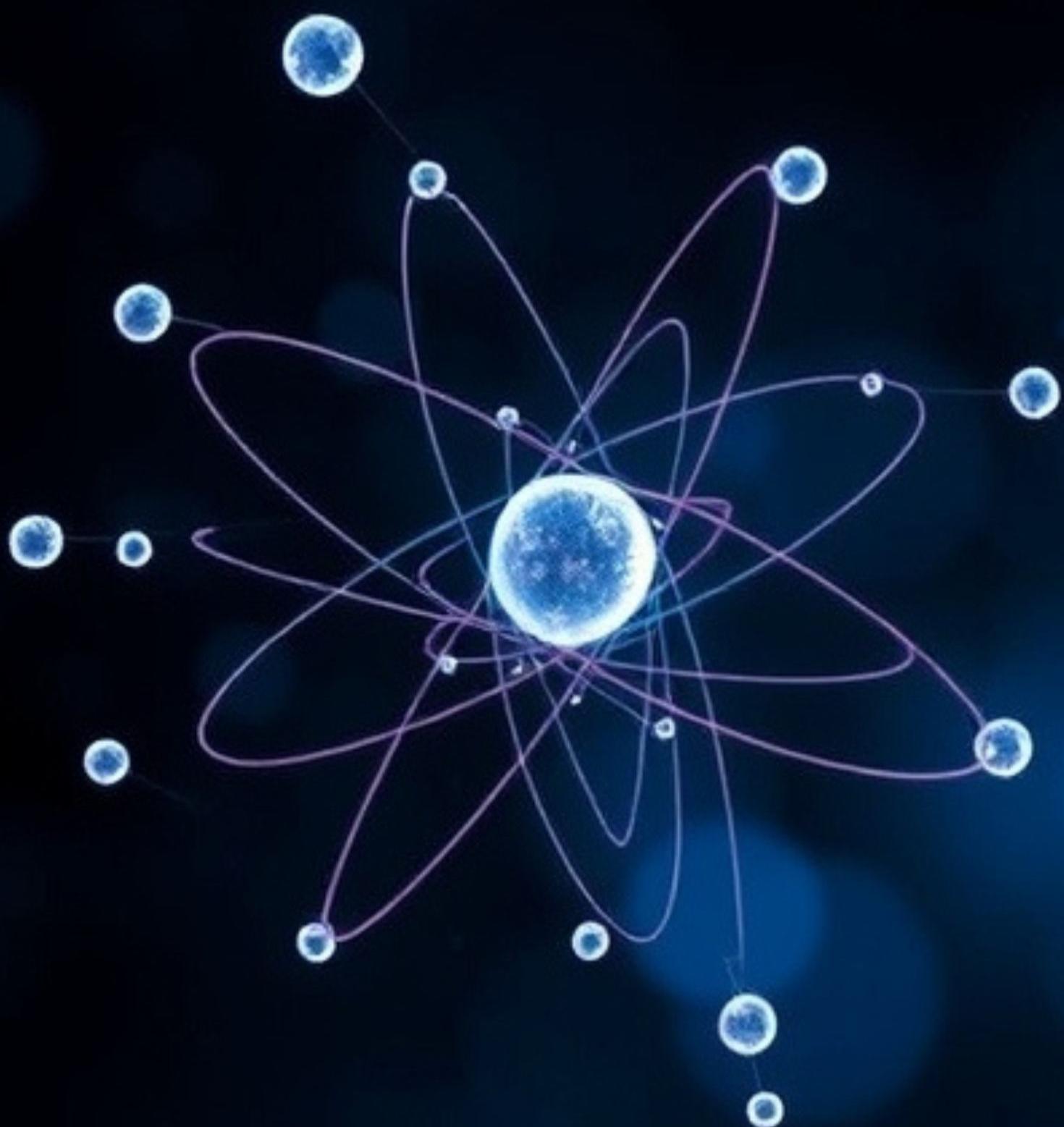


The Subtle Dance of Atoms



NATURE'S HIDDEN MOVEMENTS

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 Wherby 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. 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 birdsboth those that teem In gladsome regions of the water-haunts, About the riverbanks 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, Unfailingly each to its proper teat, As nature intends. Lastly, with any grain, Thou'lt see that no one kernel in one kind Is so far like another, that there still Is not in shapes some difference running through. By a like law we see how earth is pied With shells and conchs, where, with soft waves, the sea Beats on the thirsty sands of curving shores. Wherefore again, again, since seeds of things Exist by nature, nor were wrought with hands After a fixed pattern of one other, They needs must flitter to and fro with shapes In types dissimilar to one another. Easy enough by thought of mind to solve Why fires of lightning more can penetrate Than these of ours from pitch-pine born on earth. For thou canst say lightning's celestial fire, So subtle, is formed of figures finer far, And passes thus through holes which this our fire, Born from the wood, created from the pine, Cannot. Again, light passes through the horn On the lantern's side, while rain is dashed away. And why?- unless those bodies of light should be Finer than those of water's genial showers. We see how quickly through a colander The wines will flow; how, on the other hand, The sluggish olive-oil delays: no doubt, Because 'tis wrought of elements more large, Or else more crook'd and intertwined. Thus It comes that the primordials cannot be So suddenly sundered one from other, and seep, One through each several hole of anything. And note, besides, that liquor of honey or milk Yields in the mouth agreeable taste to tongue, Whilst nauseous wormwood, pungent centaury, With their foul flavour set the lips awry; Thus simple 'tis to see that whatsoever Can touch the senses pleasingly are made Of smooth and rounded elements, whilst those Which seem the bitter and the sharp, are held Entwined by elements more crook'd, and so Are wont to tear their ways into our senses, And rend our body as they enter in. In short all good to sense, all bad to touch, Being up-built of figures so unlike, Are mutually at strife-lest thou suppose That the shrill rasping of a squeaking saw Consists of elements as smooth as song Which, waked by nimble fingers, on the strings The sweet musicians fashion; or suppose That same-shaped atoms through men's nostrils pierce When foul cadavers burn, as when the stage Is with Cilician saffron sprinkled fresh, And the altar near exhales Panchaean scent; Or hold as of like seed the goodly hues Of things which feast our eyes, as those which sting Against the smarting pupil and draw tears, Or show, with gruesome aspect, grim and vile. For never a shape which charms our sense was made Without some elemental smoothness; whilst Whate'er is harsh and irksome has been framed Still with some roughness in its elements. Some, too, there are which justly are supposed To be nor smooth nor altogether hooked, With bended barbs, but slightly angled-out, To tickle rather than to wound the sense-And of which sort is the salt tartar of wine And flavours of the gummed elecampane. Again, that glowing fire and icy rime Are fanged with teeth unlike whereby to sting Our body's sense, the touch of each gives proof. For touch-by sacred majesties of Gods!- Touch is indeed the body's only sense-Be't that something in-from-outward works, Be't that something in the body born Wounds, or delighteth as it passes out Along the procreant paths of Aphrodite; Or be't the seeds by some collision whirl Disordered in the body and confound By tumult and confusion all the sense-As thou mayst find, if haply with the hand Thyselv 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'l undertake That seeds have infinite differences in form, Lest thus thou forcest some indeed to be Of an immeasurable immensityWhich I have taught above cannot be proved. And now for thee barbaric robes, and gleam Of Meliboean purple, touched with dye Of the Thessalian shell... The peacock's golden generations, stained With spotted gaieties, would lie o'erthrown By some new colour of new things more bright; The odour of myrrh and savours of honey despised; The swan's old lyric, and Apollo's hymns, Once modulated on the many chords, Would likewise sink o'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, 'tmust be confessed That matter, too, by finite tale of shapes Does differ. Again, from earth's midsummer heats Unto the icy hoar-frosts of the year The forward path is fixed, and by like law O'ertravelled backwards at the dawn of spring. For each degree of hot, and each of cold, And the half-warm, all filling up the sum In due progression, lie, my Memmius, there Betwixt the two extremes: the things create Must differ, therefore, by a finite change, Since at each end marked off they ever are By fixed point-on one side plagued by flames And on the other by congealing frosts. The which now having taught, I will go on To bind thereto a fact to this allied And drawing from this its proof: those primal germs Which have been fashioned all of one like shape Are infinite in tale; for, since the forms Themselves are finite in divergences, Then those which are alike will have to be Infinite, else the sum of stuff remains A finite-what I've proved is not the fact, Showing in verse how corpuscles of stuff, From everlasting and to-day the same, Uphold the sum of things, all sides around By old succession of unending blows. For though thou view'st some beasts to be more rare, And mark'st in them a less prolific stock, Yet in another region, in lands remote, That kind abounding may make up the count; Even as we mark among the four-foot kind Snake-handed elephants, whose thousands wall With ivory ramparts India about,

