

ATERIALISM

losophical Conception

OF THE

Universe

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MATERIALISM

AS A

PHILOSOPHICAL CONCEPTION

OF THE

UNIVERSE

OR

HUME VINDICATED

GRECIAN PERIOD

AND

SEVENTEENTH CENTURY PERIOD

BY

CRAIG RUIE



MONTREAL;
E. M. RENOUF
1905

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PREFACE.

The groundwork of these Essays was laid when I was a member of the Senior Division of the Class of Logic and Metaphysics in the University of Edinburgh. They are chiefly compiled from the notes of the class lectures, from the works of Bishop Berkeley, edited by A. C. Fraser, late Professor of Logic and Metaphysics, and from the study of various authors.

I have revised, rewritten, and brought the conceptions down to the present day. I have never had the courage to give them to the public, because I felt sure that erstwhile some noted Scotch Metaphysician would arise and vindicate the character of Mr. Hume, from the stigma placed upon it by the churchmen; but, so far as I can learn, nobody has yet done so, though many philosophical scholars have written elaborately on the theories of Berkeley and Hume, making comprehension still more incomprehensible to the mind of the ordinary thinking Being.

The Original Essays were competitive, read and discussed before the students' association; they caused not a little sensation at the time, owing to the views contained in them, not quite agreeing with the views of the leading Physical Scientists, who, since that day, have come to take a more moderate view of Locke's Theory, and the Evolution Theory of Darwin.

The present Lord Kelvin, the greatest living scientist of the day, admitted before the Royal Society that his supposition of the Origin of the Universe, in no way explains the matter or helps us out of the difficulty, for that is only to shift the ground from the real to the ideal, and to leave us still in the dark as to how the Universe came to be a Universe, and by whom it was originated. We have a right to enquire how it originated and particularly how it has exercised such a tremendous influence on the minds of the people.

As for himself, he had had such a lengthened experience, and had viewed the question from every vantage ground, that he was now forced to acknowledge and recognize "A Sovereign Intelligence" as the Source and Destiny of Existence.

Huxley was not as frank as this, though he ought to have been so, for what is Huxley's Mysterious Activity but a "Sovereign Intelligence"—or Bishop Berkeley's "Supreme Mind"—even Hume said that he did not pronounce it absolutely insuperable, for you can easily see Faith professed between the lines of my book. Neither did Locke deny the existence of a Supreme Being, for in his Conduct of the Understanding (pp. 82, sect. 38), he says: "God has made the intellectual world harmonious and beautiful without us; but it will never come into our heads all at once. We must bring it home piecemeal, and then set it up by our own industry or else we will have nothing but darkness and a chaos within, etc."

Berkeley's assaults upon Metaphysical abstractions, etc..... had more than anything else to do

with the "Intellectual Awakening" of Hume, and with the direction taken by his thoughts. Hume in his turn set Modern Thought on the lines on which we find it at the present day. Hume asserts that Berkeley's writings form the best lessons in scepticism which are to be found among the Ancient or Modern Philosophers (Bayle not excepted), thus transforming Berkeley into "an Unconscious Sceptic."

I have endeavoured in these brief and concise Essays to give the reader, and especially the young student of Logic and Metaphysics, a "Bird's Eye View" of Mr. Hume's position.

(a) How he came to take such a position;

(b) His Method of Combatting his position, and

(c) The Vindication of his position.

If I succeed in removing the mist and veil of words, from the minds of those people who look upon Mr. Hume as a pronounced Sceptic, I will feel satisfied.

I hate the term "Sceptic," because the Greek word skeptikos meaning: "A Thoughtful Person" from what seemed an innocent and harmless Being has grown up into a most dangerous and unphilosophical monster. But as the mass of men rush to conclusions with haste and assert them with far more positiveness than their knowledge warrants, the discerning few of clearer vision are often brought into collision with popular beliefs, especially in Religion. Thus it is that in common parlance a "Sceptic" has come to mean a person who does not believe in a First Cause or Deos, call it what you may; but the field of Thought in which the Sceptic so-called pre-

fers to exercise his mind is not Religion, but Philosophy.

The Original Genius is never sufficiently subordinate and amenable to discipline. He is apt to be critical, to startle his easy-going companions with new and seemingly heterodox views. He is the ugly duckling whom all the virtuous and commonplace broad must cackle at !!!

I have particularly avoided giving the Biography of any of the writers. It is of little moment to me what a man's name is, or the exact date of his birth. All that, is foreign to our purpose. There is nothing shows the smallness of a man's mind than haggling over a name or a date, instead of taking up the main question at issue, and that is the man's Theory or Doctrine. As, for example, Moses: What do we care a straw whether Moses ever existed or not; or if that was his real name? The question at issue is: That a Theory of the Origin of the Universe and all that it contains, was propounded by a certain party under the name Moses. How does this Theory compare with other Theories advanced, and what Theory seems most feasible to man's mind at the present day? Every man, who is competent, or at least thinks himself competent, claims a right to interpret nature for himself.

In the make up of these Essays, and others not yet published, I have drawn from the class-notes, the class lectures, and from the works since published, of Professors Blackie, Sellar, Kelland, Tait, Fraser, Calderwood, Masson, and S. S. Laurie, all of whom have since passed away, except Fraser and Laurie, whose literary works have made the last half of the

Nineteenth Century the brightest period in the annals of any University.

A British period, of great literary activity in every department of learning, Medicine, Science, Theology, Philosophy, Law and all the Arts, the professors of which have obtained a world-wide reputation, for their contribution towards the accomplishment of the Millenium.

SUMMARY.

Thales made "Water" the source and destiny of all things, and said that the Universe had a Spirit in it, with Divine indwelling powers. Electricity is the Soul.

Anaximander suggested "An Infinite" as the Originative Principle of all things, "Infinite" itself causes things to come into "being" and recalls them back from being. Xenophanes conceived "Spiritual Substance" or "Unity" and the "Perfection" of a "Deity," as the Origin of the Universe. The Earth rose out of the Sea.

Anaximenes said the "Air" is the Origin of the Universe, from which all things are formed by compression.

Anaxagoras formulated two principles of Existence, "Matter" and "Mind."

Mind or Eternal Intelligence, and Matter as Atoms are the Origin of the Universe and all that is in it. Order through the influence and operation of this mind suggests a soul, with an "Aerial Body."

Pythagoras said "Number" is the Essence of all things. Things are only a copy of Numbers. Numbers are things themselves. "Finite and Infinite," "Odd and Even." All things in the Universe result from a combination of the Finite and Infinite. Man's Soul partook of the nature of the Central Fire, possessing three elements, Reason, Intelligence and Passion.

Heraclitus made Fire and Material the Source and Destiny of Existence, together with Eternal "Movement." Thus, Fire is the symbol of the underlying reality of Existence, or the fact of being from which he formulated the famous dictum "All things Pass." Protagoras and Gorgias, did not bother themselves about Originative Principles, they simply taught Philosophy for pay.

Parmenides made "Universal" or "Absolute Being," or "Unity in Thought," as the Source and

Destiny of Existence.

Empedocles conceived Fire, Matter and Air, or Fire, Atoms and Empty space, as the Origin of all things.

Democritus and Leucippus, conceived the process of Becoming under the Symbol of "Fire" the ultimate Elementary ground of Nature, is an Infinite Multitude of indivisible corporeal particles (atoms). No design but only law and life, from the finest atoms. Air, Earth, Fire and Water, or Fire, Heat, Atoms and Empty space in a Mass is the Origin of the Universe.

Two co-equal elements, the Full and the Empty or Being and Non-Entity.

Necessity or Fate: the Cause.

Epicurus and Lucretius, simply reproduced the Doctrine of Democritus.

The veritable existence in Nature are Atoms and Empty Space.

Melissus and Zeno were the Expositors and Defenders of the Doctrine of Parmenides, their chief Forte lay in the Ingenuity of their defence.

Pyrrho disbelieved in any one ever acquiring a

scientific knowledge of things. Matter is his Originative Principle.

From Socrates, the two Great Streams of later Philosophy emanated. The First, a Philosophy of Law, or Universals in action: the second, a Philosophy of Law, or Universals in Thought and Nature as well.

Plato and Aristotle, the Two Great Giants of Philosophy, undertook to work out the Socratic Doctrine of Thought, through the whole field of the knowable. Unfortunately, Aristotle's works were lost, for over a thousand years, but Christianity took up the "problem," and worked it out on the lines of the Spiritualistic or Idealistic Theory, to the present day. Lord Bacon resuscitated the Epicurean Doctrine, and asserted that Nature cannot well be explained without the assumption of Atoms and that Observation, Reflection, and particularly Experience was an indispensable necessity.

Descartes, said consciousness is knowledge of a present state, it is always knowledge of self as Intelligence. Self-Consciousness, this is his meaning of "Cogito ergo sum."

Geulinx and Malebranche, adopted the Cartesian Theory with slight improvement.

Spinoza is the necessary outcome of Des Cartes; Hobbes and Gassendi were chiefly Psychologists. The outcome of the whole Anglican Movement is to be found in Locke's Essay, etc.

Locke declined the Physical consideration of the mind, Matter and Motion exist: 1. No "Innate Ideas;" 2. All knowledge springs from experience.

Bishop Berkeley's "A Supreme Mind" A Sover-

eign Intelligence is the Source and Destiny of Existence. All knowledge springs from the Supreme Mind, etc.

Hume, All our Knowledge springs from Ideas and Impressions.

C.R.

PROBABLE DATES OF THE PHILOSOPHERS OF THE GRECIAN PERIOD.

	Probable date,
	Born.
Thales	В.С. 640
Anaximander	B.C. 620?
Xenophanes	B.C. 600?
Pythagoras	
Heraclitus	
Anaximenes	B.C. 556?
Parmenides	
Anaxagoras	
Zeno, the Eleatic	
Herorotus	
Socrates	
Leucippus	
Proagoras	
Democritus	
Gorgias	
Empedocles	
Melissus	
Plato	
Aristotle	
Zeno, the Stoic	
Epicurus	
Pyrrho	B.C. 340?

MATERIALISM AS A PHILOSOPHICAL CONCEPTION OF THE UNIVERSE,

OR

HUME VINDICATED.

CHAPTER I.

The question concerning the "Origin of Existence" must embrace all forms of "existence," including the Existence of "Moral Being!"

The question of Moral Being gives complexion to the wider question affecting existence generally. This question leads us into the region of Intellectual Speculation (which is the mind's views of anything in its various aspects and relations, or the mind's views of a subject not verified by facts). Speculation must first start from facts, and must then return to facts, for a test to its validity. Here, we have to consider where the sphere is open to us through speculation, then we come upon a vast region of enquiries concerned with all known existence. and with all that may bear upon the "Source" and "Destiny of Existence." In reasoning thus, we come upon "one Great Question," namely, "How has the "Universe come into Being?" or "How has the Universe come into Existence?" In order to guard us against false conceptions as well as to guard us against false reasonings, it is needful to remember.

not only the knowledge we have of the Universe, but it is as needful to remember how that knowledge has been gathered or acquired concerning the existence of such "Universe." Every metaphysician admits that the knowledge we have leads us to find out the cause, and that we know the universe as being "Physical," "Intellectual" and "Moral," that there must be "Power" adequate to produce every phenomenon," that is, everything which is presented to the eve by observation and experiment, or any appearance, whose cause is not immediately obvious to the mind, in the universe; that this power may be "Force," "Intelligence" or "Will;" but we admit of no deviation from the single "Law of Intelligence" that there must be power adequate to produce fact: this we hold to be certainly true, whether the "Power" be observed by us or no. Now, the discovery of the "Power" will afford an explanation, but the certainty of its existence is that which leads to philosophical enquiry and supports it, before the "Source" is reached, and at last crowns it with success. In this way alone can we reach the intelligent recognition of "Fixed Law" of the Universe, and the discovery of Fixed Law leads inevitably to the acknowledgment of Intelligence and "Personality," and to a "First Cause;" in other words, to a "Creator" of the "Universe," or to a Creator of the government of the World."

Now, it is to be observed, that should the "Force" declared to be operating, be invisible and impalpable to us, it is no Barrier to the "Scientific Explanation" of the "Universe," that is, to the acknow-

ledgment of "Fixed Law."

In seeking an explanation of the "Origin of the Universe," we are perfectly certain that the answer is not within the range of experience, and therefore Physical Science can have nothing to say on this subject. It can offer no suggestions, it can present no objections. It can only fulfil its definite task, and leave its results as material in this problem. But when we seek an explanation of "Fixed Law" itself, there can be no explanation short of "Sovereign Intelligence." Here we are forced into the recognition of a "First Cause": - "First Cause," "Nature," or any other name you please, provided that, when we speak of the origin of existence, we understand one another, as that which causes everything to spring into life. The recognition of a Sovereign Intelligence is the natural outcome of the exercise of intelligence; but it is a natural outcome, or outcome of nature, without being a logical conclusion from an inductive process. It is rather an evident truth from intellectual action than the resultant from argumentative exercise. All orderly existence has its true "Source" in Intelligence, and so in like manner intelligence recognizes the inconsistency and irrationality of every attempt to seek the "Source" of the universe lower. In the use of such Intelligence, "Science" has grown up around it, that is, an orderly exposition of the system of the Universe has sufficiently matured to afford a general conception of orderliness in the totality of existence.

So situated, the next question concerns the origin of the Universe; to this question there can be but one answer. All science would require to be dissolved and thrown back again to "Chaos," if the answer be not self-evident, that Intelligent Personality is the only explanation.

In order to comprehend this question aright, we must discuss the different "theories" propounded, from the earliest ages, down to the present time, and not till then can we form an unbiassed judgment, whether Materialism can account for the "Origin of Existence," of the Universe and of "Moral Being," or "No."

Material: Matter, that of which all existing things are composed, that which determines their coming into being, and into which they pass on ceasing to be. Can this really be the "Origin of Existence?" or Originative Principle of all things," as the early thinkers formulated, or no?

The Fundamental Position of the Materialistic or Development Theory is that all our most complex states of consciousness are merely developments under natural law, from our simplest states. The mind as known in present consciousness is the general resultant of all previous experience. The Development Theory is First a Theory of Mind; second, a Theory of Morals." We have it not in our power to ascertain by any direct process, what consciousness told us at the time, when its revelations were in their pristine purity. It only offers itself to our inspection as it exists now when those original revelations are overlaid and buried under a mountainous heap of acquired "Notions and Perceptions."

The "Problem" has always been the Dualism (i.e., that there are "Two Principles" in Nature, one Active and the other Passive), in Thought and Existence and how we come by our knowledge.

At the outset, we must decline to discuss the Chinese and Indian Mythology, the Kosmogonies of Greece and the Scholasticism of the Middle Ages, which belong to the historical science of the Christian Dogmas, as too tedious and foreign to our purpose.

A Theory which criticizes other theories must stand criticism itself, on the same lines. It must account for organized existence: how the higher sprang from the lower: how consciousness is higher than material, as well as how duality of origin takes place by bringing in Force, in addition to substance, and how Force produces existence. The Theory must answer all these questions satisfactorily, in order to take rank, as a theory of the Universe; it must pass over from the negative form into a positive theory. Now, then, the question arises, where shall we begin? Well, we shall begin with the modern definition of Materialism and discuss the philosophy of the Greeks from the time of Thales to the present day, always taking care to note or keep in view the questions: 1st, How do we come by our knowledge. 2nd What is it that causes things to come into Being, out of, and, 3rd, What is it that recalls them back from Being into infinite Void

The explanation of the Universe is alleged to be discovered in its Material Substance. Now, Materialism is this:—When the nature of the mind is viewed by philosophers as Mere Matter, or as a product of Material Organization, the theory is called Materialistic, the opposite view is called Spiritualistic or Idealistic. Materialism existed from the

earliest of times, owing to external things being nearer to the natural conciousness than the I (Ego). and even the I (Ego), in the idea of primitive people, is connected rather with the body than with the shadowy soul, the product of sleeping and of waking dreams which they suppose to inhabit the body.

The earliest account we have of the Origin of Existence, the Origin of the Universe and the Origin of all things, is from "Moses." Thus, Moses in describing the origin of Existence, etc., postulates a "Great First Cause" or Spirit of God, as the Originative Principle, then tells us that the earth was without "Form" and "Void," and darkness was upon the face of the deep:—Out of whose formlessness the heavens and all the worlds came to be, by virtue of an Eternal Movement, or Movement of the Spirit of God, in the "Water;" it acquired the capacity of transition from the universal into the particular, that is into land and water, from which we infer that water was co-existent with the Spirit.

Then Moses introduces the Spirit, speaking thus:

"Let the earth bring forth the living creature,"

"Let the water bring forth the moving creature that hath life." As though he said, "Let matter bring them forth, for, according to Moses, the material principle of things is Water." or, in other words, the Originative Principle of things is "Water." Therefore, the actively Formative Reason, moved upon the face of the deep, and the Creation was brought about, "through the Spirit imparting to them strength to bring forth." This is Huxley's Mysterious Activity, or Movement, which he was ignorant

of, but was forced to admit. Thus things arise by separation and unfolding or development, so that matter is not without forms, but contains them all, and since it unfolds what it carries concealed within itself. It is in truth all nature and the mother of all things. If we have interpreted Moses' position correctly, it follows that he postulated Spirit or mind as the prius, and Matter as its vehicle or expression. The two being in combination act and react on each other. Moses found Mind and Matter in the Universe, but he did not decide or tell us which was first in existence. He started with Mind and Matter, and he left off with Mind and Matter. How are we at the present day?

The early Greek philosophers never raised the first question: viz., How do we come by our knowledge? but formulated the "Originative Principle" of all things under some Material expression, by the Originative Principle or Element of all things they meant, that of which all existing beings are composed, that which determines their coming into "Being" and into which they pass on ceasing to be. Where these philosophers differed from each other was simply in the answer, which they gave to this question: What was the Nature of this principle? The difference of view among them applies to the number, and to the character of the supposed element or elements.

The founder of Grecian Philosophy of this kind was Thales of Miletus, born about 640 B.C. He conceived the idea that "Water" was the "Source" and "Destiny" of Existence, viz., that everything came out of the water, and on ceasing to be, went back again to water; that the earth rested on water

What suggested such a conception to him must have been, that he observed that all forms of substance which promote life are moist, that heat seems to be conditioned by moisture, that the life-producing element in every creature is moist, also its readiness to take various shapes, its convertibility from water to steam, vapor and ice, and its ready mixture with other substances. It is possible that he meant "water" to be no more than a Symbol of the Origin of Existence like the figure in a mathematical proposition representing that ideal reality underlying all change, which is at once the beginning, the middle and the end of all: that he did not mean "water" to be identical with this, for Aristotle tells us that he thought the whole universe was full of gods. Therefore, it is quite evident, he did not mean "Water" in our Metaphysical Sense to be the Source and Desteiny of Existence, because, he believed, all things have a soul in them in virtue of which they move other things, and are themselves moved, even as the magnet, by virtue of its soul or life moves the iron.

From which we may infer, that he was only vaguely symbolizing in different ways an idea, of the soul of the Universe, of its divine indwelling powers, of the gods or of water as the Origin of things, as yet without form and void, containing within a potency of greater life hereafter.

This Originative Principle, in the conception of Anaximander, was, the "Infinite," not Water, nor any of the other so-called elements, but something different from any of them, something hardly nameable, out of whose formlessness, the heavens, the earth, and all the worlds in the heavens came

into existence, and by necessity came to be the Source and Destiny of Existence. Thus, as he poetically expressed it: "Time brought its revenges and for the wrong-doing of existence all things paid the penalty of death."

He conceived the Original contraries of heat and cold, to separate from his primitive Matter, by virtue of an Eternal Movement in it, from which we infer that he formulated "Motion" as Eternal also. Yet he did not believe in the generation of anything in the modern sense of the word; but supposed that the Primary Matter simply changed its relative positions, in obedience to a Moving Power residing in it.

His primitive Matter cannot remain an idle universal; but possessing capacity of transition into the particular, namely, "Time brought its revenges and for the wrong doing of Existence, all things paid the penalty of Death." From which we get to the earliest conception of things, as it is found in Genesis. This formless infinitude is always here, something beginning or ending underlying all, enwrapping all and governing all. He insisted that the first living creatures sprang from Moisture; as time went on, these forms of life reached their fuller possibilities, and were transferred to the dry land, casting off their old nature like a husk. The word husk, in his mind, implies and depicts a conception of interior and necessary development in things.

He maintained that "Man" must have developed out of other and lower forms of life, because of his exceptional need, under present conditions, of care and nursing in his earlier years. Had he come into being at once, as a human creature, he could never have survived, or, as Darwin puts it, He must have descended from common parents, and have been modified in the course of dissent, that the wide structural gaps asserted by Biologists to exist between one group of animals and another have become extinct by the death of the intermediate forms.

As to the "Origin of Man," he seems to have taught a "Theory of Development" from lower forms of life, or, as we would say to-day, "an Evolution Theory," which is only another name for the "Development Theory" from the modern point of view.

Consequently, Anaximander is dubbed as the Originator of Darwinism, yet he never raised the question of, "How we come by our knowledge."

CHAPTER II.

B. C., 556.

The "Source and Destiny of Existence," or the "Source and Destiny of the Universe" as conceived by Anaximenes is the unlimited, all-embracing, evermoving "Air." Its fluidity, readiness, wide extension and Absolute Neutrality of Character, as regards color, taste, smell, form, etc., were obvious suggestions. Being, convinced to this hypothesis, because the "Air" (from which by rarifaction and condensation everything else is formed), surrounds the whole "Universe." And "Breath," which to him implied an "Identity" with the Life, was nothing but "Air." and the identification of Air with Life supplied just that principle of productiveness and Movement which was felt to be necessary in the Primal Element of Being. The fact of Being Heraclitus formulated into the famous dictum, "All things Pass." In the Eternal flow of Being consisted its reality, even as in a living body; wherein, while there is life, there is no stability, or fixedness, these are the attributes of the unreal image of life, not of life itself; "being or reality consists in never being," but always in becoming, not in stability, but in change. This eternal movement is an eternal strife of opposites whose differences consummate themselves in finest harmony. Thus, "Oneness" emerges out of Multiplicity, Multiplicity out of "Oneness," and the harmony of the Universe is of contraries. "War" is the father and king of all

things. Neither God nor man presided at the creation of anything, that is, that which was is that which is, and that which ever shall be, even an everliving Fire, ever-kindling, and ever being extinguished. Thus "Fire" is the symbol of the underlying reality of existence. Its subtlety, its mobility, its power of penetrating all things and devouring all things, its powers for beneficence in the warmth of living bodies and the life-giving power of the "Sun" is seen in this "Eternal Reason" or Law of Fate. To his mental view creation was a process eternally in Action. The "Fiery Element" descending by the law of its "being" into the cruder forms of "Water" and "Earth," only to be resolved again by upward process into Fire, even as one sees the vapour, from the sea ascending and melting into the "Ether."

