, Invisible, because devoid of light, Borne on and gliding all along with her, Which in three modes may block and blot her disk. Again, she may revolve upon herself, Like to a ball's sphere—if perchance that be— One half of her dyed o'er with glowing light, And by the revolution of that sphere She may beget for us her varying shapes, Until she turns that fiery part of her Full to the sight and open eyes of men; Thence by slow stages round and back she whirls, Withdrawing thus the luminiferous part Of her sphered mass and ball, as, verily, The Babylonian doctrine of Chaldees, Refuting the art of Greek astrologers, Labours, in opposition, to prove sure— As if, forsooth, the thing for which each fights, Might not alike be true,—or aught there were Wherefore thou mightest risk embracing one More than the other notion. Then, again, Why a new moon might not forevermore Created be with fixed successions there Of shapes and with configurations fixed, And why each day that bright created moon Might not miscarry and another be, In its stead and place, engendered anew, 'Tis hard to show by reason, or by words To prove absurd—since, lo, so many things Can be create with fixed successions: Spring-time and Venus come, and Venus' boy, The winged harbinger, steps on before, And hard on Zephyr's foot-prints Mother Flora, Sprinkling the ways before them, filleth all With colours and with odours excellent; Whereafter follows arid Heat, and he Companioned is by Ceres, dusty one, And by the Etesian Breezes of the north; Then cometh Autumn on,

and with him steps Lord Bacchus, and then other Seasons too And other Winds do follow—the high roar Of great Volturnus, and the Southwind strong With thunder-bolts. At last earth's Shortest-Day Bears on to men the snows and brings again The numbing cold. And Winter follows her, His teeth with chills a-chatter. Therefore, 'tis The less a marvel, if at fixed time A moon is thus begotten and again At fixed time destroyed, since things so many Can come to being thus at fixed time. Likewise, the sun's eclipses and the moon's Far occultations rightly thou mayst deem As due to several causes. For, indeed, Why should the moon be able to shut out Earth from the light of sun, and on the side To earthward thrust her high head under sun, Opposing dark orb to his glowing beams— And yet, at same time, one suppose the effect Could not result from some one other body Which glides devoid of light forevermore? Again, why could not sun, in weakened state, At fixed time for-lose his fires, and then, When he has passed on along the air Beyond the regions, hostile to his flames, That quench and kill his fires, why could not he Renew his light? And why should earth in turn Have power to rob the moon of light, and there, Herself on high, keep the sun hid beneath, Whilst the moon glideth in her monthly course Athrough the rigid shadows of the cone?— And yet, at same time, some one other body Not have the power to under-pass the moon, Or glide along above the orb of sun, Breaking his rays and outspread light asunder? And still, if moon herself refulgent be With her own sheen, why could she not at times In some one quarter of the mighty world Grow weak and weary, whilst she passeth through Regions unfriendly to the beams her own?

ORIGINS OF VEGETABLE AND ANIMAL LIFE

And now to what remains!—Since I've resolved By what arrangements all things come to pass Through the blue regions of the mighty world,— How we can know what energy and cause Started the various courses of the sun And the moon's goings,

and by what far means They can succumb, the while with thwarted light, And veil with shade the unsuspecting lands, When, as it were, they blink, and then again With open eye survey all regions wide, Resplendent with white radiance—I do now Return unto the world's primeval age And tell what first the soft young fields of earth With earliest parturition had decreed To raise in air unto the shores of light And to entrust unto the wayward winds. In the beginning, earth gave forth, around The hills and over all the length of plains, The race of grasses and the shining green; The flowery meadows sparkled all aglow With greening colour, and thereafter, lo, Unto the divers kinds of trees was given An emulous impulse mightily to shoot, With a free rein, aloft into the air. As feathers and hairs and bristles are begot The first on members of the four-foot breeds And on the bodies of the strong-y-winged, Thus then the new Earth first of all put forth Grasses and shrubs, and afterward begat The mortal generations, there upsprung— Innumerable in modes innumerable— After diverging fashions. For from sky These breathing-creatures never can have dropped, Nor the land-dwellers ever have come up Out of sea-pools of salt. How true remains, How merited is that adopted name Of earth—"The Mother!"—since from out the earth Are all begotten. And even now arise From out the loams how many living things— Concreted by the rains and heat of the sun. Wherefore 'tis less a marvel, if they sprang In Long Ago more many, and more big, Matured of those days in the fresh young years Of earth and ether. First of all, the race Of the winged ones and parti-coloured birds, Hatched out in spring-time, left their eggs behind; As now-a-days in summer tree-crickets Do leave their shiny husks of own accord, Seeking their food and living. Then it was This earth of thine first gave unto the day The mortal generations; for prevailed Among the fields abounding hot and wet. And hence, where any fitting spot was given, There 'gan to grow womb-cavities, by roots Affixed to earth. And when in ripened time The age of the young within (that sought the air And fled earth's damps) had burst these wombs, O then Would Nature thither turn the pores of earth And make her spurt from open

veins a juice Like unto milk; even as a woman now Is filled, at child-bearing, with the sweet milk, Because all that swift stream of aliment Is thither turned unto the mother-breasts. There earth would furnish to the children food; Warmth was their swaddling cloth, the grass their bed Abounding in soft down. Earth's newness then Would rouse no dour spells of the bitter cold, Nor extreme heats nor winds of mighty powers— For all things grow and gather strength through time In like proportions; and then earth was young. Wherefore, again, again, how merited Is that adopted name of Earth—The Mother!— Since she herself begat the human race, And at one well-nigh fixed time brought forth Each breast that ranges raving round about Upon the mighty mountains and all birds Aerial with many a varied shape. But, lo, because her bearing years must end, She ceased, like to a woman worn by eld. For lapsing aeons change the nature of The whole wide world, and all things needs must take One status after other, nor aught persists Forever like itself. All things depart; Nature she changeth all, compelleth all To transformation. Lo, this moulders down, A-slack with weary eld, and that, again, Prospers in glory, issuing from contempt. In suchwise, then, the lapsing aeons change The nature of the whole wide world, and earth Taketh one status after other. And what She bore of old, she now can bear no longer, And what she never bore, she can to-day. In those days also the telluric world Strove to beget the monsters that upsprung With their astounding visages and limbs— The Man-woman—a thing betwixt the twain, Yet neither, and from either sex remote— Some gruesome Boggles orphaned of the feet, Some widowed of the hands, dumb Horrors too Without a mouth, or blind Ones of no eye, Or Bulks all shackled by their legs and arms Cleaving unto the body fore and aft, Thuswise, that never could they do or go, Nor shun disaster, nor take the good they would. And other prodigies and monsters earth Was then begetting of this sort—in vain, Since Nature banned with horror their increase, And powerless were they to reach unto The coveted flower of fair maturity, Or to find aliment, or to intertwine In works of Venus. For we see there must Concur in life conditions manifold, If life

is ever by begetting life To forge the generations one by one: First, foods must be; and, next, a path whereby The seeds of impregnation in the frame May ooze, released from the members all; Last, the possession of those instruments Whereby the male with female can unite, The one with other in mutual ravishments. And in the ages after monsters died, Perforce there perished many a stock, unable By propagation to forge a progeny. For whatsoever creatures thou beholdest Breathing the breath of life, the same have been Even from their earliest age preserved alive By cunning, or by valour, or at least By speed of foot or wing. And many a stock Remaineth yet, because of use to man, And so committed to man's guardianship. Valour hath saved alive fierce lion-breeds And many another terrorizing race, Cunning the foxes, flight the antlered stags. Light-sleeping dogs with faithful heart in breast, However, and every kind begot from seed Of beasts of draft, as, too, the woolly flocks And horned cattle, all, my Memmius, Have been committed to guardianship of men. For anxiously they fled the savage beasts, And peace they sought and their abundant foods, Obtained with never labours of their own, Which we secure to them as fit rewards For their good service. But those beasts to whom Nature has granted naught of these same things— Beasts quite unfit by own free will to thrive And vain for any service unto us In thanks for which we should permit their kind To feed and be in our protection safe— Those, of a truth, were wont to be exposed, Enshackled in the gruesome bonds of doom, As prey and booty for the rest, until Nature reduced that stock to utter death. But Centaurs ne'er have been, nor can there be Creatures of twofold stock and double frame, Compact of members alien in kind, Yet formed with equal function, equal force In every bodily part—a fact thou mayst, However dull thy wits, well learn from this: The horse, when his three years have rolled away, Flowers in his prime of vigour; but the boy Not so, for oft even then he gropes in sleep After the milky nipples of the breasts, An infant still. And later, when at last The lusty powers of horses and stout limbs, Now weak through lapsing life, do fail with age, Lo, only then doth youth with flowering years Begin

for boys, and clothe their ruddy cheeks With the soft down. So never deem, percase, That from a man and from the seed of horse, The beast of draft, can Centaurs be composed Or e'er exist alive, nor Scyllas be— The half-fish bodies girdled with mad dogs— Nor others of this sort, in whom we mark Members discordant each with each; for ne'er At one same time they reach their flower of age Or gain and lose full vigour of their frame, And never burn with one same lust of love, And never in their habits they agree, Nor find the same foods equally delightsome— Sooth, as one oft may see the bearded goats Batten upon the hemlock which to man Is violent poison. Once again, since flame Is wont to scorch and burn the tawny bulks Of the great lions as much as other kinds Of flesh and blood existing in the lands, How could it be that she, Chimaera lone, With triple body—fore, a lion she; And aft, a dragon; and betwixt, a goat— Might at the mouth from out the body belch Infuriate flame? Wherefore, the man who feigns Such beings could have been engendered When earth was new and the young sky was fresh (Basing his empty argument on new) May babble with like reason many whims Into our ears: he'll say, perhaps, that then Rivers of gold through every landscape flowed, That trees were wont with precious stones to flower, Or that in those far aeons man was born With such gigantic length and lift of limbs As to be able, based upon his feet, Deep oceans to bestride or with his hands To whirl the firmament around his head. For though in earth were many seeds of things In the old time when this telluric world First poured the breeds of animals abroad, Still that is nothing of a sign that then Such hybrid creatures could have been begot And limbs of all beasts heterogeneous Have been together knit; because, indeed, The divers kinds of grasses and the grains And the delightsome trees—which even now Spring up abounding from within the earth— Can still ne'er be begotten with their stems Begrafted into one; but each sole thing Proceeds according to its proper wont And all conserve their own distinctions based In nature's fixed decree.

ORIGINS AND SAVAGE PERIOD OF MANKIND

But mortal man Was then far hardier in the old champaign, As well he should be, since a hardier earth Had him begotten; builded too was he Of bigger and more solid bones within, And knit with stalwart sinews through the flesh, Nor easily seized by either heat or cold, Or alien food or any ail or irk. And whilst so many lustrums of the sun Rolled on across the sky, men led a life After the roving habit of wild beasts. Not then were sturdy guiders of curved ploughs, And none knew then to work the fields with iron, Or plant young shoots in holes of delved loam, Or lop with hooked knives from off high trees The boughs of yester-year. What sun and rains To them had given, what earth of own accord Created then, was boon enough to glad Their simple hearts. Mid acorn-laden oaks Would they refresh their bodies for the nonce; And the wild berries of the arbute-tree, Which now thou seest to ripen purple-red In winter time, the old telluric soil Would bear then more abundant and more big. And many coarse foods, too, in long ago The blooming freshness of the rank young world Produced, enough for those poor wretches there. And rivers and springs would summon them of old To slake the thirst, as now from the great hills The water's down-rush calls aloud and far The thirsty generations of the wild. So, too, they sought the grottos of the Nymphs— The woodland haunts discovered as they ranged— From forth of which they knew that gliding rills With gush and splash abounding laved the rocks, The dripping rocks, and trickled from above Over the verdant moss; and here and there Welled up and burst across the open flats. As yet they knew not to enkindle fire Against the cold, nor hairy pelts to use And clothe their bodies with the spoils of beasts; But huddled in groves, and mountain-caves, and woods, And 'mongst the thickets hid their squalid backs, When driven to flee the lashings of the winds And the big rains. Nor could they then regard The general good, nor did they know to use In common any customs, any laws: Whatever of booty fortune unto each Had proffered, each alone would bear away, By instinct

trained for self to thrive and live. And Venus in the forests then would link The lovers' bodies; for the woman yielded Either from mutual flame, or from the man's Impetuous fury and insatiate lust, Or from a bribe—as acorn-nuts, choice pears, Or the wild berries of the arbute-tree. And trusting wondrous strength of hands and legs, They'd chase the forest-wanderers, the beasts; And many they'd conquer, but some few they fled, A-skulk into their hiding-places...