That her interiors cannot entered be-So big her count of brutes of which we see Such few examples. Or suppose, besides, We feign some thing, one of its kind and sole With body born, to which is nothing like In all the lands: yet now unless shall be An infinite count of matter out of which Thus to conceive and bring it forth to life, It cannot be created and-what's more-It cannot take its food and get increase. Yea, if through all the world in finite tale Be tossed the procreant bodies of one thing, Whence, then, and where in what mode, by what power, Shall they to meeting come together there, In such vast ocean of matter and tumult strange?- No means they have of joining into one. But, just as, after mighty ship-wrecks piled, The mighty main is wont to scatter wide The rowers' banks, the ribs, the yards, the prow, The masts and swimming oars, so that afar Along all shores of lands are seen afloat The carven fragments of the rended poop, Giving a lesson to mortality To shun the ambush of the faithless main, The violence and the guile, and trust it not At any hour, however much may smile The crafty enticements of the placid deep: Exactly thus, if once thou holdest true That certain seeds are finite in their tale, The various tides of matter, then, must needs Scatter them flung throughout the ages all, So that not ever can they join, as driven Together into union, nor remain In union, nor with increment can grow-But facts in proof are manifest for each: Things can be both begotten and increase. 'Tis therefore manifest that primal germs, Are infinite in any class thou wiltFrom whence is furnished matter for all things. Nor can those motions that bring death prevail Forever, nor eternally entomb The welfare of the world; nor, further, can Those motions that give birth to things and growth Keep them forever when created there. Thus the long war, from everlasting waged, With equal strife among the elements Goes on and on. Now here, now there, prevail The vital forces of the world-or fall. Mixed with the funeral is the wildered wail Of infants coming to the shores of light: No night a day, no dawn a night hath followed That heard not, mingling with the small birth-cries, The wild laments, companions old of death And the black rites. This, too, in these affairs 'Tis fit thou hold well sealed, and keep consigned With no forgetting brain: nothing there is Whose nature is apparent out of hand That of one kind of elements consists-Nothing there is that's not of mixed seed. And whatsoe'er possesses in itself More largely many powers and properties Shows thus that here within itself there are The largest number of kinds and differing shapes Of elements. And, chief of all, the earth Hath in herself first bodies whence the springs, Rolling chill waters, renew forevermore The unmeasured main; hath whence the fires arise-For burns in many a spot her flamed crust, Whilst the impetuous Aetna raves indeed From more profounder fires-and she, again, Hath in herself the seed whence she can raise The shining grains and gladsome trees for men; Whence, also, rivers, fronds, and gladsome pastures Can she supply for mountain-roaming beasts. Wherefore great mother of gods, and mother of beasts, And parent of man hath she alone been named. Her hymned the old and learned bards of Greece Seated in chariot o'er the realms of air To drive her team of lions, teaching thus That the great earth hangs poised and cannot lie Resting on other earth. Unto her car They've yoked the wild beasts, since a progeny, However savage, must be tamed and chid By care of parents. They have girt about With turret-crown the summit of her head, Since, fortressed in her goodly strongholds high, 'Tis she sustains the cities; now, adorned With that same token, to-day is carried forth, With solemn awe through many a mighty land, The image of that mother, the divine. Her the wide nations, after antique rite, Do name Idaean Mother, giving her Escort of Phrygian bands, since first, they say, From out those regions 'twas that grain began Through all the world. To her do they assign The Galli, the emasculate, since thus They wish to show that men who violate The majesty of the mother and have proved Ingrate to parents are to be adjudged Unfit to give unto the shores of light A living progeny. The Galli come: And hollow cymbals, tight-skinned tambourines Resound around to bangings of their hands; The fierce horns threaten with a raucous bray; The tubed pipe excites their maddened minds In Phrygian measures; they bear before them knives, Wild emblems of their frenzy, which have power The rabble's ingrate heads and impious hearts To panic with terror of the goddess' might. And so, when through the mighty cities borne, She blesses man with salutations mute, They strew the highway of her journeyings With coin of brass and silver, gifting her With alms and largesse,

and shower her and shade With flowers of roses falling like the snow Upon the Mother and her companion-bands. Here is an armed troop, the which by Greeks Are called the Phrygian Curetes. Since Haply among themselves they use to play In games of arms and leap in measure round With bloody mirth and by their nodding shake The terrorizing crests upon their heads, This is the armed troop that represents The arm'd 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 'tmust not be thought that in all ways All things can be conjoined; for then wouldest 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. e 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 toughest be perchance endowed, But rather with what sort of shape equipped, 'Tis thine to know the atoms need not colour, But render forth sensations, as of touch, That vary with their varied forms. Besides, Since special shapes have not a special colour, And all formations of the primal germs Can be of any sheen thou wilt, why, then, Are not those objects which are of them made Suffused, each kind with colours of every kind? For then 'twere meet that ravens, as they fly, Should dartle from white pinions a white sheen, Or swans turn black from seed of black, or be Of any single varied dye thou wilt. Again, the more an object's rent to bits, The more thou see its colour fade away Little by little till 'tis quite extinct; As happens when the gaudy linen's picked Shred after shred away: the purple there, Phoenician red, most brilliant of all dyes, Is lost asunder, ravelled thread by thread; Hence canst perceive the fragments die away From out their colour, long ere they depart Back to the old primordials of things. And, last, since thou concedest not all bodies Send out a voice or smell, it happens thus That not to all thou givest sounds and smells. So, too, since we behold not all with eyes, 'Tis thine to know some things there are as much Orphaned of colour, as others without smell, And reft of sound; and those the mind alert No less can apprehend than it can mark The things that lack some other qualities. But think not haply that the primal bodies Remain despoiled alone of colour: so, Are they from warmth dissevered and from cold And from hot exhalations;