Of absolute knowledge human nature is not capable, but only the Divine. To the Eternal, therefore, alone all things are good and beautiful and just; to him alone do things appear in their totality. To the human partial reason, some things are unjust and others just. The "Mystery of Existence," the unreality of what seems most real, the intangibility and evanescence of all things earthly have remained and will always remain, among the deepest and most insistent of the world's thoughts in its sincerest moments, and in its greatest thinkers.

The universe, said the Pythagoreans, was constituted of Indefinites and Definers, i.e., of that which has no character, but has infinite capacity of taking a character, and, second, of things, or forces which impose a character upon this. Out of the combination of these two principles, all knowable

existence come into Being. "All things Pass," said Heraclitus, all things as known have number, said the Pythagoreans, and this number has two natures. the odd and the even; the known thing is the oddeven or union of the two. Number only belongs to the first class; as such it is the source of all knowledge and of all good. Number became a kind of God, a revealer, and the Philosophy a kind of religion or mystery. Assuming that ultimately the elements of knowable existence are but "two," the "One" or Definite, and the manifold or Indefinite, it was argued that there must be some law which shall render their intelligible union possible. This "Principle of Union was Deity," ever living, ever one, eternal, immovable, self-identical. This was the Supreme Reality.

The universe in its Evolution is the self-picturing of the "Deity."

The Pythagoreans suggested what they conceived to be a higher solution of the Existence of all things, namely, that Proportion and Harmony is the Principle of Practical Life, as well as it is the Sovereign Law "of the Universe." They regarded the universe as a symmetrically arranged "whole or Unit;" that combined in harmony within itself all the varieties and contrarieties of Existence, from which they inferred as there exists nothing whatever, without "Form" and "Measure;" that "Number" is necessarily the Principle of things themselves, as well as the order which they exhibit in the Universe. We have no definite historical account handed down to us, whether they considered "Number" as a real material—real matter, or as an Ideal Principle which ordered and disposed everything. Yet we know that they did not make any distinction between a real and an Ideal Principle; but contented themselves with the general proposition; that "Number" was the principle of things, that all was "Number," Pythagoras' "Forte" was mathematics, and he made every branch of study subservient to it. At the present day, he would be regarded as a "Freemason."

His pupils, in some mysterious way, deduced from his teaching, that numbers were the "Basis" and "Essence" of Things. No stress ought to be laid upon him, as an exponent of the Origin of the Universe, for he looked upon himself as a being destined by the gods, to reveal to his disciples only a new and pure mode of life. From our standpoint, we would consider him the originator of the "Order of Freemasonry."

His school or secret society was a kind of Religious Brotherhood the members of which were bound together by peculiar rites and observances. Everything done and taught in the fraternity was kept a profound secret from all without its pale. The members had some private signs by which they could recognize each other, even if they had never met before.

At the present day "Freemasonry" demands a belief in a "Sovereign Intelligence," the "Soul's Immortality," "A Future State" and honour amongst men. It is not a religion or a system of religion: it is, so its members claim, the handmaid of all seeking "truth," "light" and "right." It is a system of morality illustrating by symbols man's condition and responsibility. It inculcates the "Duty" of man to man, in all the relations of life, of the ruler and the ruled, of the rich and the poor, of the old and

decrepit, of the living to the dying and the dead, it neither discusses religion nor politics. Its basic principles are belief in a "Supreme Being," brotherly love, relief, and truth and charity to all men. It is a social order; patriotism is written on its banners, and its charity knows no bounds. Its heart is human, and its mission is peace, progress and prosperity.

The fact that throughout the British Empire and among other free and enlightened peoples, so many of these in every grade of society who are interested in preserving what is most valuable and beneficial in the present social and political order of things are active and prominent members of the craft. proves that Freemasonry is a thoroughly patriotic and loyal institution. The fact that so many of the adherents and leaders even of so many creeds and denominations belong to the order shows beyond question that Freemasonry is a most tolerant institution. The fact that so many men of more than ordinary ability and culture are zealous Freemasons is proof that there is much in and pertaining to the Fraternity which is worthy the attention of the best intellects

Hegel in referring to: (a) The "Water Theory," (b) "The Air Theory," and (c) "The Number Theory," says, that the water theory is the beginning of Philosophy because water is a Universal, and it is also real.

It is a universal, for all other things are resolved into it; the Principle must not be abstract, but concrete, i.e., at once universal and particular. It is evident that as "Water" is here regarded as at once universal and real, the proposi-

tion expresses the absolute as unity of "Thought" and "Being." In the "Air Theory" he perceives a spiritual as well as a material Element, and considers it an advance or improvement on the "first;" but in the "Number Theory," he finds much with which he agrees; for numbers have been much used as expressions of ideas, i.e., applicable in expression of the absolute relation.

While the "Pythagoreans" held to the theory of "Space" and "Time," another school arose, which negatived these, and declared that "All is One," and that "One" Deos. The founder (Xenophanes) of this school conceived all nature to be Deos, or that "Matter itself" is of the very nature of the Deos; this form of the "theory" is only a "higher phase" of Materialism, which from the highest view, Deos is the "Spiritual Substance" pervading all things, and in activity Deos is the Spiritual Force operating through all things. This is the Modern Theory of "Pantheism," or, in a lower stage, "Monotheism."

Xenophanes insisted that Deos must be "One," "eternal," "incorporeal" without beginning or ending. As Aristotle expresses it: He looked forth over the whole heavens and said that Deos is one; that That which is one is Deos; outside the self-existent there could be no "Second" "Self-existent," otherwise each would be conditioned by the existence of the other, and the self-existent would be gone; anything different from the self-existent must be of the non-existent, "must be nothing." He was content to emphasize that which seemed to him to be necessary and true, "that Deos was Deos," and not either partner with or a function of matter. He recognized a world of phenomena as to the origin

of things, and imagined a time when there was neither sea, nor land, but an all-pervading "slough" and "slime," which through many periods of inundations, emerged as earth and water, the source from which we spring.

A great distinction is drawn between the "World of Reason" and the "World of Sensation" by "Parmenides," who improved upon the theory begun by Xenophanes. He suggested that the "World of Reason" is the "World of Being," self-existent, uncreated, unending, unmoved, unchanging, ever poised and self-sufficient. Knowledge is of this, and of this only, for outside this known reality there is nothing. All things, which mortals have imagined to be realties are but words, as of the birth and death of things, of things which were, and have ceased to be, of here and there, of now and then.

It is obvious enough that in all this we have only a statement of the "inconceivability" by human reason of that passage from being as such to that "world of phenomena" which is now; but was not before and will cease to be, from "Being" to "Becoming," from "Eternity" to "Time," from the "Infinite" to the "Finite." In all this Parmenides did not contradict such observed facts as "Generation," or "Motion," "Life" or "Death." He talked of a world, which had nothing to do with observation.

He found "two Originative Principles" at work, "One" pertaining to "Light" and "Heat," the other to "Darkness" and "Cold;" of the two principles, the bright one being analogous to "Fire" the "dark one" to earth. The former was the male or formative element, the latter the female or receptive element; the former had analogies to "being," as such,

the latter to "non-being." From the union of these two principles all observable things in creation come, and over this union a Deos-given power presides, whose name is "Love." On the other hand, since this union was a union of opposites (light and heat), discord or strife also had her say in the union. Thus the nature and character in every creature was the resultant of two antagonistic forces, and depended for its particular excellence or defect on the proportions, in which these two elements: the light and the dark, the fiery and the earthy, had been comingled. Parmenides practically admitted that he did not see how to bridge over the partition between Existence in itself, and the changeful, temporary existing things, which the senses give us notions of: but whatever the connection be, if there be a connection, he is convinced that nothing would be more impossible than to make the data of sense, in any way, or degree, the measure of the reality of Existence, or the source from which itself comes into "being." Parmenides, may be said, was fighting the "Battle of Personality in man" as well as that of "Reality in Nature" without being aware of it.

"Hegel" asserted, what Xenophanes began, Parmenides and Melissus improved; and what "these" taught, Zeno completed. The Fundamental Thought of these: only "Being is" and "Non-Being,"

i.e., "Becoming," is not at all.

. In the opinion of Heraclitus, "the Universe" is neither "Pure Being," nor "Phenomenal Being," but both of them; and conceived the process of "Becoming" under the Symbol of "Fire," arguing that the totality of things is in eternal flow, in uninterrupted motion and mutation, and that their per-

manence is only illusion. Nothing remains the same: all comes and goes, resolves itself and passes into other forms. Out of all comes all: from life. death; from the dead, life; there is everywhere and eternally only this one process of the alternation of "birth and decay." We may ask What has "Fire" to do with all this? Heraclitus answers: "The world is an "ever-living fire," that in due measure and degree extinguishes itself and again kindles itself; that this fire, this restless, alltransmuting and equally (in heat) all verifying elements represents the constant force of this eternal alteration and transformation, the notion of life, in the most vivid and energetic manner, and accounts for the multiplicity of things, by the arrestment and partial extinction of this "fire," in consequence of which it condenses itself into material elements (first air, then water, then earth). Fire is to Heraclitus the Principle of Movement of Physical as of Spiritual Vitality; the Soul itself is a Fiery Vapour;" its power and perfection depends on its being pure from all grosser and duller elements.

Zeno, the Eleatic, was a pupil of Parmenides. He had nothing to add to or to vary in this doctrine. He simply became an expositor and defender of that doctrine, his popularity lay in the ingenuity of his dialectic resources of defence. The relation of Zeno and Parmenides is humorously expressed by Plato, thus: "I see Parmenides, said Socrates, that Zeno is your second self; in his writings, too, he puts what you say in another way and would fain deceive us into believing that he is telling us what is new. For you in your poems say 'All is One,' and of this

you adduce excellent proofs, and he, on the other hand, says, 'There is no many,' and on behalf of this he offers overwhelming evidence." To this Zeno replies, admitting the fact, and adds: "These writings are meant to protect the arguments of Parmenides against those who scoff at him, and show the many ridiculous and contradictory results which they suppose to follow from the affirmation of the "One." My answer is an address to the partisans of the many, whose attack I return with interest by retorting upon them that their hypothesis of the being of many carried out appears in a still more ridiculous light than the hypothesis of the being of One. Zeno had a great effect on subsequent philosophies by the development of ingenious verbal distinction, which in the hands of so-called sophists and others became a weapon of considerable, temporary power. The secret of his method was that he put side by side two contradictory propositions with respect to any particular supposed real thing in experience, and then proceeded to show that both these contradictories alike imply what is inconceivable. He was the author of several philosophical works; but none of them have come down to us. He strongly argued the existence of absolute motion.

Melissus: The Eleatic was also a pupil of Parmenides. He developed very fully what is technically called the science of logic, the Dilemma. Thus, for example, he begins his treatise on Existence or on Nature. "If nothing exists, then there "is nothing for us to talk about. But if there is "such a thing as existence, it must either come into "being or 'be ever-existing.'" "If it come into being, "it must come from the existing or the non-existing.

"Now that anything which exists, above all that "which is absolutely existent, should come from "what is not, is impossible." "Nor can it come from that which is; for then it would be already, and would not come into being." "That which exists, therefore, comes not into being; it must, therefore, be ever-existing." "From similar treatment, he proves that the existent can have no ending in time." Melissus applied the results of his analysis to the question already raised by his predecessors, of the trustworthiness of "Sensation." He argues, "If there were many real existences to each of them, the same reasonings must apply, as I have already used with reference to the "One" existence. That is to say, "If earth really exist, and water, and air, and iron and gold, and fire, and things living and things dead, and black and white, and all the various things whose reality men ordinarily assume, if all these really exist, and our sight and our hearing give us facts, then each of these as really existing must be what we concluded the One existence must be; among other things, each must be unchangeable, and can never become other than it really is." "But assuming that sight and hearing and apprehension are true, we find the cold becoming hot, and the hot cold, the hard changes to soft, the soft to hard; the living thing dies, and from that which is not living, a living thing comes into being; in short, everything changes, and what now is, in no way resembles what was." It follows, therefore, that we neither see nor apprehend realities. In fact, we cannot pay the slightest regard to experience without being landed in self-contradictions. We assume that there are

all sorts of really existing things, having a permanence both of form and power, and yet we imagine these very things altering and changing according to what we, from time to time, see about them. "If they were realities, as we first perceived them, our sight must now be wrong. For if they were real, they could not change. Nothing can be stronger than reality, whereas, to suppose it changed we must affirm that the real has ceased to be, and that which was not has displaced it." Melissus, by such reasoning, the world of sense was a world of illusion; the very first assumptions of which, as of the truthfulness of the senses and the reality of the various objects which we see, are unthinkable. The weakness as well as the strength of the Eleatic position consisted in its purely negative and critical attitude

Parmenides conceived a Unity in Thought, which is limited. Melissus held by a material unity, which is unlimited.

Zeno maintained that "There is no many," and Heraclitus held Unity in Multiplicity. The difference between them is a difference of vision, or rather mental picture as to this mighty All which is One, or as Aristotle puts it, a difference between thought and matter, or between form and matter. Xenophanes made no clear statement on this question, he intuitionally gazing up to the Arch of Heaven declares, "The One is God."

Parmenides resolves all becoming into an absolutely permanent Being. Heraclitus resolves all permanent existence into an Absolutely Fluent Becoming

Now the question arises: Why is All Being a Becoming? Why is the One perpetually sundered into the many?

The Materialistic Theory must answer this question, in order to take rank as a theory of the Universe, a Positive, not a Negative Theory.

CHAPTER III.

Why is All Being a Becoming?
Why is the "One" perpetually sundered into the Many?

Empedocles attempts to answer this problem by combining the "Eleatic Being" with the Heraclitic Becoming; by postulating as imperishable beings the four elements (Air, Earth, Fire and Water), eternal, self-subsistent and mutually inderivative, but divisable primal matters, and then mingling and moulding them by the two moving forces: (a) the uniting "One" of Love, and (b) the disuniting "One" of Strife.

At first the four elements existed together absolutely one with each other, and immovable in the pure and perfect divine world where Love kept them in unity until Strife broke up the unity, hence the world of contraries in which we live began to form uself. He attributes to the elements an immutable being, by virtue of which they arise, not out of each other, nor pass over into each other, nor are they capable of any change in themselves, but only in their mutual composition. in truth, he conceives the universe in which we live—as the continual product of two conflicting forces (Love and Strife).

Neither of the one nor of the other may "man have apprehension by the senses; they are spiritually discerned, yet of the first, men have a faint idea of the creative force within their own members which they name by the names of *Love* and *Nuptial Joy*."

He does not clearly discern between these forces; he has so confounded them that at times it is strife that through separation leads to new unions, and Love that through union causes diremption of that which was before. He seems to have had a vision of these two forces, not as the counteracting yet cooperative pulsations of the universal life, but as rival forces having had in time their periods of alternate supremacy and defeat. While all things were in union under the influence of Love, then was there neither Earth, nor Water, nor Air, nor Fire, much less any of the individual things that in eternal interchange are formed of them; but all was in perfect sphere-like balance enwrapped in the serenity of an eternal silence. Then came the reign of Strife, whereby war arose in heaven as of the fabled giants, and endless change, endless birth and endless death

There are two forces working upon the four elements (air, earth, fire, water), and against each other; yet each is like the other, either a unifying or a separating force as one pleases to regard them, and in the eternal silence, the Ideal Perfectness, there is no warfare at all. There is Joy in Love, which creates, and in creating destroys; there is Joy in the Eternal Stillness, nay, this is itself the Ultimate Joy. There are two forces working, Love and Hate, yet is there but one force, and that force is Necessity; and for final contradictions the universe is self-balanced, self-conditioned, a perfect sphere; therefore, this Necessity is perfect self-realization and consequently perfect freedom.

Empedocles has the same conception of the early condition of the Earth as in other cosmogenies. At

first it was a chaos of watery slough, which, slowly under the influence of sky and sun, parted off into earth and sea. The sea was the sweat of the earth, and by analogy with the "sweat" it was salt. The heavens, on the other hand, were formed of air and fire, and the sun was, as it were, a speculum, at which the effulgence and the heat of the whole heavens concentrated. But that the Aether and the fire to possess a solidifying power, and therefore water, he held to be proved by the hot fountains and fiery phenomena to be seen in Sicily. He imagined fire to possess a solidifying power, and therefore attributed to it the solidity of the earth and the hardness of the rocks. No doubt he had seen some effects of fire in metamorphic formation in his own vicinity.

Empedocles denies Origination and Decease, that is, transition of what is into what is not and of which is not into what is; from Parmenides he takes the permanent immutable being of his primitive matters; from Heraclitus the principle of a moving force. With the former he places true being in original undistinguished unity as the world; with the latter he conceives the universe as the continual product of conflicting forces. In short, he united the fundamental ideas of Parmenides and Heraclitus, and thus constructed the universe.

The fragments of Melissus contain the same thoughts and arguments as those of Parmenides. The Eleatics simply refused to believe in the changeableness as the principle of the world; they assumed a "One" in the universe, besides which all change must be but appearance and subjective mistake.

Of those who conceived the process of Becoming

under the symbol of "Fire," Heraclitus and Empedocles were the first, Leucippus and Democritus were the second, and Epicurus and Lucretius were the third.

Democritus' Originative Principle is Fire and Heat, as Forms and Atoms are infinite; these atoms in a body or mass are the elements of universal nature, which means that Fire and Heat atoms and empty space in a body or mass is the origin of the universe.

"Body," he says, "is unthinkable except by reference to space, which that body does not occupy, as well as to space which it does occupy and conversely space is unthinkable except by reference to body actually or potentially filling or defining it;" in this way he was trying to account for "change" in nature, having thus obtained his principle of stability and his principle of change on an equal footing.

He next laid down that all the differences visible in things were differences either of shape, of arrangement or of position. He maintained that this was not a unity, some "One" immovable, unchangeable existence, but an innumerable number of "Atoms" invisible by reason of their smallness, which career, through empty space and by their union bring objects into being, by their separation bring these to destruction. The action of these atoms on each other depended on the manner in which they were brought into contact; but in any case the unity of any object was only an apparent unity, it being really constituted of a multitude of interlaced and mutually related particles, and all growth or increase of the object being conditioned by the

troduction into the structure of additional atoms from without. For the motion of the atoms he had no anterior cause to offer other than Necessity or Fate.

In proof of this, he enunciates his first proposition. "Out of Nothing arises Nothing." Nothing that is can be destroyed; all change is only combination and separation; all the visible structure of the Universe had its origin in the movements of the atoms that constituted it, and conditioned its infinite changes. The atoms were infinite in number. though not infinite in the number of their shapes. Many atoms were similar to each other, and this similarity formed a basis of union among them, or solid foundation across which dissimilar atoms played to constitute the difference of things. Out of this idea of an eternal eddy or whirl he developed a world, nay rather multitudes of worlds, all varying one from the other, some without sun or moon. others with greater luminaries than those of the earth, others with a greater number. All had necessarily a centre; all as systems were necessarily spherical.

Epicurus and Lucretius, adopting the same "theory," conceived that the world was formed by a happy combination of atoms and empty space, acting of themselves blindly, and necessarily after innumerable futile conjunctions had taken place.

Langé revived this hypothesis and represented the world as an instance of success which had been preceded by milliards of entire or partial failures. Democritus, no doubt, drew his conclusions of universal nature by first suggesting that the "Origin of Existence" was "Fire" and "Heat," and observing

that "Fire" by heating bodies united them on cooling. The theory consists in the attempt to explain the different phenomena of nature by maintaining that the "original characteristics" of "matter" were not qualitative but quantitive. Every material object has some matter previously existing exactly equal in quantity to it, out of which it was made, as may be seen in the seasons, in the phenomena of growth, etc., viz., in the order of nature. Kant says: "In all change of phenomena the substance is permanent, and its amount in nature is neither increased nor diminished. All phenomena are in time in which, as substratum, the matter which furnishes the basis in which the perceptible qualities inhere, but substance is the substratum of all that is 'real.' Therefore, as this substance cannot change in existence, neither can its quality in nature be increased or diminished. I find that at all periods, not only the philosopher, but even the common understanding, has always presupposed this permanence of matter"

There is a law even in destruction; force is required to dissolve anything; were it otherwise the world would have disappeared long ago: the elements set free by decay and death; new things are built up; there is no waste nor visible lessening of living things; were it not so, infinite time past would have exhausted all the matter in the universe, but nature is immortal.

If, where Mill says: "That the idea of Indestructibility of matter is a philosophical conception purely as opposed to the vulgar idea, that what passes out of sight is lost; for example, water spilt on the ground passes away entirely."

The Epicureans answer: "The water, no doubt, disappears, but it reappears in the juices of the crops and the trees and the beasts of the fields which feed on them. Nor need we be surprised at the doctrine, that the Atoms so all-powerful in the formation of things are themselves invisible; examples may be had in the winds, "odours," "heat," cold evaporation, etc. It is not the permanency of matter which all the wrangling is about.

The problem has always been the Dualism in Thought and Existence and How we come by our Knowledge. The doctrine of Kant claims an axiomatic validity as a necessary presupposition of

any regulated experience.

"Nothing happens by chance, but everything through a cause and of necessity." Langé declares this proposition must be regarded as a decided negation of the science of the final causes of things, for the cause is nothing, but the mathematico-mechanical law followed by the atoms in their motion through an unconditioned necessity, though no confusion is more common. Nothing can be more completely opposite than chance and necessity, and the explanation lies in this, "that the notion of necessity is entirely definite and absolute, while that of chance is relative and fluctuating. It is only from the side of efficient cause that the phenomenal world is accessible to enquiry, and all infusion of final causes which by way of supplement placed above or beside the nature forces subject to necessity. I have never found any reason to think that it is possible for a rational creature to conceive a thing beginning to exist and proceeding from no cause; then whatever beginneth to exist proceedeth from

some cause. If it be demonstrable we can assign a reason for our belief of it; if it be intuitive, it is on the same footing with other intuitive axioms, viz.: We believe it because the law of our nature renders it impossible for us to disbelieve it; to verify this axiom, it has been said that nothing can produce itself, this is not more certain than the axiom to be proved, and, therefore, is no proof at all.

Mr. Hume asserts that this axiom is not intuitively certain, because all certainty must arise from the comparison of "Ideas" and from the discovery of such relations as are unalterable, so long as the "Ideas" continue the same; but the only relations of this kind are resemblance, proportion in quantity and number, degrees of any quality and contrariety, none of which is implied in the maxim.

"Whatever begins to exist proceeds from some cause, that maxim is not intuitively certain. This argument, if it prove anything at all, would prove that the maxim is not even certain, for we are here told that it has not that character or quality from which all certainty arises. What has begun to be must have had an antecedent or cause which accounts for it. Whatever we believe to have had an 'Origin,' we at once believe also to have had a cause. Thought implies the truth of it every moment. Sensation gives rise to thought in virtue of it" Hume did not even venture to deny it, although he ought in consistency to have done so, and obvious! desired to be able to do so. Hume performed an immense service in showing how extremely little we can know of the particular causes of particular events apart from the study of both in connection, apart from observation, with experiment and induction. If every event must have had a cause we require to prove it to have been an event, to have a commencement.

