## Life and mind on the basis of modern medicine (materialism) / by Robert Lewins; edited by W. Stewart Ross, after revision by the author.

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# LIFE AND MIND:

ON THE BASIS OF MODERN MEDICINE

ROBERT LEWINS, M.D.



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## LIFE AND MIND

ON

## THE BASIS OF MODERN MEDICINE (MATERIALISM)

BY

ROBERT LEWINS, M.D.

EDITED BY W. STEWART ROSS, AFTER REVISION BY THE AUTHOR.

- "Die Weltgeschichte ist das Weltgericht."--Schiller.
- "For that which befalls men befalls beasts; as the one dies so does the other: they have all one breath; all go unto one place; all are of the dust, and all turn to dust again."—Ecclesiastes iii, 18, 19.
- "If it be possible to perfect mankind, the means of doing so will be found in the Medical Sciences."—DESCARTES.
  - "See all in Self and but for Self be born," POPE's Dunciad.

### LONDON

W. STEWART & CO., 41 FARRINGDON STREET, E.C.



## EDITOR'S PREFACE TO FIRST EDITION.

THE principles enunciated in this volume we have long been engaged in expounding and popularising in the columns of a weekly paper devoted to the establishment of a more rational system of life than the supernatural one. Our labours in this direction having met with the approval of the author of the conspectus of modern medical principles, for some years out of print, to which we were indebted for our acquaintance with what we term Ideal-Hylozoism, or the Brain Thesis of Mind and Matter, we requested permission to be allowed to superintend the publication of another edition of the work, which will be found to contain the key to all that has been written on the subject. The Author, having consented to this request kindly empowered us to add a series of notes upon certain portions of the tract, which were necessarily brief suggestions alone because of the necessity, in a work of such compass, of rigidly adhering to the main principle which it enforced.

The editorial portion of this volume is purely hermeneutical, being an amplification of what precedes it. The ground covered by Dr. Lewins is really so wide that every paragraph of what he has written would easily serve as the text of a large volume.

One word in conclusion. The Brain Thesis of Life and

Mind, or Mind and Matter, has successfully run the gauntlet of adverse criticism. Its principles are not new—on the contrary, they are as old as human nature, being those of sound sense and science in all ages. We believe them to be incontrovertible, and our most earnest desire is that both the individual and society at large will apply them to their legitimate ends—namely, to the establishment of a healthy, unsuperstitious, harmonious mode of living, to the emancipation of mankind from the worst of thraldoms, and to the universal practical recognition of the truth that man is, whether for weal or woe as he himself may choose, the sole law to himself, and the only possible Providence to man.

THALASSOPLEKTOS.

## AUTHOR'S PREFACE TO FIRST EDITION.

THE following demonstration—on data that constitute the Magna Charta of modern Physics and Physiology—of the baselessness of Animism and the all-sufficiency of Hylozoism in consciousness and its objects, was first published in 1873.

It is now reprinted, with a few unimportant additions, from an earnest desire that the one simple physical principle enunciated with no uncertain sound in this synopsis—a principle which makes Materialism obligatory on the contemporary conscience of civilised Europe and America-may receive from reflecting and patriotic readers more serious attention than has hitherto been awarded it. Such attention it now really imperatively demands in the present ominous aspect of the political horizon, which clearly presages another "cosmic wave," destined, sooner or later, to involve the British Empire in crises which will assuredly place all our institutions in Church and State once more on trial, and which will, above all, result in discrediting the inveterate Pharisaism-utterly repudiated alike by reason and science—which pretends that "belief in the Bible is the palladium of our liberty and greatness."

The author—a military surgeon of more than twenty years' experience of active service in peace and war—has been, since

1848, painfully penetrated by the foreboding which all history, especially of the last thirty eventful years, appears to justifythat no nation can permanently escape catastrophes when its public opinion is dominated by the obsolete traditions, political and religious, of a "creed outworn"—traditions reprobated by the judicial sanity of the age as untenable hypocrisies and anachronisms. If it be true, as the following pages, on apparently incontrovertible evidence, place beyond question, that "Divine inspiration" and "revelation," in all their Protean forms—whether Polytheist, Jewish, Christian, or Mohammedan -be in reality merely natural pathological phenomena, symptomatic of cerebral exaltation and disturbance, it follows that Life, permeated by delusions cherished as being more vital than life itself, must be, as Shakespeare says, "a tale told by an idiot, full of sound and fury, signifying nothing." It is surely self-evident that foregone conclusions, combining radical misconceptions of man's nature and destiny with a vain reliance on supernatural interference in mundane affairs, must wholly vitiate our conduct and outlook in every direction-individual and national—of human activity.

LONDON, June 1877.

### PREFATORY BIOGRAPHICAL NOTE.

Dr. Robert Lewins was born at North Berwick on August 28, 1817. His father, Dr. Robert Lewins, was, at the time of the birth of the subject of this memoir, a medical practitioner in that then, as now, fashionable and patrician resort. On the occasion of the death of Dr. Welsh of Haddington, father of Jane Welsh Carlyle, Dr. Robert Lewins, senior, removed from North Berwick to that town, to a well-known classical academy of which (Hardie's) the future philosopher of Solipsismal Monism was sent to learn his three R's. This he left for the parish school to which, in Scotland, gentle and semple went in those days. It was while he was a young school-boy at Haddington that the future Dr. Lewins once, when he along with some other children was out on a nutting expedition, forgathered with "Bonnie Jeannie Armour," the widow of Robert Burns, and at the time on a visit to Burns's brother Gilbert at Grant's Braes, an incident of which Dr. Lewins still speaks with some interest. We next find the future Hylo Idealist a boarder with William Tennant, then headmaster of one of Scotland's most celebrated schools, Dollar Academy. Tennant is accounted by many facile princeps among Scottish humorists, and his well-known "Anster Fair" certainly affords some basis for such claim. After leaving Dollar, Tennant filled the Chair of Oriental Languages in the University of

St. Andrews. His coming in contact with powerful and idiosyncratic individualities in the most plastic and impressionable period of his life-Mr. James Johnstone of the Haddington parish school was an early friend of Carlyle (see Froude's biography of the Chelsea sage), and, like Tennant, a scholar and man of superior mental attainment-exercised a stimulating and inspirational influence on young Lewins, and left impressions which have been with him continually through all his long, arduous, and often eventful career. may be noted, as testifying to Jane Welsh's influence, even in her callow years, that Mr. Johnstone owed his appointment to her patronage. Only those gifted with rare psychological penetration would perceive that there is aught of the imagery and phantasy of poetry in the author of the following pages; and yet, from the impulse given by Tennant, and the romantic scenery round Dollar, Dr. Lewins had reached his twentyseventh year before he abandoned the luxury of embodying his emotional and romantic imaginings in verse.