With the flung stones and with the ponderous heft Of gnarled branch. And by the time of night O'ertaken, they would throw, like bristly boars, Their wildman's limbs naked upon the earth, Rolling themselves in leaves and fronded boughs. Nor would they call with lamentations loud Around the fields for daylight and the sun, Quaking and wand'ring in shadows of the night; But, silent and buried in a sleep, they'd wait Until the sun with rosy flambeau brought The glory to the sky. From childhood wont Ever to see the dark and day begot In times alternate, never might they be Wildered by wild misgiving, lest a night Eternal should possess the lands, with light Of sun withdrawn forever. But their care Was rather that the clans of savage beasts Would often make their sleep-time horrible For those poor wretches; and, from home y-driven, They'd flee their rocky shelters at approach Of boar, the spumy-lipped, or lion strong, And in the midnight yield with terror up To those fierce guests their beds of out-spread leaves. And yet in those days not much more than now Would generations of mortality Leave the sweet light of fading life behind. Indeed, in those days here and there a man, More oftener snatched upon, and gulped by fangs, Afforded the beasts a food that roared alive, Echoing through groves and hills and forest-trees, Even as he viewed his living flesh entombed Within a living grave; whilst those whom flight Had saved, with bone and body bitten, shrieked, Pressing their quivering palms to loathsome sores, With horrible voices for eternal death— Until, forlorn of help, and witless what Might medicine their wounds, the writhing pangs Took them from life. But not in those far times Would one lone day give over unto doom A soldiery in thousands marching on Beneath the battle-banners, nor

would then The ramping breakers of the main seas dash Whole argosies and crews upon the rocks. But ocean uprisen would often rave in vain, Without all end or outcome, and give up Its empty menacings as lightly too; Nor soft seductions of a serene sea Could lure by laughing billows any man Out to disaster: for the science bold Of ship-sailing lay dark in those far times. Again, 'twas then that lack of food gave o'er Men's fainting limbs to dissolution: now 'Tis plenty overwhelms. Unwary, they Oft for themselves themselves would then outpour The poison; now, with nicer art, themselves They give the drafts to others.

BEGINNINGS OF CIVILIZATION

Afterwards, When huts they had procured and pelts and fire, And when the woman, joined unto the man, Withdrew with him into one dwelling place,

Were known; and when they saw an offspring born From out themselves, then first the human race Began to soften. For 'twas now that fire Rendered their shivering frames less staunch to bear, Under the canopy of the sky, the cold; And Love reduced their shaggy hardiness; And children, with the prattle and the kiss, Soon broke the parents' haughty temper down. Then, too, did neighbours 'gin to league as friends, Eager to wrong no more or suffer wrong, And urged for children and the womankind Mercy, of fathers, whilst with cries and gestures They stammered hints how meet it was that all Should have compassion on the weak. And still, Though concord not in every wise could then Begotten be, a good, a goodly part Kept faith inviolate—or else mankind Long since had been unutterably cut off, And propagation never could have brought The species down the ages. Lest, perchance, Concerning these affairs thou ponderest In silent meditation, let me say 'Twas lightning brought primevally to earth The fire for mortals, and from thence hath spread O'er all the lands the flames of heat. For thus Even now we see so many objects, touched By the celestial flames, to flash aglow, When thunderbolt has

dowered them with heat. Yet also when a many-branched tree, Beaten by winds, writhes swaying to and fro, Pressing 'gainst branches of a neighbour tree, There by the power of mighty rub and rub Is fire engendered; and at times out-flares The scorching heat of flame, when boughs do chafe Against the trunks. And of these causes, either May well have given to mortal men the fire. Next, food to cook and soften in the flame The sun instructed, since so oft they saw How objects mellowed, when subdued by warmth And by the raining blows of fiery beams, Through all the fields. And more and more each day Would men more strong in sense, more wise in heart, Teach them to change their earlier mode and life By fire and new devices. Kings began Cities to found and citadels to set, As strongholds and asylums for themselves, And flocks and fields to portion for each man After the beauty, strength, and sense of each— For beauty then imported much, and strength Had its own rights supreme. Thereafter, wealth Discovered was, and gold was brought to light, Which soon of honour stripped both strong and fair; For men, however beautiful in form Or valorous, will follow in the main The rich man's party. Yet were man to steer His life by sounder reasoning, he'd own Abounding riches, if with mind content He lived by thrift; for never, as I guess, Is there a lack of little in the world. But men wished glory for themselves and power Even that their fortunes on foundations firm Might rest forever, and that they themselves, The opulent, might pass a quiet life— In vain, in vain; since, in the strife to climb On to the heights of honour, men do make Their pathway terrible; and even when once They reach them, envy like the thunderbolt At times will smite, O hurling headlong down To murkiest Tartarus, in scorn; for, lo, All summits, all regions loftier than the rest, Smoke, blasted as by envy's thunderbolts; So better far in quiet to obey, Than to desire chief mastery of affairs And ownership of empires. Be it so; And let the weary sweat their life-blood out All to no end, battling in hate along The narrow path of man's ambition; Since all their wisdom is from others' lips, And all they seek is known from what they've heard And less from what they've thought. Nor is this folly Greater to-day, nor greater

soon to be, Than' twas of old. And therefore kings were slain, And pristine majesty of golden thrones And haughty sceptres lay o'erturned in dust; And crowns, so splendid on the sovereign heads, Soon bloody under the proletarian feet, Groaned for their glories gone—for erst o'er-much Dreaded, thereafter with more greedy zest Trampled beneath the rabble heel. Thus things Down to the vilest lees of brawling mobs Succumbed, whilst each man sought unto himself Dominion and supremacy. So next Some wiser heads instructed men to found The magisterial office, and did frame Codes that they might consent to follow laws. For humankind, o'er wearied with a life Fostered by force, was ailing from its feuds; And so the sooner of its own free will Yielded to laws and strictest codes. For since Each hand made ready in its wrath to take A vengeance fiercer than by man's fair laws Is now conceded, men on this account Loathed the old life fostered by force. 'Tis thence That fear of punishments defiles each prize Of wicked days; for force and fraud ensnare Each man around, and in the main recoil On him from whence they sprung. Not easy 'tis For one who violates by ugly deeds The bonds of common peace to pass a life Composed and tranquil. For albeit he 'scape The race of gods and men, he yet must dread 'Twill not be hid forever—since, indeed, So many, oft babbling on amid their dreams Or raving in sickness, have betrayed themselves (As stories tell) and published at last Old secrets and the sins. But nature 'twas Urged men to utter various sounds of tongue And need and use did mould the names of things, About in same wise as the lack-speech years Compel young children unto gesturings, Making them point with finger here and there At what's before them. For each creature feels By instinct to what use to put his powers. Ere yet the bull-calf's scarce begotten horns Project above his brows, with them he 'gins Enraged to butt and savagely to thrust. But whelps of panthers and the lion's cubs With claws and paws and bites are at the fray Already, when their teeth and claws be scarce As yet engendered. So again, we see All breeds of winged creatures trust to wings And from their fledgling pinions seek to get A fluttering assistance. Thus, to think That in those days some

man apportioned round To things their names, and that from him men learned Their first nomenclature, is foolery. For why could he mark everything by words And utter the various sounds of tongue, what time The rest may be supposed powerless To do the same? And, if the rest had not Already one with other used words, Whence was implanted in the teacher, then, Fore-knowledge of their use, and whence was given To him alone primordial faculty To know and see in mind what 'twas he willed? Besides, one only man could scarce subdue An overmastered multitude to choose To get by heart his names of things. A task Not easy 'tis in any wise to teach And to persuade the deaf concerning what 'Tis needful for to do. For ne'er would they Allow, nor ne'er in anywise endure Perpetual vain dingdong in their ears Of spoken sounds unheard before. And what, At last, in this affair so wondrous is, That human race (in whom a voice and tongue Were now in vigour) should by divers words Denote its objects, as each divers sense Might prompt?—since even the speechless herds, aye, since The very generations of wild beasts Are wont dissimilar and divers sounds To rouse from in them, when there's fear or pain, And when they burst with joys. And this, forsooth, 'Tis thine to know from plainest facts: when first Huge flabby jowls of mad Molossian hounds, Baring their hard white teeth, begin to snarl, They threaten, with infuriate lips peeled back, In sounds far other than with which they bark And fill with voices all the regions round. And when with fondling tongue they start to lick Their puppies, or do toss them round with paws, Feigning with gentle bites to gape and snap, They fawn with yelps of voice far other then Than when, alone within the house, they bay, Or whimpering slink with cringing sides from blows. Again the neighing of the horse, is that Not seen to differ likewise, when the stud In buoyant flower of his young years raves, Goaded by winged Love, amongst the mares, And when with widening nostrils out he snorts The call to battle, and when haply he Whinnies at times with terror-quaking limbs? Lastly, the flying race, the dappled birds, Hawks, ospreys, sea-gulls, searching food and life Amid the ocean billows in the brine, Utter at other times far other cries Than when they fight

for food, or with their prey Struggle and strain. And birds there are which change With changing weather their own raucous songs— As long-lived generations of the crows Or flocks of rooks, when they be said to cry For rain and water and to call at times For winds and gales. Ergo, if divers moods Compel the brutes, though speechless evermore, To send forth divers sounds, O truly then How much more likely 'twere that mortal men In those days could with many a different sound Denote each separate thing. And now what cause Hath spread divinities of gods abroad Through mighty nations, and filled the cities full Of the high altars, and led to practices Of solemn rites in season—rites which still Flourish in midst of great affairs of state And midst great centres of man's civic life, The rites whence still a poor mortality Is grafted that quaking awe which rears aloft Still the new temples of gods from land to land And drives mankind to visit them in throngs On holy days—'tis not so hard to give Reason thereof in speech. Because, in sooth, Even in those days would the race of man Be seeing excelling visages of gods With mind awake; and in his sleeps, yet more— Bodies of wondrous growth. And, thus, to these Would men attribute sense, because they seemed To move their limbs and speak pronouncements high, Befitting glorious visage and vast powers. And men would give them an eternal life, Because their visages forevermore Were there before them, and their shapes remained, And chiefly, however, because men would not think Beings augmented with such mighty powers Could well by any force o'ermastered be. And men would think them in their happiness Excelling far, because the fear of death Vexed no one of them at all, and since At same time in men's sleeps men saw them do So many wonders, and yet feel therefrom Themselves no weariness. Besides, men marked How in a fixed order rolled around The systems of the sky, and changed times Of annual seasons, nor were able then To know thereof the causes. Therefore 'twas Men would take refuge in consigning all Unto divinities, and in feigning all Was guided by their nod. And in the sky They set the seats and vaults of gods, because Across the sky night and the moon are seen To

roll along—moon, day, and night, and night's Old awesome constellations evermore, And the night-wandering fireballs of the sky, And flying flames, clouds, and the sun, the rains, Snow and the winds, the lightnings, and the hail, And the swift rumblings, and the hollow roar Of mighty menacings forevermore. O humankind unhappy!—when it ascribed Unto divinities such awesome deeds, And coupled thereto rigours of fierce wrath! What groans did men on that sad day beget Even for themselves, and O what wounds for us, What tears for our children's children! Nor, O man, Is thy true piety in this: with head Under the veil, still to be seen to turn Fronting a stone, and ever to approach Unto all altars; nor so prone on earth Forward to fall, to spread upturned palms Before the shrines of gods, nor yet to dew Altars with profuse blood of four-foot beasts, Nor vows with vows to link. But rather this: To look on all things with a master eye And mind at peace. For when we gaze aloft Upon the skiey vaults of yon great world And ether, fixed high o'er twinkling stars, And into our thought there come the journeyings Of sun and moon, O then into our breasts, O'erburdened already with their other ills, Begins forthwith to rear its sudden head One more misgiving: lest o'er us, percase, It be the gods' immeasurable power That rolls, with varied motion, round and round The far white constellations. For the lack Of aught of reasons tries the puzzled mind: Whether was ever a birth-time of the world, And whether, likewise, any end shall be How far the ramparts of the world can still Outstand this strain of ever-roused motion, Or whether, divinely with eternal weal Endowed, they can through endless tracts of age Glide on, defying the o'er-mighty powers Of the immeasurable ages. Lo, What man is there whose mind with dread of gods Cringes not close, whose limbs with terror-spell Crouch not together, when the parched earth Quakes with the horrible thunderbolt amain, And across the mighty sky the rumblings run? Do not the peoples and the nations shake, And haughty kings do they not hug their limbs, Strook through with fear of the divinities, Lest for aught foully done or madly said The heavy time be now at hand to pay? When, too, fierce force of fury-winds at sea