Can this be done? Our opinion of the necessity of a cause to the production of everything that has a beginning is by Hume supposed to arise from observation and experience: "It is true that, in our experience, we have never found anything beginning to exist and proceeding from no cause, but I hope it will not appear that our belief of this axiom has experience for its foundation." Here is an acknowledgment of an "unknown cause," which we are bound to interpret as a "Sovereign Intelligence," whether Mr. Hume will accept it or no.

Mr. Locke reasons out the same conclusion. He says bare matter cannot be the Free Cause of a thinking substance; to be a cause implies to be intelligent. and Bishop Barkeley says, matter only exists in the mind of a Sovereign Intelligence.

CHAPTER IV.

In his next proposition, Democritus asserts that "Nothing exists but Atoms and Empty Space." That this was not a "Unity," some one immovable, unchangeable existence; but an innumerable number of Atoms, invisible by reason of their smallness, which career through empty space, and by their unions bring objects into being, by their separation bring these to destruction. The action of these atoms on each other depended on the manner in which they were brought into contact; but in any case the Unity of any object was only an apparent Unity, it being really constituted of a multitude of interlaced and mutually related particles, etc., etc.

Here, we have in the same proposition at once, the strong and the weak side of rational explanation of Nature, of every great discovery of phenomena into the Motion of the smallest particle, and undoubtedly even in Classical ages, the most important results might have been attained in this direction, if the reaction, that took its rise in Athens against the devotion of philosophers to Physical Science had not gained the upper hand; but "Science" is forever precluded, from finding a bridge between what the simplest sound is, as the sensation of a subjectmine, e.g., the process of disintegration in the brain, which science must assume, in order to explain this particular sensation of sound as a fact in the objective World. Mr. Locke replies: "It is as impossible to conceive that ever, bare, unthinking incogitative matter should produce a thinking, in-

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telligent 'Being' as that nothing should of itself produce Matter." "Let us suppose any parcel of matter, eternal, great or small, we shall find it, in itself, able to produce nothing, e.g.: Let us suppose the matter of the next pebble. We meet with, eternal, closely united, and the parts firmly at rest together. If there were no other being in the Universe, must it not eternally remain so, a dead inactive lump?" "Is it possible to conceive it can add motion to itself, or produce anything, being purely Matter? Matter, then, by its own strength, cannot produce in itself so much as motion. The Motion it has must also be from eternity, or else be produced, and added to matter, by some other being, more powerful than Matter. Matter, as is evident, having not power to produce motion in itself. But let us suppose unthinking 'Motion' cternal, too, yet. Matter, incognitative Matter and Motion, whatever changes it might produce, of figure and bulk, could never produce thought. Knowledge will still be as far beyond the power of Motion and Matter to produce, as Matter is beyond the power of nothing to produce." I appeal to everyone's own thought, whether he cannot as easily conceive matter produced by nothing, as thought to be produced by pure Matter, when, before, there was no such as thought, or an intelligent Being existed. You may as rationally expect to produce "Sense," "Thought" and "Knowledge" by putting together, in a certain figure, and motion, gross particles of Matter, as by those which are the minutest that do anywhere exist. "They knock and resist one another, just as the greater do, and that is all they can do, so that if we suppose "Nothing" first or eternal,

"Matter" can never begin to be, if we suppose "bare Matter" with "Motion" eternal. "Motion" can never begin to be, if we suppose only "Matter" and "Motion" first or eternal. "Thought" can never begin to be; consequently, "Bare Matter" cannot be the Free Cause of a "Thinking Substance." To be a cause implies to be intelligent. Now, we can clearly see that Mr. Locke never denied the existence of a "Sovereign Intelligence."

He simply declined to discuss the subject and contented himself by building a platform, upon which he constructed the "Universe." Darwin did the same thing in his "Origin of Species." He never denied the existence of a "Sovereign Intelligence." He, like Locke, simply declined to discuss it, and contented himself by assuming "that the innumerable 'species,' 'Genera' and 'Families' of 'Organic Beings' with which the world is peopled, have all descended, each within its own 'class' or 'group' from common parents, and have all been modified in the course of descent, that all plants and animals, however different they may now be, must at one time or other have been connected by direct or indirect intermediate Gradations, and that the appearance of isolation presented by various groups of organic beings must be unreal, that the wider structural gaps asserted by naturalists to exist between one group of animals and another had become extinct, by the death of the intermediate forms."

We claim a right to interpret the preceding paragraph for ourselves, and explain it in our own way of thinking. Now, we shall suggest that Mr. Darwin's parent stock (Genus: male and fe-

male), beget a family of, say from one to twenty individuals, which he designates by the name of Species; these will survive according to circumstances, adaptation, and to fitness, etc., then the survivors will pair, and beget families (individuals), which will have a greater difference from the parent stock; these again will pair, and create a still greater difference from the parent stock, because the male and female, in each case will be different from the preceding ones, and so on, until we reach the innumerable Genera Species and families of Organic Beings, with which the world is peopled each within its own class, from common parents.

As the new generations or species spring into existence, the parent stocks die out and leave not a vestige of that resemblance in the surviving breed.

We know positively, that the intermediate species of whole families have become extinct, and have disappeared as mysteriously from the face of the earth as the ships that have sailed gallantly out to sea and of whom nothing has ever been heard or seen of them after their masts have dropped below the horizon. Thousands and thousands of heirs are sought after every year in Great Britain alone; but not a trace of the missing links can be found. Darwin may have been thinking of this when he said, that the wider structural gaps asserted by Biologists to exist between one group of animals and another had become extinct by the death of the intermediate forms.

Every sensible farmer knows that he can improve or deteriorate his stock, by crossing them with superior or inferior breeds; but he can never produce exactly the same species of animal; because the male

and female are different from the preceding ones: Again, what did Mr. Darwin mean by "The survival of the Fittest, etc." Let me take as an example: "A young plantation," the trees of which growing so closely together, that there is no room for development. In the course of the year, some trees will show signs of decay, others will show signs of vigour. The strong tree will absorb the nourishment from the weak one, and in a very short time, the weak tree succumbs for the want of nourishment: so with a brood of chickens, so with a breed of animals, man not excepted; but let us look at it from another point of view, and suppose that the "young plantation" is under the care of a "Forrester," whose business it is to see to the welfare of the trees. As soon as he sees any of the trees show signs of decay, he marks them to be cut down; and thus, from year to year the weeding process takes place, until he has a beautiful and flourishing plantation.

It is just the reverse with the farmer; he only keeps a few of the best for breeding purposes, and buys others to improve the breed; but sells the fattest and plumpest to the butcher for food, and retains the weaklings, until they are fit for the market. Or, take for example: Some mischievious person feeds poison to the chickens in their food. The weaklings cannot get near the food, being crowded out by the strong ones; so in the course of an hour or so, all the strong ones are dead, from the effects of the poison, and the weaklings survive. Why? because they did not get a morsel of the poisoned food. Is this the survival of the fittest?

In the case of cattle, the same rules are applicable. Do the same rules apply to man? "The fittest survive," all right; the weaklings must give place to the strong and be crushed out; the strong are sent to the front, and get killed, while the weaklings are kept at home and survive. Is this the "Survival of the Fittest?"

In modern warfare the weak man has just as good a chance to kill as many strong men, as the strong man has to kill weak men. Is this correct?

How is it, that the finest, the best and the most promising young people are taken away, at a very early age, and the puny pukey weaklings survive, who, in the course of years, produce the best works in Science, Medicine, History, Literature and Philosophy, etc.

How is it that the puniest, pukiest, and most unlikely persons have been the principal assassins of all times? Is this the Survival of the Fittest?

In answer to the questions:—"Concerning the Origin of Existence," the Origin of the Universe," the "Origin of Moral Being," Aristotle replies:—
"The existence of a Supreme Being is an eternally perfect Entelechy, a life everlasting. In that, therefore, which belongs to the divine, there must be an eternally perfect movement. Therefore, the heavens, which are, as it were, the body of the Divine, are in form a sphere of necessity ever in circular motion." Why then, is not this true of every portion of the Universe? Because there must of necessity be a point of rest of the circling body at the centre. Yet the circling body cannot rest either as a whole, or as regards any part of it; otherwise, its motion

could not be eternal, which by nature it is. Now, that which is a violation of nature cannot be eternal; but the violation is posterior to that which is in accordance with nature, and thus the unnatural is a kind of displacement or degeneracy from the natural, taking the form of a coming into being."

"Necessity then requires earth, as the element standing still at the centre. Now, if there must be earth, there must be fire. For if one of two opposites is natural or necessary, the other must be necessary too, each, in fact, implying the necessity of the other. For the two have the same substantial basis, only the positive form is naturally prior to the negative; for instance, warm is prior to cold, and in the same way motionlessness and heaviness are predicated in virtue of the absence of motion and lightness, i.e., the latter are essentially 'prior.'

"Further, if there are fire and earth, there must also be the elements which lie between these, each having an antithetic relation to each. From this it follows that there must be a process of coming into being, because none of these elements can be eternal, but each affects, and is affected by each, and they are mutually destructive. Now, it is not to be argued that anything which can be moved can be eternal, except in the case of that which by its own nature has eternal motion. And, if coming into being must be predicated of these, the other forms of change can also be predicated." (Arist, De Caelo, ii, p. 3).

This passage not only contains his idea of the Divine Entelechy, but also the ingenuity with which he gave that appearance of logical completeness to

the vague and ill-digested, scientific imaginations of the time, which remained so evil an inheritance, even to the present day.

In order to complete his theory on this subject, the four elements, Air, Earth, Fire and Water, are all equally in a world which is contrary to Nature, i.e., the world of change, of coming into being and going out of being. Apart from these, there is the "Element of Eternal World," which is "in accordance with nature," having its own natural and eternal motion ever the same.

Still more clearly is the Organic conception carried out in his discussion of the Vital Principle or Soul in the various grades of living creatures and in Man? (See Essay on the Soul).

With the Stoics the Deity is the Active and Formative Power of Matter, immanent in it, and essentially combined with it. The Universe is the Deity's body and the Deity is the Universe's soul: thus. they conceived Deity and Matter as one substance identical with itself. The universe has no independent existence; it is produced, animated and ruled by the Deity, or Zeus. In it the Deity is the eternal necessity which subjects all to unalterable law. The Deity is the Spiritual breath, that permeates nature, the Art-subserving fire, that forms or creates the "Universe." Everything in the universe is breathed into by the divine life coming into special existence out of the divine whole, and returning into it again and thus bringing to pass a necessary cycle of Constant Origination and Decease, in which, perpetually re-creating itself. Only

the whole is permanent, and in every actual existence there is reason. Their recognition of Reason is almost the same as the Supremacy of Conscience, by Bishop Butler.

The style of Epicurus was, in fact, plain and unadorned; but he seems all the same to have been able to say what he meant; and few, if any, writers. ancient or modern, have ever had so splendid a literary tribute as Epicurus had from the great Roman poet, Lucretius, his follower and expositor. "Glory of the Greek race," he says, "who first hadst power to raise on high so bright a light in the midst of darkness so profound, shedding a beam on all the interests of life, thee do I follow, and in the markings of thy track do I set my footsteps now. Not that I desire to rival thee; but rather for love of thee, would fain call myself thy disciple. For how shall the swallow rival the swan, or what speed may the kid with its tottering limbs attain, compared with the brave might of the scampering steed? Thou, O Father, art the discoverer of Nature; thou suppliest to us a father's teachings, and from thy pages, illustrious One, even as bees sip all manner of sweets along the flowery glades, we, in like manner; devour all Thy golden words, 'Golden and right worthy to live for ever.' For soon as thy philosophy, birth of thy godlike mind hath began to declare the origin of things, straigthway the terrors of the soul are scattered, earth's walls are broken apart, and through all the void I see nature in the working. I behold the gods in manifestation of their power, I discern their blissful seats, which never winds assail nor rain-clouds sprinkle with their showers, nor snow falling white with hoary frost doth buffet, but cloudless aether, ever wraps them round, beaming in broad diffusion of glorious light. For nature supplies their every want, nor aught impairs their peace of soul. But nowhere do I see any regions of hellish darkness, nor does the earth impose a barrier to our sight of what is done in the void to our sight, of what is down in the void beneath our feet. Wherefore, a holy ecstacy and thrill of awe possess me, while thus by thy power the secrets of nature are disclosed to view." (Lucretius. De Natura Rerum III., 1-30).

This devotion to the memory of Epicurus, on the part of Lucretius, was paralleled by the love felt for him by his contemporaries. He had crowds of followers who loved him, and who were proud to learn his words by heart. He seems indeed to have been a man of exceptional kindness and amiability, and the garden of Epicurus became proverbial as a place of temperate pleasures and wise delights, and as a rule of conduct, Epicurcanism has generally been associated with the finer forms of enjoyment rather than with the more sensual.

Epicurus, as we have previously stated, reproduced the Doctrine of Democritus, that the universe was formed by a happy combination of atoms, and empty space acting of themselves blindly and necessarily after innumerable futile conjunctions had taken place. The veritable existences in nature are the atoms, which are too minute to be discernable by the senses, but which, nevertheless, have a definite size, and cannot further be divided. They have also a definite weight and form; but no qualities

CONCEPTION OF THE UNIVERSE.

other than these. There is an infinitude of empty space, because a limit to space is unthinkable. It follows that there must be an infinite number of atoms, otherwise they would disperse through infinite void and disappear. There is a limit, however, to the number of varieties among the atoms, in respect of form, size and weight. The existence of the void space is proved by the fact that motion takes place; it necessarily exists also to separate the atoms from one another.

"The natural course for all bodies having weight is downwards." If this be so, he said, the atoms would all travel for ever in parallel lines, and those "clashings" and "interminglings" of atoms, out of which he conceived all visible forms to be produced, could never occur. He, therefore, laid it down that the atoms deviated the least little bit from the straight, thus making the world possible. And he thought that this supposed deviation of the atoms not only made the world possible; but human freedom also. In the deviation, without apparent "Cause" of the descending atoms, the law of necessity was broken, and there was room on the other hand for man's free-will; on the other, for prayer to the gods, and for hope of their interference on our behalf

CHAPTER V.

"The Materialistic Theory" is practically connected with a "Development," or "Atomic Theory." It makes use of Scientific Methods with an avowed antagonism to the Metaphysical. All science, as science must necessarily proceed on the understanding that it takes no account of the Metaphysical.

The Theory as such is progress, from the lower to the higher. As a theory of the universe, it is nothing; because it is progress from the less to the greater. It is not alleged by any one that the world existed always, as it now is. The question is then: how are we to account for progress? This theory suggests from something unspeakably lower; the world has advanced to what it now is. As if it were an advantage that the Beginning should be as small as possible, reference being made to primordial "Forms," "Germs," "Protoplasms;" nay, even "Inorganic Matter." No inorganized matter explains itself. Neither "Germ" nor "Matter" can account for action.

The Atomic Theory in Chemistry, which Dalton invented, presupposes Matter to be composed of ultimate, indivisible particles which unite together in various proportions; that these atoms are in the same element exactly similar in size, weight and every other property; that the atoms of any one element differ from those of all other elements in weight and chemical properties, and when union takes place, it must of "necessity" take place be-

tween atom and atom, or between a definite number of atoms of both elements. It would follow then that "granting" the existence of such atoms (here, he is begging the question), and that the atoms of any one element "must" be equal in weight, while the atoms of different elements would differ in weight, "Chemical Combination," "if it did take place," would do so in certain well-marked, definite proportions by weight, namely, the relative weights of different atoms, or in some multiples of those weights. All observation and experiments show us that "Chemical Combination" does so take place.

Here comes the crowning point of Dalton's Theory, with the mournful admission that "As we cannot explain the facts of Chemical Combination" by any other "hypotheses," these facts become a strong a Priori Proof of the Atomic Theory; still it can "never" be more than "theory," since it would be impossible that we should ever succeed in isolating an atom, and thus obtain direct proof, while mentally we cannot conceive of any particle, however small: but that we can also conceive of its half, or any fraction of it, and mathematically it is possible to demonstrate that "Space," and, therefore, "Matter" (which occupies space), is incapable of infinite division? He uses the term "Atom" much as he uses the term "Element," not as expressing an "Absolute Fact," but as a convenient term to express what is observed to be the case according to our present knowledge." Professor Huxley pertinently replies, "That whether 'Matter' be 'Atomic' or not, this much is certain, that granting 'matter' to be Atomic, it would appear as it now does." All right.

Granting, Matter to be "Atomic," "Inorganized Mass" or Germ, as the supposed "Origin of Existence," of the "Universe," and of "Moral Being," neither can account for progress in acting, beginning to act, or originating progress.

It was either "necessitated" to act, or "Free" to act. If "necessitated," it is not self-sufficient. If "Free," it is no mere "germ," and certainly not "inorganized matter"; also: The Facts of the "Physical Universe" are all against it, because there is no Germ or "Inorganized Mass" known to us, which is not dependent upon something external, for its upholding

Such Germ or Inorganized Mass must have been necessitated to produce something greater than itself, and to be lost in that which it produces. The whole problem is "Causality;" if there be no such thing, there is no problem. Therefore, whoever attempts Hypothetically to account for the "Existence of things known," does, in revising the problem, admit the "Principle of Causality." In admitting this "Law," Materialism is found inadequate to give any rational account of the order or law of the universe.

Professor Faraday sums the whole "Atomic Theory" up in these words:—"Seeing that all marked cases of Chemical Combination can be demonstrated always to take place in definite proportion, and that by 'Inference,' a similar proportionality 'may be supposed' to extend to less marked cases—seeing that these definite proportions of bodies entering into combination are mutually proportional among themselves, it follows, that such definite

immutability, such proportionality should most 'rationally' (here is an appeal to Reason, where no Reason is admitted) be considered as indicating a 'ponderable ratio' between combining elements, and that the 'ratio,' never changing, would 'seem' to be indicative of elementary ponderable 'Molecules' of determinate relative weight, 'unchanging,' 'indivisible' 'qualities,' which will be recognized as fulfilling the "Definition of an Atom." Granting then (hat in hand): 1st. The Existence of Atoms 2nd. That the Atoms of the same Element are absolutely identical in size, weight, and all other respects. 3rd. That the Atoms of one element differ from those of another element in weight and Chemical Properties; and 4th. That whatever combination takes place between two elements, it occurs between them," Atom to Atom." My dear Professor Faraday, you have reckoned without your "Host." Professor Ernest Rutherford, of McGill University, an expert in Radio-Activity (in 1903), burst the insuperable wall of the Atomic Theory, and left it. a debris of shattered atoms! To the satisfaction and approval of the "present Scientific World." See the following: -

Among the speculations to which the emanations of radium have given rise, none is more fascinating than that of Prof. Rutherford, who sees in the radiance thrown off like a material substance from the radio-active metals, an object-lesson on a small scale of the birth of elements. It would be clearer to say that he sees in the gradual breakdown of the radium atom into simpler forms the reversed process of the manufacture of the elements.

From radium and from thorium there proceeds a radio-active emanation. In the case of thorium, this radio-active emanation has actually been separated from the radio-active matrix, and has been called "Thorium X." This emanation—substance, gas, incomplete positive atoms, negative ions, electrons—is itself radio-active; but it gradually loses its radio-activity. It can make other substances, like glass or zinc sulphide, radio-active; but they, too, gradually lose their radio-activity, and gradually this transferred radio-activity disappears altogether. What becomes of it?

Prof. Rutherford's explanation is this. The unstable atoms of the parent radium (or thorium) are breaking up. They shoot out atoms and incomplete atoms and parts of atoms in a state of highly unstable equilibrium. This is the emanation, the "Thorium X" or "Radium X."

But these emanation atoms, being also in a state of unstable equilibrium, go on throwing out bits of themselves in the endeavour to gain equilibrium. The product they throw off is the "excited activity" perceptible in the bodies which these unstable entities bombard. This "excited activity" at last disappears; it, too, has thrown off something—something, perhaps, simpler, but something not yet identified.

Prof. Rutherford and Mr. Soddy suggest that here we have an example of the transmutation of an element, the atoms taking one form after another. What the final product is we can only guess. Prof. Rutherford guessed helium, the element which is the primal ancestor (in the periodic scale of ele-

ments) of the radio-active metal. The suspicion that helium might be the ultimate product, or one of them, of the disintegration of radium, receives fresh confirmation from the announcement just made by Prof. Ramsay and Mr. Soddy. They have been examining for some months the spectra of the gases emanating from radium bromide; they have found distinct evidence of the presence of helium when all the other constituents of the gaseous emanation were frozen out.

Sir Oliver Lodge, in making the suggestion that radium might point the way to the glow worm's secret of turning energy into light with much less loss than man's crude methods have discovered, went on to say that much might be learned from a closer study of the light rays which emanate from luminous plants, insects and bacteria. Work is being done in this direction by M. Raphael Dubois, who recently exhibited in Paris a lamp of which the light was derived from luminous microbes. He prepared cultures of luminous bacteria in gelatine, and arranged the cultures, kept in position by wire gauze, so that they formed a kind of thick inner varnish to a glass flask. The flask thus made into impromptu lamp proved itself capable of dimly lighting a big room in the marine biology laboratory of Tamaris-sur-Mer. The light was powerful enough for people to recognize one another and even to see the movement of one another's features, and the bacteria continued to supply light for several weeks.

"The Atoms are infinite in number, and of Endless Variety of Form," etc., etc.

"The variety of all things is a consequence of the Variety of their Atoms in number, size, figure and arrangement, and act on each, only by pressure or collision," etc.

No number of material atoms, though eternal and endowed with Mechanical Force, can explain the "Unity and Order of the Universe." "Every Atom," "every Molecule" must even, in what is ultimate in it, bear the stamp of a Metaphysical Power and "Wisdom," must from the very nature of the case, mirror the lustre of a Metaphysical Being, and proclaim its dependence upon Sovereign Intelligence.

We again declare that there must be "Power" adequate to produce every phenomena in the Universe; that this "Power" may be "Force." "Intelligence," or "Will;" but we admit of no deviation from the "Single Law of Intelligence," that there must be power adequate to produce fact; this we hold to be certainly true, whether the "Power" be observed by us or no.

The universe cannot be explained physically as all materialists think. We must be informed how the universe came to be a "Universe," how it came to have the Unity which underlies its diversity—if it resulted from a countless multitude of ultimate causes. Did the atoms take council together and devise a common plan, and work out this common plan, and thus produce the Universe and all that it contains.

This "Hypothesis" is utterly untenable, yet it is rational in comparison with the "Notion," that these Atoms combined, by mere chance, and by chance produced such a Universe as this on which we live.