Dr. Lewins, senior, was among the very first to feel dissatisfied with the too purely classical education of English schools, and to set the example, subsequently extensively followed in Edinburgh, of recognising the claims of the modernity of German methods. Dr. Lewins, junior, was sent before the completion of his fifteenth year to the Institute of the Brüder Gemeinde, Moravian Brotherhood, or Herrnhuters, at Neuwied on the Rhine, since famous as the birthplace of Carmen Sylva, Queen of Roumania, and who has achieved an enviable reputation as an authoress. Here Dr. Lewins remained two years, and acquired a knowlege of German, which became to him quite a "mutter sprache," or mother tongue. Leaving the Herrnhuters, he studied in succession at the Universities of Heidelberg, Paris, Edinburgh, and Vienna, the latter being the head school in Europe for pathology-eleven bodies being daily dissected in the dead-house of the general hospital, the

Alser suburb. As a German bursche, at the age of seventeen he travelled extensively in Switzerland, Italy, including Rome, Naples, Pæstum, Capri, and Sicily—the latter at that time so beset with brigands, that the adventurous bursche could not prevail upon any of his companions to accompany him. He made the ascent of both Vesuvius and Etna.

On the completion of his professional studies, Dr. Robert Lewins, junior, was expected to become the partner of his father, who had now removed to Leith, where he had a lucrative practice, and held the office of Censor of the Royal College of Physicians, Edinburgh. But his son, from his training as an earnest and capable student who had travelled, could see no venue for his energy and ambition in the formal and conventional routine work of a civilian practitioner. The father's remonstrance subsided into consent, and the son, after two years' experience as partner, accepted in December 1842 of a commission in the Army Medical Department. His first appointment was to the 75th or Stirlingshire Regiment, now one of the battalions of Gordon Highlanders, a regiment which had been originally raised in 1794. Our young medical officer served through the Rebecca Riots in Wales in 1843, and later in the year was appointed to a Staff Assistant Surgeoncy at the Cape of Good Hope, which in two years he exchanged for an appointment in the 63rd.

The Army Medical Department was at that time under the Directorship of Sir James M'Gregor, Bart., designated by the great Duke of Wellington, from his experience in the Peninsular War, as "the most successful public servant he had ever known."

Dr. Lewins served for twenty-three years in the 75th Regiment, in the 63rd, now the first battalion of the Associated Manchester Regiment, and on the Medical Staff. He was surgeon in chief of the latter corps in the Crimea, where it was the greatest sufferer in a campaign unparalleled for loss of life since that of

Moscow in 1812, being practically annihilated from casualties in battle and from disease. This was to the contemplative, yet adventurous, spirit of our author an experience singularly sinister, but, at the same time, exceptionally instructive.

Dr. Lewins served in three other campaigns—in South Africa against the Caffres (Macomo, Sandili, &c.), in New Zealand, against the Maories, and in North China, where, at the capture of the Taku Forts, he was surgeon in charge of the Hospital Ship "Mauritius," to which all the worst—mostly incurable—cases of the Expeditionary Army were sent during the campaign in which Pekin was taken, and the Summer Palace burnt, in retaliation for the treacherous murder of English officers and Mr Bowlby, correspondent of the *Times*.

In 1868 Dr. Lewins retired from the army with a pension for life. He had undergone his full share of dangers, privations, and hardships, having served his country under her colours in the four quarters of the globe. He had gratified his natural bent, for which a civilian medical practice furnished no arena, and he had obtained a valuable and profoundly suggestive experience, dearly bought, it is true; but all experience, to be really valuable, must be so. He possesses the Crimean medal, and four clasps, Alma, Inkerman, Balaklava, and Sebastopol; as also the Turkish and China medals.

Besides his extensive itinerary under the flag, Dr. Lewins has since his retirement from the army travelled widely, bringing to the scenes of his travels a mind singularly capable and enriched, and yet always plastic and receptive to further impression and educative influence. The Protagorean thesis he first excogitated when a young man with his regiment in India, he has adhered to, and elaborated ever since, finding in all subsequent experience and thought only further and further corroboration and support of his position. As often stated, Dr. Lewins finds the "Brain Theory of the Universe" one with Kant's negation of "Thing in Itself," only based on the sure

and certain foundations of positive science superadded to the more conjectural formulas and methods of Metaphysics and Psychology. His principal philosophic coadjutor was the late Miss Constance Naden, a writer whose premature death has left our English literature and thought all the poorer. Since her death, as her literary executor, Dr. Lewins has issued carefully and sympathetically edited editions of her various works.

It will be evident, even from this meagre sketch of an earnest and purposeful life, that the qualifications of Dr. Lewins for the envisaging and investigation of the important problem dealt with in this treatise on Life and Mind have been exceptional, not to say unique. He assumes to solve the vast and dread proposition entirely in favour of Solipsismal Monism, thus making universal Egoism the master-key of the enigma. Medicine has, in all ages, been what D. Lange, in somewhat mixed metaphor, terms the theology of Materialism; the whole objective realm being absorbed by the subjective. The actual creator of the only objective sphere accessible to sense and thought becomes thus the Ego or Self—the Atman of the Hindus. From its decision there neither is, nor can be, any appeal whatever.

W. STEWART ROSS.

October 1894.

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THE design of this short contribution to the philosophy of Modern Science is one the execution of which I have felt for many years past-ever since the collapse of the European equilibrium, established at the seemingly final eclipse of the first French Revolution, by the annus mirabilis of 1848—to be an essential desideratum in the current distracted state of public opinion in Great Britain with respect to the claims upon our belief of Divine Revelation, at the existing standpoint of Science. Volumes could not better illustrate the irreconcilable antagonism between Revelation and Science than a statement respecting Death made by the Archbishop of Canterbury, in his sermon on the text "Jesus wept," preached in Lambeth Church on Hospital Sunday, June 15, 1873. This venerated dignitary, official authority, and mouthpiece of Church and State-scholar and man of culture though he be -still finds it justifiable to advocate the pitiful-or rather pitiless—anachronism now so thoroughly refuted by Science, Sense, and right Feeling, that "Death is a frightful thing, the memento of Sin, for Sin gave it birth." The Archbishop is evidently still under the sacerdotal conviction, now so repulsive to the average conscience of our age as a libel alike on "Omnipotence" and Humanity, that the myth in the Hebrew Scriptures of the Creation and Fall of Adam is a matter of fact.

No soldier, no philanthropic civilian, however humanitarian, can, consistently with duty, hold such an opinion of Death; it is quite fatal to the maxim, "Dulce et decorum est pro patria mori."