and they move, Both sterile of sound and dry of juice; and throw Not any odour from their proper bodies. Just as, when undertaking to prepare A liquid balm of myrrh and marjoram, And flower of nard, which to our nostrils breathes Odour of nectar, first of all behooves Thou seek, as far as find thou may and can, The inodorous olive-oil (which never sends One whiff of scent to nostrils), that it may The least debauch and ruin with sharp tang The odorous essence with its body mixed And in it seethed. And on the same account The primal germs of things must not be thought To furnish colour in begetting things, Nor sound, since pow'rless they to send forth aught From out themselves, nor any flavour, too, Nor cold, nor exhalation hot or warm. The rest; yet since these things are mortal all-The pliant mortal, with a body soft; The brittle mortal, with a crumbling frame; The hollow with a porous-all must be Disjoined from the primal elements, If still we wish under the world to lay Immortal ground-works, whereupon may rest The sum of weal and safety, lest for thee All things return to nothing utterly. Now, too: whate'er we see possessing sense Must yet confessedly be established all From elements insensate. And those signs, So clear to all and witnessed out of hand, Do not refute this dictum nor oppose; But rather themselves do lead us by the hand, Compelling belief that living things are born Of elements insensate, as I say. Sooth, we may see from out the stinking dung Live worms spring up, when, after soaking rains, The drenched earth rots; and all things change the same: Lo, change the rivers, the fronds, the gladsome pastures Into the cattle, the cattle their nature change Into our bodies, and from our body, oft Grow strong the powers and bodies of wild beasts And mighty-winged birds. Thus nature changes All foods to living frames, and procreates From them the senses of live creatures all, In manner about as she uncoils in flames Dry logs of wood and turns them all to fire. And seest not, therefore, how it matters much After what order are set the primal germs, And with what other germs they all are mixed, And what the motions that they give and get? But now, what is't that strikes thy sceptic mind, Constraining thee to sundry arguments Against belief that from insensate germs The sensible is gendered?- Verily, 'Tis this: that liquids, earth, and wood, though mixed, Are yet unable to gender vital sense. And, therefore, 'twill be well in these affairs This to remember: that I have not said Senses are born, under conditions all, From all things absolutely which create Objects that feel; but much it matters here Firstly, how small the seeds which thus compose The feeling thing, then, with what shapes endowed, And lastly what they in positions be, In motions, in arrangements. Of which facts Naught we perceive in logs of wood and clods; And yet even these, when sodden by the rains, Give birth to wormy grubs, because the bodies Of matter, from their old arrangements stirred By the new factor, then combine anew In such a way as genders living things. Next, they who deem that feeling objects can From feeling objects be create, and these, In turn, from others that are wont to feel When soft they make them; for all sense is linked With flesh, and thews, and veins-and such, we see, Are fashioned soft and of a mortal frame. Yet be't that these can last forever on: They'll have the sense that's proper to a part, Or else be judged to have a sense the same As that within live creatures as a whole. But of themselves those parts can never feel, For all the sense in every member back To something else refers-a severed hand, Or any other member of our frame, Itself alone cannot support sensation. It thus remains they must resemble, then, Live creatures as a whole, to have the power Of feeling sensation concordant in each part With the vital sense; and so they're bound to feel The things we feel exactly as do we. If such the case, how, then, can they be named The primal germs of things, and how avoid The highways of destruction?- since they be Mere living things and living things be all One and the same with mortal. Grant they could, Yet by their meetings and their unions all, Naught would result, indeed, besides a throng And hurly-burly all of living things-Precisely as men, and cattle, and wild beasts, By mere conglomeration each with each Can still beget not anything of new. But if by chance they lose, inside a body, Their own sense and another sense take on, What, then, avails it to assign them that Which is withdrawn thereafter? And besides, To touch on proof that we pronounced before, Just as we see the eggs of feathered fowls To change to living chicks, and swarming worms To bubble forth when from the soaking rains,

The earth is sodden, sure, sensations all Can out of nonsensations be begot. But if one say that sense can so far rise From nonsense by mutation, or because Brought forth as by a certain sort of birth, 'Twill serve to render plain to him and prove There is no birth, unless there be before Some formed union of the elements, Nor any change, unless they be unite. In first place, senses can't in body be Before its living nature's been begot,- Since all its stuff, in faith, is held dispersed About through rivers, air, and earth, and all That is from earth created, nor has met In combination, and, in proper mode, Conjoined into those vital motions which Kindle the all-perceiving senses-they That keep and guard each living thing soever. Again, a blow beyond its nature's strength Shatters forthwith each living thing soe'er, And on it goes confounding all the sense Of body and mind. For of the primal germs Are loosed their old arrangements, and, throughout, The vital motions blocked,- until the stuff, Shaken profoundly through the frame entire, Undoes the vital knots of soul from body And throws that soul, to outward widedispersed, Through all the pores. For what may we surmise A blow inflicted can achieve besides Shaking asunder and loosening all apart? It happens also, when less sharp the blow, The vital motions which are left are wont Oft to win out-win out, and stop and still The uncouth tumults gendered by the blow, And