The scientific proof of the "Non-eternity" of Matter is as yet far from a complete one. We know nothing of Atoms, nothing of what is permanent in Nature, from direct experience. We cannot pass beyond "Experience," beyond all testimony of the Senses when we believe anything permanent in Nature, not less than when we believe something beyond Nature.

Suppose we grant Materialists, that there is something in "Matter" which is Self-existent and Eternal, we still stand in need of an "Eternal Intelligence," if we seek after what is Eternal. Science tells us, that it is not the earth, nor anything contained in it; nor the sea, nor the beings living in it, for although they may have begun to be in times far remote, yet it was within times to which the thoughts of finite beings can reach back.

It does not take a great stretch of imagination to see that the whole of "this Theory" is formed upon Hypothesis! Hypothesis! Hypothesis! It is easy to build a "Universe" if you are allowed to construct a platform, and get your material at hand, ready-made. Anybody can do that. That is just what we are all doing. We are all using and experimenting with the materials at hand, ready-made, and then fancying that we have arrived at the absolute Fact of Existence till the next ugly duckling arises and bursts our "Pet Theory."

It is a significant fact, that man's body, by which his mind is so much affected, is like all other bodies, subject to the law of Matter, and yet through the self-conscious power of his mind, his body and the extra-organic things, by means of his body, are themselves subject more or less to the laws of Mind. Thus, in our present state of being at least, the operation of the mind entirely depends upon the right condition of the body; whatever promotes bodily health tends to promote the growth of the mind, which is so mysteriously connected with it.

It is admitted that the "Mind" phenomena, even as simple states of consciousness, are different from the other known phenomenon called "Matter;" but this seems to present no difficulty to the "Scientific Mind." Quantity, plus Quality, plus Motion, feel and think themselves. The "Atom," as the ultimate of the physical, feels and thinks (after a certain evolution); therefore, feeling and thinking must always be implicated in the atom itself; but yet it is only Matter.

Then man's "Mind" is a combination of Matter and Motion, such that it feels and thinks all less complex combinations and also itself. In such a case it must have all the conditions of matter, and could be defined "as a separate or individualised "One" material organic complex, with a certain relation of feeling and knowing to other atomic and organic combinations, which are like itself in all respects, save in the manner of their combination.

"The Mind of a Man" is "for itself," not by any freak of nature, but just as every atom and every organic thing is for itself. Its peculiarity is, that it is "Mind," a potency of receiving and reflecting the rest of the world—a self-conscious I (Ego). The "Self," or I is permanent, and has the same relation to all the succeeding thoughts, acts and feelings

which I call mine; or, as Reid puts it, in a negative form, "I am not thought," "I am not action," "I am not feeling," "I am something that thinks and feels and acts." In short, my Ego is not my body, though Ego and body are mutually conditioned.

The Present Tendency to Materialistic Conceptions of the Universe, and of Life, consequent on the prominence in people's imaginations, needed more than ever the counterpoise of Reflection on the Immaterial and Spiritual and the Invisible. This reflection would show that certainly and constantly connected with the world of Matter, as all human minds are. We have no reason whatever to regard the Material World as the true cause of our conscious being, and no reason to suppose, that our true conscious existence is dependent for existence on union with Matter.

The most renowned Chemists and the most expert Analysts say, "We cannot destroy matter;" therefore, it is Eternal. The most learned Metaphysicians and the most cultured Theologians declare, we see Order and Intelligence in the Universe; therefore, a Sovereign Intelligence must exist. Consequently, we declare, that Materialists must have greater Faith than Deists, because their Faith must transcend "Observation" and "Experience" which is the foundation of the Materialistic or Atomic Theory.



SECOND ESSAY.

MATERIALISM AS A PHILOSOPHICAL CONCEPTION OF THE SOUL.



CHAPTER VI.

The Collapse of contending Philosophies in Greece promoted the Collapse of Contending Systems of Political Authority, and the Collapse of Political Authority facilitated the growth of that "Individualism" in "Thought," with which the name of the Sophists is associated. The name Sophist seems at first to have implied, that "Skill" was the object of the teaching, rather than "Truth" (practical men not theorists); the Greek word means an able cultivated man in any branch of the Arts. The End in View of their Philosophy was no longer Universal Truth; but individual Success, and consistently enough, the philosopher himself professed the individualism of his own point of view, by teaching only "those" who were prepared to pay him for his teaching. All over Greece, with the growth of Democracy, this philosophy of "Persuasion" became popular.

Protagoras was the first great leader of the Sophists who taught for "pay;" his Principles may be thus summarized: "Man is the Measure of all things," namely, each man is the measure of all things, 'whether of their existence, when they do exist, or of their non-existence when they do not exist,' to which 'Plato' replied:—'If truth be only sensation, and one man's discernment is as good as another man's and every man his own judge, and everything that he judges is right and true, then what need of Protagoras to be our instructor at a

high figure, and why should we be less knowing than he is, or have to go to him, if every man is the measure of all things." Protagoras propounded his "Doctrine" on the lines of the Heraclitean System; (a), that everything is in continual flow, and the apparently real objects in nature are the mere temporary and illusory result of the, in themselves, invisible movements and minglings of the "Elements." of which they are composed. (b) That it is a "Delusion" to attempt to give a factitious reality to the things which appear; that it is equally a "Delusion" to attempt to separate the thing perceived from the perception itself; in a word, a thing is only as, and when it is perceived; and (c) A Delusion is to attempt to separate a supposed perceiving "Mind" from the perception. All three exist only in and through the momentary perception, the supposed reality behind this, whether external in the object, or internal in the "Mind," is a "Mere Imagination." Thus, the Heraclitean flow in Nature was extended to "mind" also. Only the sensation exists, and that only at the moment of its occurrence; this alone is "Truth;" this alone is "Reality;" all else is "Delusion," from which we deduce, that all appearances are equally "True;" what seems to be to any man, that is alone the true to him. The relation of such a "Doctrine" as this to Politics, and to "Morals," is not far to seek. Every man's opinion is as good as another's. It, in short, presupposes Anarchism in Politics," and a distraction of "Mind in Morals." Certainly, not "Scepticism" as this term is interpreted at the present day. To my mind this "Term" seems to be the least appropriate, for such a pur-

pose; because if you give a dog a bad name, you may as well hang him; from what seemed a "harmless pup," has grown up into a ferocious and dangerous "brute;" thus, the innocent and insignificant Greek word Skeptikos—"A Thoughtful Person," has grown up into a most dangerous and "Unphilosophical Monster." The Scepticism of Pyrrho, in Ancient times, and that of Hume, in Modern times, are intellectual amusements, which conduct to no results, for they can neither be proved nor disproved logically, because if "Self-Consciousness and Memory" must be first vindicated, before they can be used, we can never get to work at all. The "Originators" were a class of highly cultured men, who taught the different Greek Philosophies for pay, especially the Heraclitean System. Their chief "Forte" lay in Persuation.

In discussing the Originative Principle of the different Philosophies, they so played upon the meanings of words, that they annihilated the existence of "Everything." Let us, for example, take the "Dictum of Gorgias." "Nothing exists," or if Nothing exists, it cannot be apprehended by Man and even, if it could be apprehended, the Man who apprehended it could not expound or explain it to his fellowmen. His chief argument to prove the first position laid down by him, depended on a double and ambiguous use of the word "is." "Nothing exists"—Nothing—that which is not exists—is the non-existent—that which is, is the non-existent. Therefore, "Being" is predicable of that which is not. So conversely he proved "Not Being" to be predicable of that which "is," and in like man-

ner he made away with any possible assertions as to the "Finite," or "Infinite," the Eternal or Created Nature of that which is. Logic could supply him with any amount of alternative arguments from whatever point he started, such as would seem to land the question in an impossibility. Hence his first proposition was, he claimed established, that "Nothing is."

To prove the second, that even if anything is, it cannot be known to man; thus, if what a man thinks is not identical with what "is," plainly what "is" cannot be known to man, thus, if what a man thinks not identical with what "is," can be shown from the fact that thinking does not affect the facts.

It does not take a great stretch of any one's mind to see that this sort of arguing is a play upon words, and not of much consequence.

You may imagine the moon made of green cheese or witches riding on broomsticks in the air, but no one to-day believes in the existence of such, because such things cannot exist.

Again, if we assume that which we think is identical with what "is," then it must be impossible to think of what "is not," but this is false, for we can think of such admittedly imaginary beings as Scylla and Charybdis, and multitudes of others. Therefore, there is no necessary relation between our "thoughts" and any "realities." We may believe, but we cannot prove, which, if any of our conceptions have relation to an external fact, and which have not. Again, supposing any man had an apprehension of what is "real," could he possibly communicate it to any one else. If a man saw

anything, he could not possibly, by verbal description, make clear what it is he sees, to a man who never saw. And so if a man has not himself the apprehension of reality, mere words from another cannot possibly give him any idea of it. He may imagine he has the same idea as the speaker, but where is he going to get the "common test" by which to establish the identity.

The "Purport of this Doctrine" (as has been said again and again by the most expert metaphysicians), is to isolate or individualize.

(a) "To isolate" each man from his fellow, he cannot tell what they know or think; they cannot reach any common ground with him.

(b) It isolates each man from nature, he cannot tell what nature "is;" he cannot tell whether he knows anything or "reality" at all.

(c) "It isolates" him from himself; he cannot tell for certain, if any, what relation exists between what he imagines, or perceives at any moment and any remembered or imagined previous experiences: he cannot be sure that there were ever any such experiences or what that self was which had them, or whether there were any self-perceiving anything.

Just imagine how amazing the "Moral Effect" of such arguing would have on the minds of the ablest and wealthiest Youth of Greece, of such an absolute Collapse of Belief. Yet this philosophic "Abnegation" did not deprive these "Young Bucks" of their appetites and passions. It did not in the least alter their desirability for wealth and power; the principal effect it had on them and on the public generally, was to shatter the invisible, social

bonds of reverence and honour, truth and justice, which in a greater or less degree "act" as a restraining force upon the purely selfish appetites and desires of men. Not only belief in Divine government disappeared, but belief in any government, external or internal. Justice became a cheating device to deprive a man of what was ready to his grasp. Good faith was stupidity when it was not a more subtle form of deceit. Morality was, at best, a mere convention, which a man might cancel if he pleased. The "One Reality" was the appetite of the moment. "The One Thing Needful" its gratification. "Society," therefore, was "Universal War," only with subtler weapons.

The majority of the Sophists did not trouble themselves with philosophic questions. All they professed to do was to teach some practical skill of a verbal or rhetorical character. They had nothing to do with the nature or value of "Ideals." they did not profess to say whether any end or aim was in itself good or bad; but, given an end or aim, they were prepared to teach those who paid them, to acquire a skill, which would be useful towards attaining that end or aim.

Even in this country we cannot boast of any very great improvement on this condition of affairs. All our professional men are "One Book Men," or one horse machines, or in a more pleasurable and classic term, "Specialists," Specialists in this and Specialists in that, and Specialists in anything and everything, from a needle to an anchor.

The theory of Negation of law in Nature, or in Man, which underlie the Sophistic practice, had its

logical and necessary effect, on the social structure throughout Greece. So "Party Politics" and "Business Competition" is threatening the fundamental Morality of this country at the present day, in a loosening of the bonds of family affection, of honour, of reverence, of religion, of law, and of Patriotism. In Business Competition, all kinds of devices are in use by which one man might get even with another, or might get the better of another, such as ingenious advertisements, dexterous bargain sales, and pertinaceous pushing of goods by energetic salesmen. There are also adulteration of goods, misrepresentation of values, intriguing with governments for special favours, and not infrequently out and out prevarication of the truth. The man in the same business as one's self was looked upon as mine enemy and must be treated as such, etc.

"In Politics:—It may not be inapt to quote the well-known passage from Thucydides, which describes the condition of thought in his own time, which is distinctly characteristic of the Sophistic teaching.

The common meaning of words was turned about at Men's pleasure, the most reckless bravo was deemed the most desirable friend. A man of prudence and moderation was styled a coward. A man who listened to reason was a good-for-nothing simpleton. People were trusted according to their violence and unscrupulousness, and no one was so popular as the successful conspirator, except perhaps, one who had been clever enough to outwit him at his own trade. But anyone who honestly

attempted to remove the causes of such treacheries was considered a traitor to his party. As for oaths, no one imagined they were to be kept a moment longer than occasion required. It was, in fact, an added pleasure to destroy your enemy, if you managed to catch him, through his trusting to your word. These words of the most sober and philosophic of Greek historians illustrate the absolute necessity whereby the theories of philosophers in the closet extend themselves into the market-place and the home, and find an ultimate realization of themselves for good or evil in the business and bosoms of the Common Crowd. Such a state of affairs and of Society required a reconciler, who would weld what was true in the new doctrine of Individualism with what was valuable in the old doctrine of universal and necessary truth, who should be able to say: "Yes, I acknowledge that your individual view of things must be reckoned with, and mine and everybody else's, and for that very reason do I argue for a universal and necessary truth; because the very truth for you, as an individual, is just this universal. The union and identification of the individual and universal is the doctrine of Socrates.

We have seen that Philosophy as an Analysis of the data of perception or of Nature had issued in a Social and Moral Chaos; only by brooding on the Moral Chaos could the spirit of truth evoke a New Order; only out of the Moral darkness could a new intellectual light be made to shine.

To Socrates it was given to recover the lost point of stability in the world of morals, and, by a system

entirely his own, invented for the purpose of dealing with the Anarchists about him so as to prepare the way for his successors when the time came for a more extended exposition of the true point of view.

Socrates, who stands deservedly high among ancient moralists, never professed to have anything very certain to teach on any of the great questions about which men will ever seek for information. He invariably used ambiguous language and seemed to have been very undecided himself with regard to many matters with which he was often called upon to deal in his instruction to his pupils. "If," said he, "death be a removal hence to another place, and if what is said of the dead be true, etc." This is simply a confession of ignorance (long before Huxley's time). The concluding words of Socrates' apologia were: "I go to die, you to live, but which of us is destined to an improved being is concealed from everyone, except to a 'Sovereign Intelligence." Though Socrates gave expression to many deep truths yet he spoke with great hesitation and doubt.

CHAPTER VII.

Plato and Aristotle, the two great giants of Philosophy, undertook to work out the Socratic Doctrine through the whole field of the knowable. Aristotle tells us that Thales maintained that the whole universe was full of gods; therefore it is quite evident he did not mean "Water," in our metaphysical sense, to be the source and Destiny of Existence. If this be so, we would like to know Thales' conception of the "Soul." His answer would be: "If you take a piece of amber and rub it with your hand, it will acquire the property of first attracting and then supporting minute light bodies which will temporarily adhere to its surfaces. The exercise of this power I attribute to the spirit or soul of the Substance Amber, and it pervades my 'Water Theory' which I conceived to be Source and Destiny of Existence. We who have seen the development of Electricity, within the last thirty years, can fully appreciate this comprehension of it as soul or spirit."

Would you not admit with me that this is a most subtle and dangerous "Soul," nay even as dangerous as the one Moses heard in the burning bush which threatened him with instant death if he dared come near it without first conforming to the rules laid down. You have only to touch "one" of the "live wires" of our "Trolley Cars" when you will realize the fact much quicker than it takes me

to write of it. Moses only saw the blazing bush; he did not see the Spirit. Neither do we see "Electricity," only when it is adjusted for the purpose of lighting our houses and streets, etc. Yet we must admit that Thales' and his contemporaries knew no more about the origin of spirit or soul in amber than our physical scientists do at the present day about the origin of Electricity, X-Rays and Radium. Yet it is here and destined to be of incomprehensible service to mankind, either for medical purposes or for driving our Trolley Cars, lighting our houses and streets as if it were with Chain Lightning.

Seeing that Thales raised the question that "Water" is the "Origin" of all things and "Electricity" the soul in all things, we cannot refrain from taking notice of the development and utilization of the "Great Natural Wealth of Water Power" of Canada which took place lately, when the Canadian Power Company opened its power-house in Queen Victoria Park, Niagara Falls, for the purpose of operating street cars, factories, mills, etc., and for lighting towns and cities a hundred miles away. The "Water" is taken from the Niagara River, at a distance above the "Falls," is carried by means of a feeder canal to the wheel-pit, falling then with tremendous force upon the turbines at the bottom of the pit. It sets up and maintains their terrific whirling motion. The power thus secured is transmitted by great steel shafts to the surface of the pit, and there by means of large generators converted into "Electrical Energy."

Besides the Niagara Falls we have also harnessed Sturgeon Falls, Shawinigan Falls, Richelieu Falls (at Chambly) and the Lachine Rapids, etc., for the same purposes. No one can deny but this is the most wonderful emanation and condensation of the power of Electricity in the history of the world, going back only twenty years, not to speak of Thales' time. What it will be in other twenty years would not be safe to predict.

The plant now in course of construction at the Niagara Falls, together with the large installation on the United States side of the Falls, are designed to develop an aggregate of about a million horse-power.

Thales made Electricity the soul in all things. Anaximander conceived the original contraries of heat and cold as the basis of life, and Anaximenes made "Air" or breath the basis of life or "Soul" in every animal; none of them raised the question of the immateriality or immortality of the "Soul."

Xenophanes enunciated the proposition "All is One," but he did not say whether this one was Intellectual or Material. The "One" is Deos. Deos with him is all eye, understanding, ear, unmoved, undivided, undisturbed, ruling all through thought, and, like to men, neither in form nor understanding, thus establishing the unity and immortality of the Deity from whom everything receives life or "Soul." Parmenides opposes this unreasoned conception of Deos, and declares this Being to be self-existent, self-sufficient and imperishable, whole and sole, immutable and illimitable, indivisibly and timelessly present, perfectly and universally identical.

Parmenides said the "One" was limited, Melissus

said the "One" was unlimited, Xenophanes said the "One" is "Deos."

The humanity of their position "is" the "thought" that this great Universe must be "One." With this Idea of a single Life, of a single Being, before them. What "is," they thought, cannot be this coming and this going that sense apprehends; there must be that which "is" in the midst of it all, and it alone "is," in a word. They simply refused to believe in the changeableness as the principle of the world.

"Zeno" says: The "changeableness" and plurality of the everyday world "is" supposed to contradict the "conception" of the Universe as a single unchangeable "Being," and I admit that both cannot be correct. However, Parmenides has, for his part, established the reasonableness of the supposition of Unity, and I will now, for my part, point out to you that these elements (change and plurality) involve contradictions, and are, therefore, incorrect or untrue to Reason. This Reason is against the world of sense; the cognition of sense is deceptive.

Anaxagoras, who flourished about the same time as Pythagoras, Heraclitus, Democritus and Leucippus, declared that neither "Matter" nor "Force" could account for the beauty and adaptation of the course and structure of the Universe; that Origination and Destruction are phrases which are generally misunderstood; that nothing is really "originated or destroyed"; the only processes which actually take place are "combination" and "separation" of Elements already existing. These ele-

ments we are to conceive as having been in a state of Chaos at first, infinite in number and infinitely small, forming in their immobility a confused and Characterless Unity. About this "Chaos" was spread the "Air" and "Ether," infinite also in the multitude of their particles and infinitely extended. Before separation commenced there was no clear colour or appearance in anything; whether of moist or dry, of heat or cold, of bright or dark, but only an infinite number of "seeds" of things, having concealed in them all manner of forms, colours and savours; in short, "All things were as One;" then cometh "Mind," "A Thinking Being," and by division brought "all things" into "Order." This "Mind" is Infinite, absolute, mixed with nothing. alone by itself, the purest and subtlest of all things. It is omniscient and omnipresent; it is dominant. especially in what has "Soul," whether greater or less; it has disposed everything into a world; nothing is separated from another but "Mind." Every mind is similar, both the greater and the less, but no one thing is similar to another; in fact, his "Originative Principle" is a "Designing Mind," "A Soveregn Intelligence," who causes things to come into Being and recalls them back from Being into infinite Void; or who knows all about the things which pass into or out of existence.

The "Fundamental" Feature of this Doctrine of the "Mind" lies in the notion of the world-forming power. He could not explain Motion from mere Matter, so he postulated an "Incorporeal Being" the source of movement and arrangement.

Anaxagoras discarded the dominant and dog-

matic belief of the state that Air, Earth, Fire and Water were the primary forms of life, and publicly propounded the doctrine of "Mind" and "Matter." or that a "Supreme Mind" or Sovereign Intelligence, distinct from the visible world, was the Origin of all Existence, and had imparted Form and Order to the Chaos of Matter. A doctrine contrary to the orthodoxy of the Church and State, for which he was tried for "Heresy," found guilty, fined five talents and ostracised from Athens. Had it not been for the influence and eloquence of his pupil. Pericles, he would have suffered death. Socrates actually suffered death for the same doctrine, which settled that sort of Philosophy for years to come, and it was proclaimed that every fellow who propounded such a doctrine contrary to that of the Church and State would meet with a similar fate, or a like fate would be meted out to him.

On account of his religious views we have no hesitation in saying that Bishop Berkeley suggested "Mind," a supreme mind, to counteract Locke's materialistic views, though Berkeley was accredited to be an original thinker, yet he may have had in his mind Anaxagoras' theory, when he suggested that "Matter" can only exist so long as a "Mind" exists to comprehend it, all else is only "Sensations and Perceptions."

Hume, who had no love for religious dogmas, thought he had a fine opportunity and embraced it, to demolish the Bishop's Theory on the grounds of his own suggestions.

Our opinion is that Anaxagoras was the first who suggested the transition of the problem from

"Matter" to "Mind;" that, when he conceived the Idea of "Mind," he was thinking of the human "Mind"; that, though he may not have had very pure conceptions of the "immateriality" and "personality" of the Mind, yet he believed in both. Could you blame him? Not for a moment, when men like Bishop Berkeley stumbled so badly after such a length of time and with the most modern ideas before him.

The Heraclitean Conception of the "Universe" as the realization of the "Universal Being," so also the "Body," whether of man or of any other creature, is the "realization" for the time being of a "Soul," which Heraclitus defined as "A Fiery Vapour," as a Kindred Vapour; it is a manifestation of the Essential Element, formless, everchanging with every breath, and is the constructive and unifying force which keeps the body together and conditions its life and growth. With every breath we take we inhale a portion of the all-pervading vital element of all being, in which we live and move and have our consciousness.

The eternal and omnipresent wisdom becomes our wisdom through the senses, and especially through the eyes. We are not deprived of this wisdom in sleep, only the flower, for the breath holds on to the root. On awakening we again begin to partake of our full measure of the living thought.