My present purpose is to attempt, in quite ordinary and intelligible language, divested of all technicality which is not familiar to all fairly educated persons, to popularise the thoroughly accredited verdict of ancient and modern Medicine —the science of human nature—that life is nothing more than organisation in action. Upon this strictly physical basis—disregarding all philosophical speculation or ideology, from Plato to Comte, as an ignis fatuus which has only served during thousands of years of misdirected, though doubtless unavoidable, activity to perplex and mislead the human mind—I propose to formulate, in a few sentences, a consistent and rational theory of human existence, in which everything supernatural, and exceptional to familiar, every-day observation and experience, is removed from the domain of right reason into that of fancy and fable. No doubt both the poetical and metaphysical faculties are most essential and important elements in human nature; but the legitimate end of imagination and philosophical speculation is to lead us to the possession of positive facts which are practically useful in real life. All records of intellectual processes that stop short of this result are—except during the brief period of our mental non-age, education, and unstable equilibrium—impediments to right conduct, and only serve to cheat and beguile us of our time. Action, not contemplation, is the true vocation of adult man —a sentiment thus forcibly expressed by Mephistopheles in "Faust":-

> "Ich sag' es dir ein Kerl, der speculirt, Ist wie ein Thier, auf dürrer Heide, Von einem bösen Geist im Kreis herum geführt, Und rings umher liegt schöne grüne Weide."

I chiefly desire to bring to bear, for practical, social, and political purposes, one single, well-established philosophical canon on the so-called inspiration and infallibility of the Bible—the book which, though widely discredited elsewhere, and especially in Germany, still exerts an overwhelming weight in England, against which it has hitherto seemed hopeless to struggle. In a purely scientific and judicial spirit, I assert

as really incontrovertible the non-existence of a vital or spiritual principle as an entity apart from the inherent energy of the material organism; in other words, that matter has of itself its own energeia (working power), and neither requires nor

admits of supernatural interference.

This one firmly-established fact alone, I am fully satisfied, proves conclusively that all supernaturalism, alike "sacred and profane," is explicable by quite familiar phenomena of deranged cerebration and innervation; and that, as a corollary, the pretended "fundamental truths of Christianity"—as forms of animism (spiritualism)—are palpable fallacies, ill-analysed and misinterpreted signs of disordered functions of the brain and cranial nerve-centres, having, therefore, no more authority or claim to special sanctity than analogous pretensions in the case of the Zendavesta, Koran, or other extinct or extant idolatry. Mohammed, indeed, from being subject to epilepsy, must be considered by modern pathology as labouring during his whole public career—which was much more extended than that of the immature Prophet of Nazareth-under actual organic brain disease; and the widespread religion of Islam may, therefore, be dismissed at once, as a pathological question, from the serious notice of the non-medical world.\* In like manner, the Grecian Oracles, reverenced by the most civilised nation of antiquity as super-human utterances of Divine Wisdom, were merely the ravings of women temporarily insane from the inhalation of gases which disturbed, by poisoning the blood, their cerebral functions. Insanity and idiocy are to this day still venerated in the native lands of Jesus and Mohammed as the manifestations of Divine inspira-Epilepsy, doubtless from its striking and imposing physiological symptoms, was in ancient times regarded as the "Holy Disease" par excellence. Hippocrates, no doubt, incurred the odium attached to "impiety" when he taught that no disease was more or less holy than another, all alike being the result of deranged bodily organs—a rational doctrine which thus, at the very dawn of medicine, virtually negatives all

<sup>\*</sup> Christianity, as has come down to us, has a quite similar origin if, as is the universal tradition of the Church, St. Paul's stake in the flesh was the falling sickness, which modern medicine shows impairs the mind more than the body. Some of St. Paul's dicta, as, "meeting the Lord in the air," &c., show distinct signs of more or less mental aberration.

spiritualism whatever, and gives the coup de grâce to all hieratic mystery. Christianity will thus be found, when examined by the light of the eighteenth and nineteenth centuries, to be simply what impartial Greeks and Romans described it at its origin-a Syrian superstition. Syria-the "Holy Land" of the Bible and Koran (as if in sound philosophy any one place or thing can be holier than another)—seems throughout antiquity to have been especially notorious for the mysticism of its inhabitants; by which term I mean such predominance of the imaginative over the reflective faculties that sober reason and observation, the seeing things as they are in the open daylight of fact and nature, become quite disguised and obscured by the phantasmagoria of illusion. Doubtless this arose chiefly from geological and meteorological peculiarities, the scenery round Jerusalem and through the wilderness of Judæa towards the Jordan being exceedingly weird and hideous, well fitted to be the nursery of an ascetic creed "whose kingdom is not of this world." This radical defect, which necessitates the intellect to revolve perpetually in a vicious circle fatal to all real progress, is indeed characteristic of the human mind throughout all the East, as every impartial traveller perceives on a

very cursory acquaintance.

An Asiatic—as, among others, M. Renan has shown in his "Life of Jesus," and in other contributions to the genesis of Christianity, must mystify and fable, must soar into the supernatural, not necessarily from conscious deceit, but because, from the structural arrangement of his cerebral organs, exaggeration, hyperbole, and the preference of fiction to fact is his natural element. To him Lord Bacon's aphorism is peculiarly applicable—"A mixture of a lie doth ever add pleasure." In the whole texture of his mind he displays the impulsive, visionary imaginativeness and incapacity for patient and sustained impersonal research of women and children, swayed less by judgment than by sentiment and passion. To minds of this class plain truth appears insipid, displeasing, and unsatisfactory, as compared with fiction; in direct contrast to that disciplined virile European intellect which, in comparatively recent times, by strict adherence to the investigation of what really exists, has so immeasurably extended, for the benefit of mankind, the range of mental vision. In the signal triumphs of civilisation during the last two centuries the Orient, and the

traditional methods of the Orient, have no part whatever. This Semitic defect was some years since exemplified in the person of Lord Beaconsfield, when, in the Sheldonian Theatre at Oxford, he ignored the first elements of modern science by proclaiming urbi et orbi that "he was on the side of the angels," which are clearly imaginary beings, like the divinities of the classic Pantheon or the genii of Arabian fable. stagnation of Turkey for four hundred years past is also another proof of Eastern immobility and impenetrability by the modern spirit. To minds fettered by dogmatic creeds, reform is, as Mr. Carlyle said of Popery, impossible. Bible believers, whether Protestant or Papist, have been characterised by Professor Huxley as the Bourbons of the world of thought, who neither learn nor forget—a truth which, if realised, as it might have been generations since, would have saved England from the late distracted policy on the Eastern Question—a policy apparently based upon the mistaken notion that it was possible to inspire the Ottoman with a love of and zeal for reform.

To return from this disgression to my more immediate purpose. The single and simple cardinal principle of modern science above italicised, to which I could direct attention—as subversive of all spiritualism and mysticism whatever—is a product of English genius. It cannot properly be considered older, in its definite shape, than the publication of Newton's "Principles of Natural Philosophy" in the year before the Revolution of 1688, although, in a vague and indefinite form, its spirit was awake in Europe from the time of the Revival of Learning. As stated in its charter, our Royal Society was established, after many years' virtual proscription during the Civil War and Protectorate, at the Restoration of Charles II., as a protest against supernatural methods, the Puritan Revolt being the last sincere and earnest abortive attempt to govern mankind on Christian principles, or to take au serieux in political life the truth of the Jewish and Gospel Revelations. Modern Physical and Mental Science, dating from the English Revolution—the era of Newton and Locke—may thus justfy be considered the real Antichrist. Yet, mirabile dictu, one of the early measures of William III., credited as being an Atheist. was to render it felony in any baptised Englishman to discredit Trinitarian Evangelism.

