

ТИТ ЛУКРЕЦИЙ КАР

ON THE NATURE OF
THINGS

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Titus Lucretius Carus

On the Nature of Things

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,
Glowing 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 light 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 all 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 triped 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 boscase. 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 't must 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
'T has 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 fortified 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
Delightful 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,
Unharm'd, 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 intervalles 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-quicken'd 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,
Unfailing 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 Panchaeon 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 gaities, 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'er mastered 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, 't must 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 carved 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 whatsoever 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, fortified 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 Dictaeon 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 't must 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 perchance 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;

Конец ознакомительного фрагмента.

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