Man possesses "wisdom" because his soul is kindled by union with the universal spirit, but he has a base side, which is the element of unreason, and it depends on the dryness or moistness of the Spirit of the Divine within him. If too moist like an

inebriate person, he is base; so the trustworthiness or otherwise of the senses depends on the elevation or baseness of the spirit that is within. To those whose souls are base and barbarous, the eternal movement, the living fire, is invisible. Too much of the moisture element in us, then, whether sleeping or waking we only see inanimate things; our spirits are dead. In other words, our trustworthiness depends on the union of the fragmentary perceptions with the "Eternal Law," the quality of it, on the dryness or moistness of the spirit within. Of absolute knowledge human nature cannot comprehend, but only the Divine, because our body and spirit is finite; without the body and the life of the body, that "Soul" is a blind and fleeting ghost.

Of such unrealized souls, there are many in various degrees and states; the whole air is full of them. Multitudes of fleeting ghosts or spirits are continually seeking realization through union with bodies passing at birth into this "One" and that "One," and at death issuing forth again into void space. The Union of the Soul and body became necessary for the realization of the "Soul," even as the reality of the Universal Being was the Unity in Multiplicity.

Parmenides said the "One" was limited. Heraclitus said Unity in Multiplicity. Parmenides resolves all becoming into an absolutely permanent Being. Heraclitus resolves all permanent existence into an absolutely fluent Becoming. Now, the question arises: Why is all being a becoming, or, Why is the "One" perpetually sundered into the Many?

The Atomic or Materialistic Theory must answer this question, in order to take rank as a theory of the Universe—a Positive, not a Negative Theory. Empedocles attempts to answer this problem, (see 1st Essay, page 30), and defines: The "Soul." a Fiery Vapour, or an ordered composite of all the elements of life in Nature, in this composite of the elements in Man, and of the elements in Nature. Empedocles found a solution of our powers of perception. The Faculty of Apprehension is specifically located in the blood, the varieties of apprehension and the Specific Faculties in each individual depended on the blood mixture; dull and stupid persons had a deficiency of the lighter element; quick and impulsive persons had a larger proportion of these. Orators had a perfect mixture in their tongues, Cunning Craftsmen in their hands, and so on. Sensation in plants and the lower animals have it in similar fashion. The process of Sensation, he conceived to be conditional, by an actual emission from the bodies perceived of images of themselves, consistent to their nature, to be indeed an emanation of the "Universal Being." He draws no radical distinction between sense-apprehension and thought.

The "Soul" is composed of Atoms, extremely delicate and fine, it very much resembles the "breath," with a mixture of heat thrown in at one time coming nearer to matter, at another time coming nearer to fire. Owing to the delicacy of its composition, it is extremely subject to variations, as we see it in passions and emotions, its phases of thought and its varied experience, without

which we cannot live. The Epicureans believed that the "Soul" is the chief Cause of Sensations in us. Not that it could of itself have had Sensation without the enveloping of the rest of the structure, in fact, the rest of the structure having prepared this Chief Cause, gets from it a share of all which the soul has. The "Soul" being of equal Material Composition with the other portions of the bodily structure "dies," of course, with it; that is, its particles, like the "rest," are dispersed to form "new" bodies.

From the foregoing explanation of the "Soul" we can easily understand that these men believed in the "Doctrine of the Transmigration of Souls," of which the following passage is a free Translation.

"There is a Decree of Necessity, a law given of old from the gods, eternal, sealed with mighty oaths, that when any heavenly creature (daimon), of those, who are endowed with length of days, shall in waywardness of heart 'defile' his hands with sin of deed or speech, he shall wander for thrice ten thousand seasons far from the dwellings of the 'Blest,' taking upon himself in length of time, all manner of Mortal Forms, traversing in turn the many toilsome paths of Existence. Him the 'Aetherial Wrath' hurries onward to the deep; the deep spues him forth on to the threshold of the earth, the unworn earth casts him up to the 'Fires of the Sun,' and the Aether hurls him into the eddies. One receives him, and then another; but everyone detests him."

"So the life of all creatures was a great expiation, an eternal round of punishment for sin. In

the eternal flow of life each creature rose and fell in the scale of existence, according to the deeds done in each successive life, rising among men to the functions of prophets, priests or kings, or among beasts to the dignity of the lion; or among trees, to the beauty of the laurel: or, on the contrary, sinking through sin to the lowest forms of bestial or vegetable life, till at last, through obedience and right-doing, they have expiated their wrong, are endowed by the gods with endless honour, to dwell for ever with them and share their banquets, untouched any more with human care. human sorrow or human pain." The "Hanging" of any living creature was abhorred for all were "Kin," all foul acts were forms of sin, worse than suicide. Life should be a long Act of worship, of expiation, of purification in the dim past, they pictured a vision of a golden age, in which men worshipped not many gods, but "Love" only, and not with sacrifices of blood, but with pious images and cunningly odorous incense and offerings of fragrant myrrh, with abstinence, and above all, with that noblest Abstinence, the Abstinence from "Vice" and "Wrong." The idea of a personal relation to an eternal rewarder was only vaguely held at this time in Greece.

CHAPTER VIII.

The idea of a personal immortality was a mere pious dream, a doctrine mooted here and there in Secret Mystery. Men did not bother their minds about it, their sole attention was centered in the Universe, the Heavens, the Stars, and the strange phenomena of the laws of Nature. Mr. Hume shows no such partiality in favour of the world of Spirits (whatever he may have thought about their peculiar mode of inebriation). He adopts the theory of ideas in its full extent, and shows that there is neither matter nor mind in the Universe. nothing but impressions and ideas. What we call a body, is only a bundle of sensations, and what we call the mind, is only a bundle of thoughts, passions and emotions, without any subject; he maintains that these are all on the lines of Bishop Berkeley's suggestions. Our minds are only a Series of Feelings. Hume's "idea" is "Mind Perception and Object," all in "One"; by the term perception, he means the Mind itself. Therefore there is nothing dreadful about death, for there is nothing left to know or feel anything about it.

Democritus constructed the human body, and the bodies of all the other animals, out of Fire, Heat, Atoms and Empty Space; by a combination of these, by a continual Melting of the Air we breathe, and those forms of Atoms, which are in continual flow, the System is kept up and increased; that man and

the other animals can only survive so long as they can keep up this process, and that all animals are on an equality so far as Eternity or Future State is concerned. From such a theory we infer that the whole human body is one Mass of self-existent Matter, from which there arises a wider and wider expanding movement throughout the general Mass: by which there would be no end to the increase in bulk. When, we would ask, is this increase arrested? Surely not at death, for there could be no death owing to the increase of self-existent Matter? Also, what cause arrests this "Increase" and produces decay, in the Vital parts, in order that it may spring up in another form? The only answer we get is: "Out of Nothing arises Nothing." thing that is can be destroyed.

His "Soul" is composed of fine, smooth, round Atoms, like those of Fire, which are the most mobile, and by their motion permeates the whole "Body" and produce the phenomena of life. This structure of exceeding tenuity and nimbleness was the source of the motion characteristic of living creatures, and provided that elastic counteracting force to the inward-pressing air, whereby were produced the phenomena of respiration. Every object, whether living or not, kept its form and distinctive existence by its possession, in a degree of a kind of Soul or Spirit of resistance in its structure, adequate to counteract the pressure of external forces upon its particles.

A very subtle definition, but it is Matter for all that, and this Matter is distributed throughout the Universe, and everywhere produces the phenomena of heat and of life.

The "Soul" is the essential part of Man; the "Body" is only the Vessel of the Soul, and this must be our principal care. Mind he regards not as the world building force; but only as one form of Matter amongst others.

There was indeed a Soul or Spirit of the Universe, as there was a Soul or Spirit of every individual thing, that constituted it; but this was only a finer system of Atoms after all. All else is convention or dream; the only realities are atoms and empty space, and it is produced by Necessity or Fate.

Of absolute truth through the senses we know nothing; our perceptions are only conventional interpretation of we know not what.

Before attempting to pass any opinions on Aristotle's Vital Principle (or Soul), may we be permitted to quote at length from his Treatise (De Anima), on the subject in which the fundamental conception is very completely illustrated?

"Now, as to substance, we remark, that this is one particular Category among existences, having their different aspects. First, there is to say, the Raw Matter, having in it no definite character or quality: Second, the Form or Specific character, in virtue of which the thing becomes nameable. Third, there is the thing or substance, which these two together constitute. The "Matter" is, in other words, the potentiality of the thing or Form (is the realization of that potentiality). We may further have this realization in two ways corresponding in character to the distinction between knowledge and actual contemplation or "Mental Perception."

Among substances as above defined, those are most truly such which we call bodily objects. and among those, most especially, objects which are the products of nature, inasmuch as all other bodies must be derived from them. Now, among such natural, some are possessed of life, some are not by life, that is a process of spontaneous nourishment, growth and decay. Every natural object naving life is a substance compounded of several qualities. It is, in fact, a bodily substance defined in virtue of its having life. Between the living body, thus defined, the Vital Principle (or Soul) a marked distinction must be drawn. The body is the matter in which something else subsists, and what we mean by the Vital Principle (or Soul) is just this substance in the sense of the form or Specific Character that subsists in the Natural body, which is potential living; that is, the Vital Principle (or Soul) is substance as realization only. However, if such a body as has been just defined, recalling now the distinction between realization as possessed knowledge and as actual contemplation, we shall see that in its essential Nature, the Vital Principle (or Soul) correspond rather to the first than to the second; for both sleep and waking depend on the Vital Principle (or Soul), or life being there, but of these, waking only can be said to correspond to the active form of Knowledge. Sleep is rather to be compared to the State of having without being immediately conscious that we have. Now, if we compare these two states, in respect of their Priority of Development in a particular person, we shall see that the state of latent possession comes first.

Aristotle's definition of the Vital Principle, or Soul, is the earliest realization of a Natural body, having in it the potentiality of life.

"To every form of organic structure this definition applies, for even the parts of plants are organs, although very simple ones; thus, the outer leaf is a protection to the pericarp and the pericarp to the fruit; or, again, the roots are organs bearing an Analogy to the mouth in animals, both serving to take in food. Putting our definition then into a form applicable to every stage of the "Vital Principle" (or Soul), we shall say that "The 'Soul' is the Earliest realization of a Natural body having Organization;" in this way we are relieved from the necessity of asking whether Soul and Body are One. We might as well ask whether the Wax and the impression are one, or, in short, whether the Matter of any object and that whereof it is the matter or substratum are one, as has been pointed out. Unity and Substantiality may have several significations; but the truest sense of both is found in realization. The general definition of the Vital Principle above given may be further explained. thus .

"The Vital Principle (or 'Soul') is the rational substance or function, that is to say, it is that which gives essential meaning and reality to a body knowable;" thus, if an axe were a natural instrument or Organ, its rational substance would be found in its realization of what an axe means; this would be its Vital Principle (or Soul); apart from such realization, it would not be an axe at all, except in name, being, however, such as it is, the axe

remains independently of any such realization. For the statement that the Soul is the reason of a thing; that which gives it essential meaning and reality does not apply to such objects as an axe; but only to natural bodies, having power of spontaneous motion (including growth) and rest. "Or we may illustrate what has been said, by reference to the bodily members. If the eye be a living creature. "sight" will be its soul, for this is the rational substance or function of the eye. On the other hand, the "Eye" itself is the Material Substance, in which the function subsists, which function being gone, the "Eye" would no longer be an eye, except in name, just as we can speak of the eye of a statue or of a painted form. Now, apply this illustration from a part of the body to the whole; for as any one Sense stands related to its organs, so does the Vital Principle sense in general to the whole "Sensitive Organism" as such, always remembering that we do not mean a dead body; but one which really has in it potential life, as the seed or fruit has. Of course, there is a form of realization to which the name applies, in a specially full sense. as when the axe is actually cutting, the eye actually seeing, the man fully awake. But the Vital Principle (or Soul) corresponds rather with the function of sight or the capacity for cutting, which the axe has, the body on the other hand standing in a relation of potentiality to it. Now, just as the Eve may mean both the Actual Organ or pupil, and also the function of sight, so also the living Creature means both the Soul and the body. We cannot therefore think of body apart from Soul, or soul apart from body. If, however, we regard the Soul as composed of parts, we can see that the realization to which we give the name of Soul is in some cases essentially a realization of certain parts of the body. We may, however, conceive the Soul as in other aspects, separable, in so far as the realization cannot be connected with any bodily parts. Nay, we cannot be certain, whether the Soul may not be the realization or perfection of the body.

According to the Great Polymath, Conservation and Nutrition is the "Soul" in plants, sensation in animals, and the human "Soul" is a combination of Nutrition, Sensation and Cognition. The Soul is related to the body as form is to matter; it is animating principle; simply for this reason the soul cannot be thought of without the body, neither can it exist by itself, and with the body it ceases to be. It is different with Thought or Reason, which constitutes what is specific in man as "Pure Intellectual Principle;" it is absolutely simple, immaterial or self-subsistent, it is what is divine in man; it comes as being no result of a lower process. As regards Sensation, Epicurus like Democritus conceived bodies as having a power of emitting from their surface extremely delicate images of themselves; those are composed of very fine Atoms; in spite of their tenuity they are able to maintain for a considerable time their relative form and order, though liable after a time to distortion. They fly with great celerity through the void and find their way through the windows of the senses to the Soul, which by its delicacy of nature is in sympathy with them and apprehends their form.

The gods are indestructible, being composed of the very finest and subtlest atoms; their life is one of perfect blessedness and peace; they are in number countless; they are not subject to the passions of humanity; they dwell apart in the intercosmic spaces.

"Cicero" jestingly remarks: "Epicurus by way of a joke introduced his gods so pure that you 'could see through them, so delicate that the wind 'could blow through them, having their dwelling-'places outside between two worlds for fear of 'breakage.'" According to Aristotle: (a) All existence and life is referred to the natural forces inherent in Matter. (b) The activity of the Soul consists in actual motion. (c) There are functions of the soul which cannot be related to bodily conditions. (d) There was in man a portion of Divine Aether, which dwells eternally in the heavens, and was the ever-moving cause of all things. (e) If there was in man "a Passive Mind," which became all things, as all things through sensation affected it; there was also "a Creative Mind" in man, which is above and unmixed with that which it apprehends, gives laws to this; is essentially prior to all particular knowledge; is therefore eternal; not subject to the conditions of Time and Space, consequently indestructible. We have here a vague conception of immortality.

Here we are stranded in the dualism of a transcendental "Deity," and the world he governs of the body with an animal Soul and the separable "Vital Principle." The thought or reason, Strato regarded as consciousness based upon sensation.

He supposed the activity of the Vital Principle to consist of actual motion; all existence and life he referred to the natural forces inherent in Matter. To our Modern Materialists the idea of the "Soul" consisting of fine Matter would, of all others, be most repugnant, though we now find such ideas only amongst fanciful dualists, yet the case was quite different when nothing was known as to the nature of nerve force or the functions of the brain.

CHAPTER IX.

"The Material Soul" of Epicurus is a genuine constituent of the bodily life, an "organ" and not a heterogenous substance existing independently and continuing to exist after the "dissolution of the body." The body encloses the soul and conducts sensations.

If the body be destroyed, the soul must also be "dissolved." The Origin of Mental images is due to a constant streaming of fine particles from the surface of bodies; in this manner actual Material

Copies of things enter into us.

"The Actualization of an Organic body possessing a potential life," "the organic body possesses life only potentially." "The Actualization of this potentiality comes from without, and that is all." The human form contains the spiritual being in complete interpenetration with the sensitive and appetitive faculties as these constitute the animal soul, and the same thing with the merely "Vital Principle," thus the infinity of Forms under which Matter appears taught Bruno that "It does not receive from another something eternal, but produces them from itself and engenders them from its bosom. Matter is not that naked, mere empty capacity without efficiency, completeness and fact, or "prope nihil," which some philosophers have wished to make it, and, to which they have so much contradicted each other. In Bruno's conception "Matter" is real, that is, existing in the Act; in the Aristotelian conception "Matter is potential," i.e., existing only in possibility, not in Act. Bruno makes "Matter" the true essence of things, and makes it bring forth all forms out of itself. Aristotle makes Matter the potentiality of the thing or form, and refers all existence and life to the natural forces inherent in Matter. In Berkeley's conception "Matter" is only real so long as there is a supreme "Mind" to comprehend it. In Hume's conception Matter does not exist, only ideas and perceptions. Again, we would ask: Could "Matter" or Atoms ever produce "Order" or Organization on an extensive scale, or could Atoms ever produce Order or Organization of a durable Character? We emphatically say, No; unless ordered, arranged and adjusted in ways of which Intelligence alone can be the Ultimate Explanation.

Animated Being seems to be distinguished from whatever is Inanimate, by the two properties of "Motion" and "Feeling," and these two are almost the only distinctions which have been transmitted to us by the earlier writers upon the subject. Some conceived the Soul to be a Motor Power, maintaining that nothing can impart "Motion" unless it be "Self-Motive." Others conceived it to be "A Fiery Vapour," as a Kindred Vapour, for a manifestation of the Essential Element; maintaining that it is formless, ever-changing with every breath we take, yet it is the constructive and unifying force; which keeps the body together and conditions its life and growth. They also make breathing the boundary of life, that animal bodies crush by their contraction, those forms of atoms, which are in continual flow, give motion, and that compensation is afforded for the exit, by the entrance of other forms, during the act of breathing, and asserting that animals can survive only so long as they can support or keep up this process.

We had a common truism among us in our early days, that when a person died, he died for the want of breath; now, it is heart failure. All who held the same theory assumed that "Motion" is the most characteristic property of the Soul, and that while it moves all others, it also moves itself; or is self-moved.

Anaxagoras was of a different opinion from those who held that Mind and Soul were absolutely the same. He said they were not the same: that "Mind" apart from external things was the source and Destiny of all things. Again, we repeat, this is the Berkeleian conception, which Hume so gleefully demolished, not because he actually believed in it himself: but to take down the Bishop; there is nothing a lawyer likes better than to take down an orthodox and dogmatic divine. We are no sooner left stranded in the dualism of a transcendental, universal Being, and the world he governs, of the body with an animal Vital Principle (or Soul), and the Separable immortal spirit, than another class of historians of Philosophy spring into existence, who strain every nerve to abolish all dualism between the Spiritual and Material, and cast us on the shoals of Pantheism or Monotheism. By making the Originative Principle and the World "One"—(that is Deus, and the World "One"). With the stoics, the Originator

or First Cause is the active and formative power of "Matter" imminent in it and essentially combined with it. The Universe is the Originator's body, and the Originator is the World's Vital Principle (or Soul). Thus, they conceived the "Originator" and Matter as one substance, identical with itself: the world has no independent existence; it is produced, animated and ruled by the Originator; in it the First Cause is the eternal necessity which subjects all to unalterable law, or as our modern physical scientists would say, the universality of the law of Causation; which, of course, they cannot deny that there is a "First Cause," call it what you will.

The "First Cause" is the Spiritual Breath, which permeates nature, the Art-subserving fire, which forms or creates the Universe. Everything in the world is breathed into by the Originative Life: coming into special existence out of the Universal Being, and returning into it again, and thus bringing to pass a necessary cycle of constant origination and decease, in which perpetually re-creating itself only the whole is permanent, and in every actual existence there is "Reason." Philosophers differ with respect to "First Causes," both as to their nature and number, but those who make corporeal differences most, from those who hold them to be incorporeal, and from those who say that they are composed of "Corporeal" and "Incorporeal" Molecules. Yet all have assumed that the Nature of First Causes is motive.

We have a very imperfect conception of the distinction between Animated and Inanimated Beings, handed down to us. They were distinguished from one another by the "Two Properties of Motion and Feeling. All beings, which had Motion and Feeling were animate. All existences which had not Motion and Feeling were inanimate: thus, Sensation was made the lowest form of distinction between Animate and Inanimate things.

Our Biologists, Physiologists, Psychologists and Zoologists of the present day make the same distinction; though on a more enlightened scale; their lowest stage is "Sensation;" their marginal line is drawn here; because they lose their reasoning in the "Form," and cannot go further back for a deeper "Primordial Fact." They tell us, "Sensation" is an affection of the Sentient Organism; there is no disputing that; but we must ask them: "Why do they ignore the first case,—the Prior Question? Where the 'Idea of Infinity' comes from," and, second, Where the "Idea of a Sentient Organism comes from?" Professor Huxley pertinently replies: These are Metaphysical problems. "I must confess that I find the Air of that region of speculation too rarified for my constitution, and I am disposed to take refuge in Ignorance."

"Pyrrho," the Originator of the "Doctrine of Ignorance," when once surprised in some sudden access of Fear, confessed that it was hard for him to get rid of the Man in himself.

Vigorous Men and growing nations are never Agnostics; they decline to rest in mere "Suspense" and "Ignorance;" they are extremely the opposite of "Inactive" and "Submissive;" they believe

earnestly and feel strongly. The most pronounced Agnostics of the last half century have been extremely vigorous and grasping—declining to rest in "ignorance." Their desirability for wealth and power was not in the least affected and they felt strongly, if any one did not believe their word; in short, felt insulted if anyone said he disbelieved them—and none more so than Huxley himself.

How can he expect others to believe in his writings, when he casts such a slur on others. He and many others have created a bad precedent for the uneducated, and it amounts to pure viciousness among the half educated.

Men's minds are too inquisitive, and were always so, to remain inactive under any circumstances. If those men, who unblushingly call themselves Agnostics, would only devote a little time to the study of the Origin of Existence; to the study of how protoplasm comes into existence, they would find out that there must be some "Mysterious Activity," as Huxley puts it, to make it come to life. A Mysterious Activity—A "First Cause," in short: A Cause which makes it come to life. You may call it what you will, provided we understand one another, when we speak of that, which causes the germ to spring into existence. No Scientist dares deny that; he must own up to a First Cause—"A Metaphysical Cause" or a cause beyond Nature.

The number of Guessers who have pretended to solve this problem is legion; in fact, every Tom, Dick and Harry who could put a few "ideas" together, or thought he could do so, talked about Evolution in his labour, in his occupation, in his

trade, in his profession and in his calling. Evolution in this and evolution in that, and evolution in everything. If you are not an Evolutionist, you are not in it.

Then, on the other hand, we have a great number of "Alarmists," who have discovered Mites in Cheese, "Bacillae" in "Diseases," and "Microbes" in "Dirt," who howl, that we are all dead men, unless these can be annihilated by a pulp, a liquid, or by a Transfusion of a fluid. To such, we would answer, "All Things Pass." Our fathers and our fathers' fathers knew from the earliest of ages that there were a seed time and harvest, that there were "Mites in Cheese," and Microbes in Dirt, but they never believed that they sprung from these.