This radical principle of true knowledge, which the human mind has only reached after persevering for thousands of years in false methods, is the confidence, based on fixed scientific data, and not merely on conjecture, in the all-sufficiency of Matter to carry on its own operations, and the consequent absurdity, uselessness, and non-necessity of any hypothesis which assumes that from outside the sphere of sensible material phenomena there intrudes an immaterial, spiritual, or supernatural factor to perform functions which matter, by virtue of its own indwelling energy, really performs for and by itself. I confidently submit to the judgment of my contemporaries the assertion that the whole hypothesis of Immaterialism, of an overruling of matter by "spirit" (in the transcendental, not etymological, sense of the word)—the former the passive instrument, the latter the active agent—received its death-blow, as Leibnitz deplored at the time, on the fall of the Cartesian and establishment of the Newtonian Philosophy. Our great English geometrician, by his discovery of universal gravitation, was the real founder, in Christian times, of scientific, common-sense Materialism, although, from prejudices of his own education in the still prevalent scholastic philosophy of his age, he himself failed to carry out his own data to their legitimate conclusions in the domain of Biology. The tremendous revolution in European thought at the close of the seventeenth century can even yet be well appreciated by comparing the mystical idealism of Milton's "Paradise Lost," and—though in a less degree—of Dryden, with the common-sense realism of Pope's "Essay on Man" or Swift's "Tale of a Tub," and especially with that of eighteenth century English Deism, so momentous in its bearing on French and German thought. From the awe-struck manner in which the intellectual representative of Puritanism\* apostrophises Light as too sacred even to be named, we recognise the fatal tendency of that sacerdotal mysticism which renders free thought, free investigation, and real progress an impossibility. There is no room for doubt, from his cosmological and psychological standpoint, that had Milton been aware of the

<sup>\*</sup> See Samuel Butler's ("who asked for bread, and received a stone") "Hudibras," which must, however, be read cum grano salis, and not by any means as an impartial record of that great movement and protest against conventional Church conformity.

prismatical experiments and cosmical demonstrations of Newton, he would have turned from their concrete, mechanical operations, as theologians from the "anatomist's scalpel," with abhorrence and proud contempt. With what haughty scorn does not even Swift speak of the presumption of butcher-like surgeons in venturing opinions on "sacred" subjects! Socrates, who has been considered by not a few orthodox authorities to have had a quasi Divine Mission, as a forerunner of Christ, protested against the impudence and profanity of Anaxagoras when he degraded the divine Helios and Selene into a Sun and Moon of calculable motions and magnitudes. Astronomy was pronounced by him to be among the "Divine Mysteries," which it is impossible to understand and madness to investigate, as the above-named physicist had presumptuously pretended to do. He held, indeed, that the Gods did not intend that man should pry into cosmical arrangements; that they managed such things so as to be beyond his ken; and, therefore, logically discarded General Physics, or the study of Nature, altogether, as impious madness. "Moral Philosophy" he considered to be alone fit for Humanity. Natural Science he taught to be celestial arcana, that would for ever remain inscrutable secrets to mankind. (See Grote's "History of Greece," chapter lxviii.) So far as we can see, this abject state of mental prostration in presence of cosmical phenomena remained the mediæval and Reformation standpoint, and was—despite the admirable, but incomplete, labours of Copernicus, Tycho Brahe, Kepler, and Galileo—only fully displaced by the discovery of Universal Gravitation. Both Bacon and Milton-not to speak of Luther, Calvin, Cranmer, Knox, and other founders of Protestant churches and sects-scholars at the high-water mark of the knowledge of their respective epochs, disbelieved the true system of the universe. George Buchanan, one of the first Reformation Humanists, inveighs against the theorem of earth motion, in his tract "De Sphæro," as a theory too ridiculous for serious consideration, as did his contemporaries—Luther and Melancthon.

Whatever may have been the doubts and quibbles of Newton himself, of Locke, and of their learned and unlearned contemporaries, it became patent to Sir Isaac's immediate successors—at all events from Halley downwards to Laplace and other

French Newtonians—as to us a century and a half later, that as soon as it became a demonstrated fact that matter was active, not passive, that its every particle was in motion itself, and the cause of motion in every other particle, the belief in an energising principle as a separate entity, apart and distinct from matter itself, became an untenable fallacy. The whole fabric of Immaterialism, the idea of the necessity of supernatural influence in inorganic matter, was annihilated at once, thus consummating the conquest of Occidental over Oriental thought, of which latter the chief religions of the world are the crowning products. In Chemistry the Antiphlogistic theory of Lavoisier, which annihilated the hypothesis of a "Principle of Levity," has exactly the same bearing on Materialism as the elimination, by Newton, from the universe, of Gravity (Attraction) in any other sense than as a property or function of matter itself. The introduction of the scholium of the Supreme Being into the "Principia" must be regarded by every English physicist of to-day—as it has always been by foreign Newtonians, from Voltaire downwards—as a proof that, in this instance at least, "great wits to madness sure are near allied," and that the mind—the vis prope divina of his epitaph in Westminster Abbey - of our illustrious countryman was reeling under the burden of his all but superhuman task. The so-called Godless saying of Laplace to Napoleon is well known: "Je n'ai pas besoin de cette hypothèse." Robespierre's fall, attempted suicide, and execution seven weeks after his institution of the "Fête to the Supreme Being," that Terrorist himself ascribed to this event.

The generalisation from the Newtonian discovery cannot be restricted to "brute" matter; it is equally applicable to the organic kingdom of nature, to plants, animals, and man. Sensibility and voluntary motion (animal life), just as in the case of the automatic cosmos, is not the outcome of a vital or sensomotor principle, spiritual or immaterial, animating, vivifying, or vitalising the material organisation. On the contrary, just as in the simpler though not less wonderful—for in an infinite scale there are no absolute degrees—case of inanimate matter, animal vitality, or conscious existence, with all its marvellous and complicated processes of body and mind, is merely the active expression of the material machinery of the microcosm. In this microcosm special anatomical structures or tissues