call each part to its own courses back, And shake away the motion of death which now Begins its own dominion in the body, And kindle anew the senses almost gone. For by what other means could they the more Collect their powers of thought and turn again From very doorways of destruction Back unto life, rather than pass whereto They be already well-nigh sped and so Pass quite away? Again, since pain is there Where bodies of matter, by some force stirred up, Through vitals and through joints, within their seats Quiver and quake inside, but soft delight, When they remove unto their place again: 'Tis thine to know the primal germs can be Assaulted by no pain, nor from themselves Take no delight; because indeed they are Not made of any bodies of first things, Under whose strange new motions they might ache Or pluck the fruit of any dear new sweet. And so they must be furnished with no sense. Once more, if thus, that every living thing May have sensation, needful 'tis to assign Sense also to its elements, what then Of those fixed elements from which mankind Hath been, by their peculiar virtue, formed? Of verity, they'll laugh aloud, like men, Shaken asunder by a spasm of mirth, Or sprinkle with dewy tear-drops cheeks and chins, And have the cunning hardihood to say Much on the composition of the world, And in their turn inquire what elements They have themselves,- since, thus the same in kind As a whole mortal creature, even they Must also be from other elements, And then those others from others evermore-So that thou darest nowhere make a stop. Oho, I'll follow thee until thou grant The seed (which here thou say'st speaks, laughs, and thinks) Is yet derived out of other seeds Which in their turn are doing just the same. But if we see what raving nonsense this, And that a man may laugh, though not, forsooth, Compounded out of laughing elements, And think and utter reason with learn'd speech, Though not himself compounded, for a fact, Of sapient seeds and eloquent, why, then, Cannot those things which we perceive to have Their own sensation be composed as well Of intermixed seeds quite void of sense? INFINITE WORLDS Once more, we all from seed celestial spring, To all is that same father, from whom earth, The fostering mother, as she takes the drops Of liquid moisture, pregnant bears her broods-The shining grains, and gladsome shrubs and trees, And bears the human race and of the wild The generations all, the while she yields The foods wherewith all feed their frames and lead The genial life and propagate their kind; Wherefore she owneth that maternal name, By old desert. What was before from earth, The same in earth sinks back, and what was sent From shores of ether, that, returning home, The vaults of sky receive. Nor thus doth death So far annihilate things that she destroys The bodies of matter; but she dissipates Their combinations, and conjoins anew One element with others; and contrives That all things vary forms and change their colours And get sensations and straight give them o'er. And thus may'st know it matters with what others And in what structure the primordial germs Are held together, and what motions they Among themselves do give and get; nor think That aught we see hither and thither afloat Upon the crest of things, and now a birth And straightway now a ruin, inheres at rest Deep in the eternal atoms of the world. Why, even in these our very verses here,

It matters much with what and in what order Each element is set: the same denote Sky, and the ocean, lands, and streams, and sun; The same, the grains, and trees, and living things. And if not all alike, at least the most-But what distinctions by positions wrought! And thus no less in things themselves, when once Around are changed the intervals between, The paths of matter, its connections, weights, Blows, clashings, motions, order, structure, shapes, The things themselves must likewise changed be. Now to true reason give thy mind for us. Since here strange truth is putting forth its might To hit thee in thine ears, a new aspect Of things to show its front. Yet naught there is So easy that it standeth not at first More hard to credit than it after is; And naught soe'er that's great to such degree, Nor wonderful so far, but all mankind Little by little abandon their surprise. Look upward yonder at the bright clear sky And what it holds-the stars that wander o'er, The moon, the radiance of the splendour-sun: Yet all, if now they first for mortals were, If unforeseen now first asudden shown, What might there be more wonderful to tell, What that the nations would before have dared Less to believe might be?- I fancy, naught-So strange had been the marvel of that sight. The which o'erwearied to behold, to-day None deigns look upward to those lucent realms. Then, spew not reason from thy mind away, Beside thyself because the matter's new, But rather with keen judgment nicely weigh; And if to thee it then appeareth true, Render thy hands, or, if 'tis false at last, Gird thee to combat. For my mind-of-man Now seeks the nature of the vast Beyond There on the other side, that boundless sum Which lies without the ramparts of the world, Toward which the spirit longs to peer afar, Toward which indeed the swift elan of thought Flies unencumbered forth. Firstly, we find, Off to all regions round, on either side, Above, beneath, throughout the universe End is there none-as I have taught, as too The very thing of itself declares aloud, And as from nature of the unbottomed deep Shines clearly forth. Nor can we once suppose In any way 'tis likely, (seeing that space To all sides stretches infinite and free, And seeds, innumerable in number, in sum Bottomless, there in many a manner fly, Bestirred in everlasting motion there), That only this one earth and sky of ours Hath been create and that those bodies of stuff, So many, perform no work outside the same; Seeing, moreover, this world too hath been By nature fashioned, even as seeds of things By innate motion chanced to clash and cling-After they'd been in many a manner driven Together at random, without design, in vain-And as at last those seeds together dwelt, Which, when together of a sudden thrown, Should alway furnish the commencements fit Of mighty things-the earth, the sea, the sky, And race of living creatures. Thus, I say, Again, again, 'tmust be confessed there are Such congregations of matter otherwhere, Like this our world which vasty