Suppose we ask the deceased Professors Balfour, Clifford, Dawson, Sidgewick, Lubbock, Lancaster, Müller, Tyndale, Faraday, Mill, Hamilton, Bain, Wallace, Chalmers, Calderwood, Caird, Tait, Huxley, and the present Lord Kelvin: What is their opinion of the "Origin of Existence"; 2, Of the Origin of the Universe; 3, Of the Origin of the Soul; 4, Of the Origin of Moral Being: Everyone of them would admit that the knowledge we have leads us to find the Cause, and that we know the Universe as being physical, intellectual and moral; that there must be power adequate to produce every phenomena in the Universe; that this power may be Force, Intelligence or "Will;" but we admit of no deviation from the Single Law of Intelligence: that there must be power adequate to produce fact; this we hold to be certainly true, whether the power be observed by us or no, but the certainty of its existence is that which leads to metaphysical enquiry. In this way alone can we reach the intelligent recognition of the "Fixed Law of the Universe," and the discovery of Fixed Law leads inevitably to the acknowledgment of Intelligence and Personality; in fact, to a "First Cause": in other words, to a "Creator of the Universe," or to a "Creator of the Government of the World;" in short, when we seek an explanation of Fixed Law itself, there can be no explanation short of Sovereign Intelligence. Here, the recognition of Sovereign Intelligence is the natural outcome of the exercise of Intelligence; but Huxley says that though I admit all that, I declare I cannot explain or know anything about the Sovereign Intelligence (Ignoramus et ignorabimus).

CHAPTER X.

The Testimony of Professor Balfour (late Professor of Botany in the University of Edinburgh), a scholar of undoubted ability, experience and research; in fact, a Samson in the Science of Botany, who was the Originator of the Natural Method of the Classification of the Vegetable Kingdom; a Method which is in accordance with the "System of Nature"; that is, the System of a Sovereign Intelligence, will be sufficient to answer my question concerning the Origin of Existence, of the Universe, and of "Moral Being."

"In examining the Vegetable Kingdom, we observe that the individuals composing it are formed by a "Great First Cause" in accordance with a principle of Order and Intelligence, as well as a

Principle of Special Adaptation.

"In Vegetable Anatomy and Physiology we note the order pursued in the arrangement of the various parts of the root, stem, leaves and flowers of plants. We trace in an elementary manner their different functions, and then we proceed to apply the facts of Vegetable Anatomy and Physiology to the classification of Plants, and to consider the plan according to which they may be grouped together in Classes and Families. We see around us various Kinds or Sorts of plants, more or less resembling each other." "In Systematic Botany:—We endeavour to mark those resemblances, and to determine their relations. In associating plants in

certain groups, we naturally proceed on an 'Idea of Resemblance' or likeness, while in Ordinary language, this 'Idea' is 'vague' and indefinite: in Scientific language, it must be 'strict' and 'vigorous." It is not enough to say, that one plant resembles another in its general aspect. We must ascertain the particulars of agreement and the points of difference. We must weigh well the importance of the characters, and must compare Organs, which are equivalent in value, and thus we shall often find, that plants, which to common observers appear "alike," are in reality "totally different." A species is an assemblage of Individuals presenting certain constant characters in common. and derived from "One Original Stock." For each Species, we believe that there has been a "Parent Stock," which has given Origin to a succession of "Similar Individuals." There is no evidence of a "Transmutation of Species." The erroneous statements regarding the conversion of oats into rye have proceeded on imperfect observation. What are called varieties, therefore, are Variations in Species. We admit that they can be improved by cultivation; but if allowed again to run wild, they would return to their original stock. In arranging plants according to Nature, or the "Natural Method" or System, the object is to bring together those which are allied in all "Essential Points of Structure." It is so called, because it professes to follow the "System of Nature," i.e., the System of a "Sovereign Intelligence," and thus takes into account the "True Affinities of Plants on a comparison of all their Organs." Darwin was so struck

with Professor Balfour's "Natural System of the Classification of the Vegetable Kingdom, that he set himself to work, and to find out, on the same lines, how far he could trace the Development of the Animal Kingdom. When he could not get the connection, he said it had become annihilated or lost, from which the truism arose Darwin's Missing Link, in his "Evolution Theory." This "Doctrine of Evolution" adopted by Professor Huxley, so far as the present physical World is concerned, postulates the Fixity of the rules of operation of the Causes of Motion in the Material World. "If all kinds of Matter are modifications of "One" Kind, and if all modes of motion are derived from the same "Energy," the orderly Evolution of Physical Nature, out of one Substratum, and one "Energy" implies that the rules of Action of that energy should be fixed and definite. In the past history of the world, back to that point, there can be no room for chance or necessity. Huxley confesses that he finds the air of this region of Speculation too rarified for his constitution, and takes refuge in "igoramus et ignorabimus. We are ignorant, and we shall be ignorant, said to be the outburst, for his "Agnosticism," which recalls Pyrrho's two phrases, (a), "Suspense of Judgment; and (b), "Impassibility."

Huxley assumes Man to have arisen in this manner, though by no means necessarily in one locality, whether he arose singly, or a number of examples appeared contemporaneously, is also an open question for the believer in the production of species, by the gradual modification of pre-existing

ones. At what epoch of the world's history this took place, again, we have no evidence whatever. If you please, you may, with perfect consistency be the strictest of monogenists, and even believe in Adam and "Eve" as the primaeval parents of all mankind; but the reconciler and combiner of all that is good in the monogenetic and Polygenetic Theories is Darwin, in his "Origin of Species."

How pertinent are the words of "Huxley" in reference to the tradition that Man-like apes had been seen in Africa over three hundred years ago, viz.: "Ancient Traditions" when tested by the severe processes of Modern Investigations, commonly enough fade away into mere "dreams;" but it is singular how often the "Dream" turns out to have been a half-waking "one," presaging a "reality;" according to Huxley, ancient traditions are mere dreams; but how singular the dreams turn out a reality. What makes it a reality to him is just this: he saw these Man-like apes, and was convinced just like his namesake of old.

The Portuguese sailors, who saw these Man-like apes in Africa over three hundred years ago were just as sure of their existence then as Huxley was when he saw them, that "they appeared to them like men in many ways, and were very dangerous." It was no dream in the eyes of the sailors; it was only a pertinent dream in Huxley's brain; of course, he can't believe others, unless he sees for himself.

Huxley, on being told that Von Wurmb had sent a couple of the Pongo "Orang-Outang" to Europe, said, "I doubt the fact," and Camper promised to investigate and give full details of Van Wurmb's Pongo skeleton; but Huxley said, "he never carried it out," and "I mistrust the whole representation."

As a Professor of Biology and Physiology, would Huxley admit that he was an Ignoramus? No! far from it; he would feel perfectly insulted if anybody hinted at such a statement. Yet when he composed his Essay on "Man's Place in Nature" (in 1863), he recorded the facts of others, who had never seen any of the Man-like apes; but had gathered the stories from the most unreliable sources imaginable, and believed in them with greater cupidity than he did in the Biblical stories. The philosophy of "Moral" Being depends upon a thorough knowledge of Psychology and Physiology. Why Huxley did not pursue the study of Psychology as well as Physiology is another of his "Mysteries."

We are reminded of a peculiar tribe of Ape-like people, discovered lately, in the Northeast part of the British Colony of New Guinea, who have lived so long in beats and huts erected on piles in the middle of swamps, marshes and lakes, that they can scarcely walk. Their legs have been so long unused, that they have not developed in proportion to other parts of their bodies. The "Male" is fair-sized, with a good chest, a thick neck, and arms to match his trunk; but his thighs are small, his legs are spindling, his feet are short, broad, thin and flat, and his toes are elementary and useless. The "Female's" legs are very short and slender in proportion to her figure; her toes are long, very slight, and stand out

rigidly from the foot as if they have no joints. Their profile is more ape-like than any other human beings heretofore met with. On land, these marsh people are out of their element; but like ducks on the water; they move about in their clumsy boats. hollowed to a mere shell, easy to upset, owing to the rounded shape of the log, of which they are made. They live on certain plants which grow in the marshes, on fish, on wild fowl, and on the food of the sago palm. This diet is varied, by exchanging fish and sago for vegetables from the neighbouring tribes who live on the land. There, amid reeds and water lilies, this strange tribe (of Marsh people) have lived for, no one knows how many generations. They themselves say they have lived always in houses reared on piles, in that very lake, and there is no tradition, in the tribe, that it has ever lived anywhere else. Their lives are very monotonous, and their habits apparently do not vary from one generation to another. When they die their bodies are placed at rest under a thick covering of Matting, on small platforms among the reeds. They know no better home, and have no desire for anything better. We can imagine Huxley giving the same answer as he gave when told about the Man-like apes, viz., "Ancient Traditions when tested by the severe processes of Modern investigations, fade away into mere dreams, but it is singular how often the dream turns out to have. been a half-waking one, presaging a reality."

For the last "twenty" years we have read any amount of Literature, and have listened to any amount of discussion on "Man's Place in Nature:"

"His Origin, Progress and Decay." Whether he is sprung from the Monkey, or is a production of the "Torula," "Protoplasm," or "Germ in Barm," or whether he has evolved from the "Amœba," the Protoplasm in Dirt or Mud. The number of "Guessers" who have pretended to solve this Problem is legion. Quite recently a Dr. Waters delivered an able address before a certain Society in the U.S., and in the course of his speech said: "The great event looked for by chemists, and which is destined to come from the observation of every step up till now, is the production of 'Protoplasm.' If it once can be produced, every indication to the absolute conclusion is that it must of Necessity possess life. If this ever happens, the whole idea of creation, and of Man's position in the universe will be shattered." This is all very fine and loud sounding; but we must remind Dr. Waters that he has not caught on to the proper problem. It is not the building up of the universe and all that is in it, with Professor Rutherford's shattered debris (of Atoms); but the idea: How we come by our knowledge of Life, Necessity, Protoplasm, Creation, Universe Absolute; in short, where the Ideas of "Infinity" and of Sentient Organism come from. We must insist upon everyone answering these questions, first, before attempting to build the universe. Protoplasm is being made every day. It only requires the conditions laid down (in Huxley's postulates), such as the particular "form," "light," heat and temperature to be attended to, before it could spring into life under a "Mysterious Activity." This reminds us of the American invention for

hatching birds' eggs. If the conditions laid down are violated, the germ dies; too much heat and the chick is roasted, or too much cold and the chick is frozen." Does not all this suggest the hypothesis, that there is "Order" and Intelligence" in the 'Universe," and without that, nothing can spring into Existence.

It is most singular and exceedingly surprising how Huxley tenaciously seized, and voraciously devoured "Dalton's Atomic Theory." "Schaun's Cell Theory," and "Darwin's Evolution Theory"; but rejected Berkeley's Mind Theory." which is the simplest of all the theories; for you have only to give your consent to "One Postulate," and the Mystery is solved. Just postulate the "Existence of a Great First Cause" as the "Originative Principle," when you have all that is required to account for the Origin of the Universe, and everything in it; but no! says Huxley: "The air of this region is too rarified for my constitution." I prefer that of Dalton, Schaun, and Darwin, for their theories are physical, and by them we are trying to unravel and to unfold the secrets of the Metaphysical; but whether we will succeed or not, I cannot tell. Of course, all we do is to anticipate Nature, by the invention of "Hypothesis," which, though verifiable, often have very little foundation to start with, yet not infrequently have turned out to be wholly erroneous in the end.

There is no absolute line of demarcation between animals and plants. The intimate structures and the modes of change in the "cells" of the two are fundamentally the same. The "Cell Theory," pro-

mulgated by Schaun and adopted by Huxley, who declares that he has established the following "Fundamental Truths: First:-That all living bodies contain substances of closely similar physical and chemical composition, which constitute the physical basis of life, is known as "Protoplasm." Second:-That all complex living bodies consisted at one period of their existence of an aggregate of minute portions of such substance of similar structure called "Cells," each cell having its own life independent of the others, though influenced by them. Third:—That all the Form characters of animals and plants are the results of the modes of multiplication, growth and structural change, of the cells, considered as "Form Units." Fourth: -That all the Physiological Activities of Animals and plants, assimilation, secretion, excretion, motion and generation, are the expression of the Activities of the Cells called Physiological Units.

"The Protoplasmic Cell," which the imagination of Evolutionists places at the beginning of "Time," as the "sterling point of this great process" is not merely this or that, has not merely "this" or "that" quality or possibility. It is, and in the power of that "little word" is, enclosed a "whole world" of "thought," which is there at the first, remains "there" all through the Evolution of the Protoplasm, will be "there" when these are done; is, in fact, independent of "Time and Space"; has nothing to do with such distinctions, expresses rather their Ultimate Unreality.

The same writer who advocated the "Evolution Theory," declared: "That as far as mere human

Knowledge and Intellect are concerned, the nature of the 'human soul' or its connection or relation with the 'human body' is entirely a 'Mystery.' All attempts to investigate this Divine (Sovereign Intelligence), not human problem, have hitherto not only failed to present any light on the Wonderful Mystery"; but have entirely failed even to show us how, by any scientific or Philosophic Method with which we are acquainted, we shall be able to acquire such Knowledge." Our only answer to such a declaration is that this "Wonderful Mystery" of Being and Life, the true purport and reality of this "World," of which we seem to be a part, and yet of which we seem to have some apprehension as though we were other than a part, the strange problems of Creation, of Change, of birth and death, of love and fear of right and wrong; purification of a heaven, dreamt of or believed in, or somehow actually apprehended, of life here, and of an immortality yearned after and hoped for; these "Wonderful Mysteries" no philosophy ever did or ever can "empty" of their strangeness, or bring down to the level of the "commonplace certainties" of daily life or of science-which are no more than shadows after all: they seem Certainties, because of the background of "Mystery" on which they are cast.

The systems of great philosophers, poets and preachers may die; but such death means, as is said of the ordinary death of things, only an infinity of new births being dead, their systems yet speak in the inherited language and ideas and aspirations and beliefs, which form the never-ending,

still-renewing material, for New Philosophies and New Faiths.

The Mystery of Existence, the "Unreality of what seems most real, the "intangibility" and Evanescence" of all things Earthly, have remained, and always will remain, amongst the deepest and most insistent of the World's thoughts in its sincerest "Moments" and in its Greatest Thinkers.

That anyone should lose sight of the idea of law. of rationality, of eternal self-centred freedom, and so be carried away by some "vision" of a gradual process of Evolution, from mere emptiness to fullness of Being, such a position would be not dissimilar to that of many "would-be Metaphysicians among Evolutionists, who, not content with the "Doctrine of Evolution" as a Theory in science, an ordered and organizing views of observed facts. will try to elevate it into a vision of what is, and alone is behind the observed facts. They fail to see that the "more blind," the "more accidental," so to speak, the process of differentiation may be, the more it is shown that the struggle for existence drives the wheels of progress along the lines of least resistance by the most common-place of "mechanical necessities;" in the "same proportion" must a 'law' be posited behind all this process." "A reason in 'Nature' which gathers up the 'beginning and the ending."

THIRD ESSAY.

ORIGIN OF OUR KNOWLEDGE,

OR

HOW DO WE COME BY OUR KNOWLEDGE



CHAPTER XI.

ORIGIN OF OUR KNOWLEDGE.

The Transition from Ancient to Modern Philosophy was brought about by the feeling that philosophy should be freed from the control of the church and state, and that the intellectual powers of the "Mind" should be given greater freedom to prosecute, with care and constant effort, the search for truth in Nature. Scientific interest excited the spirit of free enquiry and a thirst for Knowledge. Objects of Faith became objects of thought. Men were carried away from the sphere of Absolute Belief into the Sphere of Doubt, of Search, and of the use of their intellectual faculties. The authority of Reason, the principle of Intellect, the Spirit of inquiry, the lenging on the part of consciousness for the power of self-government, for freedom from the restraints of Authority (were introduced), according to the advancing Intelligence of the times.

Scientific Inquiry not only destroyed a variety of transmitted errors and prejudices; but what was highly important, it turned the thoughts and attention of Men to the Actual fostering and encouraging the habit of reflection and the feeling of self-dependence, in fact. Reason was dethroned: Chaos was King. The collapse of contending philosophies in Greece promoted the collapse of contending systems, of Political Authority facilitated the growth of that individualism in thought, with which the name of the Sophists is associated.

Herodotus (484, B.C.) conceived a strong belief in a divine power, existing apart and independent of Man and Nature, which assigns to every being its sphere. This sphere no one is allowed to transgress, without disturbing the order, which has existed from the beginning-in the Moral World. no less than in the physical world, and by disturbing this order, Man brings about his own destruction. This Divine "Power" is the "Origin" of the Universe," and the cause of all external events. though he does not deny the free Activity of Man, or establish a blind "Law of Fate" or "Necessity," The "Divine Power" is rather the Manifestation of eternal justice, which keeps all things in a proper equilibrium, assigns to each being its path, and keeps it within its bounds, where it punishes overweaning haughtiness and insolence. It assumes the character of the divine nemesis. Herodotus everywhere shows the most profound reverence for everything which he conceives as divine, and rarely ventures to express an opinion on what he considers as sacred or religious Mystery; though now and then he cannot refrain from expressing a doubt in regard to the correctness of the popular belief of his countryman.

Herodotus seems to have been contemporary with Anaxagoras, Heraclitus and Parmenides, and have had some knowledge of their doctrine. Against the popular "Mythology" he conceived a strong belief in a "Divine Power" existing apart, and independent of Man and Nature. This "Divine Power" is the "Origin of the Universe," of "Moral Being," and of everything in the Universe. How does this

conception of the "Originative Principle" (or God) compare with the Christian Belief at the present day, in the existence of a Supreme Being, or Sovereign Intelligence, as the author of all.

Herodotus believed in a Divine Power, as the Originator of all. Christians believe in God as the originator of all things. Each in their own way believed without being able to give proof. It is irresistible; but yet Man cannot argue his way to a satisfactory proof.

469 B.C.

Græcian Philosophy had its final say in Plato and Aristotle, on the "Great Lines of Universal Knowledge;" no further original structures were destined to be raised by Greek hands. These two giants of philosophy undertook to work out the Socratic Doctrine through the whole field of the Knowable-From Socrates the Two Great Streams of Philosophy issued, namely:—

Ist. The Philosophy of Law, or "Universals in Action." 2nd. The Philosophy of Law, or "Universals in Thought" and Nature as well. He was convinced that life was not the Chaos, that Sophists made out, on the contrary, everybody had a meaning and a purport in his every word and Act, which could be made intelligible to himself and others if you could only get people to think out clearly what they really meant, from which he formulated the New Vision of things: that "Virtue is Knowledge"—Knowledge! Yes, real Knowledge; not mere head knowledge, or lip knowledge; but the know-

ledge of the Skilled Man, "the Man, who by obedience and self-restraint has come to a knowledge evidencing itself in works expressive of the law, that is in him, as he is in it."

"Virtue is knowledge. "Something in me, in you, in each Man: Something which is absolute, over-ruling, eternal."

"Virtue is Knowledge." "And so if a man is virtuous, he is realizing what is best and truest in himself, he is fulfilling also what is best and truest without himself. Virtue is Knowledge," "and therefore the law of virtuous growth is expressed in the Maxim: 'Know thyself,' by realizing in yourself the law which constitutes your real being."

"Virtue is Knowledge," and therefore all the manifold relations of life, all the multiform activities of life, all the sentiments of life, all these are parts of a knowable whole; they are expressions of law; they are Reason realizing itself through individuals, and in the same process realizing them.

Socrates made it his chief business to reach a proper understanding of such general conceptions as Virtue, Piety, Justice, Bravery and Temperance, etc. In this he simply carried out a process of generalization, in order to form a general or abstract conception, which might be afterwards applied to any variety of examples; in short, he looked around for a satisfactory "Basis" upon which he could found a proper standard of morals, for the guidance and practice of the public, in order to restore the lost point of equilibrium. He was so intent on this, that he did not raise the question concerning the origin of our knowledge; but we know from Plato,

that he vigorously opposed the Doctrine of Protagoras and Gorgias, which reduces everything to a state of anarchism; or which reduces everything to the phenomenal. Plato rises into a higher region of enquiry. He gives to the general conceptions of Socrates the character of "Ideas," which constitute the fundamental ideas of Reason.

Under the Guise of a Pythagorean Philosopher Plato attempts to image forth, as in a vision or dream, the actual framing of the universe, conceived as a realization of the Eternal Thought or Idea, as follows: "There is the Eternal Creator, who desired to make the 'World,' because He was good and free from jealousy, and, therefore, willed that all things should be like Himself; that is, that the formless, chaotic, unrealized void might receive form and order, and become, in short, real as He is. Thus, Creation is the process by which the Eternal Creator works out His own image, His own ideas, in and through that which is formless, that which has no name, which is nothing, but dead earth, or 'Matter.' And first, the world-soul, image of the divine, is formed on which as on a 'diamond network' the manifold structure of things is fashioned, the stars, the seven planets with their sphere music, the four elements and all the various creatures, etherial or fiery, ærial, aqueous and earthy, with the consummation of them all in microcosm, in the animal world, and specially in Man." One can easily see that this is an attempt by Plato to carry out the reverse process in thought, to that which first comes to thinking Man. "Man" has sensations, i.e., he comes first upon that which is conceivably last in creation, on the immediate and temporary things or momentary occurrences of earth. In these sensations, as they accumulate into a kind of unreasoned knowledge, he discovers elements which have been active to correlate the sensations, which have from the first exercised a governing influence upon the sensations, without which no two sensations could be brought together to form anything one could name.

These regulative, underlying, permanent elements are "Ideas," i.e., General Forms or "Notions," which are by reason known to have been there before, because through them alone can the sensations become intelligibly possible, or thinkable and nameable: Thus, Plato is led to the conception of an order the reverse of our individual experience, the order of the creation, the order of Divine thought, which is equivalent to the order of the Divine's working; this dream is generally taken as a myth, and not as Plato's conception of the Universe.

In Plato's philosophy, we find three fixed points of belief, viz.: First, that "Mind" is eternally Master of the Universe; second, that "Man" in realizing, what is most truly himself, is working in harmony with the "Eternal Mind," and is in this way a Master of Nature, reason governing experience and not being a product of experience, and Thirdly, that at death we go to powers, who are wise and good, and to men departed who in their day shared in the divine Wisdom and goodness; that, in short, there is something remaining for the dead, and bet-

ter for those that have done good than for those that have done evil.

In Plato's perfect life there are four elements: in the "body," Air, Earth, Fire and Water; in the "soul," the finite, the indefinite, the union of the two, and the cause of that union. If this be so, he reasons, may we not by ananlogy reason for a fourfold order in the Universe? There also we find regulative elements, and indefinite elements and the union of the two. Must there not also be the "Great Cause," even "Divine Wisdom" ordering and governing all things, and from whom we obtain our knowledge, as to the nature of ideas? What is the relation of "Ideas," as eternally existing in the mind of "Deos," to the same "Ideas" as possessed by individual Man? Does each individual actually partake in the thought of Deos through the Ideas, or are his ideas only resemblances of the Eternal? If he partakes, then the eternal ideas are not one but many, as many as the persons who possess them. If his ideas only resemble, then there must be some basis of reference by which the resemblance is established; a third existence resembling both, and so on ad infinitum. He suggests that, Ideas are only notions in our minds. But to this it may be replied, that there is an end in that case of any reality in our ideas. Unless in some way they have a true and causal relation with something beyond our minds, there is an end of mind altogether, and with mind gone everything goes. This remains a difficulty for us, and is the stumbling block of Kant's Critic and of the Hamiltonian adaptation of Kant as well as of the

Platonic Ideas. It has been said that you cannot criticise 'Revelation.' Then, how do you know what is Revelation, or that there is one at all? You know nothing of things in themselves. Then how do you know that there are things in themselves? We must admit that this difficulty has not yet been overcome. Hence Aristotle remarks, that Plato found in the 'Ideas' the Originative or Formative Cause of things, that which made them what they were, or could be called their 'Essence,' in the 'Great' and 'Small.' he founds the opposite 'Principle or Matter' of things."