manifest special functions, one of them being consciousness egoistic and altruistic-of which mentation or cerebration is only a mode. Thought and Moral Feeling is thus only localised sensation, the special life of the hemispheres of the brain, organs familiarly known to be exceptionally developed in the human, as compared with all other, animals. Modern physiology, based on histology, just as in the case of modern physics—the division between these two being a purely artificial one—has been compelled entirely to discard the Oriental, classical, mediæval, metaphysical, ante-Newtonian speculation that organic function has for its factor a spiritual or immaterial entity, or "soul." The question of the anima mundi and anima humana (using the term in the sense of soul) is at bottom one and the same. The speculation—explicable and excusable even so late as the prevalence of the Cartesian system, while the erroneous idea of the inertness of matter vitiated philosophy—had no longer a locus standi after its refutation by Newton. If matter acts by means of its own vis insita, and depends on no extraneous influx, or impulse, the whole problem of Immaterialism and Materialism, Supernaturalism and Naturalism, is solved in favour of the latter. No modern physiologist has any difficulty in realising what seemed so insuperable a stumbling-block to the ancient and even to modern philosophers, so late at least as Locke namely, that sensation and thought are due to matter (nerve substance). The whole difficulty seems to us purely imaginary, depending on preconceived fancies as to the twofold existence of spirit and matter in the universe, and the inferiority of the latter to the former-ideas of no greater value than the old prejudice - so mischievous in astronomical discovery - of mathematicians about the "perfection" of the circle, or the fanciful notion of peculiar sanctity attached to the numbers 3 and 7.\* We know nerves feel or sensate, and we also know equally well, both from physiology and pathology, that a special portion of the nervous system—the hemispheres of the brain —thinks. That this is so will be readily conceded by all who

<sup>\*</sup> The great anti-Scriptural significance of Herschell's discovery of Uranus lay in its breaking through the "sacred" idea of the seven planets. For the mystical sanctity of the arithmos hagios 7 see the Book of Revelation passim. [The word sacer means both holy and accursed, as in the latter case of auri sacra fames].—ED.

will briefly consider the following facts, as quoted from a most profound article on physiology, written by the late Professor Hughes Bennett, in the eighth edition of the Encyclopædia Britannica:-

"That the hemispheres of the Brain are the seats of the intellectual faculties-viz., Emotion, Passion, Volition-and at the same time essential to Consciousness, may be considered proved by these established facts:—(1) In the Animal Kingdom a correspondence is observed between the quantity of grey matter, the depth of the convolutions, and the sagacity [or ideal sagacity] of the animal. (2) At birth the grey matter in those parts is very defective, the convolutions being only superficial fissures confined to the surface of the Brain; and as the grey matter increases, intelligence develops. (3) Vivisection shows that, on slicing away the Brain, the animal becomes more dull and stupid in proportion to the quantity of grey matter removed. (4) Clinical experience points out that, in cases where disease has been found to commence at the circumference of the Brain (that is, at the hemispherical convolutions), and proceeds towards the centre, the mental faculties are affected first; whereas, in those diseases which commence at the central parts, and proceed towards the circumference, the mental faculties are affected last."

The single fact alluded to in No. 3 of the above quotation from Professor Bennett solves, beyond the power of logical contradiction, the question at issue between Spiritualism and Materialism in favour of the latter. Nothing can be clearerthan that the act of slicing the hemispherical ganglia of the encephalon induces insensibility and stupidity, which is equivalent to stating that it impairs the mind and blunts the moral feelings. No physical pain, no paralysis, is the result—a fact dwelt on by early vivisectors with astonishment: the effect is only a purely mental one, which surely demonstrates that the organ injured is the primary seat of the mind—"the dome of thought, the palace of the soul." We should certainly conclude that such was the case, from similar experimental results in any other organ. Modern Medicine, since the time of Bichat, who, by founding histology, first made anatomy a true science, is necessarily Materialistic. In reality Medicine has never been aught else in principle, although this has been much more plainly and unmistakably recognised since Bichat's time. In

the Dark Ages the popular adage—which doubtless originated among the clerics who observed the tendency of Medicine—averred: "Ubi tres medici duo athei"—of course every one being an Atheist who was not a Catholic Christian. Bichat, who died prematurely exhausted at the early age of thirty-one, did not thoroughly realise the results of his own great labours. His definition of life was that it is "the sum of the functions which resist death." Much more lucid is the simple Materialistic definition of Béclard—namely, that life is "organisation

[i.e., organised structure] in action."

From the medical or natural standpoint, the metaphysical notion that man is a dual being, compounded of soul and body, is in reality only the last lingering relic of the vicious, obsolete School-physiology, which was the parent of occult therapeutical practice in the Middle Ages, and is familiarly known in medical literature as the system of Van Helmont, a Flemish physician, who died about the time of Sir Isaac Newton's birth. This system was based on the fallacy of the essential passivity of matter, and pre-supposed that in every organ of the organ there is an archæus, a ruling spirit, an eudemon in health, a kakodemon in disease—the active agent in function, whose sole raison d'être was the presumed incapacity of matter, "living or dead," to exhibit, proprio motu, energy of any kind. This theory, identical with that of divine and demoniac possession in the Bible, is a mere phase or variety of Animism, and is altogether incompatible with modern Medicine. It is needless to say that it has long since fallen into even popular contempt in Europe as regards every other organ or series of organs in the body, except the sensorium.\* Its latest advocate—not a mere quack—seems to have been Sir Kenelm Digby, who obtained some reputation at Court during the early years of the Restoration by his work -published in 1658, the year of Cromwell's death-"On the Cure of Wounds [at a distance] by the Powder of Sympathy." Some lingering relics of this ridiculous mysticism may even yet be traced in the vulgar notion about killing the dog which has bitten you, in order to avert the peril of hydrophobia in yourself.

<sup>\*</sup> Error, however, dies hard: in a modified form this old fallacy again reared its head during the chloroform controversy in 1848. Vide "Memoir of Sir James Y. Simpson," by Professor Duns, D.D.; Edinburgh, Edmonston & Douglas, 1873.

The radical antithesis between the old dual doctrine of body, animated by "spirit" and modern physiology, may be well illustrated by reference to the different views as to the rationale of "suspended animation" in the two systems. In the one, where matter is held to be essentially inert, a vital principle, an animating spirit, must be assumed, which in syncope, asphyxia, or death, deserts—either temporarily or finally—its material tenement, to emigrate as an indestructible, veritable entity elsewhere. In the modern scientific view we have, with complete reason, and on sufficient grounds, abandoned this separation of soul and body, this emigration, during periods of insensibility and immobility, of the former to other spheres of activity. We now know, as certainly as we know of any demonstrated fact of science—to mention no other grounds for our certainty than the mechanical means of treatment successfully employed for the restoration of the apparently dead—that life resides in tissue as an immanent energy, with its corollary, that suspension of life is the consequence of the derangement, the arrest, of those material conditions (the ultimate link in the chain of which is the contact of the oxygen of the atmosphere, through the arterial circulation, with the tissues), exactly as takes place in the case of any other apparatus which ceases to work from derangement of its machinery. The discredit into which exorcism has fallen shows that, even in the unscientific mind, material force has been substituted for "vagrant spirit," now "in" now "out of the body," as the active agent in vitality. Compare, as examples of the radically false nature of Oriental biology, Paul's description of his vision of a journey to the third heaven, and into Paradise, in the 12th chapter of 2nd Corinthians, with a similar legend in the history of Mohammed.