Sweepeth a navy's admiral down the main With his stout legions and his elephants, Doth he not seek the peace of gods with vows, And beg in prayer, a-tremble, lulled winds And friendly gales?—in vain, since, often up-caught In fury-cyclones, is he borne along, For all his mouthings, to the shoals of doom. Ah, so irrevocably some hidden power Betramples forevermore affairs of men, And visibly grindeth with its heel in mire The lictors' glorious rods and axes dire, Having them in derision! Again, when earth From end to end is rocking under foot, And shaken cities ruin down, or threaten Upon the verge, what wonder is it then That mortal generations abase themselves, And unto gods in all affairs of earth Assign as last resort almighty powers And wondrous energies to govern all? Now for the rest: copper and gold and iron Discovered were, and with them silver's weight And power of lead, when with prodigious heat The conflagrations burned the forest trees Among the mighty mountains, by a bolt Of lightning from the sky, or else because Men, warring in the woodlands, on their foes Had hurled fire to frighten and dismay, Or yet because, by goodness of the soil Invited, men desired to clear rich fields And turn the countryside to pasture-lands, Or slay the wild and thrive upon the spoils. (For hunting by pit-fall and by fire arose Before the art of hedging the covert round With net or stirring it with dogs of chase.) Howso the fact, and from what cause soever The flamy heat with awful crack and roar Had there devoured to their deepest roots The forest trees and baked the earth with fire, Then from the boiling veins began to ooze O rivulets of silver and of gold, Of lead and copper too, collecting soon Into the hollow places of the ground. And when men saw the cooled lumps anon To shine with splendour-sheen upon the ground, Much taken with that lustrous smooth delight, They 'gan to pry them out, and saw how each Had got a shape like to its earthy mould. Then would it enter their heads how these same lumps, If melted by heat, could into any form Or figure of things be run, and how, again, If hammered out, they could be nicely drawn To sharpest points or finest edge, and thus Yield to the forgers tools and give them power To chop the forest down, to hew the logs, To

shave the beams and planks, besides to bore And punch and drill. And men began such work At first as much with tools of silver and gold As with the impetuous strength of the stout copper; But vainly—since their over-mastered power Would soon give way, unable to endure, Like copper, such hard labour. In those days Copper it was that was the thing of price; And gold lay useless, blunted with dull edge. Now lies the copper low, and gold hath come Unto the loftiest honours. Thus it is That rolling ages change the times of things: What erst was of a price, becomes at last A discard of no honour; whilst another Succeeds to glory, issuing from contempt, And day by day is sought for more and more, And, when 'tis found, doth flower in men's praise, Objects of wondrous honour. Now, Memmius, How nature of iron discovered was, thou mayst Of thine own self divine. Man's ancient arms Were hands, and nails and teeth, stones too and boughs— Breakage of forest trees—and flame and fire, As soon as known. Thereafter force of iron And copper discovered was; and copper's use Was known ere iron's, since more tractable Its nature is and its abundance more. With copper men to work the soil began, With copper to rouse the hurly waves of war, To straw the monstrous wounds, and seize away Another's flocks and fields. For unto them, Thus armed, all things naked of defence Readily yielded. Then by slow degrees The sword of iron succeeded, and the shape Of brazen sickle into scorn was turned: With iron to cleave the soil of earth they 'gan, And the contentions of uncertain war Were rendered equal. And, lo, man was wont Armed to mount upon the ribs of horse And guide him with the rein, and play about With right hand free, oft times before he tried Perils of war in yoked chariot; And yoked pairs abreast came earlier Than yokes of four, or scythed chariots Whereinto clomb the men-at-arms. And next The Punic folk did train the elephants— Those curst Lucanian oxen, hideous, The serpent-handed, with turrets on their bulks— To dure the wounds of war and panic-strike The mighty troops of Mars. Thus Discord sad Begat the one Thing after other, to be The terror of the nations under arms, And day by day to horrors of old war She added an increase. Bulls, too, they tried In

war's grim business; and essayed to send Outrageous boars against the foes. And some Sent on before their ranks puissant lions With armed trainers and with masters fierce To guide and hold in chains—and yet in vain, Since fleshed with pell-mell slaughter, fierce they flew, And blindly through the squadrons havoc wrought, Shaking the frightful crests upon their heads, Now here, now there. Nor could the horsemen calm Their horses, panic-breasted at the roar, And rein them round to front the foe. With spring The infuriate she-lions would up-leap Now here, now there; and whoso came apace Against them, these they'd rend across the face; And others unwitting from behind they'd tear Down from their mounts, and twining round them, bring Tumbling to earth, o'ermastered by the wound, And with those powerful fangs and hooked claws Fasten upon them. Bulls would toss their friends, And trample under foot, and from beneath Rip flanks and bellies of horses with their horns, And with a threat'ning forehead jam the sod; And boars would gore with stout tusks their allies, Splashing in fury their own blood on spears Splintered in their own bodies, and would fell In rout and ruin infantry and horse. For there the beasts-of-saddle tried to scape The savage thrusts of tusk by shying off, Or rearing up with hoofs a-paw in air. In vain—since there thou mightest see them sink, Their sinews severed, and with heavy fall Bestrew the ground. And such of these as men Supposed well-trained long ago at home, Were in the thick of action seen to foam In fury, from the wounds, the shrieks, the flight, The panic, and the tumult; nor could men Aught of their numbers rally. For each breed And various of the wild beasts fled apart Hither or thither, as often in wars to-day Flee those Lucanian oxen, by the steel Grievously mangled, after they have wrought Upon their friends so many a dreadful doom. (If 'twas, indeed, that thus they did at all: But scarcely I'll believe that men could not With mind foreknow and see, as sure to come, Such foul and general disaster.—This We, then, may hold as true in the great All, In divers worlds on divers plan create,— Somewhere afar more likely than upon One certain earth.) But men chose this to do Less in the hope of conquering than to give Their enemies

a goodly cause of woe, Even though thereby they perished themselves, Since weak in numbers and since wanting arms. Now, clothes of roughly inter-plaited strands Were earlier than loom-wove coverings; The loom-wove later than man's iron is, Since iron is needful in the weaving art, Nor by no other means can there be wrought Such polished tools—the treadles, spindles, shuttles, And sounding yarn-beams. And nature forced the men, Before the woman kind, to work the wool: For all the male kind far excels in skill, And cleverer is by much—until at last The rugged farmer folk jeered at such tasks, And so were eager soon to give them o'er To women's hands, and in more hardy toil To harden arms and hands. But nature herself, Mother of things, was the first seed-sower And primal grafter; since the berries and acorns, Dropping from off the trees, would there beneath Put forth in season swarms of little shoots; Hence too men's fondness for ingrafting slips Upon the boughs and setting out in holes The young shrubs o'er the fields. Then would they try Ever new modes of tilling their loved crofts, And mark they would how earth improved the taste Of the wild fruits by fond and fostering care. And day by day they'd force the woods to move Still higher up the mountain, and to yield The place below for tilth, that there they might, On plains and uplands, have their meadow-plats, Cisterns and runnels, crops of standing grain, And happy vineyards, and that all along O'er hillocks, intervales, and plains might run The silvery-green belt of olive-trees, Marking the plotted landscape; even as now Thou seest so marked with varied loveliness All the terrain which men adorn and plant With rows of goodly fruit-trees and hedge round With thriving shrubberies sown. But by the mouth To imitate the liquid notes of birds Was earlier far 'mongst men than power to make, By measured song, melodious verse and give Delight to ears. And whistlings of the wind Athrough the hollows of the reeds first taught The peasantry to blow into the stalks Of hollow hemlock-herb. Then bit by bit They learned sweet plainings, such as pipe out-pours, Beaten by finger-tips of singing men, When heard through unpathed groves and forest deeps And woodsy meadows, through the untrod

haunts Of shepherd folk and spots divinely still. Thus time draws forward each and everything Little by little unto the midst of men, And reason uplifts it to the shores of light. These tunes would soothe and glad the minds of mortals When sated with food,—for songs are welcome then. And often, lounging with friends in the soft grass Beside a river of water, underneath A big tree's branches, merrily they'd refresh Their frames, with no vast outlay—most of all If the weather were smiling and the times of the year Were painting the green of the grass around with flowers. Then jokes, then talk, then peals of jollity Would circle round; for then the rustic muse Was in her glory; then would antic Mirth Prompt them to garland head and shoulders about With chaplets of intertwined flowers and leaves, And to dance onward, out of tune, with limbs Clownishly swaying, and with clownish foot To beat our mother earth—from whence arose Laughter and peals of jollity, for, lo, Such frolic acts were in their glory then, Being more new and strange. And wakeful men Found solaces for their unsleeping hours In drawing forth variety of notes, In modulating melodies, in running With puckered lips along the tuned reeds, Whence, even in our day do the watchmen guard These old traditions, and have learned well To keep true measure. And yet they no whit Do get a larger fruit of gladsomeness Than got the woodland aborigines In olden times. For what we have at hand— If theretofore naught sweeter we have known— That chiefly pleases and seems best of all; But then some later, likely better, find Destroys its worth and changes our desires Regarding good of yesterday. And thus Began the loathing of the acorn; thus Abandoned were those beds with grasses strewn And with the leaves beladen. Thus, again, Fell into new contempt the pelts of beasts— Erstwhile a robe of honour, which, I guess, Aroused in those days envy so malign That the first wearer went to woeful death By ambuscades,—and yet that hairy prize, Rent into rags by greedy foemen there And splashed by blood, was ruined utterly Beyond all use or vantage. Thus of old 'Twas pelts, and of to-day 'tis purple and gold That cark men's lives with cares and weary with war. Wherefore, methinks, resides the greater blame With us

vain men to-day: for cold would rack, Without their pelts, the naked sons of earth; But us it nothing hurts to do without The purple vestment, broidered with gold And with imposing figures, if we still Make shift with some mean garment of the Plebs. So man in vain futilities toils on Forever and wastes in idle cares his years— Because, of very truth, he hath not learnt What the true end of getting is, nor yet At all how far true pleasure may increase. And 'tis desire for better and for more Hath carried by degrees mortality Out onward to the deep, and roused up From the far bottom mighty waves of war. But sun and moon, those watchmen of the world, With their own lanterns traversing around The mighty, the revolving vault, have taught Unto mankind that seasons of the years Return again, and that the Thing takes place After a fixed plan and order fixed. Already would they pass their life, hedged round By the strong towers; and cultivate an earth All portioned out and boundaried; already Would the sea flower and sail-winged ships; Already men had, under treaty pacts, Confederates and allies, when poets began To hand heroic actions down in verse; Nor long ere this had letters been devised— Hence is our age unable to look back On what has gone before, except where reason Shows us a footprint. Sailings on the seas, Tillings of fields, walls, laws, and arms, and roads, Dress and the like, all prizes, all delights Of finer life, poems, pictures, chiselled shapes Of polished sculptures—all these arts were learned By practice and the mind's experience, As men walked forward step by eager step. Thus time draws forward each and everything Little by little into the midst of men, And reason uplifts it to the shores of light. For one thing after other did men see Grow clear by intellect, till with their arts They've now achieved the supreme pinnacle.

BOOK VI

PROEM

'Twas Athens first, the glorious in name, That whilom gave to hapless sons of men The sheaves of harvest, and re-ordered life, And decreed laws; and she the first that gave Life its sweet solaces, when she begat A man of heart so wise, who whilom poured All wisdom forth from his truth-speaking mouth; The glory of whom, though dead, is yet to-day, Because of those discoveries divine Renowned of old, exalted to the sky. For when saw he that well-nigh everything Which needs of man most urgently require Was ready to hand for mortals, and that life, As far as might be, was established safe, That men were lords in riches, honour, praise, And eminent in goodly fame of sons, And that they yet, O yet, within the home, Still had the anxious heart which vexed life Unpausingly with torments of the mind, And raved perforce with angry plaints, then he, Then he, the master, did perceive that 'twas The vessel itself which worked the bane, and all, However wholesome, which from here or there Was gathered into it, was by that bane Spoilt from within,—in part, because he saw The vessel so cracked and leaky that nowise 'T could ever be filled to brim; in part because He marked how it polluted with foul taste Whate'er it got within itself. So he, The master, then by his truth-speaking words, Purged the breasts of men, and set the bounds Of lust and terror, and exhibited The supreme good whither we all endeavour, And showed the path whereby we might arrive Thereunto by a little cross-cut straight, And what of ills in all affairs of mortals Upsprang and flitted deviously about (Whether by chance or force), since nature thus Had destined; and from out what gates a man Should sally to each combat. And he proved That mostly vainly doth the human race Roll in its bosom the grim waves of care. For just as children tremble and fear all In the viewless dark, so even we at times Dread in the light so many things that be No whit more fearsome than what children feign, Shuddering, will be upon them in the dark. This terror then, this darkness of the mind, Not sunrise with its flaring spokes of light, Nor glittering arrows of morning can disperse, But only nature's aspect and her law. Wherefore the more will I go on to weave In verses this my undertaken task. And since I've taught thee that the

world's great vaults Are mortal and that sky is fashioned Of frame e'en born in time, and whatsoe'er Therein go on and must perforce go on

The most I have unravelled; what remains Do thou take in, besides; since once for all To climb into that chariot' renowned

Of winds arise; and they appeased are So that all things again...