ether holds In huge embrace. Besides, when matter abundant Is ready there, when space on hand, nor object Nor any cause retards, no marvel 'tis That things are carried on and made complete, Perforce. And now, if store of seeds there is So great that not whole life-times of the living Can count the tale... And if their force and nature abide the same, Able to throw the seeds of things together Into their places, even as here are thrown The seeds together in this world of ours, 'tmust be confessed in other realms there are Still other worlds, still other breeds of men, And other generations of the wild. Hence too it happens in the sum there is No one thing single of its kind in birth, And single and sole in growth, but rather it is One member of some generated race, Among full many others of like kind. First, cast thy mind abroad upon the living: Thou'lt find the race of mountainranging wild Even thus to be, and thus the scions of men To be begot, and lastly the mute flocks Of scaled fish, and winged frames of birds. Wherefore confess we must on grounds the same That earth, sun, moon, and ocean, and all else, Exist not sole and single-rather in number Exceeding number. Since that deeply set Old boundary stone of life remains for them No less, and theirs a body of mortal birth No less, than every kind which here on earth Is so abundant in its members found. Which well perceived if thou hold in mind, Then Nature, delivered from every haughty lord, And forthwith free, is seen to do all things Herself and through herself of own accord, Rid of all gods. For-by their holy hearts Which pass in long tranquillity of peace Untroubled ages and a serene life!- Who hath the power (I ask), who hath the power To rule the sum of the immeasurable,

To hold with steady hand the giant reins Of the unfathomed deep? Who hath the power At once to roll a multitude of skies, At once to heat with fires ethereal all The fruitful lands of multitudes of worlds, To be at all times in all places near, To stablisch darkness by his clouds, to shake The serene spaces of the sky with sound, And hurl his lightnings,- ha, and whelm how oft In ruins his own temples, and to rave, Retiring to the wildernesses, there At practice with that thunderbolt of his, Which yet how often shoots the guilty by, And slays the honourable blameless ones! Ere since the birth-time of the world, ere since The risen first-born day of sea, earth, sun, Have many germs been added from outside, Have many seeds been added round about, Which the great All, the while it flung them on, Brought hither, that from them the sea and lands Could grow more big, and that the house of heaven Might get more room and raise its lofty roofs Far over earth, and air arise around. For bodies all, from out all regions, are Divided by blows, each to its proper thing, And all retire to their own proper kinds: The moist to moist retires; earth gets increase From earthy body; and fires, as on a forge, Beat out new fire; and ether forges ether; Till nature, author and ender of the world, Hath led all things to extreme bound of growth: As haps when that which hath been poured inside The vital veins of life is now no more Than that which ebbs within them and runs off. This is the point where life for each thing ends; This is the point where nature with her powers Curbs all increase. For whatsoe'er thou seest Grow big with glad increase, and step by step Climb upward to ripe age, these to themselves Take in more bodies than they send from selves, Whilst still the food is easily infused Through all the veins, and whilst the things are not So far expanded that they cast away Such numerous atoms as to cause a waste Greater than nutriment whereby they wax. For 'tmust be granted, truly, that from things Many a body ebbeth and runs off; But yet still more must come, until the things Have touched development's top pinnacle; Then old age breaks their powers and ripe strength And falls away into a worser part. For ever the ampler and more wide a thing, As soon as ever its augmentation ends, It scatters abroad forthwith to all sides round More bodies, sending them from out itself. Nor easily now is food disseminate Through all its veins; nor is that food enough To equal with a new supply on hand Those plenteous exhalations it gives off. Thus, fairly, all things perish, when with ebbing They're made less dense and when from blows without They are laid low; since food at last will fail Extremest eld, and bodies from outside Cease not with thumping to undo a thing And overmaster by infesting blows. Thus, too, the ramparts of the mighty world On all sides round shall taken be by storm, And tumble to wrack and shivered fragments down. For food it is must keep things whole, renewing; 'Tis food must prop and give support to all,- But to no purpose, since nor veins suffice To hold enough, nor nature ministers As much as needful. And even now 'tis thus: Its age is broken and the earth, outworn With many parturitions, scarce creates The little lives-she who created erst All generations and gave forth at birth Enormous bodies of wild beasts of old. For never, I fancy, did a golden cord From off the firmament above let down The mortal generations to the fields; Nor sea, nor breakers pounding on the rocks Created them; but earth it was who bore-The same to-day who feeds them from herself. Besides, herself of own accord, she first The shining grains and vineyards of all joy Created for mortality; herself Gave the sweet fruitage and the pastures glad, Which now to-day yet scarcely wax in size, Even when aided by our toiling arms. We break the ox, and wear away the strength Of sturdy farm-hands; iron tools today Barely avail for tilling of the fields, So niggardly they grudge our harvestings, So much increase our labour. Now to-day The aged ploughman, shaking of his head, Sighs o'er and o'er that labours of his hands Have fallen out in vain, and, as he thinks How present times are not as times of old, Often he praises the fortunes of his sire, And crackles, prating, how the ancient race, Fulfilled with piety, supported life With simple comfort in a narrow plot, Since, man for man, the measure of each field Was smaller far i' the old days. And, again, The gloomy planter of the withered vine Rails at the season's change and wearies heaven, Nor grasps that all of things by sure degrees Are wasting away and going to the tomb, Outworn by venerable length of life.