The bearing of this unity, and not duality, of constitution in man, on what are called the "fundamental truths of Divine Revelation," must be apparent at a glance. What has been mistaken for supernatural interference resolves itself into Hyperæsthesia or Anæsthesia, dependent on increased or diminished nervous and cerebral action. It is quite unnecessary, from this physiological vantage ground, seriously to allude to the portents, miracles, prophecies, &c., adduced by mystagogues (successful or unsuccessful) to sanction their pretensions to dictate authoritatively, as exceptionally privileged beings, to their fellow-creatures the behests of heaven, from Moses to

Pius IX. and the author of the Book of Mormon. All such must be uncompromisingly negatived by science in the nine-teenth century as impostures—conscious or unconscious—the promulgator of an untruth not being, of course, less an impostor from being his own first dupe; even though he be the victim of circumstances beyond his own direct control. Of course, by this use of the word imposture I do not presume to ascribe deceitful motives, but merely to state facts. A Romish priest may "innocently" increase his income by fees for soulmasses; nevertheless, the transaction must be termed an imposture by all who recognise that no such entity as the "soul" exists, with its corollary of the baselessness of purgatory, heaven, and hell.

It were an impertinence, in the present state of physiology and physics, to argue in refutation of the incredible assertions that human beings can raise the really dead, arrest the motions of the sun and moon, change water into wine, lay the winds and waves by a word, cure old standing or congenital organic disease or deformity instantaneously by a touch, by the invocation of any name under heaven, or in any other way alter or suspend the regular order of the universe by means corresponding with the idea of a miracle in theology. We can, however, easily understand the origin of such a delusion. certain conditions of excited mental exaltation, when the brain is peculiarly affected, we entertain an abnormal sense of our identity with the universe, and therefore confound the post hoc with the propter hoc. In such states of feeling-of which poetic orgasm forms a familiar illustration—we imagine ourselves to be other than we are—the lords and masters, not the servants of Nature. "Lords over Nature, lords of the visible earth, lords of the senses five." When we eliminate from matter the anima or vital principle, we nullify entirely the venerable hypothesis of divine or diabolic inspiration and possession, and give authoritative scientific sanction to the Sadducean doctrine that all reported visions of angels and spirits, good or evil, are spectral appearances—symptoms of disturbed bodily function of organs within the skull, "coinages of the brain, bodiless creations," like the apparition in Hamlet, and apparitions everywhere else. Such assumed supernatural visitations as the "descent of the Holy Ghost" at Pentecost, and the conversion of Paul (to whom, and not directly to Jesus Christ or

any of his immediate companions and disciples, Protestantism is chiefly indebted for its Evangelical doctrines) on his journey to Damascus—phenomena lying at the very root of the alleged Divine origin of Christianity—belong to the very alphabet of medical science, and may be confidently diagnosed as not preternatural occurrences at all, but merely symptoms of over-excitement—the result either of Anæmia or Hyperæmia of the nervous centres in the head. Just as demoniacal possession is manifestly merely a disordered condition of the organism, so is Divine possession, inspiration, prophetic fury, and such phantasmata as Belshazzar's vision and the apocalyptic sights and sounds of seers and second-sight wizards of every race and clime, from Ezekiel to Merlin, from Daniel to Thomas the Rhymer. "The sound from heaven as of a rushing, mighty wind," the cloven tongues of fire, are simply hyperbolical descriptions of symptoms, familiar to every clinical tyro, of morbid action in the encephalic sensory ganglia connected with the auditory and optic nerves, and are, indeed, only exaggerations of that "singing in the ears" and "floating of motes" before the eyes which every one who reads this must have himself experienced from the most trifling derangement, centric or ex-centric, of the circulation of the blood within the brain, or from over-tension of the brain, eye, or ear nerve tissue itself. The exaltation of the faculty of speech—a parallel case to which is well known as the Irvingite epidemic of ."unknown tongues"—is also the external sign of excited function, at the origin in the brain, of another cranial nerve, the lingual or motor nerve of the tongue. The mental tumult, panic, and metamorphosis of ideas, feelings, and character are also quite ordinary symptoms, consequent on the participation of the cerebral hemispheres—seat of the moral feelings, ideas, and character—in the excited condition of the adjacent sensory ganglia. Identical symptoms, affecting both the organs of sense and the mental and moral faculties, are now quite familiar to us as exhibited by fanatics in "camp meetings" and religious revivals, not uncommon since Whitfield and Wesley's time, among the pitiably benighted populations of Great Britain, North America, and Protestant Ireland.\* All such occurrences, whether they happened 1800

<sup>\*</sup> Since the above was written we have had another widely-spread mental epidemic of this character affecting these countries, in the case

years ago in Palestine, or yesterday at our own doors, have no connection whatever with supra-mundane agency, but are simply the usual, constantly-recurring, every-day indications of abnormal states of emotional sensoria, of minds in which sentiment overpowers reason—minds undisciplined by culture,

science, and experience of public affairs and the world.

The conversion of Paul falls under the same category, and resolves itself into an apoplectic or epileptic form of sunstroke, accompanied by Pseudo-blepsis, a genus of the Dysæsthesia of Cullen's Nosology, comprising the species imaginaria, in which objects which have no real existence, under the bondage of the will to a dominant idea, are pictured on the retina; followed by temporary blindness or indistinct vision—a not uncommon sequel to protracted cerebral tension, excitement, and anxiety. The probable proximate cause of this paroxysm—the active symptoms of which lasted only three days, though, as often happens in illness of this character, it revolutionised the whole future life of the sufferer—we are justified in attributing to the exposure of a brain in a state of tumultuous vascular and nervous excitement to the noon-day blaze of an Eastern sun. Such instances of mistaken diagnosis merit as little notice, other than professional, from contemporary Medicine, as do the tales of witchcraft in former ages, or the shameful Spiritualistic delusion of to-day. All such supposed evidences of supernatural power are merely indications of natural bodily infirmity. Paul, as an Asiatic, possessed a differently formed head from ours, a head whose anterior cerebral lobes were less developed, in proportion to the middle and posterior ones. Therefore, from structural formation, in the "Apostle of the Gentiles" imagination predominated over reason; and the grandest organisations so constituted cannot envisage things in the "dry light of truth."

The conversion of Colonel Gardiner, a well-known cavalry officer, killed at the battle of Preston Pans, as reported by Dr. Doddridge, and very graphically sketched by Sir W. Scott in "Waverley," is another instance of the same kind, identical in its leading features with that of Paul. It was attended

of the so-called religious revival under the direction of the American "evangelists," Messrs. Moody and Sankey (1877). Not to speak (1894) of the later incredible delusions of the Salvation Army under "Field-Marshal" Booth.

by similar ocular and acoustic hallucinations, and instantaneous life-long change of character and conduct, clearly traceable—as shown by Dr. Hibbert in his work "On Apparitions"—to recent concussion of the brain from an accident—a fall from his horse. It may also be mentioned that two famous mystagogues who have recently aspired to found new religions, Swedenborg and Comte, were in like manner the subjects of Brain affection. The case of the former has been most exhaustively treated by Dr. Maudsley in the Journal of Mental Science. The medical history of Swedenborg is, mutatis mutandis, that of all successful—

"Madmen who have made men mad By their contagion; Conquerors and Kings, Founders of Sects and Systems."