Which were, are changed now, with fury stilled; All other movements through the earth and sky Which mortals gaze upon (O anxious oft In quaking thoughts!), and which abase their minds With dread of deities and press them crushed Down to the earth, because their ignorance Of cosmic causes forces them to yield All things unto the empery of gods And to concede the kingly rule to them. For even those men who have learned full well That godheads lead a long life free of care, If yet meanwhile they wonder by what plan Things can go on (and chiefly yon high things Observed o'erhead on the ethereal coasts), Again are hurried back unto the fears Of old religion and adopt again Harsh masters, deemed almighty,—wretched men, Unwitting what can be and what cannot, And by what law to each its scope prescribed, Its boundary stone that clings so deep in Time. Wherefore the more are they borne wandering on By blindfold reason. And, Memmius, unless From out thy mind thou spuest all of this And casteth far from thee all thoughts which be Unworthy gods and alien to their peace, Then often will the holy majesties Of the high gods be harmful unto thee, As by thy thought degraded,—not, indeed, That essence supreme of gods could be by this So outraged as in wrath to thirst to seek Revenges keen; but even because thyself Thou plaguest with the notion that the gods, Even they, the Calm Ones in serene repose, Do roll the mighty waves of wrath on wrath; Nor wilt thou enter with a serene breast Shrines of the gods; nor wilt thou able be In tranquil peace of mind to take and know Those images which from their holy bodies Are carried into intellects of men, As the announcers of their form divine. What sort of life will follow after this 'Tis thine to see. But that afar from us

Veriest reason may drive such life away, Much yet remains to be embellished yet In polished verses, albeit hath issued forth So much from me already; lo, there is The law and aspect of the sky to be By reason grasped; there are the tempest times And the bright lightnings to be hymned now— Even what they do and from what cause soe'er They're borne along—that thou mayst tremble not, Marking off regions of prophetic skies For auguries, O foolishly distraught Even as to whence the flying flame hath come, Or to which half of heaven it turns, or how Through walled places it hath wound its way, Or, after proving its dominion there, How it hath speeded forth from thence amain— Whereof nowise the causes do men know, And think divinities are working there. Do thou, Calliope, ingenious Muse, Solace of mortals and delight of gods, Point out the course before me, as I race On to the white line of the utmost goal, That I may get with signal praise the crown, With thee my guide!

GREAT METEOROLOGICAL PHENOMENA, ETC.

And so in first place, then, With thunder are shaken the blue deeps of heaven, Because the ethereal clouds, scudding aloft, Together clash, what time 'gainst one another The winds are battling. For never a sound there comes From out the serene regions of the sky; But wheresoever in a host more dense The clouds foregather, thence more often comes A crash with mighty rumbling. And, again, Clouds cannot be of so condensed a frame As stones and timbers, nor again so fine As mists and flying smoke; for then perforce They'd either fall, borne down by their brute weight, Like stones, or, like the smoke, they'd powerless be To keep their mass, or to retain within Frore snows and storms of hail. And they give forth O'er skiey levels of the spreading world A sound on high, as linen-awning, stretched O'er mighty theatres, gives forth at times A cracking roar, when much 'tis beaten about Betwixt the poles and cross-beams. Sometimes, too, Asunder rent by wanton gusts, it raves And imitates the tearing sound of sheets Of paper—even this kind of noise thou mayst In

thunder hear—or sound as when winds whirl With lashings and do buffet about in air A hanging cloth and flying paper-sheets. For sometimes, too, it chances that the clouds Cannot together crash head-on, but rather Move side-wise and with motions contrary Graze each the other's body without speed, From whence that dry sound grateth on our ears, So long drawn-out, until the clouds have passed From out their close positions. And, again, In following wise all things seem oft to quake At shock of heavy thunder, and mightiest walls Of the wide reaches of the upper world There on the instant to have sprung apart, Riven asunder, what time a gathered blast Of the fierce hurricane hath all at once Twisted its way into a mass of clouds, And, there enclosed, ever more and more Compelleth by its spinning whirl the cloud To grow all hollow with a thickened crust Surrounding; for thereafter, when the force And the keen onset of the wind have weakened That crust, lo, then the cloud, to-split in twain, Gives forth a hideous crash with bang and boom. No marvel this; since oft a bladder small, Filled up with air, will, when of sudden burst, Give forth a like large sound. There's reason, too, Why clouds make sounds, as through them blow the winds: We see, borne down the sky, oft shapes of clouds Rough-edged or branched many forky ways; And 'tis the same, as when the sudden flaws Of north-west wind through the dense forest blow, Making the leaves to sough and limbs to crash. It happens too at times that roused force Of the fierce hurricane to-rends the cloud, Breaking right through it by a front assault; For what a blast of wind may do up there Is manifest from facts when here on earth A blast more gentle yet uptwists tall trees And sucks them madly from their deepest roots. Besides, among the clouds are waves, and these Give, as they roughly break, a rumbling roar; As when along deep streams or the great sea Breaks the loud surf. It happens, too, whenever Out from one cloud into another falls The fiery energy of thunderbolt, That straightaway the cloud, if full of wet, Extinguishes the fire with mighty noise; As iron, white from the hot furnaces, Sizzles, when speedily we've plunged its glow Down the cold water. Further, if a cloud More dry receive the fire, 'twill suddenly Kindle to flame and

burn with monstrous sound, As if a flame with whirl of winds should range Along the laurel-tressed mountains far, Upburning with its vast assault those trees; Nor is there aught that in the crackling flame Consumes with sound more terrible to man Than Delphic laurel of Apollo lord. Oft, too, the multitudinous crash of ice And down-pour of swift hail gives forth a sound Among the mighty clouds on high; for when The wind hath packed them close, each mountain mass Of rain-cloud, there congealed utterly And mixed with hail-stones, breaks and booms...

Likewise, it lightens, when the clouds have struck, By their collision, forth the seeds of fire: As if a stone should smite a stone or steel, For light then too leaps forth and fire then scatters The shining sparks. But with our ears we get The thunder after eyes behold the flash, Because forever things arrive the ears More tardily than the eyes—as thou mayst see From this example too: when markest thou Some man far yonder felling a great tree With double-edged ax, it comes to pass Thine eye beholds the swinging stroke before The blow gives forth a sound athrough thine ears: Thus also we behold the flashing ere We hear the thunder, which discharged is At same time with the fire and by same cause, Born of the same collision. In following wise The clouds suffuse with leaping light the lands, And the storm flashes with tremulous elan: When the wind hath invaded a cloud, and, whirling there, Hath wrought (as I have shown above) the cloud Into a hollow with a thickened crust, It becomes hot of own velocity: Just as thou seest how motion will o'erheat And set ablaze all objects,—verily A leaden ball, hurtling through length of space, Even melts. Therefore, when this same wind a-fire Hath split black cloud, it scatters the fire-seeds, Which, so to say, have been pressed out by force Of sudden from the cloud;—and these do make The pulsing flashes of flame; thence followeth The detonation which attacks our ears More tardily than aught which comes along Unto the sight of eyeballs. This takes place— As know thou mayst—at times when clouds are dense And one upon the other piled aloft With wonderful upheavings—nor be thou Deceived because we see how broad their base From underneath, and not how

high they tower. For make thine observations at a time When winds shall bear athwart the horizon's blue Clouds like to mountain-ranges moving on, Or when about the sides of mighty peaks Thou seest them one upon the other massed And burdening downward, anchored in high repose, With the winds sepulchred on all sides round: Then canst thou know their mighty masses, then Canst view their caverns, as if builded there Of beetling crags; which, when the hurricanes In gathered storm have filled utterly, Then, prisoned in clouds, they rave around With mighty roarings, and within those dens Bluster like savage beasts, and now from here, And now from there, send growlings through the clouds, And seeking an outlet, whirl themselves about, And roll from 'mid the clouds the seeds of fire, And heap them multitudinously there, And in the hollow furnaces within Wheel flame around, until from bursted cloud In forky flashes they have gleamed forth. Again, from following cause it comes to pass That yon swift golden hue of liquid fire Darts downward to the earth: because the clouds Themselves must hold abundant seeds of fire; For, when they be without all moisture, then They be for most part of a flamy hue And a resplendent. And, indeed, they must Even from the light of sun unto themselves Take multitudinous seeds, and so perforce Redden and pour their bright fires all abroad. And therefore, when the wind hath driven and thrust, Hath forced and squeezed into one spot these clouds, They pour abroad the seeds of fire pressed out, Which make to flash these colours of the flame. Likewise, it lightens also when the clouds Grow rare and thin along the sky; for, when The wind with gentle touch unravels them And breaketh asunder as they move, those seeds Which make the lightnings must by nature fall; At such an hour the horizon lightens round Without the hideous terror of dread noise And skiey uproar. To proceed apace, What sort of nature thunderbolts possess Is by their strokes made manifest and by The brand-marks of their searing heat on things, And by the scorched scars exhaling round The heavy fumes of sulphur. For all these Are marks, O not of wind or rain, but fire. Again, they often enkindle even the roofs Of houses and inside the very

rooms With swift flame hold a fierce dominion. Know thou that nature fashioned this fire Subtler than fires all other, with minute And dartling bodies,—a fire 'gainst which there's naught Can in the least hold out: the thunderbolt, The mighty, passes through the hedging walls Of houses, like to voices or a shout,— Through stones, through bronze it passes, and it melts Upon the instant bronze and gold; and makes, Likewise, the wines sudden to vanish forth, The wine-jars intact,—because, ye see, Its heat arriving renders loose and porous Readily all the wine—jar's earthen sides, And winding its way within, it scattereth The elements primordial of the wine With speedy dissolution—process which Even in an age the fiery steam of sun Could not accomplish, however puissant he With his hot coruscations: so much more Agile and overpowering is this force.