"Mind" and "Matter." Each is correlative of the other, so to speak, as the male and female; the one is generative, formative, active, positive; the other is capable of being impregnated, exceptive, passive, negative, but neither can realize itself apart from the other.

"This relation of 'Being' with that which is other than 'Being' is 'Creation wherein we conceive of the world as coming to be, yet not in time. And in the same way Plato speaks of a third form, besides the 'Idea' and that which receives it, viz., 'Formless Space, the Mother of all things.' As Kant might have formulated it, 'Time and Space are not prior to creation; they are forms under which creation becomes thinkable.'"

As we have previously stated, Aristotle wrought out his "Theory," through the whole field of the knowable; He begins with a discussion of the "Chief Good" which he declares to be "Happiness." He is thus led into the doctrine of the "Mean," or avoidance of extremes. His rule of practical life

is to act according to right reason. Reason is distinguished into, 1st, Scientific, which contemplates necessary "Matter," and, 2nd, The Reasoning or "Discursive Faculty" which deals with contingent Matter. Our principles of knowledge originate from "Sense" through induction, and from "Intellect" as their subjective correlate. These two Elements form the "Basis" of the Epicurean and Stoic Doctrines. The Stoics selected the Rational Nature, and the Epicureans, the Sensational, under the doctrine, that "Happiness" is the "Chief Good."

The Stoic Maxim is to live according to Nature, while the Epicureans declared the pleasure of the "soul" above that of the body, and there is no standard higher than the agreeable.

How do we obtain our Knowledge: -

1st. "Knowledge of Fact" is Knowledge by onlook.

2nd. "Knowledge Inferred" is knowledge of one thing through means of another.

3rd. "Knowledge of First Principles" is knowledge by insight into truth higher than "fact."

Socrates asserted that "Knowledge is Virtue." This declaration involves a theory of practice rather than of "Knowledge."

Fichte accentuated the necessity of a "Deduction" on the part of "Reason," purely out of its own self, and perfectly free from any pre-supposition.

Hegel seizing this thought, as the simplest notion of Reason, that of pure being, deduces thence in a progress from abstract to concrete notions, the complete system of pure, "rational Knowledge." We do not merely have successive impressions as

Hume thought; we feel them as real, as being. This feeling it is which is afterwards taken up by the "Reason" or "Will" and constituted the fundamental category of knowledge.

Plato rises into a higher region of inquiry; he gives to the general conceptions of Socrates, the character of "Ideas," which constitute the fundamental "Ideas of Reason," the perfect essences of things; the eternal laws of being, and belong to a super-sensible state, a world or sphere of "Ideas." Intelligence is confused with the shadows of the sensible state and is ever striving to rise into this upper world of higher knowledge. The power to know these primary ideas is already in the soul, and their presence is explained by a theory of reminis sence, on account of our being descended from a higher sphere.

Hume reduced existence to a series of appearances and mind to a bundle of perceptions. "Virtue is an end, and is desirable on its own account, without fee or reward, merely for the immediate satisfaction which it conveys."

Here is a powerful Intuitional Impulse for which modern thinkers are exceedingly obliged to Hume. The exercise of the Reason gives "Ideas" out of which principles originate. We know only passing appearances; even the ideas of reason involve us in hopeless confusion.

Kant's three grand "Ideas" of Reason are the "Soul," "Deity" and the "Universe;" he maintains the reality of things in themselves. The mind is a noumenon, existing in a super-sensible or cogitable world, superior to the laws of *Causality*; the theory

of Kant becomes almost analogous to that of Plato. His ideas of pure reason, though involving us speculatively in contradictions, are regulative of intellectual life; yet the theory is negative and sceptical in its conclusion, from which its cogitative or supersensible world cannot give us a philosophic deliverance.

Fichte discarded the Speculative Reason of Kant, and regarded reason as practical.

Hegel made the "Idea" the source of all reality. Starting from a conception such as "Being," he passes over to its opposite—Non-Being, and then by the combination of both to reach a higher unity—"Becoming." The motion is thus the first moment, reaching the Antithesis is the second moment, and the combination is the third moment. Universality and Necessity are the prominent features of his theory.

CHAPTER XII.

In attempting to reconcile Democritus' Doctrine with that of Aristotle's, or rather in attempting to conquer "Dualism" by means of Transcendental Speculation and Ascetic Mortification, Ancient Philosophy sank in complete exhaustion and Christianity took up the problem; but we must decline to discuss the Scholasticism of the Middle Ages, which belong to the Historical Science of the Christian Dogmas, as foreign to our purpose. Christianity contributed nothing to the Materialistic Theory. It only gave an impetus to Philosophy.

In the Sixteenth Century, Lord Bacon, of Verulam resuscitated the Epicurean Theory. A Doctrine which derives its name from Epicurus, an attic philosopher, who made enjoyment and the pleasures of the senses the chief object of life, denying the resurrection and the future state, and at the same time Atomism became the Foundation of our Modern Sciences.

Lord Bacon asserted that the study of matter in its manifold transformations carries us further than abstraction, and that, without the assumption of "Atoms," Nature cannot well be explained. He directed anew the "Observation" and "Reflection" of his contemporaries to actual fact, proximately to nature, that he raised experience, which had hitherto been culy matter of chance, into a separate and independent object of thought, and that he awoke a general consciousness of its indispensable necessity.

Lord Bacon's merit lay in the establishment of the principle of Empirical Science of a thinking exploration of Nature.

The "Source of Human Knowledge" lay in the Senses, declared Epicurus, which gave us an immediate and true perception of that which actually came into contact with them. Falsity came in with peoples' interpretations or imaginations with respect to these Sensations.

Sensations leave a trace in the memory, and out of similarities among Sensations there are developed in the "Mind" general notions, such as "Man," "House," which are also true, because they are reproductions of Sensations. When a Sensation occurs, it is brought into relation in the "Mind" with one or more of these notions: this is predication; true also in so far as its elements are true, but capable of falsehood as subsequent sensation may prove. If supported or not contradicted by sensation, it is or may be true; if contradicted or not supported by sensation, it is or may be false. This is all Epicurus had to say on the subject; Naked and Unarmed, as Cicero said, like all self-taught or ill-taught teachers.

The Sects of the Stoics was founded by Zeno, whose Doctrine was a sterner one than that of Epicurus, as he professed to extirpate every natural feeling and affliction and live a life of the most rigid self-denial. His belief in a supreme Being, in the "Immortality of the Soul," and in Virtue, Wisdom and Justice, as the only good things, made his system in some respects to resemble the doctrine of Christianity, but the fatal error of his teaching

lay in the pride and Egotism which it fostered. Their Doctrine of Knowledge is thus recorded by Plutarch (56-106, A.D.).

"That when a human being is born, he has the governing part of his soul like a sheet of paper ready prepared for the reception of writing, and on this the *soul* inscribes in succession its various *ideas*."

The first form of the writing is produced through the senses; when we perceive, for example, a white object, the recollection remains when the object is gone; now when many similar "recollections have accumulated, we have what is called Experience: besides the 'ideas' which we get in this natural and quite undesigned way, there are other 'ideas,' which we get through teaching and information; in the strict sense only, these latter ought to be called ideas;' the former should rather be called 'perceptions.'

"The 'rational faculty' in virtue of which we are called reasoning beings is developed out of or over and beyond the mass of perceptions. In the second seven years' period of life, in fact, 'a thought' may be defined as a 'kind of mental image,' such as a rational animal alone is capable of having. Thus, there are various gradations of mental apprehensions." First, those of "Sensible Qualities" obtained through the action of the objects, and "the assent of the perceiving subject; then by 'Experience,' by comparison, by analogy, and by the combination of the reasoning faculties. Further moral general notions are arrived at, and conclusions formed, e.g., that the gods exist and exercise a providential care over the Universe. By this "faculty, the wise man ascends to the apprehension of the good and true."

Biologists, etc., of the present day, do not believe in this crude form of the Origin of our Knowledge. They maintain that Primitive Man in his primitive relations have all the primitive feelings which the lower animals have, and these primitive feelings are known by the name of Instincts (such as selfpreservation, Propagation, Sympathy, Kindness, Fear, and Animal Courage, etc.).

If Man were no more than this bundle of needs in the form of appetitive impulses and desires, which we find in the lower animals, he would not be Man, he would not be the king of beasts; for the lion and the tiger would soon make short work of him. We must go beyond mere feelings and impulses and their inevitable manifestations in certain circumstances: Though we must admit that "Feeling" is the starting point of all Manifestations of Consciousness, and lies at the root of all that Animal and Man are and can be; yet "Feeling" cannot in any strict logical sense be defined; but it can be marked off from other experiences and in contrast with them.

The specific endowment which makes Man different from other Animals, lifts him above all animals, and consequently above his own Animal Nature, is essentially and primarily "Will' or, as some people would have it, "Reason," which they put inside Man on the top of his animal Mind, to regulate that mind, like a piece of cleckwork, and then, when they come to the moral sphere, the sphere of conduct, and encounter "Will," they seem to speak of "Will" as if it were a bare force subsisting on its own account, and working in more or less har-

mony with the clockwork, Reason: (These are inadequate conceptions of Reason and Will), and ought not to be entertained by any thinker, if he desire simplicity of truth.

Through the evolution of "Will," Man emerges out of and beyond Animal Sensation in its highest form, and becomes a knowing being, a Man-being, a percipient being, a self-determining being, and no longer a mere victim of the dynamical interplay of feelings and sensations; but a self-conscious being.

The Interpretation of Consciousness implies, 1st, The discrimination and classification of Facts; 2nd. The determination of their Origin or Source, and 3rd, The discovery of the legitimate inferences from these facts. In this way we may construct a rational explanation of our experience. The distinction between the testimony of consciousness to internal facts and its testimony to "Something beyond itself," is well put by Mr. Mill. "Every state of consciousness involves three elements, viz: "I-am conscious—of a perception. (a). The conscious knower; (b), the consciousness, and (c), the present experience, i.e., a perception. Consciousness is the uniform characteristic of our experience; in consciousness the recognition of 'Self' is invariable; the special exercise recognized is variable. While, therefore, consciousness is knowledge of a present state, it is always knowledge of 'Self' as 'Intelligence'—Self-consciousness. This is the meaning of Descartes' 'Cogito ergo sum'-I think; therefore, I am." This celebrated utterance is not an argument, but a simple statement of the fact,

that each thinker is as certain of his own existence, as of his own thought.

Descartes advised every philosopher to start, by first divesting himself of all previous prejudices and all his former opinions, to reject the evidence of sense, of intuition, and of Mathematical Demonstration, to suppose that there is no "Deity," no heaven, no earth, no nothing, and that man has neither hands nor feet, nor body; in a word, he is to doubt of everything of which it is possible to doubt, and to be persuaded that everything is false, which can possibly be conceived to be doubtful. Now. "there is only one point of which it is impossible to doubt, namely:—That 'I,' the person who doubts, am thinking." This proposition "Cogito ergo Sum," and this only may be taken for granted, and nothing else whatever is to be believed without proof.

Mr. Hume says, "Descartes will either believe nothing at all, or if he believes anything, it must be upon the recommendation of Sophistical Reasoning."

"The argument proceeds on a supposition, that the thing to be proved is true." There is no such an individual as "I," the person thinking, the "I" is only a bundle of "sensations" or a Series of Feelings: There is no such a thing as a "Material Body," for Bishop Berkeley explained it away, and put "mind" in its place, and "I" annihilated the Bishop's "Mind" and put a bundle of Ideas and Impressions in its place. So there you are, you can't go any further. However, Mr. Hume was not in existence, when Descartes begged his own existence, and the truthfulness of his faculties, from which he proceeds to prove the existence of an

"Originative Principle." "We are conscious, that we have in our mind the 'Idea' of a 'Being,' infinitely perfect, intelligent and powerful, necessarily existent and eternal." It implies the notions of eternal and necessary existence, and of infinite perfection. It neither is nor can be a fiction of the imagination; but a true and immutable Nature; which must of necessity exist; therefore, there is an "Originative Principle"—a "Deity" necessarily existent, infinitely wise, powerful and true, and possessed of all perfection. This "Being" is the maker of us and of all our faculties; he cannot deceive, because he is infinitely perfect; therefore, our faculties are true and not fallacious.

Professor Huxley would have said: Why do you not do as I do when I wish to establish a physical theory. I simply tell the people, "the air of that region is too rarified for my constitution." All I require is two or three postulates, and then the thing is simple. But there were no clever Biologists in Descartes' time, and he easily got the people to believe in their own existence, and the truthfulness of their faculties, then they could easily deduce the fact of the Existence of "A Great First Cause"—a Deity, when the whole Mystery of the universe and everything in it could easily be solved. (Myself first, then Deity, and afterwards the existence of the whole world.)

From this we see that Descartes began with Abstraction and Deduction, and in connection with it that purest form of all, Deduction.

Mathematics.—His whole theory of the Universe is wrought out from the Mathematical side of Natural Philosophy, which applied to all the phenomena of Nature; the standard of Number and of Geometrical Figure emanated from him, yet he was not an adherent of "Vigorous Atomism"; he denied the conceivability of "Atoms." Even if there are particles that small which cannot possibly be any further divided, yet the Deity must be able to divide them again; because their divisibility is still constantly conceivable.

He substituted small, round corpuscles which remain quite as unchanged as the Atoms, and are divisible only in thought. He made no essential distinction between Organic and Inorganic Nature; therefore the step from the lower Animal to Man was but a short one. By such reasoning, he so paved the way that he may be fairly regarded as the immediate forerunner of Outspoken Materialism. "Spinoza" is the necessary outcome of Descartes, and accepted the Cartesian definition of substance as that which stands in need of nothing else.

Geulinx, an adherent and exponent of the Cartesian System, was of the opinion that neither the soul acts on the body, nor the body directly on the Soul; then (a), How is it possible for the affections of the body to act on the Soul? (b), How is it possible for the volitions of the "Soul" to act on the body? and (c), How do we obtain our perception of an external world? Answer: By Contemplation; and this can only take place mysteriously. It is the Deity alone who can conform "Outer" to "Inner"; "Inner" to "Outer"; who converts external objects into internal "Ideas." Every operation that combines outer and inner; the Soul and

the world, is neither an effort of the spirit nor of the world, but simply an immediate Act of the Diety, He who inparted "Motion" to "Matter" and assigned it its laws. So the agreement of the bodily motion, and the Mental Volition, depends alone on that Sublime Artificer, who has produced in them this inexplicable community.

Malebranche, though a Cartesian expositor, disagrees with his view of the relation between the Soul and body. These are rigorously distinguished from each other, and in their essence mutually opposed. How does the Soul, the "I," attain to a knowledge of the external world, and to Ideas of Corporeal things? Answer:—The Absolute Substance (the Deity) contains all things in himself; he sees all things in himself according to their true Nature and being. In him, too, are the Ideas of all things. He is the entire World as an intellectual or "Ideal World." He is the Absolute Substance (the Deity), who is the means of mediating between the "I" and the world. In him we see the Ideas. Our volitions and our sensations in reference to things proceed from him. It is "He" who retains together the Objective and Subjective World, which in themselves are separate and apart. Spinoza, adopting the Cartesian definition of "Substance" as that which stands in need of nothing else. Spontaneous existence is the absolute power to exist, which cannot depend on anything else; every special existence is only a modification of the universal substance, that all existence, Material existence included, springs directly from the "Absolute Substance or Deity"

as the single substance. The Universe is only an emanation of the Creative Being of Deity. The Deity is only the substance of things and not anything else. Substance is finite as well as infinite; the one spirit or thought, and the other matter or extension, i.e., the two attributes in which the single substance reveals itself to us, so far as it is the cause of all that is. The question now arises: Are these attributes related to the infinite substance? It is only the human understanding that invests substance with these two attributes. To the understanding:—Substance is thought, then considered under the attribute of thought, and extension considered under the attribute of extension.

The attributes do not explain what substance really "is." Spinoza subjects the relation between body and soul to the idea of inseparable Unity of Spirit and Matter, a unity which pervades the whole of Nature, but in various grades of perfection. Here is his simple resolution of the problem, which was so difficult and even inexplicable. In man as everywhere else, extension and thought are together, and inseparable. The Soul is the Consciousness that has for its objects the associated body, and through the intervention of the body, the Corporeal world, so far as it affects the body. The body is the real organism, whose states and affections consciously reflect themselves in the "Soul." Soul and body are the same thing; but expressed, in the one case, as conscious thought; in the other, as Material extension.

The Union of the Soul and Body was called by Descartes, "A Violent Collocation"; by Geulinx—

"A Miracle;" by Malebranche—"Sublated into Deity."

· Spinoza made the One Universal substance, the single positive element in Existence. Leibnitz conceives substance as the living activity, the working force, and refers to the elasticity of a bent bow as an example of this force, which, no sooner than all external obstacles are removed, exerts its power on resuming its natural position. That active force constitutes the quality of substance: That substance is individual "A Monad," and that there is plurality of "Monads," which constitutes the elements of all reality, the fundamental being of the whole physical and spiritual world. Leibnitz' "Monads" are a facsimile to the Atoms; they are insusceptible of influence from without, and indestructible by any external power. They are indivisible points and qualitatively different. The Monad is a living, spiritual being (soul). Everywhere in the world there is living individuality and living connection of individualities. They are not dead like inorganic Matter; but are self-subsistent, self-identical and indeterminable from without. Leibnitz held the Cartesian doctrine, affirming that there are necessary truths, which are the truths of Universal Reason.

Hobbes, in England, and Gassendi in France, drawn to the fact, "Cogito ergo sum," "I think; therefore I exist." Both contraverted Descartes and worked in Psychology as a special science; both followed in the train of Lord Bacon. Hobbes, in his view of the Universe, confined himself exclusively to the phenomena, which are knowable

and can be explained by the law of Causality. He maintained that the origin of all our knowledge is "sense," for there is no conception in a Man's "Mind," which hath not at first been begotten upon the organs of "sense," though he did not deny that there are "Eternal Laws of Nature." In reply to Hobbes, Cudworth asserted that there is "A natural, immutable, and eternal justice, and that there are some ideas which must needs arise from the innate vigour and activity of the mind itself."

CHAPTER XIII.

The outcome of the whole "Anglican Movement" of the Seventeenth Century is to be found in "Locke's Essay" on the "Human Understanding." Locke declined the Physical consideration of the Mind, or to examine wherein its essence consists: or by what motions of our spirits, or alterations of our bodies, we come to have any "sensations by our organs," and whether these ideas do in their formation, any or all of them depend on Matter or no as lying out of his way in his design. His "Theory of Knowledge" is founded upon "Two Thoughts:-viz.: First:-That there are no "Innate Ideas": Second:-That all our knowledge springs from "Experience," viz.: Sensation and Reflection. In refuting "innate ideas," he falls back upon children and idiots, as well as that the uneducated have no knowledge of abstract propositions. Were Ideas innate, we should all of necessity be aware of them even from our earliest childhood.

To be in the Mind is the same thing as to be known. Nor can we say that the general propositions are first known to consciousness. When we begin to use our understanding, on the contrary, the knowledge of the particular is prior.

The child knows that sweet is not bitter long before it understands the logical proposition of contradiction.

Locke tries to show that the converse is the true way in which our understanding is formed. How

then does the mind acquire its knowledge? Locke answers, "By Experience on which all knowledge is founded, on which, as its principle, all knowledge depends."

Experience, through Sensation and Reflection, furnish the understanding with all its knowledge.

"Simple Ideas" are such as the mind receives from sounds, colours, the sense of resistence to touch, the idea of extension and motion.

The ideas of substances, of changing properties and of relations, are complex ideas. What the beginning of substances "is," we know not; we only know its attributes, which are taken from simple sense-impressions; from the notion of substance he passes to that of relation. "Only through these attributes showing themselves frequently in a certain connection, do we succeed in forming the compound Idea of a substance, which underlie the changing phenomena." Even Feeling and Emotions spring from the repetition, and manifold combinations of the simple sensations, which the senses convey to us. Finally, Locke examines the nature of truth, and the nature of our cognitive faculties. He says "That the human mind, previous to Education and Habit, is as susceptible of any one impression as of any other," a doctrine, which, if true, would go near to prove, that "truth" and "Virtue" are no better than human contrivances. If truth be anything permanent, which it must beif it be anything at all, those perceptions or impulses of understanding by which we become conscious of it, must be equally permanent; which they could not be; if they depended on Education, and

if there were not a law of nature independent of Man, which determines the understanding in some cases to believe, in others to disbelieve. It is impossible to imagine that any course of Education could ever bring a rational creature to believe that he is not the same person to-day he was yesterday: that the ground he stands on does not exist? Could make him disbelieve the testimony of his own senses, or that of other Men? Could make him expect unlike events in like circumstances? or that the Course of Nature, of which he has hitherto had experience, will be changed, even when he foresees no cause to hinder its continuance?

The substance of Bishop Berkeley's argument against the existence of Matter is found in Locke's Essay, and in Descartes' "Principia," Locke's "Essay," like Darwin's "Origin of Species," on its publication, caused such a "Furore" among men of every rank and profession, that the whole civilized world became enthusiasts over its "doctrine." Everybody became a "Materialist," just as everybody became "An Evolutionist" later on, even to the present day, of course; at the present day it is fashionable to be an "Evolutionist." You are not in it if you are not an "Evolutionist." It is evolution in this, and evolution in that; in fact, evolution in every mortal thing. You are not safe to talk on any subject; but it is attributed to Evolution. Nay, even Theology has not escaped evolution. Would that these Men would study the real nature of the "Evolution Theory" before boring Society with it.

It was to "stem" the "Tide" of Locke's Material-

istic Doctrine, that Bishop Berkeley "suggested that the "Material World" cannot "Exist" unless "A Mind" exists to comprehend it, and this "Mind" he suggested to be the "Supreme Mind," or if you will, "Sovereign Intelligence;" all else is only sensations and perceptions. We receive these from God, because they exist in God. Berkeley's assault upon Metaphysical abstractions with his destructive criticism of mathematical quantity and his destructive criticism of an "Independent Material World" had more than anything else to do with the "Intellectual Awakening" of "Hume," and with the direction taken by his thought. Hume, in his turn, set "Modern Thought" on the lines on which we find it at the present day. Hume asserts that most of the writings of Berkeley form the best lessons in "Scepticism" which are to be found among the Ancient or Modern Philosophers, Bayle not excepted, thus transforming Berkeley into an unconscious sceptic.