Comte's natural history is still a desideratum. Ordinary biographies, by hero-worshippers, of the founder of the "Religion of Humanity" with all its hierarchical plagiarisms, erotic and other extravagances and anachronisms, lacking physiological and pathological elucidation, are worthless and misleading. The poet Wordsworth speaks of the consecration, and poets (or prophets) dream of the light that never was on sea or land. Grander by far, however, is the light that ever is on sea or land, or in the vault of heaven. Undoubtedly, imagination often paints sublime pictures; but the light of reason and nature, as seen in that radiance, gives truer and more sublime reflections of himself, and of the things made visible by himself, to every well-attuned, harmonious beholder. Poetry and religion—which latter is, faute de mieux, the poesy of the unpoetical—are really dwarfed and minimised when brought into the presence of pure Truth, whose veil the mere artist, unable to clear his mind of illusion, dare not attempt to raise.\*

As a necessary part of my argument, however, I am anxious to bring to bear upon the doctrine of a personal immortality—a doctrine which still seems to flourish amid the present wreck of time-honoured creeds and metaphysics—the above fact of the unity, and not duality, of nature in man. This belief, from the premiss that there is in the human being, just as in inorganic and the lower animal creation, no such thing as a soul at all, must be dismissed to the limbo of other exploded

<sup>\*</sup>Consult Schiller's poem, from "Der Jungling in Sais" (The Youth in Sais).

superstitions. No doubt every mind capable of abstract thought has within itself, as the reflex, minister, and interpreter of nature-which is in itself endless and eternalthe sense of feeling of immortality, of endlessness in time and space. Without that feeling we should, indeed, be strangers and aliens on this planet, which is itself only an atom in the infinite abyss of Immensity. Time and space are like all "things" else in reality, not natural verities at all, but merely artificial, brain-created segments and analyses of eternity and immensity. Nature herself ignores all such limitations. Her only realities and syntheses are eternity as regards time, and immensity as regards space. All that has been said or sung, in pre-scientific ages, of God or Gods, may be predicated in this our age of the material universe, and of man, by whose Egoity it is created or realised, beyond which it is impossible for the human mind to range. Higher than himself no man can think, his own perceptions and conceptions constituting his entire universe.\* Thus, while eliminating the chimera of resurrection from the dead, and a sense of personal identity in "other states of being," reason provides a complete substitute in the idea of immortality possessed in our present bodies. And this idea, this sensation of endless duration in time, and extension in space—a sensation never absent, for weal or woe, in minds capable of high abstract power, but in the average mind only paroxysmally present--forced, too often horribly, on the attention in moments of exalted feeling, pain, terror, suspense, actual or anticipated torture—as in surgical operations, sleeplessness, dreams, nightmare, or under the action of certain narcotics, as opium, haschiz, and alcoholhas been confounded by precipitate theorists with the literal idea of resurrection from the dead, and a future eternal life of happiness or misery, apart from our present bodies, or with those bodies in a "glorified" form. † The apparently different

† I need surely waste no words, at the present day, in pointing out the fatal fallacies and inconsistencies contained in the apology for the Resurrection, in Corinthians xv. I, and elsewhere in the New Testament. No

<sup>\*</sup> That the God of our Bible is a mere anthropological creation seems a corollary from the "definition" of the Deity in the Thirty-Nine Articles of the English Church, where he is represented as a "Being without parts" (personality) "or passions." Such an "Entity" is, indeed, a Non-Entity—the worship of whom by prayer and praise is a mere reductio ad absurdum. The conception is, indeed, pure autotheism (self-idolatry).

idea of ante-natal existence which forms part of most Asiatic creeds, and is known to European scholars as the Pythagorean doctrine of the Metempsychosis, and the modern Christian one of a post-mortem individual immortality, are really one and the same chimerical notion. Both are relegated, by sober, scientific analysis, from the domain of the actual into that of the ideal. Both are alike the ill-analysed empirical conception which the cerebral function, untrained by scientific discipline, frames to itself of the infinite, the eternal—in the one case as applied to the past, in the other to the future. An actual, veritable immortality is, among other reasons, perfectly superfluous, for this all-sufficient one, that we have already, in our present state of being, an ideal one in the conception of it.

"Heirs of immortality" we certainly are, but not in the theological sense of the phrase. Only in so far as that, during every pulse-beat between the cradle and the grave, our minds have an instinctive sense, more or less definite, of endless duration and extension. Man, then, as a sentient being, is launched into eternity, not when he dies-for at death he returns to the same condition of nothingness, so far as consciousness is concerned, as was the case prior to his embryonic existence—but when the first stirrings of life, including the life of the brain, or consciousness, begin. Healthy sensation, or perfect life in every organ, including the cerebral hemispheres, is thus our only heaven; morbid sensation, varying, as it does, from ennui or general malaise to mental and corporeal agony and anguish, our only hell. Earth remains ever paradise, if the healthy operation of every anatomical structure could be preserved; perpetual sunshine of body and mind is the blessed

doubt, looked at from the elect point of view, the hypothesis is not without its attraction for spiritual self-conceit; but the simple truth, here as ever, transcends in beauty and grandeur all such fictions of human vanity. Fruition is better than expectation, possession than promise, actual ex-

perience than faith or hope.

The debated text from Job xix. 26, in our Burial Service, once relied on as a proof of resurrection from the dead, would be, even if correctly rendered, merely an Oriental catachresis, expressive of confidence in ultimate recovery from the affliction of parasitic disease. His wife's advice, in the 2nd chap., 9th verse, "to curse God and die," negatives all idea of belief in a future state of rewards and punishments. Whether she really advised Job either to curse or to bless, there can be no doubt that the Bible doctrine of the resurrection, of immortality, &c., is the mere vulgar, unabstract notion of the unthoughtful, immature, and uninformed mind.

result—a beatitude implied in the physiological aphorism, "The normal exercise of every organic function is pleasureable" -a fact which at one blow entirely demolishes the, to some minds, imposing fabric of Pessimism; a fact which, if truly realised, would put an end to the wild "impeachments of Providence" and the now too common complaints of what is fatalistically termed the "common lot." Wherever, therefore, malaise of body or mind is present, its cause must be sought for in deranged bodily function, and in no "higher" or more recondite region. All that is fabled by poets, saints, martyrs, founders of sects and systems, under the term Saturnian or Golden Age, Kingdom of Heaven, Paradise, &c., is comprehended in that supreme bien aise which results from the equilibrium of the bodily functions.\* That state, and that alone, in which, as in healthy infancy, or in the hey-day of untroubled youth, no portion of the nervous system, indicating loss of general balance of the organism, obtrudes itself on our attention, is the true palingenesia or resipiscentia, whether of mythology, philosophy, or Christianity. Goethe, in his tragedy of "Faust," published in 1790, merely expresses the opinions of most thinking men outside professional theology during the greater part of the eighteenth century, before the reaction in favour of Mysticism, dating from the outbreak of the war with revolutionary France in its last decennium, in the passage—

> "Das Drüben kann mich wenig kümmern Schlägst du erst diese Welt zu Trümmern, Die Andere mag darnach entstehn: Aus dieser Erde quillen meine Freuden, Und diese Sonne scheinet meinen Leiden; Kann ich mich erst von ihnen scheiden, Dann mag, was will und kann, geschehn.