Now in what manner engendered are these things, How fashioned of such impetuous strength As to cleave towers asunder, and houses all To overtopple, and to wrench apart Timbers and beams, and heroes' monuments To pile in ruins and upheave amain, And to take breath forever out of men, And to o'erthrow the cattle everywhere,— Yes, by what force the lightnings do all this, All this and more, I will unfold to thee, Nor longer keep thee in mere promises. The bolts of thunder, then, must be conceived As all begotten in those crasser clouds Up-piled aloft; for, from the sky serene And from the clouds of lighter density, None are sent forth forever. That 'tis so Beyond a doubt, fact plain to sense declares: To wit, at such a time the densed clouds So mass themselves through all the upper air That we might think that round about all murk Had parted forth from Acheron and filled The mighty vaults of sky—so grievously, As gathers thus the storm-clouds' gruesome might, Do faces of black horror hang on high— When tempest begins its thunderbolts to forge. Besides, full often also out at sea A blackest thunderhead, like cataract Of pitch hurled down from heaven, and far away Bulging with murkiness, down on the waves Falls with vast uproar, and draws on amain The darkling tempests big with thunderbolts And hurricanes, itself the while so crammed Tremendously with fires and winds, that

even Back on the lands the people shudder round And seek for cover. Therefore, as I said, The storm must be conceived as o'er our head Towering most high; for never would the clouds O'erwhelm the lands with such a massy dark, Unless up-builded heap on lofty heap, To shut the round sun off. Nor could the clouds, As on they come, engulf with rain so vast As thus to make the rivers overflow And fields to float, if ether were not thus Furnished with lofty-piled clouds. Lo, then, Here be all things fulfilled with winds and fires— Hence the long lightnings and the thunders loud. For, verily, I've taught thee even now How cavernous clouds hold seeds innumerable Of fiery exhalations, and they must From off the sunbeams and the heat of these Take many still. And so, when that same wind (Which, haply, into one region of the sky Collects those clouds) hath pressed from out the same The many fiery seeds, and with that fire Hath at the same time inter-mixed itself, O then and there that wind, a whirlwind now, Deep in the belly of the cloud spins round In narrow confines, and sharpens there inside In glowing furnaces the thunderbolt. For in a two-fold manner is that wind Enkindled all: it trembles into heat Both by its own velocity and by Repeated touch of fire. Thereafter, when The energy of wind is heated through And the fierce impulse of the fire hath sped Deeply within, O then the thunderbolt, Now ripened, so to say, doth suddenly Splinter the cloud, and the aroused flash Leaps onward, lumining with forky light All places round. And followeth anon A clap so heavy that the skiey vaults, As if asunder burst, seem from on high To engulf the earth. Then fearfully a quake Pervades the lands, and 'long the lofty skies Run the far rumblings. For at such a time Nigh the whole tempest quakes, shook through and through, And roused are the roarings,—from which shock Comes such resounding and abounding rain, That all the murky ether seems to turn Now into rain, and, as it tumbles down, To summon the fields back to primeval floods: So big the rains that be sent down on men By burst of cloud and by the hurricane, What time the thunder-clap, from burning bolt That cracks the cloud, flies forth along. At times The force of wind, excited from without, Smiteth into a cloud already hot

With a ripe thunderbolt. And when that wind Hath splintered that cloud, then down there cleaves forthwith Yon fiery coil of flame which still we call, Even with our fathers' word, a thunderbolt. The same thing haps toward every other side Whither that force hath swept. It happens, too, That sometimes force of wind, though hurtled forth Without all fire, yet in its voyage through space Igniteth, whilst it comes along, along,— Losing some larger bodies which cannot Pass, like the others, through the bulks of air,— And, scraping together out of air itself Some smaller bodies, carries them along, And these, commingling, by their flight make fire: Much in the manner as oft a leaden ball Grows hot upon its aery course, the while It loseth many bodies of stark cold And taketh into itself along the air New particles of fire. It happens, too, That force of blow itself arouses fire, When force of wind, a-cold and hurtled forth Without all fire, hath strook somewhere amain— No marvel, because, when with terrific stroke 'Thas smitten, the elements of fiery-stuff Can stream together from out the very wind And, simultaneously, from out that thing Which then and there receives the stroke: as flies The fire when with the steel we hack the stone; Nor yet, because the force of steel's a-cold, Rush the less speedily together there Under the stroke its seeds of radiance hot. And therefore, thuswise must an object too Be kindled by a thunderbolt, if haply 'Thas been adapt and suited to the flames. Yet force of wind must not be rashly deemed As altogether and entirely cold— That force which is discharged from on high With such stupendous power; but if 'tis not Upon its course already kindled with fire, It yet arriveth warmed and mixed with heat. And, now, the speed and stroke of thunderbolt Is so tremendous, and with glide so swift Those thunderbolts rush on and down, because Their roused force itself collects itself First always in the clouds, and then prepares For the huge effort of their going-forth; Next, when the cloud no longer can retain The increment of their fierce impetus, Their force is pressed out, and therefore flies With impetus so wondrous, like to shots Hurled from the powerful Roman catapults. Note, too, this force consists of elements Both small and smooth, nor is there aught that can With

ease resist such nature. For it darts Between and enters through the pores of things; And so it never falters in delay Despite innumerable collisions, but Flies shooting onward with a swift elan. Next, since by nature always every weight Bears downward, doubled is the swiftness then And that elan is still more wild and dread, When, verily, to weight are added blows, So that more madly and more fiercely then The thunderbolt shakes into shivers all That blocks its path, following on its way. Then, too, because it comes along, along With one continuing elan, it must Take on velocity anew, anew, Which still increases as it goes, and ever Augments the bolt's vast powers and to the blow Gives larger vigour; for it forces all, All of the thunder's seeds of fire, to sweep In a straight line unto one place, as 'twere,— Casting them one by other, as they roll, Into that onward course. Again, perchance, In coming along, it pulls from out the air Some certain bodies, which by their own blows Enkindle its velocity. And, lo, It comes through objects leaving them unharmed, It goes through many things and leaves them whole, Because the liquid fire flieth along Athrough their pores. And much it does transfix, When these primordial atoms of the bolt Have fallen upon the atoms of these things Precisely where the intertwined atoms Are held together. And, further, easily Brass it unbinds and quickly fuseth gold, Because its force is so minutely made Of tiny parts and elements so smooth That easily they wind their way within, And, when once in, quickly unbind all knots And loosen all the bonds of union there. And most in autumn is shaken the house of heaven, The house so studded with the glittering stars, And the whole earth around—most too in spring When flowery times unfold themselves: for, lo, In the cold season is there lack of fire, And winds are scanty in the hot, and clouds Have not so dense a bulk. But when, indeed, The seasons of heaven are betwixt these twain, The divers causes of the thunderbolt Then all concur; for then both cold and heat Are mixed in the cross-seas of the year, So that a discord rises among things And air in vast tumultuosity Billows, infuriate with the fires and winds— Of which the both are needed by the cloud For fabrication of the

thunderbolt. For the first part of heat and last of cold Is the time of spring; wherefore must things unlike Do battle one with other, and, when mixed, Tumultuously rage. And when rolls round The latest heat mixed with the earliest chill— The time which bears the name of autumn—then Likewise fierce cold-spells wrestle with fierce heats. On this account these seasons of the year Are nominated "cross-seas."—And no marvel If in those times the thunderbolts prevail And storms are roused turbulent in heaven, Since then both sides in dubious warfare rage Tumultuously, the one with flames, the other With winds and with waters mixed with winds. This, this it is, O Memmius, to see through The very nature of fire-fraught thunderbolt; O this it is to mark by what blind force It maketh each effect, and not, O not To unwind Etrurian scrolls oracular, Inquiring tokens of occult will of gods, Even as to whence the flying flame hath come, Or to which half of heaven it turns, or how Through walled places it hath wound its way, Or, after proving its dominion there, How it hath speeded forth from thence amain, Or what the thunderstroke portends of ill From out high heaven. But if Jupiter And other gods shake those refulgent vaults With dread reverberations and hurl fire Whither it pleases each, why smite they not Mortals of reckless and revolting crimes, That such may pant from a transpierced breast Forth flames of the red levin—unto men A drastic lesson?—why is rather he— O he self-conscious of no foul offence— Involved in flames, though innocent, and clasped Up-caught in skiey whirlwind and in fire? Nay, why, then, aim they at eternal wastes, And spend themselves in vain?—perchance, even so To exercise their arms and strengthen shoulders? Why suffer they the Father's javelin To be so blunted on the earth? And why Doth he himself allow it, nor spare the same Even for his enemies? O why most oft Aims he at lofty places? Why behold we Marks of his lightnings most on mountain tops? Then for what reason shoots he at the sea?—What sacrilege have waves and bulk of brine And floating fields of foam been guilty of? Besides, if 'tis his will that we beware Against the lightning-stroke, why feareth he To grant us power for to behold the shot? And, contrariwise, if wills he to

o'erwhelm us, Quite off our guard, with fire, why thunders he Off in yon quarter, so that we may shun? Why rouseth he beforehand darkling air And the far din and rumblings? And O how Canst thou believe he shoots at one same time Into diverse directions? Or darest thou Contend that never hath it come to pass That divers strokes have happened at one time? But oft and often hath it come to pass, And often still it must, that, even as showers And rains o'er many regions fall, so too Dart many thunderbolts at one same time. Again, why never hurtles Jupiter A bolt upon the lands nor pours abroad Clap upon clap, when skies are cloudless all? Or, say, doth he, so soon as ever the clouds Have come thereunder, then into the same Descend in person, that from thence he may Near-by decide upon the stroke of shaft? And, lastly, why, with devastating bolt Shakes he asunder holy shrines of gods And his own thrones of splendour, and to-breaks The well-wrought idols of divinities, And robs of glory his own images By wound of violence? But to return apace, Easy it is from these same facts to know In just what wise those things (which from their sort The Greeks have named "bellows") do come down, Discharged from on high, upon the seas. For it haps that sometimes from the sky descends Upon the seas a column, as if pushed, Round which the surges seethe, tremendously Aroused by puffing gusts; and whatso'er Of ships are caught within that tumult then Come into extreme peril, dashed along. This haps when sometimes wind's aroused force Can't burst the cloud it tries to, but down-weighs That cloud, until 'tis like a column from sky Upon the seas pushed downward—gradually, As if a Somewhat from on high were shoved By fist and nether thrust of arm, and lengthened Far to the waves. And when the force of wind Hath rived this cloud, from out the cloud it rushes Down on the seas, and starts among the waves A wondrous seething, for the eddying whirl Descends and downward draws along with it That cloud of ductile body. And soon as ever 'Thas shoved unto the levels of the main That laden cloud, the whirl suddenly then Plunges its whole self into the waters there And rouses all the sea with monstrous roar, Constraining it to seethe. It

happens too That very vortex of the wind involves Itself in clouds, scraping from out the air The seeds of cloud, and counterfeits, as 'twere, The "bellows" pushed from heaven. And when this shape Hath dropped upon the lands and burst apart, It belches forth immeasurable might Of whirlwind and of blast. Yet since 'tis formed At most but rarely, and on land the hills Must block its way, 'tis seen more oft out there On the broad prospect of the level main Along the free horizons. Into being The clouds condense, when in this upper space Of the high heaven have gathered suddenly, As round they flew, unnumbered particles— World's rougher ones, which can, though interlinked With scanty couplings, yet be fastened firm, The one on other caught. These particles First cause small clouds to form; and, thereupon, These catch the one on other and swarm in a flock And grow by their conjoining, and by winds Are borne along, along, until collects The tempest fury. Happens, too, the nearer The mountain summits neighbour to the sky, The more unceasingly their far crags smoke With the thick darkness of swart cloud, because When first the mists do form, ere ever the eyes Can there behold them (tenuous as they be), The carrier-winds will drive them up and on Unto the topmost summits of the mountain; And then at last it happens, when they be In vaster throng upgathered, that they can By this very condensation lie revealed, And that at same time they are seen to surge From very vertex of the mountain up Into far ether. For very fact and feeling, As we up-climb high mountains, proveth clear That windy are those upward regions free. Besides, the clothes hung-out along the shore, When in they take the clinging moisture, prove That nature lifts from over all the sea Unnumbered particles. Whereby the more 'Tis manifest that many particles Even from the salt upheavings of the main Can rise together to augment the bulk Of massed clouds. For moistures in these twain Are near akin. Besides, from out all rivers, As well as from the land itself, we see Up-rising mists and steam, which like a breath Are forced out from them and borne aloft, To curtain heaven with their murk, and make, By slow foregathering, the skiey clouds. For, in addition, lo, the heat on high Of constellated

ether burdens down Upon them, and by sort of condensation Weaveth beneath the azure firmament The reek of darkling cloud. It happens, too, That hither to the skies from the Beyond Do come those particles which make the clouds And flying thunderheads. For I have taught That this their number is innumerable And infinite the sum of the Abyss, And I have shown with what stupendous speed Those bodies fly and how they're wont to pass Amain through incommunicable space. Therefore, 'tis not exceeding strange, if oft In little time tempest and darkness cover With bulking thunderheads hanging on high The oceans and the lands, since everywhere Through all the narrow tubes of yonder ether, Yea, so to speak, through all the breathing-holes Of the great upper-world encompassing, There be for the primordial elements Exits and entrances. Now come, and how The rainy moisture thickens into being In the lofty clouds, and how upon the lands 'Tis then discharged in down-pour of large showers, I will unfold. And first triumphantly Will I persuade thee that up-rise together, With clouds themselves, full many seeds of water From out all things, and that they both increase— Both clouds and water which is in the clouds— In like proportion, as our frames increase In like proportion with our blood, as well As sweat or any moisture in our members. Besides, the clouds take in from time to time Much moisture risen from the broad marine,— Whilst the winds bear them o'er the mighty sea, Like hanging fleeces of white wool. Thuswise, Even from all rivers is there lifted up Moisture into the clouds. And when therein The seeds of water so many in many ways Have come together, augmented from all sides, The close-jammed clouds then struggle to discharge Their rain-storms for a two-fold reason: lo, The wind's force crowds them, and the very excess Of storm-clouds (massed in a vaster throng) Giveth an urge and pressure from above And makes the rains out-pour. Besides when, too, The clouds are winnowed by the winds, or scattered Smitten on top by heat of sun, they send Their rainy moisture, and distil their drops, Even as the wax, by fiery warmth on top, Wasteth and liquefies abundantly. But comes the violence of the bigger rains When violently the clouds