O thou who first uplifted in such dark So clear a torch aloft, who first shed light Upon the profitable ends of man, O thee I follow, glory of the Greeks, And set my footsteps squarely planted now Even in the impress and the marks of thine-Less like one eager to dispute the palm, More as one craving out of very love That I may copy thee!- for how should swallow Contend with swans or what compare could be In a race between young kids with tumbling legs And the strong might of the horse? Our father thou, And finder-out of truth, and thou to us Suppliest a father's precepts; and from out Those scriven leaves of thine, renowned soul (Like bees that sip of all in flowery wolds), We feed upon thy golden sayings all-Golden, and ever worthiest endless life. For soon as ever thy planning thought that sprang From god-like mind begins its loud proclaim Of nature's courses, terrors of the brain Asunder flee, the ramparts of the world Dispart away, and through the void entire I see the movements of the universe. Rises to vision the majesty of gods, And their abodes of everlasting calm Which neither wind may shake nor rain-cloud splash, Nor snow, congealed by sharp frosts, may harm With its white downfall: ever, unclouded sky O'er roofs, and laughs with far-diffused light. And nature gives to them their all, nor aught May ever pluck their peace of mind away. But nowhere to my vision rise no more The vaults of Acheron, though the broad earth Bars me no more from gazing down o'er all Which under our feet is going on below Along the void. O, here in these affairs Some new divine delight and trembling awe Takes hold through me, that thus by power of thine Nature, so plain and manifest at last, Hath been on every side laid bare to man! And since I've taught already of what sort The seeds of all things are, and how, distinct In divers forms, they flit of own accord, Stirred with a motion everlasting on, And in what mode things be from them create, Now, after such matters, should my verse, meseems, Make clear the nature of the mind and soul, And drive that dread of Acheron without, Headlong, which so confounds our human life Unto its deeps, pouring o'er all that is The black of death, nor leaves not anything To prosper-a liquid and unsullied joy. For as to what men sometimes will affirm: That more than Tartarus (the realm of death) They fear diseases and a life of shame, And know the substance of the soul is blood, Or rather wind (if haply thus their whim), And so need naught of this our science, then Thou well may'st note from what's to follow now That more for glory do they braggart forth Than for belief. For mark these very same: Exiles from country, fugitives afar From sight of men, with charges foul attaint, Abased with every wretchedness, they yet Live, and where'er the wretches come, they yet Make the ancestral sacrifices there, Butcher the black sheep, and to gods below Offer the honours, and in bitter case Turn much more keenly to religion. Wherefore, it's surer testing of a man In doubtful perils-mark him as he is Amid adversities; for then alone Are the true voices conjured from his breast, The mask off-stripped, reality behind. And greed, again, and the blind lust of honours Which force poor wretches past the bounds of law, And, oft allies and ministers of crime, To push through nights and days with hugest toil To rise untrammeled to the peaks of power-These wounds of life in no mean part are kept Festering and open by this fright of death. For ever we see fierce Want and foul Disgrace Dislodged afar from secure life and sweet, Like huddling Shapes before the doors of death. And whilst, from these, men wish to scape afar, Driven by false terror, and afar remove, With civic blood a fortune they amass, They double their riches, greedy, heapers-up Of corpse on corpse they have a cruel laugh For the sad burial of a brother-born, And hatred and fear of tables of their kin. Likewise, through this same terror, envy oft Makes them to peak because before their eyes That man is lordly, that man gazed upon Who walks begirt with honour glorious, Whilst they in filth and darkness roll around; Some perish away for statues and a name, And oft to that degree, from fright of death, Will hate of living and beholding light Take hold on humankind that they inflict Their own destruction with a gloomy heart-Forgetful that this fear is font of cares, This fear the plague upon their sense of shame, And this that breaks the ties of comradry And oversets all reverence and faith, Mid direst slaughter. For long ere to-day Often were traitors to country and dear parents Through quest to shun the realms of Acheron. For just as children tremble and fear all In the viewless dark, so even we at times Dread in the light ,

so many things that be No whit more fearsome than what children feign, Shuddering, will be upon them in the dark. This terror, then, this darkness of the mind, Not sunrise with its flaring spokes of light, Nor glittering arrows of morning sun disperse, But only nature's aspect and her law. First, then, I say, the mind which oft we call The intellect, wherein is seated life's Counsel and regimen, is part no less Of man than hand and foot and eyes are parts Of one whole breathing creature. [But some hold] That sense of mind is in no fixed part seated, But is of body some one vital state,- Named "harmony" by Greeks, because thereby We live with sense, though intellect be not In any part: as oft the body is said To have good health (when health, however, 's not One part of him who has it), so they place The sense of mind in no fixed part of man. Mightily, diversly, meseems they err. Often the body palpable and seen Sickens, while yet in some invisible part We feel a pleasure; oft the other way, A miserable in mind feels pleasure still Throughout his body-quite the same as when A foot may pain without a pain in head. Besides, when these our limbs are given o'er To gentle sleep and lies the burdened frame At random void of sense, a something else Is yet within us, which upon that time Bestirs itself in many a wise, receiving All motions of joy and phantom cares of heart. Now, for to see that in man's members dwells Also the soul, and body ne'er is wont To feel sensation by a "harmony" Take this in chief: the fact that life remains Oft in our limbs, when much of body's gone; Yet that same life, when particles of heat, Though few, have scattered been, and through the mouth Air has been given forth abroad, forthwith Forever deserts the veins, and leaves the bones. Thus mayst thou know that not all particles Perform like parts, nor in like manner all Are props of weal and safety: rather those-The seeds of wind and exhalations warm-Take care that in our members life remains. Therefore a vital heat and wind there is Within the very body, which at death Deserts our frames. And so, since nature of mind And even of soul is found to be, as 'twere, A part of man, give over "harmony"- Name to musicians brought from Helicon,- Unless themselves they filched it otherwise, To serve for what was lacking name till then. Whate'er it be, they're welcome to it-thou, Harken my other maxims. Mind and soul, I say, are held conjoined one with other, And form one single nature of themselves; But chief and regnant through the frame entire Is still that counsel which we call the mind, And that cleaves seated in the midmost breast. Here leap dismay and terror; round these haunts Be blandishments of joys; and therefore here The intellect, the mind. The rest of soul, Throughout the body scattered, but obeys-Moved by the nod and motion of the mind. This, for itself, sole through itself, hath thought; This for itself hath mirth, even when the thing That moves it, moves nor soul nor body at all. And as, when head or eye in us is smit By assailing pain, we are not tortured then Through all the body, so the mind alone Is sometimes smitten, or livens with a joy, Whilst yet the soul's remainder through the limbs And through the frame is stirred by nothing new. But when the mind is moved by shock more fierce, We mark the whole soul suffering all at once Along man's members: sweats and pallors spread Over the body, and the tongue is broken, And fails the voice away, and ring the ears, Mists blind the eyeballs, and the joints collapse,- Aye, men drop dead from terror of the mind. Hence, whoso will can readily remark That soul conjoined is with mind, and, when 'Tis strook by influence of the mind, forthwith In turn it hits and drives the body too. And this same argument establisheth That nature of mind and soul corporeal is: For when 'tis seen to drive the members on, To snatch from sleep the body, and to change The countenance, and the whole state of man To rule and turn,- what yet could never be Sans contact, and sans body contact fails-Must we not grant that mind and soul consist Of a corporeal nature?- And besides Thou markst that likewise with this body of ours Suffers the mind and with our body feels. If the dire speed of spear that cleaves the bones And bares the inner thews hits not the life, Yet follows a fainting and a foul collapse, And, on the ground, dazed tumult in the mind, And whiles a wavering will to rise afoot. So nature of mind must be corporeal, since From stroke and spear corporeal 'tis in throes. Now, of what body, what components formed Is this same mind I will go on to tell.