CHAPTER XIV.

We might compare Berkeley to a traveller, who started out on a well-beaten track; everything went well with him, until he came to the Four intersecting paths: I. Scepticism, 2. Gnosticism. 3. Agnosticism. 4. Faith. Not knowing which path to take, got confused, threw up the sponge in "Despair," and did not venture further. You can imagine with what "glee" a lawyer like Hume, would like to punch the head of the portly "Bishop," on his own "Metaphysical and Theological Platform," and this is how he did it:*

Mr. Hume:—Is it really true, Mr. Bishop, that in your book on the "New Principle," you have suggested that the "Material World" cannot exist, unless a "Mind" exists to comprehend it, all else being only "Sensations" and Perceptions?

Bishop Berkeley:—It is perfectly true, Mr. Hume, the chief thing I do, or pretend to do, is only to remove the mist and veil of words. This it is that has occasioned ignorance and "confusion." This has ruined the schoolmen, and Mathematicians, the Lawyers and Divines. If men would lay aside words in thinking 'tis impossible they should ever mistake, save only in Matters of Fact!

^{*} Note:—I have put it in dialogue form between Mr. Hume and the Bishop, with Emeritus A. Campbell Fraser, L.L.D., late Professor of Logic and Metaphysics in the University of Edinburgh, as umpire-

Mr. Hume: —Very well, would I be right in interpreting from your New Principles that the Minds of all of us—in short, the soul or spirit of every animal which exists, is only "A series of Feelings?"

Bishop Berkeley:—Quite right, Mr. Hume, but then you must bear in mind that we receive our souls from "God." A Supreme Mind, a Sovereign Intelligence, because our souls exist in Him! Existence is not intelligible without "Perception and Volition."

Mr. Hume:—Oh, indeed; then would I be right in interpreting, that your assaults upon Metaphysical and Theological Abstractions, your Criticisms of Mathematical quantities, and your Criticisms of an independent "Material World," are all only sensations and Perceptions?

Bishop Berkeley: —You are perfectly right, Mr. Hume, the Philosophers lose their Abstract Matter; the Mathematicians lose their Abstract Extension; the Theologians lose their Extended Deity, and the rest of Mankind lose I don't know what.

Mr. Hume: —Very well, have you then necessarily reduced everything to sense Phenomenalism, the Principles of which subordinate to themselves the Phenomenalis Immaterialism?

Bishop Berkeley:—I have. I maintain that all ordinary seeing is really foreseeing; that the "Sight" of tangible things is the expectation, produced by habit, of experiencing unperceived phenomena of touch and muscular movement, on occasion of the ideas, or phenomena of which alone we are actually conscious when we see, but which become signs of the former.

Mr. Hume: - If that is the case, I can read Phe-

nomenal Scepticism between the lines in your "Treatise on Human Knowledge," and, of course, I have to interpret all existence in that light?

Bishop Berkeley:—I object to such treatment, because you are only looking into one of my Repositories of Philosophy, chiefly the "Repository" I had in Trinity College, Dublin, the Principles of which, subordinate to themselves, the Phenomenalist Immaterialism.

Mr. Hume: —Quite so, I can assure your Reverence, that "that" little "Trinity College Repository" of Phenomenalist Nominalism is one of the greatest and most valuable discoveries that have been made of late years in the republic of "Letters." It is full of subtle Argumentative Analysis, and Negative Phenomenalism, and I prefer it to any other?

"Umpire" Emeritus Prof. Fraser:—Mr. Hume, you must not ignore the Bishop's appeal to Common Sense, on behalf of the beliefs: (a) that the interpretable phenomena of sense, viewed objectively, are the real things; and (b) that in his Moral consciousness of himself, as a free, self-acting spiritual person, each of us reaches the Ontological Reality of Substance and Cause, and the "Spiritual Basis" of things, the datum Universalized in his "Siris." "The Tar Water Nostrum."

Mr. Hume:—Oh, I leg your pardon "Umpire." Its suggestions have never come under my interpretations. I think, I did hear something about his "Tar Water Nostrum," but I did not understand the purport of it. And as for his suggestions or interpretations about Identity and Causal Connection,

I honestly confess it is too hard a nut for my understanding to crack.

"Umpire":—Allow me to remind you, Mr. Hume, that Sense-Phenomalism is only the Introduction to the Bishop's Spiritual Philosophy.

Mr. Hume: —Indeed, I thought his Sense-Phenomalism was the whole of his Philosophy; at least the Bishop admitted as much to me a little while ago. It does not matter; I prefer it to the others. May I be permitted to suggest, interpret, expect, or assume; (that is) may I be permitted to make a Suggestion, an Interpretation, an Expectation or an Assumption, as well as the Bishop?

"Umpire": —Certainly Mr. Hume, you are allowed the same liberty of "Assumption;" the Bishop cannot object to that.

Mr. Hume:—By beginning with the "Assumption" that the Common theory of the Experts of our time is "Empiricism," so, in my hands, the Material "World," and all else along with it, melt into Phenomena capriciously connected in co-existences and successions; in this way I undo all received knowledge. At least, I may be allowed to suggest or to suppose knowledge to depend ultimately on impressions or phenomena, and to be in the position of needing to argue its way to belief in Self and Not-Self; but without any Intellectual presuppositions or first principles to enable me to do so?

Bishop Berkeley:—I can easily understand now how all Knowledge and Belief disintegrate in your hands, when you avail yourself of this "Interpretation" of the "Cartesian System," and of the Covert and Incoherent Empiricism of Mr. Locke.

Mr. Hume:—Certainly, I insist, in referring all that claims acceptance in our Knowledge or Belief, to the test of "Experience," (i.e.) transitory, unintelligible phenomena, viz., that "one" has no right to believe anything that has no counterpart in some phenomenon. Therefore, all "Ordinary Beliefs," as well as Science and Philosophy is at once dissolved into impressions or Unintelligible Phenomena?

"Umpire": —Do you mean to say, Mr. Hume, that the rigid application of the Phenomenal Criterion, the Bishop's "Spiritual Intellectualism," is made to disappear, except as a transitory Phenomenon or "Feeling," that the personal pronoun "I" can have no legitimate standing with you, because no possible phenomenal meaning, equally meaningless, "are" Space and "Time," except in their Phenomenal "Meaning."

Mr. Hume:—I maintain that these are on the lines of the Bishop's suggestions, not only "Space" and "Time," but also, as no Phenomena can be perceived in any of the "Five Senses" or imagined in the "Phantasy," that correspond to what we were supposed to intend by "Identity," Substance, cause or Power; these words and their supposed intellectual relation also disappear in the Cloudland of 'Illusions." The transcendent Beliefs along with the individual Conscious Personality are all illusions, because they are unphenomenal?

"Umpire":—You have pursued with kindred ingenuity and acuteness to extreme negative and sceptical issues, the "War" against Metaphysical abstractions in sense, which the Bishop began, in order to reach the Supersensible.

I am not at all surprised at his hesitation to proceed, with his "Trinity College Pack" at the Crossroads. If the Bishop had followed on the lines of Phenomenalist Nomenalism, he would have at last committed "Mental Suicide" in the act of decending into an "Abyss," where all assertions and all denials are alike uncertain, and indeed all alike incapable of being made in the Complete Sceptical Suspense of "Intellectual Action."

Mr. Hume: —Is not the Bishop a "Sceptic" as well as I am; he was an aider and abettor, as well as a resetter?

"Umpire": —Certainly, the Bishop is an unconscious "Sceptic," but, as you know, there is a mighty difference between a conscious and unconscious 'Sceptic" in "Metaphysics." Nay, you are both referred to by other Philosophers as "Twin Patrons" of "Scepticism." And along with Locke the Bishop is dubbed a "Twin Patron of Empiricism."

Mr. Hume:—Have not I done to the Bishop what I promised to do to him, on his own "Metaphysical" and "Theological Platform?"

"Umpire":—You have, indeed, Mr. Hume, you have completely disrobed him; you have not even taken off the Bishop's robe, but even himself, his Personality, and have not left a vestige of his Phenomena, or of anybody else's. You burst his "Dublin Pack" in the disengagement of "Reality," "permanence" and cohesion, not from things of "sense" only, but also from the conscious persons, out of whose Powers and Capacities the things of Sense draw their meaning and human interest. If this repository were the whole of the Bishop's Philoso-

phy; he might be classed with the Agnostics, nay even with the "Sceptics," but then, you must remember the Bishop published a book on "Spiritual Philosophy" under the title of "Siris," "A Tar Water Nostrum" thing, and, of course, that redeems his character.

Mr. Hume: —Thank you very much, indeed, Mr. Umpire; I did not mean to be a "Sceptic." I did not pronounce it absolutely insuperable, you can easily see "Faith" professed between the lines of my "Book."

Umpire:—Undoubtedly, I see your book of "Inquiry" points to a way of "Partial Recovery" of Lost Beliefs, in the Form of a 'Sceptical Solution" of Sceptical Doubts.

Umpire—Gentlemen:—This sort of "Scepticism" is an Intellectual Amusement, which can conduct to no results; for it can neither be proved nor disproved logically. Because, if self-consciousness and Memory must be vindicated before they can be used, we can never get to work at all. Yet this Scepticism in itself, alike incapable of proof or disproof, besides the Mental Exercise, which it affords, is a useful Propellent Force: And it is always practically refuted by the imperishable trust which "Reason" reposes in its own validity; so that no human mind can permanently surrender to it.

CHAPTER XV.

Again, we repeat, Bishop Berkeley, after his Intellectual, Mathematical, Metaphysical, and Theological Assaults on the Material World, became confused and stranded at the four intersecting paths: I, Agnosticism; 2, Gnosticism; 3, Faith; and 4, Scepticism; not knowing which path to take, became despondent, and did not venture further. In this quandary, Mr. Hume found him, and undertook to lead him, if he would allow him to choose his own path, to which the Bishop consented. So by carefully leading, cautiously examining, and expeditiously exploring every nook and cranny of the path selected, he led the Bishop until he landed him over the precipice into the abyss, as an conscious Sceptic; not a Universal Sceptic. that is a person who attempts to act, without the structure of his mind, and by other laws than those to which nature has subjected the operation of hismind: in short, to reason without assenting to the principles on which reasoning is founded, is not unlike an effort to feel without nerves, or to move without muscles. No man can be allowed to be an opponent in reasoning, who does not admit the a priori principles; without the admission of such principles it is impossible to reason.

The achievements of "Physical Science" at the present day is based upon "Three Hypotheses or Postulates, viz. First:—The Molecular Theory of

Matter. Second:—The Conservation of Energy. and, Third:—"The Evolution Theory."

Metaphysics and Theology have had great influence in developing these three Doctrines. All three doctrines are intimately connected, and each is applicable to the whole physical world. Chemists discovered that Matter was indestructible and indivisible. It is obvious that if Elementary Matter consists of indestructible and indivisible particles, each of which constantly preserves the same weight relatively to all the others, Compounds formed by the aggregations of two, three, four or more such particles must exemplify the rule of combination in definite proportions deduced from observation, and thus the Molecular Theory is established, which is only another name for the Atomic Theory.

From a scientific point of view, the following Article, clipped from a newspaper lately, would please the late Professor Huxley immensely:—

A SCIENTIST'S DREAM.

A French savant, M. Berthelot, has seen a vision of the future, in which our present moral, social, economic and culinary ideals will be effete and forgotten. The fabric of his vision is of the products of the chemist's laboratory. Before many decades the agriculturist is to cease from off the earth. Neither animal nor vegetable is to be produced for food. The chemist is to replace the farmer, the rancher and the cook.

M. Berthelot has been for years and is still working in his laboratory towards the realization of his

vision. Of the constituents of human food science has already produced the fats, the sugars and carbons, and the production of the albumenoids alone remains to be attained. The great requisite yet to be attained is an inexhaustible supply of energy, and M. Berthelot is confident that it can be secured. Either the sun's rays or the heat from the centre of the earth will be forced by science to yield it up.

As to the scientific possibility of the future which M. Berthelot predicts, only the scientist can speak; and of these some call the French savant a prophet and some a visionary. But we crave liberty to put in an utterly unscientific plea upon behalf of good-dinner-loving humanity. It would be cruel to rob us of our feasts and of the dyspepsia which follows. Moreover, we hold the strings of the purse, from whose contents the scientist must finance the reform, and we may withhold supplies.

We have been preached at of late about the simple life. We have been fed on breakfast foods, nut preparations, and other sawdust concoctions. Are we now to be robbed of our roast beef, our chops, our pork and beans; even of the grain from which the breakfast foods are manufactured, and be fed upon so many ounces per day of fat and so many ounces more of carbon, sugar or albumenoids?

What were Christmas dinner shorn of the plum pudding and the turkey? What would Thanksgiving amount to without the goose and pumpkin pies? Surely we should have neither gusto in eating nor dyspepsia the next day. The medical men would become poor, and the vermiform appendix would be without function, either for its owner or for his physician.

In the Atomists' Mind the only genuine Knowledge is that which transcends appearances and reasons out what is irrespective of appearances; that is, the only genuine knowledge is that of the "Atomic Philosopher," and his knowledge is the result of the happy mixture of his "Atoms." whereby all is in equal balance, neither too hot nor too cold. Such a man, seeing in the Mind's eye the whole universe a tissue of whirling and interlacing Atoms, with no real Mystery or terror before or after, will live a life of cheerful fearlessness, undisturbed by terror of a world to come, or of powers unseen; his happiness is not in feastings, or in gold, but in a mind at peace, and with three human perfections. First:-To reason rightly: Second: To speak graciously, and third, to do his duty.

Huxley's soul was too rarified; Thales found his soul in Electricity. Professors Tait and Thomson (now Lord Kelvin) wrestled for many years to find a satisfactory definition of Electricity, and for its proper utilization. About ten years ago Prof. Roentgen discovered a new form of radiation called X-Rays, which has proved to be of immense value to Medical Science, by which the medical practitioner can detect and locate a needle, or a bullet; in fact, anything in the human body, coins in a purse, shot in a rifle, or an anchor in a whale. Then quite recently following the discovery of X-Rays, we have that of Radium-Mr. and Mrs. Curie (discoverers), which is one of the greatest and most marvellous of scientific discoveries. Professor Ernest Rutherford, of McGill University, an expert in Radio-Activity, convinced of his own theories and ideas,

revolutionary as they seemed to be, and scouted at—succeeded in the definition and condensation of the emanation of Radium into a family of eight—to the satisfaction and approval of the present scientific world, which burst the insuperable wall of the Atomic Theory, and has left it now, only a shattered Debris. Of what? I know not; but it can't be the Atomists' Atom. What have the Physical Scientists to say now.?

Kant's mind is a transcendental conception, separated from the smallest trace of experience. Mill says: "The adaptations in Nature afford a large balance of probability in favour of Creation by Intelligence."

Montaigne's "Mind" is involved in "Matter" or Body—the "Clay Cottage," as Locke calls it. "There can be no sound mind without a sound body."

Bain:—Nerve and "Brain" afford the physical basis of Mind.

Feeling affords the Mental basis, and Memory is the basis of Intellect.

"Whatever attacks every principle of belief can destroy none."—MacIntosh.

"Reason confounds the dogmatist, and Nature confounds the Sceptic."—Pascal.

"Truth! Truth! is the cry of all; but the game of few."—Berkeley.

"The 'Soul' and 'Immortality' is the Gift of a Sovereign Intelligence"—Craig-Ruie.

In conclusion: Assuming the association of Ideas as a sort of process of spontaneous generation, and assuming the beginning in impressions, the question

is: Can Hume's Theory explain "Thought" or cognition by means of conception, as something which happens in sequence, upon previous psychical events? Hume made a strenuous effort, but failed. Hume admitted that since Reason is incapable of dispelling the "First Principles" upon which Reason is founded, Nature herself suffices for that purpose and cures me of this philosophical delirium. My systematic attack on all the Principles of Knowledge and Belief is simply a mere exercise of subtlety, in order to check Dogmatism.

Hume's Ideas and Perceptions is Mind. His Impressions and Sensations is Matter, so with Hume's Mind and Matter, all the worlds in Existence and everything in it can be built as well as all the theories of every ancient philosopher and modern "Scientist."

Thus, we are still left stranded in Dualism (Mind and Matter), but something considerably different from the traditional Dualism handed down to us. In this case we must posit "Mind" as the prius and "Matter" as its vehicle or expression.

The two being in combination, must act and react on each other; if a molecular change is produced in the cerebrum, it must affect the Mind, and if Mind, when it has once emerged, works out its own activities by means of nerve, these mind-originated activities must again make their record in the cerebrum. This being so, we should not be surprised to learn that a change might be made in the cerebrum by an outer or inner stimulus, which did not then and there emerge as a consciousness; because consciousness as a one whole was too busy with some other occupation to admit of the nerve stimulus fulfilling itself to Mind.

In the conscious stage the Nerve-force and the Mind-force would seem to be in counterpoise; in the self-conscious stage the tables are turned by the emergence of "Will," and while the Nerve-force and the Mind-force still remain inter active, they are now overpowered and regulated by the "Ego," as self-conscious subject which, Ego, has itself been affected by the free-functioning of the new phenomenon, "Will" determining all to ends and to law.

It does not follow from this that Mind ever operates even in its highest self-conscious activities independently of a physical vehicle, and therefore of physical conditions.

The World seems to be constructed on this plan: Mind using Matter, and at the same time being restricted by Matter. This is Dualism, and we can't get out of it. Matter can have no reality by itself; the reality is Mind, and yet it is externality. If we part from this Dualism, we are driven into the Arms of "Monism," Materialistic or Spiritualistic. The "Rose of Monism" smells sweeter under the spiritualistic name; but that is all.

If all is "Mind," then the dynamics of what we call Matter, and the dynamics of cerebration are the dynamics of "Mind," and not merely of the externalized expression of vehicle of Mind; for there is no externalized expression—no Matter.

If "Matter" again is "Mind," and all is Matter: then this is simply to say, that Mind is Matter; consequently, there is nothing to choose between the two positions.

Immortality:—The Final Problem of Metaphysics:—What is our Destiny? This question is of far

more importance than the question concerning the Origin of our Existence. It will be the Great Question of future generations in time and space.

We assume that we know pretty well all about the processes of generation, though we have no absolute knowledge of how Huxley's "Mysterious Activity" acts or works. Our knowledge of our existence previous to our coming into "being" is "void." Will it be so when we cease to be? or in other words: Will it be so, when we go out of being? If not: What "warrant" have we for the expectation of a life beyond the present state (or beyond the "Grave"). We have no "warrant" whatever; but must fall back upon the Hypothesis of "a Sovereign Intelligence" as the source and Destiny of our Existence. The Finite, since it is not the self-sufficient, cannot afford an argument toward immortality.

The "Nature" which is dependent upon a "Sovereign Intelligence" for its Origin must be dependent on his "Will" for its continuance. While, therefore, Futurity of Existence is clearly involved in the facts of the present life, Eternity of Existence must depend upon the "Divine Will," and can be known only as matter of distinct revelation, not as Matter of Metaphysical deduction. All that is greatest in us points towards an immeasurable future. Thither we must look for the solution of many of our dark problems, and for that purity and grandeur of personal life unknown in the present state.

If the "Best Intellects" be restricted to pure speculation, the great uncertainty must hang over them, which found utterance in the closing words of Socrates' Apology.

The hour to depart has come—for me to die; for you to live; but which of us is going to a better state is unknown to everyone except to "A Sovereign Intelligence —(Mind—a Supreme Mind).

It was on the Interpretation of this "Mind" that Hume caught Bishop Berkeley, and, without a moment's warning or time for reflecton, sprang upon him, with great adroitness, and plied him with question after question until he landed him in the toils of Anarchism, not Scepticism; for in the Bishop's "Mind" the Sovereign Intelligence and the Material World still existed; as Mr. Hume himself humbly admitted, that he did not pronounce it absolutely insuperable, for Faith could easily be read between the lines of his Philosophy.

The most renowned Scientists declare that "Matter" cannot be destroyed; therefore, it is Eternal. The most learned "Theists" maintain that they see Order and Intelligence in the Universe; therefore "A Sovereign Intelligence" must exist. Materialists must have greater "Faith" than "Theists," because their Faith must transcend "Observation and experience" (on which their Theory is founded).

When Lord Russell advocated the Behring Sea Seal Fisheries question, before the International Commission, and obtained "judgment" in favour of Canada, he jocularly remarked afterwards that when the case began, he did not know a seal from a cow, and he questioned very much if he did yet; but he was so well posted on the details of the subject by two of Canada's foremost advocates, that he had no difficulty in arranging his matter.

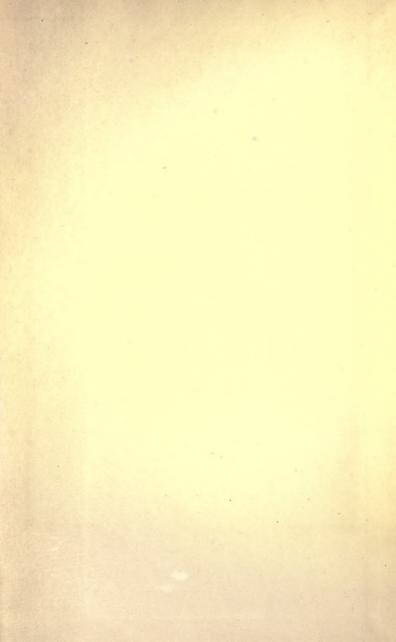
It was his Forensic expertness which enabled him

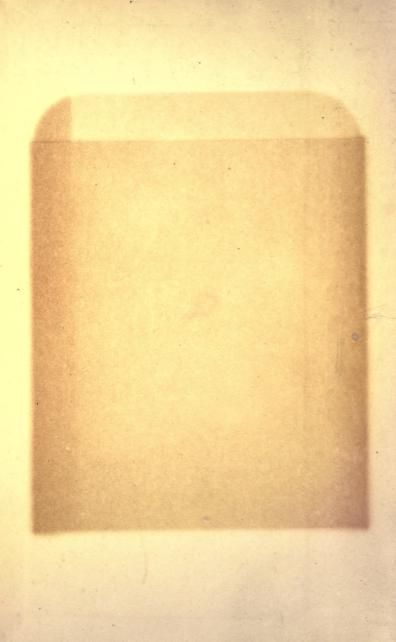
to obtain a favourable judgment, and not his own observation and experience on the subject. Nobody ever attributed dishonest motives to Lord Russell, or ever called him a "Sceptic."

When the Lord Chancellor rendered judgment in the Free Church case, no one ever attributed dishonest Motives to him, or ever called him a "Sceptic." We claim the same right for Mr. Hume.









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