are weighted down Both by their cumulated mass and by The onset of the wind. And rains are wont To endure awhile and to abide for long, When many seeds of waters are aroused, And clouds on clouds and racks on racks outstream In piled layers and are borne along From every quarter, and when all the earth Smoking exhales her moisture. At such a time When sun with beams amid the tempest-murk Hath shone against the showers of black rains, Then in the swart clouds there emerges bright The radiance of the bow. And as to things Not mentioned here which of themselves do grow Or of themselves are gendered, and all things Which in the clouds condense to being—all, Snow and the winds, hail and the hoar-frosts chill, And freezing, mighty force—of lakes and pools The mighty hardener, and mighty check Which in the winter curbeth everywhere The rivers as they go—'tis easy still, Soon to discover and with mind to see How they all happen, whereby gendered, When once thou well hast understood just what Functions have been vouchsafed from of old Unto the procreant atoms of the world. Now come, and what the law of earthquakes is Hearken, and first of all take care to know That the under-earth, like to the earth around us, Is full of windy caverns all about; And many a pool and many a grim abyss She bears within her bosom, ay, and cliffs And jagged scarps; and many a river, hid Beneath her chine, rolls rapidly along Its billows and plunging boulders. For clear fact Requires that earth must be in every part Alike in constitution. Therefore, earth, With these things underneath affixed and set, Trembleth above, jarred by big down-tumblings, When time hath undermined the huge caves, The subterranean. Yea, whole mountains fall, And instantly from spot of that big jar There quiver the tremors far and wide abroad. And with good reason: since houses on the street Begin to quake throughout, when jarred by a cart Of no large weight; and, too, the furniture Within the house up-bounds, when a paving-block Gives either iron rim of the wheels a jolt. It happens, too, when some prodigious bulk Of age-worn soil is rolled from mountain slopes Into tremendous pools of water dark, That the reeling land itself is rocked about By the water's undulations; as a basin

Sometimes won't come to rest until the fluid Within it ceases to be rocked about In random undulations. And besides, When subterranean winds, up-gathered there In the hollow deeps, bulk forward from one spot, And press with the big urge of mighty powers Against the lofty grottos, then the earth Bulks to that quarter whither push amain The headlong winds. Then all the builded houses Above ground—and the more, the higher up-reared Unto the sky—lean ominously, careening Into the same direction; and the beams, Wrenched forward, over-hang, ready to go. Yet dread men to believe that there awaits The nature of the mighty world a time Of doom and cataclysm, albeit they see So great a bulk of lands to bulge and break! And lest the winds blew back again, no force Could rein things in nor hold from sure career On to disaster. But now because those winds Blow back and forth in alternation strong, And, so to say, rallying charge again, And then repulsed retreat, on this account Earth oftener threatens than she brings to pass Collapses dire. For to one side she leans, Then back she sways; and after tottering Forward, recovers then her seats of poise. Thus, this is why whole houses rock, the roofs More than the middle stories, middle more Than lowest, and the lowest least of all. Arises, too, this same great earth-quaking, When wind and some prodigious force of air, Collected from without or down within The old telluric deeps, have hurled themselves Amain into those caverns sub-terrene, And there at first tumultuously chafe Among the vasty grottos, borne about In mad rotations, till their lashed force Aroused out-bursts abroad, and then and there, Riving the deep earth, makes a mighty chasm— What once in Syrian Sidon did befall, And once in Peloponnesian Aegium, Twain cities which such out-break of wild air And earth's convulsion, following hard upon, O'erthrew of old. And many a walled town, Besides, hath fall'n by such omnipotent Convulsions on the land, and in the sea Engulfed hath sunken many a city down With all its populace. But if, indeed, They burst not forth, yet is the very rush Of the wild air and fury-force of wind Then dissipated, like an ague-fit, Through the innumerable pores of earth, To set her all a-shake—even as a chill, When it hath

gone into our marrow-bones, Sets us convulsively, despite ourselves, A-shivering and a-shaking. Therefore, men With two-fold terror bustle in alarm Through cities to and fro: they fear the roofs Above the head; and underfoot they dread The caverns, lest the nature of the earth Suddenly rend them open, and she gape, Herself asunder, with tremendous maw, And, all confounded, seek to chock it full With her own ruins. Let men, then, go on Feigning at will that heaven and earth shall be Inviolable, entrusted evermore To an eternal weal: and yet at times The very force of danger here at hand Prods them on some side with this goad of fear— This among others—that the earth, withdrawn Abruptly from under their feet, be hurried down, Down into the abyss, and the Sum-of-Things Be following after, utterly fordone, Till be but wrack and wreckage of a world.

EXTRAORDINARY AND PARADOXICAL TELLURIC PHENOMENA

In chief, men marvel nature renders not Bigger and bigger the bulk of ocean, since So vast the down-rush of the waters be, And every river out of every realm Cometh thereto; and add the random rains And flying tempests, which spatter every sea And every land bedew; add their own springs: Yet all of these unto the ocean's sum Shall be but as the increase of a drop. Wherefore 'tis less a marvel that the sea, The mighty ocean, increaseth not. Besides, Sun with his heat draws off a mighty part: Yea, we behold that sun with burning beams To dry our garments dripping all with wet; And many a sea, and far out-spread beneath, Do we behold. Therefore, however slight The portion of wet that sun on any spot Culls from the level main, he still will take From off the waves in such a wide expanse Abundantly. Then, further, also winds, Sweeping the level waters, can bear off A mighty part of wet, since we behold Oft in a single night the highways dried By winds, and soft mud crusted o'er at dawn. Again, I've taught thee that the clouds bear off Much moisture too, up-taken from the reaches Of the mighty main, and sprinkle it about O'er all the zones, when rain is on the lands And winds convey the aery racks of vapour. Lastly, since earth is porous through her frame, And neighbours on the seas, girdling their shores, The

water's wet must seep into the lands From briny ocean, as from lands it comes Into the seas. For brine is filtered off, And then the liquid stuff seeps back again And all re-poureth at the river-heads, Whence in fresh-water currents it returns Over the lands, adown the channels which Were cleft erstwhile and erstwhile bore along The liquid-footed floods. And now the cause Whereby athrough the throat of Aetna's Mount Such vast tornado-fires out-breathe at times, I will unfold: for with no middling might Of devastation the flamy tempest rose And held dominion in Sicilian fields: Drawing upon itself the upturned faces Of neighbouring clans, what time they saw afar The skiey vaults a-fume and sparkling all, And filled their bosoms with dread anxiety Of what new thing nature were travailing at. In these affairs it much behooveth thee To look both wide and deep, and far abroad To peer to every quarter, that thou mayst Remember how boundless is the Sum-of-Things, And mark how infinitely small a part Of the whole Sum is this one sky of ours— O not so large a part as is one man Of the whole earth. And plainly if thou viewest This cosmic fact, placing it square in front, And plainly understandest, thou wilt leave Wondering at many things. For who of us Wondereth if some one gets into his joints A fever, gathering head with fiery heat, Or any other dolorous disease Along his members? For anon the foot Grows blue and bulbous; often the sharp twinge Seizes the teeth, attacks the very eyes; Out-breaks the sacred fire, and, crawling on Over the body, burneth every part It seizeth on, and works its hideous way Along the frame. No marvel this, since, lo, Of things innumerable be seeds enough, And this our earth and sky do bring to us Enough of bane from whence can grow the strength Of maladies uncounted. Thuswise, then, We must suppose to all the sky and earth Are ever supplied from out the infinite All things, O all in stores enough whereby The shaken earth can of a sudden move, And fierce typhoons can over sea and lands Go tearing on, and Aetna's fires o'erflow, And heaven become a flame-burst. For that, too, Happens at times, and the celestial vaults Glow into fire, and rainy tempests rise In heavier congregation, when, percase, The seeds of water have foregathered thus

From out the infinite. "Aye, but passing huge The fiery turmoil of that conflagration!" So sayst thou; well, huge many a river seems To him that erstwhile ne'er a larger saw; Thus, huge seems tree or man; and everything Which mortal sees the biggest of each class, That he imagines to be "huge"; though yet All these, with sky and land and sea to boot, Are all as nothing to the sum entire Of the all-Sum. But now I will unfold At last how yonder suddenly angered flame Out-blows abroad from vasty furnaces Aetnaean. First, the mountain's nature is All under-hollow, propped about, about With caverns of basaltic piers. And, lo, In all its grottos be there wind and air— For wind is made when air hath been uproused By violent agitation. When this air Is heated through and through, and, raging round, Hath made the earth and all the rocks it touches Horribly hot, and hath struck off from them Fierce fire of swiftest flame, it lifts itself And hurtles thus straight upwards through its throat Into high heav'n, and thus bears on afar Its burning blasts and scattereth afar Its ashes, and rolls a smoke of pitchy murk And heaveth the while boulders of wondrous weight— Leaving no doubt in thee that 'tis the air's Tumultuous power. Besides, in mighty part, The sea there at the roots of that same mount Breaks its old billows and sucks back its surf. And grottos from the sea pass in below Even to the bottom of the mountain's throat. Herethrough thou must admit there go...

And the conditions force [the water and air] Deeply to penetrate from the open sea, And to out-blow abroad, and to up-bear Thereby the flame, and to up-cast from deeps The boulders, and to rear the clouds of sand. For at the top be "bowls," as people there Are wont to name what we at Rome do call The throats and mouths. There be, besides, some thing Of which 'tis not enough one only cause To state—but rather several, whereof one Will be the true: lo, if thou shouldst espy Lying afar some fellow's lifeless corse, 'Twere meet to name all causes of a death, That cause of his death might thereby be named: For prove thou mayst he perished not by steel, By cold, nor even by poison nor disease, Yet somewhat of this sort hath come to him

We know—And thus we have to say the same In divers cases. Toward the summer, Nile Waxeth and overfloweth the champaign, Unique in all the landscape, river sole Of the Aegyptians. In mid-season heats Often and oft he waters Aegypt o'er, Either because in summer against his mouths Come those northwinds which at that time of year Men name the Etesian blasts, and, blowing thus Upstream, retard, and, forcing back his waves, Fill him o'erfull and force his flow to stop. For out of doubt these blasts which driven be From icy constellations of the pole Are borne straight up the river. Comes that river From forth the sultry places down the south, Rising far up in midmost realm of day, Among black generations of strong men With sun-baked skins. 'Tis possible, besides, That a big bulk of piled sand may bar His mouths against his onward waves, when sea, Wild in the winds, tumbles the sand to inland; Whereby the river's outlet were less free, Likewise less headlong his descending floods. It may be, too, that in this season rains Are more abundant at its fountain head, Because the Etesian blasts of those northwinds Then urge all clouds into those inland parts. And, soothly, when they're thus foregathered there, Urged yonder into midmost realm of day, Then, crowded against the lofty mountain sides, They're massed and powerfully pressed. Again, Perchance, his waters wax, O far away, Among the Aethiopians' lofty mountains, When the all-beholding sun with thawing beams Drives the white snows to flow into the vales. Now come; and unto thee I will unfold, As to the Birdless spots and Birdless tarns, What sort of nature they are furnished with. First, as to name of "birdless,"—that derives From very fact, because they noxious be Unto all birds. For when above those spots In horizontal flight the birds have come, Forgetting to oar with wings, they furl their sails, And, with down-drooping of their delicate necks, Fall headlong into earth, if haply such The nature of the spots, or into water, If haply spreads thereunder Birdless tarn. Such spot's at Cumae, where the mountains smoke, Charged with the pungent sulphur, and increased With steaming springs. And such a spot there is Within the walls of Athens, even there On summit of Acropolis, beside Fane of Tritonian Pallas