First, I aver, 'tis superfine, composed Of tiniest particles—that such the fact Thou canst perceive, if thou attend, from this: Nothing is seen to happen with such speed As what the mind proposes and begins; Therefore the same bestirs itself more swiftly Than aught whose nature's palpable to eyes. But what's so agile must of seeds consist Most round, most tiny, that they may be moved, When hit by impulse slight. So water moves, In waves along, at impulse just the least—Being create of little shapes that roll; But, contrariwise, the quality of honey More stable is, its liquids more inert, More tardy its flow; for all its stock of matter Cleaves more together, since, indeed, 'tis made Of atoms not so smooth, so fine, and round. For the light breeze that hovers yet can blow High heaps of poppy-seed away for thee Downward from off the top; but, contrariwise, A pile of stones or spiny ears of wheat It can't at all. Thus, in so far as bodies Are small and smooth, is their mobility; But, contrariwise, the heavier and more rough, The more immovable they prove. Now, then, Since nature of mind is movable so much, Consist it must of seeds exceeding small And smooth and round. Which fact once known to thee, Good friend, will serve thee opportune in else. This also shows the nature of the same, How nice its texture, in how small a space 'Twould go, if once compacted as a pellet: When death's unvexed repose gets hold on man And mind and soul retire, thou markest there From the whole body nothing ta'en in form, Nothing in weight. Death grants ye everything, But vital sense and exhalation hot. Thus soul entire must be of smallmost seeds, Twined through the veins, the vitals, and the thews, Seeing that, when 'tis from whole body gone, The outward figuration of the limbs Is unimpaired and weight fails not a whit. Just so, when vanished the bouquet of wine, Or when an unguent's perfume delicate Into the winds away departs, or when From any body savour's gone, yet still The thing itself seems minished naught to eyes, Thereby, nor aught abstracted from its weight—No marvel, because seeds many and minute Produce the savours and the redolence In the whole body of the things. And so, Again, again, nature of mind and soul 'Tis thine to know created is of seeds The tiniest ever, since at flying-forth It beareth nothing of the weight away. Yet fancy not its nature simple so. For an impalpable aura, mixed with heat, Deserts the dying, and heat draws off the air; And heat there's none, unless commixed with air: For, since the nature of all heat is rare, Athrough it many seeds of air must move. Thus nature of mind is triple; yet those all Suffice not for creating sense—since mind Accepteth not that aught of these can cause Sense-bearing motions, and much less the thoughts A man revolves in mind. So unto these Must added be a somewhat, and a fourth; That somewhat's altogether void of name; Than which existeth naught more mobile, naught More an impalpable, of elements More small and smooth and round. That first transmits Sense-bearing motions through the frame, for that Is roused the first, composed of little shapes; Thence heat and viewless force of wind take up The motions, and thence air, and thence all things Are put in motion; the blood is strook, and then The vitals all begin to feel, and last To bones and marrow the sensation comes—Pleasure or torment. Nor will pain for naught Enter so far, nor a sharp ill seep through, But all things be perturbed to that degree That room for life will fail, and parts of soul Will scatter through the body's every pore. Yet as a rule, almost upon the skin These motion all are stopped, and this is why We have the power to retain our life. Now in my eagerness to tell thee how They are commixed, through what unions fit They function so, my country's pauper-speech Constrains me sadly. As I can, however, I'll touch some points and pass. In such a wise Course these primordials 'mongst one another With inter-motions that no one can be From other sundered, nor its agency Perform, if once divided by a space; Like many powers in one body they work. As in the flesh of any creature still Is odour and savour and a certain warmth, And yet from all of these one bulk of body Is made complete, so, viewless force of wind And warmth and air, commingled, do create One nature, by that mobile energy Assisted which from out itself to them Imparts initial motion, whereby first Sense-bearing motion along the vitals springs. For lurks this essence far and deep and under, Nor in our body is aught more shut from view, And 'tis the very soul of all the soul. And as within our members and whole frame The energy of mind and power of soul Is mixed and latent, since create it is Of bodies small and few, so lurks this fourth,

This essence void of name, composed of small, And seems the very soul of all the soul, And holds dominion o'er the body all. And by like reason wind and air and heat Must function so, commingled through the frame, And now the one subside and now another In interchange of dominance, that thus From all of them one nature be produced, Lest heat and wind apart, and air apart, Make sense to perish, by disseverment. There is indeed in mind that heat it gets When seething in rage, and flashes from the eyes More swiftly fire; there is, again, that wind, Much, and so cold, companion of all dread, Which rouses the shudder in the shaken frame; There is no less that state of air composed, Making the tranquil breast, the serene face. But more of hot have they whose restive hearts, Whose minds of passion quickly seethe in rage-Of which kind chief are fierce abounding lions, Who often with roaring burst the breast o'erwrought, Unable to hold the surging wrath within; But the cold mind of stags has more of wind, And speedier through their inwards rouses up The icy currents which make their members quake. But more the oxen live by tranquil air, Nor e'er doth smoky torch of wrath applied, O'erspreading with shadows of a darkling murk, Rouse them too far; nor will they stiffen stark, Pierced through by icy javelins of fear; But have their place half-way between the two-Stags and fierce lions. Thus the race of men: Though training make them equally refined, It leaves those pristine vestiges behind Of each mind's nature. Nor may we suppose Evil can e'er be rooted up so far That one man's not more given to fits of wrath, Another's not more quickly touched by fear, A third not more long-suffering than he should. And needs must differ in many things besides The varied natures and resulting habits Of humankind-of which not now can I Expound the hidden causes, nor find names Enough for all the divers shapes of those Primordials whence this variation springs. But this meseems I'm able to declare: Those vestiges of natures left behind Which reason cannot quite expel from us Are still so slight that naught prevents a man From living a life even worthy of the gods. So then this soul is kept by all the body, Itself the body's guard, and source of weal: For they with common roots cleave each to each, Nor can be torn asunder without death. Not easy 'tis from lumps of frankincense To tear their fragrance