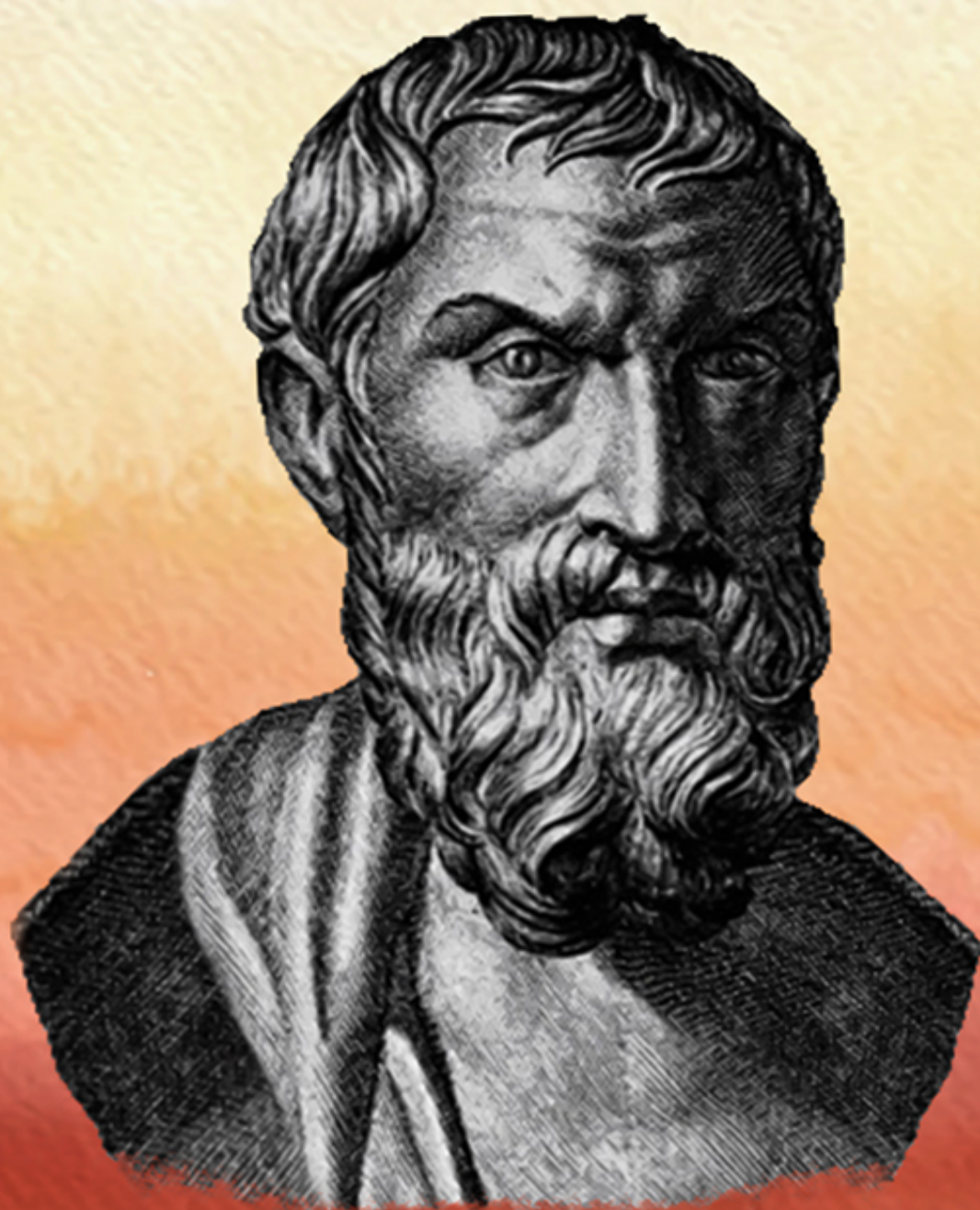


CLASSICS TO GO



**ON THE NATURE
OF THINGS**
TITUS LUCRETIVS CARUS

On the Nature of Things

Titus Lucretius Carus

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'er-mastered 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 disjointed 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,