bountiful, Where never cawing crows can wing their course, Not even when smoke the altars with good gifts,— But evermore they flee—yet not from wrath Of Pallas, grieved at that espial old, As poets of the Greeks have sung the tale; But very nature of the place compels. In Syria also—as men say—a spot Is to be seen, where also four-foot kinds, As soon as ever they've set their steps within, Collapse, o'ercome by its essential power, As if there slaughtered to the under-gods. Lo, all these wonders work by natural law, And from what causes they are brought to pass The origin is manifest; so, haply, Let none believe that in these regions stands The gate of Orcus, nor us then suppose, Haply, that thence the under-gods draw down Souls to dark shores of Acheron—as stags, The wing-footed, are thought to draw to light, By sniffing nostrils, from their dusky lairs The wriggling generations of wild snakes. How far removed from true reason is this, Perceive thou straight; for now I'll try to say Somewhat about the very fact. And, first, This do I say, as oft I've said before: In earth are atoms of things of every sort; And know, these all thus rise from out the earth— Many life-giving which be good for food, And many which can generate disease And hasten death, O many primal seeds Of many things in many modes—since earth Contains them mingled and gives forth discrete. And we have shown before that certain things Be unto certain creatures suited more For ends of life, by virtue of a nature, A texture, and primordial shapes, unlike For kinds alike. Then too 'tis thine to see How many things oppressive be and foul To man, and to sensation most malign: Many meander miserably through ears; Many in-wind athrough the nostrils too, Malign and harsh when mortal draws a breath; Of not a few must one avoid the touch; Of not a few must one escape the sight; And some there be all loathsome to the taste; And many, besides, relax the languid limbs Along the frame, and undermine the soul In its abodes within. To certain trees There hath been given so dolorous a shade That often they gender achings of the head, If one but be beneath, outstretched on the sward. There is, again, on Helicon's high hills A tree that's wont to kill a man outright By fetid odour of its very flower. And when

the pungent stench of the night-lamp, Extinguished but a moment since, assails The nostrils, then and there it puts to sleep A man afflicted with the falling sickness And foamings at the mouth. A woman, too, At the heavy castor drowses back in chair, And from her delicate fingers slips away Her gaudy handiwork, if haply she Hath got the whiff at menstruation-time. Once more, if thou delayest in hot baths, When thou art over-full, how readily From stool in middle of the steaming water Thou tumblest in a fit! How readily The heavy fumes of charcoal wind their way Into the brain, unless beforehand we Of water 've drunk. But when a burning fever, O'ermastering man, hath seized upon his limbs, Then odour of wine is like a hammer-blow. And seest thou not how in the very earth Sulphur is gendered and bitumen thickens With noisome stench?—What direful stenches, too, Scaptensula out-breathes from down below, When men pursue the veins of silver and gold, With pick-axe probing round the hidden realms Deep in the earth?—Or what of deadly bane The mines of gold exhale? O what a look, And what a ghastly hue they give to men! And seest thou not, or hearest, how they're wont In little time to perish, and how fail The life-stores in those folk whom mighty power Of grim necessity confineth there In such a task? Thus, this telluric earth Out-streams with all these dread effluvia And breathes them out into the open world And into the visible regions under heaven. Thus, too, those Birdless places must up-send An essence bearing death to winged things, Which from the earth rises into the breezes To poison part of skiey space, and when Thither the winged is on pennons borne, There, seized by the unseen poison, 'tis ensnared, And from the horizontal of its flight Drops to the spot whence sprang the effluvium. And when 'thas there collapsed, then the same power Of that effluvium takes from all its limbs The relics of its life. That power first strikes The creatures with a wildering dizziness, And then thereafter, when they're once down-fallen Into the poison's very fountains, then Life, too, they vomit out perforce, because So thick the stores of bane around them fume. Again, at times it happens that this power, This exhalation of the Birdless places, Dispels the

air betwixt the ground and birds, Leaving well-nigh a void. And thither when In horizontal flight the birds have come, Forthwith their buoyancy of pennons limps, All useless, and each effort of both wings Falls out in vain. Here, when without all power To buoy themselves and on their wings to lean, Lo, nature constrains them by their weight to slip Down to the earth, and lying prostrate there Along the well-nigh empty void, they spend Their souls through all the openings of their frame.

Further, the water of wells is colder then At summer time, because the earth by heat Is rarefied, and sends abroad in air Whatever seeds it peradventure have Of its own fiery exhalations. The more, then, the telluric ground is drained Of heat, the colder grows the water hid Within the earth. Further, when all the earth Is by the cold compressed, and thus contracts And, so to say, concretes, it happens, lo, That by contracting it expresses then Into the wells what heat it bears itself. 'Tis said at Hammon's fane a fountain is, In daylight cold and hot in time of night. This fountain men be-wonder over-much, And think that suddenly it seethes in heat By intense sun, the subterranean, when Night with her terrible murk hath cloaked the lands— What's not true reasoning by a long remove: I' faith when sun o'erhead, touching with beams An open body of water, had no power To render it hot upon its upper side, Though his high light possess such burning glare, How, then, can he, when under the gross earth, Make water boil and glut with fiery heat?— And, specially, since scarcely potent he Through hedging walls of houses to inject His exhalations hot, with ardent rays. What, then's, the principle? Why, this, indeed: The earth about that spring is porous more Than elsewhere the telluric ground, and be Many the seeds of fire hard by the water; On this account, when night with dew-fraught shades Hath whelmed the earth, anon the earth deep down Grows chill, contracts; and thuswise squeezes out Into the spring what seeds she holds of fire (As one might squeeze with fist), which render hot The touch and steam of the fluid. Next, when sun, Up-risen, with his rays has split the soil And rarefied the earth with waxing heat, Again into their ancient abodes return The seeds of fire, and all the Hot of

water Into the earth retires; and this is why The fountain in the daylight gets so cold. Besides, the water's wet is beat upon By rays of sun, and, with the dawn, becomes Rarer in texture under his pulsing blaze; And, therefore, whatso seeds it holds of fire It renders up, even as it renders oft The frost that it contains within itself And thaws its ice and looseneth the knots. There is, moreover, a fountain cold in kind That makes a bit of tow (above it held) Take fire forthwith and shoot a flame; so, too, A pitch-pine torch will kindle and flare round Along its waves, wherever 'tis impelled Afloat before the breeze. No marvel, this: Because full many seeds of heat there be Within the water; and, from earth itself Out of the deeps must particles of fire Athrough the entire fountain surge aloft, And speed in exhalations into air Forth and abroad (yet not in numbers enow As to make hot the fountain). And, moreo'er, Some force constrains them, scattered through the water, Forthwith to burst abroad, and to combine In flame above. Even as a fountain far There is at Aradus amid the sea, Which bubbles out sweet water and disparts From round itself the salt waves; and, behold, In many another region the broad main Yields to the thirsty mariners timely help, Belching sweet waters forth amid salt waves. Just so, then, can those seeds of fire burst forth Athrough that other fount, and bubble out Abroad against the bit of tow; and when They there collect or cleave unto the torch, Forthwith they readily flash aflame, because The tow and torches, also, in themselves Have many seeds of latent fire. Indeed, And seest thou not, when near the nightly lamps Thou bringest a flaxen wick, extinguished A moment since, it catches fire before 'Thas touched the flame, and in same wise a torch? And many another object flashes aflame When at a distance, touched by heat alone, Before 'tis steeped in veritable fire. This, then, we must suppose to come to pass In that spring also. Now to other things! And I'll begin to treat by what decree Of nature it came to pass that iron can be By that stone drawn which Greeks the magnet call After the country's name (its origin Being in country of Magnesian folk). This stone men marvel at; and sure it oft Maketh a chain of rings, depending, lo, From off itself! Nay, thou mayest see at times Five or

yet more in order dangling down And swaying in the delicate winds, whilst one Depends from other, cleaving to under-side, And ilk one feels the stone's own power and bonds— So over-masteringly its power flows down. In things of this sort, much must be made sure Ere thou account of the thing itself canst give, And the approaches roundabout must be; Wherefore the more do I exact of thee A mind and ears attent. First, from all things We see soever, evermore must flow, Must be discharged and strewn about, about, Bodies that strike the eyes, awaking sight. From certain things flow odours evermore, As cold from rivers, heat from sun, and spray From waves of ocean, eater-out of walls Along the coasts. Nor ever cease to seep The varied echoings athrough the air. Then, too, there comes into the mouth at times The wet of a salt taste, when by the sea We roam about; and so, whene'er we watch The wormwood being mixed, its bitter stings. To such degree from all things is each thing Borne streamingly along, and sent about To every region round; and nature grants Nor rest nor respite of the onward flow, Since 'tis incessantly we feeling have, And all the time are suffered to descry And smell all things at hand, and hear them sound. Now will I seek again to bring to mind How porous a body all things have—a fact Made manifest in my first canto, too. For, truly, though to know this doth import For many things, yet for this very thing On which straightway I'm going to discourse, 'Tis needful most of all to make it sure That naught's at hand but body mixed with void. A first ensample: in grottos, rocks o'erhead Sweat moisture and distil the oozy drops; Likewise, from all our body seeps the sweat; There grows the beard, and along our members all And along our frame the hairs. Through all our veins Disseminates the foods, and gives increase And aliment down to the extreme parts, Even to the tiniest finger-nails. Likewise, Through solid bronze the cold and fiery heat We feel to pass; likewise, we feel them pass Through gold, through silver, when we clasp in hand The brimming goblets. And, again, there flit Voices through houses' hedging walls of stone; Odour seeps through, and cold, and heat of fire That's wont to penetrate even strength of iron. Again, where corselet of the sky girds

round

And at same time, some Influence of bane, When from Beyond 'thas stolen into [our world]. And tempests, gathering from the earth and sky, Back to the sky and earth absorbed retire— With reason, since there's naught that's fashioned not With body porous. Furthermore, not all The particles which be from things thrown off Are furnished with same qualities for sense, Nor be for all things equally adapt. A first ensample: the sun doth bake and parch The earth; but ice he thaws, and with his beams Compels the lofty snows, up-reared white Upon the lofty hills, to waste away; Then, wax, if set beneath the heat of him, Melts to a liquid. And the fire, likewise, Will melt the copper and will fuse the gold, But hides and flesh it shrivels up and shrinks. The water hardens the iron just off the fire, But hides and flesh (made hard by heat) it softens. The oleaster-tree as much delights The bearded she-goats, verily as though 'Twere nectar-steeped and shed ambrosia; Than which is naught that burgeons into leaf More bitter food for man. A hog draws back For marjoram oil, and every unguent fears Fierce poison these unto the bristled hogs, Yet unto us from time to time they seem, As 'twere, to give new life. But, contrariwise, Though unto us the mire be filth most foul, To hogs that mire doth so delightsome seem That they with wallowing from belly to back Are never cloyed. A point remains, besides, Which best it seems to tell of, ere I go To telling of the fact at hand itself. Since to the varied things assigned be The many pores, those pores must be diverse In nature one from other, and each have Its very shape, its own direction fixed. And so, indeed, in breathing creatures be The several senses, of which each takes in Unto itself, in its own fashion ever, Its own peculiar object. For we mark How sounds do into one place penetrate, Into another flavours of all juice, And savour of smell into a third. Moreover, One sort through rocks we see to seep, and, lo, One sort to pass through wood, another still Through gold, and others to go out and off Through silver and through glass. For we do see Through some pores form-and-look of things to flow, Through others heat to go, and some things still To

speedier pass than others through same pores. Of verity, the nature of these same paths, Varying in many modes (as aforesaid) Because of unlike nature and warp and woof Of cosmic things, constrains it so to be. Wherefore, since all these matters now have been Established and settled well for us As premises prepared, for what remains 'Twill not be hard to render clear account By means of these, and the whole cause reveal Whereby the magnet lures the strength of iron. First, stream there must from off the lode-stone seeds Innumerable, a very tide, which smites By blows that air asunder lying betwixt The stone and iron. And when is emptied out This space, and a large place between the two Is made a void, forthwith the primal germs Of iron, headlong slipping, fall conjoined Into the vacuum, and the ring itself By reason thereof doth follow after and go Thuswise with all its body. And naught there is That of its own primordial elements More thoroughly knit or tighter linked coheres Than nature and cold roughness of stout iron. Wherefore, 'tis less a marvel what I said, That from such elements no bodies can From out the iron collect in larger throng And be into the vacuum borne along, Without the ring itself do follow after. And this it does, and followeth on until 'Thath reached the stone itself and cleaved to it By links invisible. Moreover, likewise, The motion's assisted by a thing of aid (Whereby the process easier becomes),— Namely, by this: as soon as rarer grows That air in front of the ring, and space between Is emptied more and made a void, forthwith It happens all the air that lies behind Conveys it onward, pushing from the rear. For ever doth the circumambient air Drub things unmoved, but here it pushes forth The iron, because upon one side the space Lies void and thus receives the iron in. This air, whereof I am reminding thee, Winding athrough the iron's abundant pores So subtly into the tiny parts thereof, Shoves it and pushes, as wind the ship and sails. The same doth happen in all directions forth: From whatso side a space is made a void, Whether from crosswise or above, forthwith The neighbour particles are borne along Into the vacuum; for of verity, They're set a-going by poundings from elsewhere, Nor by themselves of own accord can they Rise upwards into the

air. Again, all things Must in their framework hold some air, because They are of framework porous, and the air Encompasses and borders on all things. Thus, then, this air in iron so deeply stored Is tossed evermore in vexed motion, And therefore drubs upon the ring sans doubt And shakes it up inside....