forth, without its nature Perishing likewise: so, not easy 'tis From all the body nature of mind and soul To draw away, without the whole dissolved. With seeds so intertwined even from birth, They're dowered conjointly with a partner-life; No energy of body or mind, apart, Each of itself without the other's power, Can have sensation; but our sense, enkindled Along the vitals, to flame is blown by both With mutual motions. Besides the body alone Is nor begot nor grows, nor after death Seen to endure. For not as water at times Gives off the alien heat, nor is thereby Itself destroyed, but unimpaired remains-Not thus, I say, can the deserted frame Bear the dissevering of its joined soul, But, rent and ruined, moulders all away. Thus the joint contact of the body and soul Learns from their earliest age the vital motions, Even when still buried in the mother's womb; So no dissevering can hap to them, Without their bane and ill. And thence mayst see That, as conjoined is their source of weal, Conjoined also must their nature be. If one, moreover, denies that body feel, And holds that soul, through all the body mixed, Takes on this motion which we title "sense," He battles in vain indubitable facts: For who'll explain what body's feeling is, Except by what the public fact itself Has given and taught us? "But when soul is parted, Body's without all sense." True!- loses what Was even in its life-time not its own; And much beside it loses, when soul's driven Forth from that life-time. Or, to say that eyes Themselves can see no thing, but through the same The mind looks forth, as out of opened doors, Is-a hard saying; since the feel in eyes Says the reverse. For this itself draws on And forces into the pupils of our eyes Our consciousness. And note the case when often We lack the power to see resplendent things, Because our eyes are hampered by their light-With a mere doorway this would happen not; For, since it is our very selves that see, No open portals undertake the toil. Besides, if eyes of ours but act as doors, Methinks that, were our sight removed, the mind Ought then still better to behold a thing-When even the door-posts have been cleared away. Herein in these affairs nowise take up What honoured sage, Democritus, lays down-That proposition, that primordials Of body and mind, each super-posed on each, Vary alternately and interweave The fabric of our members.

For not only Are the soul-elements smaller far than those Which this our body and inward parts compose, But also are they in their number less, And scattered sparsely through our frame. And thus This canst thou guarantee: soul's primal germs Maintain between them intervals as large At least as are the smallest bodies, which, When thrown against us, in our body rouse Sense-bearing motions. Hence it comes that we Sometimes don't feel alighting on our frames The clinging dust, or chalk that settles soft; Nor mists of night, nor spider's gossamer We feel against us, when, upon our road, Its net entangles us, nor on our head The dropping of its withered garmentings; Nor bird-feathers, nor vegetable down, Flying about, so light they barely fall; Nor feel the steps of every crawling thing, Nor each of all those footprints on our skin Of midges and the like. To that degree Must many primal germs be stirred in us Ere once the seeds of soul that through our frame Are intermingled 'gin to feel that those Primordials of the body have been strook, And ere, in pounding with such gaps between, They clash, combine and leap apart in turn. But mind is more the keeper of the gates, Hath more dominion over life than soul. For without intellect and mind there's not One part of soul can rest within our frame Least part of time; companioning, it goes With mind into the winds away, and leaves The icy members in the cold of death. But he whose mind and intellect abide Himself abides in life. However much The trunk be mangled, with the limbs lopped off, The soul withdrawn and taken from the limbs, Still lives the trunk and draws the vital air. Even when deprived of all but all the soul, Yet will it linger on and cleave to life,- Just as the power of vision still is strong, If but the pupil shall abide unharmed, Even when the eye around it's sorely rent-Provided only thou destroyest not Wholly the ball, but, cutting round the pupil, Leavest that pupil by itself behindFor more would ruin sight. But if that centre, That tiny part of eye, be eaten through, Forthwith the vision fails and darkness comes, Though in all else the unblemished ball be clear. 'Tis by like compact that the soul and mind Are each to other bound forevermore. THE SOUL IS MORTAL Now come: that thou mayst able be to know That minds and the light souls of all that live Have mortal birth and death, I will go on Verses to build meet for thy rule of life, Sought after long, discovered with sweet toil. But under one name I'd have thee yoke them both; And when, for instance, I shall speak of soul, Teaching the same to be but mortal, think Thereby I'm speaking also of the mind-Since both are one, a substance inter-joined. First, then, since I have taught how soul exists A subtle fabric, of particles minute, Made up from atoms smaller much than those Of water's liquid damp, or fog, or smoke, So in mobility it far excels, More prone to move, though strook by lighter cause Even moved by images of smoke or fog-As where we view, when in our sleeps we're lulled, The altars exhaling steam and smoke aloft-For, beyond doubt, these apparitions come To us from outward. Now, then, since thou seest, Their liquids depart, their waters flow away, When jars are shivered, and since fog and smoke Depart into the winds away, believe The soul no less is shed abroad and dies More quickly far, more quickly is dissolved Back to its primal bodies, when withdrawn From out man's members it has gone away. For, sure, if body (container of the same Like as a jar), when shivered from some cause, And rarefied by loss of blood from veins, Cannot for longer hold the soul, how then Thinkst thou it can be held by any air-A stuff much rarer than our bodies be? Besides we feel that mind to being comes Along with body, with body grows and ages. For just as children totter round about With frames infirm and tender, so there follows A weakling wisdom in their minds; and then, Where years have ripened into robust powers, Counsel is also greater, more increased The power of mind; thereafter, where already The body's shattered by master-powers of eld, And fallen the frame with its enfeebled powers, Thought hobbles, tongue wanders, and the mind gives way; All fails, all's lacking at the selfsame time. Therefore it suits that even the soul's dissolved, Like smoke, into the lofty winds of air; Since we behold the same to being come Along with body and grow, and, as I've taught, Crumble and crack, therewith outworn by eld. Then, too, we see, that, just as body takes Monstrous diseases and the dreadful pain, So mind its bitter cares, the grief, the fear; Wherefore it tallies that the mind no less Partaker is of death; for pain and disease Are both artificers of death,- as well We've learned by the passing of many a man ere now.