In sooth, that ring is thither borne along To where 'thas once plunged headlong—thither, lo, Unto the void whereto it took its start. It happens, too, at times that nature of iron Shrinks from this stone away, accustomed By turns to flee and follow. Yea, I've seen Those Samothracian iron rings leap up, And iron filings in the brazen bowls Seethe furiously, when underneath was set The magnet stone. So strongly iron seems To crave to flee that rock. Such discord great Is gendered by the interposed brass, Because, forsooth, when first the tide of brass Hath seized upon and held possession of The iron's open passage-ways, thereafter Cometh the tide of the stone, and in that iron Findeth all spaces full, nor now hath holes To swim through, as before. 'Tis thus constrained With its own current 'gainst the iron's fabric To dash and beat; by means whereof it spues Forth from itself—and through the brass stirs up— The things which otherwise without the brass It sucks into itself. In these affairs Marvel thou not that from this stone the tide Prevails not likewise other things to move With its own blows: for some stand firm by weight, As gold; and some cannot be moved forever, Because so porous in their framework they That there the tide streams through without a break, Of which sort stuff of wood is seen to be. Therefore, when iron (which lies between the two) Hath taken in some atoms of the brass, Then do the streams of that Magnesian rock Move iron by their smitings. Yet these things Are not so alien from others, that I Of this same sort am ill prepared to name Ensamples still of things exclusively To one another adapt. Thou seest, first, How lime alone cementeth stones: how wood Only by glue-of-bull with wood is joined— So firmly too that oftener the boards Crack open along the weakness of the grain Ere ever those taurine bonds will lax their hold. The vine-born juices with the water-springs Are bold to mix, though not the heavy pitch With the light

oil-of-olive. And purple dye Of shell-fish so uniteth with the wool's Body alone that it cannot be ta'en Away forever—nay, though thou gavest toil To restore the same with the Neptunian flood, Nay, though all ocean willed to wash it out With all its waves. Again, gold unto gold Doth not one substance bind, and only one? And is not brass by tin joined unto brass? And other ensamples how many might one find! What then? Nor is there unto thee a need Of such long ways and roundabout, nor boots it For me much toil on this to spend. More fit It is in few words briefly to embrace Things many: things whose textures fall together So mutually adapt, that cavities To solids correspond, these cavities Of this thing to the solid parts of that, And those of that to solid parts of this— Such joinings are the best. Again, some things Can be the one with other coupled and held, Linked by hooks and eyes, as 'twere; and this Seems more the fact with iron and this stone. Now, of diseases what the law, and whence The Influence of bane upgathering can Upon the race of man and herds of cattle Kindle a devastation fraught with death, I will unfold. And, first, I've taught above That seeds there be of many things to us Life-giving, and that, contrariwise, there must Fly many round bringing disease and death. When these have, haply, chanced to collect And to derange the atmosphere of earth, The air becometh baneful. And, lo, all That Influence of bane, that pestilence, Or from Beyond down through our atmosphere, Like clouds and mists, descends, or else collects From earth herself and rises, when, a-soak And beat by rains unseasonable and suns, Our earth hath then contracted stench and rot. Seest thou not, also, that whoso arrive In region far from fatherland and home Are by the strangeness of the clime and waters Distempered?—since conditions vary much. For in what else may we suppose the clime Among the Britons to differ from Aegypt's own (Where totters awry the axis of the world), Or in what else to differ Pontic clime From Gades' and from climes adown the south, On to black generations of strong men With sun-baked skins? Even as we thus do see Four climes diverse under the four main-winds And under the four main-regions of the sky, So, too, are seen the colour

and face of men Vastly to disagree, and fixed diseases To seize the generations, kind by kind: There is the elephant-disease which down In midmost Aegypt, hard by streams of Nile, Engendered is—and never otherwhere. In Attica the feet are oft attacked, And in Achaean lands the eyes. And so The divers spots to divers parts and limbs Are noxious; 'tis a variable air That causes this. Thus when an atmosphere, Alien by chance to us, begins to heave, And noxious airs begin to crawl along, They creep and wind like unto mist and cloud, Slowly, and everything upon their way They disarrange and force to change its state. It happens, too, that when they've come at last Into this atmosphere of ours, they taint And make it like themselves and alien. Therefore, asudden this devastation strange, This pestilence, upon the waters falls, Or settles on the very crops of grain Or other meat of men and feed of flocks. Or it remains a subtle force, suspense In the atmosphere itself; and when therefrom We draw our inhalations of mixed air, Into our body equally its bane Also we must suck in. In manner like, Oft comes the pestilence upon the kine, And sickness, too, upon the sluggish sheep. Nor aught it matters whether journey we To regions adverse to ourselves and change The atmospheric cloak, or whether nature Herself import a tainted atmosphere To us or something strange to our own use Which can attack us soon as ever it come.

THE PLAGUE ATHENS

'Twas such a manner of disease, 'twas such Mortal miasma in Cecropian lands Whilom reduced the plains to dead men's bones, Unpeopled the highways, drained of citizens The Athenian town. For coming from afar, Rising in lands of Aegypt, traversing Reaches of air and floating fields of foam, At last on all Pandion's folk it swooped; Whereat by troops unto disease and death Were they o'er-given. At first, they'd bear about A skull on fire with heat, and eyeballs twain Red with suffusion of blank glare. Their throats, Black on the inside, sweated oozy blood; And the walled

pathway of the voice of man Was clogged with ulcers; and the very tongue, The mind's interpreter, would trickle gore, Weakened by torments, tardy, rough to touch. Next when that Influence of bane had chocked, Down through the throat, the breast, and streamed had E'en into sullen heart of those sick folk, Then, verily, all the fences of man's life Began to topple. From the mouth the breath Would roll a noisome stink, as stink to heaven Rotting cadavers flung unburied out. And, lo, thereafter, all the body's strength And every power of mind would languish, now In very doorway of destruction. And anxious anguish and ululation (mixed With many a groan) companioned alway The intolerable torments. Night and day, Recurrent spasms of vomiting would rack Alway their thews and members, breaking down With sheer exhaustion men already spent. And yet on no one's body couldst thou mark The skin with o'er-much heat to burn aglow, But rather the body unto touch of hands Would offer a warmish feeling, and thereby Show red all over, with ulcers, so to say, Inbranded, like the "sacred fires" o'erspread Along the members. The inward parts of men, In truth, would blaze unto the very bones; A flame, like flame in furnaces, would blaze Within the stomach. Nor couldst aught apply Unto their members light enough and thin For shift of aid—but coolness and a breeze Ever and ever. Some would plunge those limbs On fire with bane into the icy streams, Hurling the body naked into the waves; Many would headlong fling them deeply down The water-pits, tumbling with eager mouth Already agape. The insatiable thirst That whelmed their parched bodies, lo, would make A goodly shower seem like to scanty drops. Respite of torment was there none. Their frames Forspent lay prone. With silent lips of fear Would Medicine mumble low, the while she saw So many a time men roll their eyeballs round, Staring wide-open, unvisited of sleep, The heralds of old death. And in those months Was given many another sign of death: The intellect of mind by sorrow and dread Deranged, the sad brow, the countenance Fierce and delirious, the tormented ears Beset with ringings, the breath quick and short Or huge and intermittent, soaking sweat A-glisten on neck, the spittle in fine gouts Tainted

with colour of crocus and so salt, The cough scarce wheezing through the rattling throat. Aye, and the sinews in the fingered hands Were sure to contract, and sure the jointed frame To shiver, and up from feet the cold to mount Inch after inch: and toward the supreme hour At last the pinched nostrils, nose's tip A very point, eyes sunken, temples hollow, Skin cold and hard, the shuddering grimace, The pulled and puffy flesh above the brows!— O not long after would their frames lie prone In rigid death. And by about the eighth Resplendent light of sun, or at the most On the ninth flaming of his flambeau, they Would render up the life. If any then Had 'scaped the doom of that destruction, yet Him there awaited in the after days A wasting and a death from ulcers vile And black discharges of the belly, or else Through the clogged nostrils would there ooze along Much fouled blood, oft with an aching head: Hither would stream a man's whole strength and flesh. And whoso had survived that virulent flow Of the vile blood, yet into thews of him And into his joints and very genitals Would pass the old disease. And some there were, Dreading the doorways of destruction So much, lived on, deprived by the knife Of the male member; not a few, though lopped Of hands and feet, would yet persist in life, And some there were who lost their eyeballs: O So fierce a fear of death had fallen on them! And some, besides, were by oblivion Of all things seized, that even themselves they knew No longer. And though corpse on corpse lay piled Unburied on ground, the race of birds and beasts Would or spring back, scurrying to escape The virulent stench, or, if they'd tasted there, Would languish in approaching death. But yet Hardly at all during those many suns Appeared a fowl, nor from the woods went forth The sullen generations of wild beasts— They languished with disease and died and died. In chief, the faithful dogs, in all the streets Outstretched, would yield their breath distressfully For so that Influence of bane would twist Life from their members. Nor was found one sure And universal principle of cure: For what to one had given the power to take The vital winds of air into his mouth, And to gaze upward at the vaults of sky, The same to others was their death and doom. In those

affairs, O awfullest of all, O pitiable most was this, was this: Whoso once saw himself in that disease Entangled, ay, as damned unto death, Would lie in wanhope, with a sullen heart, Would, in fore-vision of his funeral, Give up the ghost, O then and there. For, lo, At no time did they cease one from another To catch contagion of the greedy plague,— As though but woolly flocks and horned herds; And this in chief would heap the dead on dead: For who forbore to look to their own sick, O these (too eager of life, of death afeard) Would then, soon after, slaughtering Neglect Visit with vengeance of evil death and base— Themselves deserted and forlorn of help. But who had stayed at hand would perish there By that contagion and the toil which then A sense of honour and the pleading voice Of weary watchers, mixed with voice of wail Of dying folk, forced them to undergo. This kind of death each nobler soul would meet. The funerals, uncompanioned, forsaken, Like rivals contended to be hurried through.

And men contending to ensepulchre Pile upon pile the throng of their own dead: And weary with woe and weeping wandered home; And then the most would take to bed from grief. Nor could be found not one, whom nor disease Nor death, nor woe had not in those dread times Attacked. By now the shepherds and neatherds all, Yea, even the sturdy guiders of curved ploughs, Began to sicken, and their bodies would lie Huddled within back-corners of their huts, Delivered by squalor and disease to death. O often and often couldst thou then have seen On lifeless children lifeless parents prone, Or offspring on their fathers', mothers' corpse Yielding the life. And into the city poured O not in least part from the countryside That tribulation, which the peasantry Sick, sick, brought thither, thronging from every quarter, Plague-stricken mob. All places would they crowd, All buildings too; whereby the more would death Up-pile a-heap the folk so crammed in town. Ah, many a body thirst had dragged and rolled Along the highways there was lying strewn Besides Silenus-headed water-fountains,— The life-breath choked from that too dear desire Of pleasant waters. Ah, everywhere along The open places of the populace, And

along the highways, O thou mightest see Of many a half-dead body the sagged limbs, Rough with squalor, wrapped around with rags, Perish from very nastiness, with naught But skin upon the bones, well-nigh already Buried—in ulcers vile and obscene filth. All holy temples, too, of deities Had Death becrammed with the carcasses; And stood each fane of the Celestial Ones Laden with stark cadavers everywhere— Places which warders of the shrines had crowded With many a guest. For now no longer men Did mightily esteem the old Divine, The worship of the gods: the woe at hand Did over-master. Nor in the city then Remained those rites of sepulture, with which That pious folk had evermore been wont To buried be. For it was wildered all In wild alarms, and each and every one With sullen sorrow would bury his own dead, As present shift allowed. And sudden stress And poverty to many an awful act Impelled; and with a monstrous screaming they Would, on the frames of alien funeral pyres, Place their own kin, and thrust the torch beneath Oft brawling with much bloodshed round about Rather than quit dead bodies loved in life.

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