\* I regret to observe that the Hedonism of this passage has been confounded by Professor Mivart, in his valuable "Lessons from Nature," with Sensuality, of which it really is the direct antithesis and antidote. Abuse of the body at once destroys that harmony of organic function on which true beatitude depends. My real meaning corresponds with the Christian ideal of the "Kingdom of Heaven," whose denizens are "little children." (See Matthew xviii. 3.) Connected with this subject, and the apotheosis of the founder of Christianity, it is instructive to read Mr. Froude's article, "Divus Cæsar," in "Short Studies of Great Subjects" (third series), from which it appears that Asiatic superstition had so saturated even the western portion of the Roman Empire at the commencement of our era that Augustus Cæsar was termed "Son of God," and his benign reign the "Kingdom of Heaven upon earth."—R. L. (1877).

Davon will ich nicht weiter hören, Ob man auch künftig hasst und liebt, Und ob es auch in jenen Sphären Ein Oben oder Unten giebt."

To preserve or regain this state of moral and material well-being—discarding all more transcendental aspirations as a mischievous and vainglorious Utopia and fool's paradise—ought all our efforts to be exclusively directed. It will be found, on experience, to have nothing in common with the "Let us eat and drink, for to-morrow we die" principle of the degenerate Epicurean, but to require, for its attainment and preservation, Herculean labours, taxing to their utmost legitimate limits the much-vaunted intellectual and ethical capacity of our race.

The following ten theses sufficiently summarise the chief

points contended for in this work:-

1st. The genuine disciple of Nature and Life—which are one and indivisible—takes nothing on trust, but only believes what is known with positive certainty—that is, on *data* which can be universally verified.

and despair, but the necessary preliminary of all order and progress, as without it there cannot be any inquiry, clear in-

sight, or settled convictions whatever.

3rd. Natural science is bound in conscience to divulge all her results, however much they may conflict with contemporary prejudices, in order to satisfy the human mind, and leave it free for the further pursuit and enjoyment of truth. Mental reservation, prevarication, and suppressio veri, even from such respectable motives as Mr. Darwin confesses, in his "Descent of Man," to have influenced him for many years; as habitually practised by contemporary English thinkers and savans, is disloyalty to humanity and reason, ruinous alike to their country and to the cause of civilisation and rational liberty throughout the world.

4th. Natural Philosophy, for 190 years past, has rendered trite the axiom that everything in the universe proceeds by unalterable law—an axiom thoroughly fatal to every form of religion. For, on the assumption of the immutability of Nature, the fond hope that "prayer can move the hand that

moves the world" is seen to be a mere chimera:-

"All this dread Order break, for whom, for thee? Vile worm! Oh madness, pride, impiety!"

5th. The world is from eternity to eternity. Nothing is ever created, nothing lost. Beginning or ending there is alike none. Only the form and condition of things is perishable. Everything that exists dates from eternity. Ex nihilo nihil fit.

6th. The universe is boundless in space and time. Matter can have no limits, eternity in time and immensity in space

being correlative.

7th. As the logical inference from the above, millions and millions of millennia are before us, in which new worlds and systems of worlds shall flourish and decay; at their lapse the universe can be no nearer its dissolution than at the present or

any former period.

8th. The so-called "Personal God" is merely an idol of the human brain—a pseudo-organism of pre-scientific man endowed with man's attributes and passions, a remnant of Fetichism (Animism). Jehovah, Jove, or the "Lord and Father" of the New Testament, are alike anthropomorphic inventions. Absolute Atheism, or anti-Theism, is, except that the adjective is questionable, therefore the logical postulate of Science, which "dogmatically" ventures to impugnparadoxical as the idea, like all attempts to deal in the transcendental, certainly seems when expressed in words—the evidence of Cosmical Design, and the existence of an unknown, inconceivable, intelligent "First Cause" (the phrase is a misnomer), of whose Eternal Mind the Eternal Universe may be an hypostasis or emanation. Some such belief is, indeed, frequently a necessity during the earlier stages of our life, while, even in the soundest intellect, imagination is dominant over judgment; but, for that reason alone, should be "dogmatically" discarded by those who, in riper years, have themselves outgrown the need of such a feeling, and grasped the real clue to the labyrinth of "things," which can only be thoughts.

9th. The further development of our race in intellect and moral feeling depends chiefly on education calculated to chasten the imagination by rendering it the servant—not the master—of the judgment—the disuse of à priori intuitive methods, and the systematic practice of rational habits of thought based on actual experience. At bottom this is equivalent to saying that superior enlightenment depends on proper

exercise, in every possible direction, of the cerebral hemispheres, containing as they do both subject and object, and thus doing away with the latter, except as a phase of the former.

10th. No satisfactory progress in virtue, happiness, the stability of society, or exemption from the unutterable horrors of war, can be hoped for till the present supernatural theory of existence is overthrown, and the docile study of the great Book of Nature and Life, with its invariable sequences of "cause and effect," supersedes the arbitrary, anarchic authority of falsely-called "Divine Revelation." The supernatural theory has really had no standing-place for nearly two centuries, other than that afforded by popular prejudice and a pitiable reluctance of the so-called "leaders in the world of thought" to face conclusions regardless of consequences. Thomas Brown, one of the most cautious and common-sense even of Scotch thinkers-successor of Dugald Stewart as Professor of Moral Philosophy in the University of Edinburghteaches, in his tract on "Cause and Effect," written in 1804, before German "Infidelity" had made much mark on the English mind—"that there is nothing in a cause but the fact of immediate and invariable antecedence to the change called its effect"—a necessary consequence from the thesis of the eternity of matter. Schopenhauer and Von Hartmann have broached nothing stronger in favour of Materialism.

As stated in the preface to this work, the principle herein enunciated is one which imperatively demands recognition. from "philosopher," statesman, and patriot. The continuance of what we may term a combination of hypocrisy and falsehood is a policy fraught with the gravest peril. England, as represented by her influential and cultured castes, by her nobility, gentry, clergy, and intelligent middle classes, not less than by her ignorant masses, from her pre-eminent adherence to the obsolete cause of traditional Supernaturalism, and consequent inaccessibility to the new order of ideas resulting from the light thrown on Natural and Human History by Science and Neology, presents in the nineteenth century a striking analogy to the bigotry of Spain during the day-dawn of the Reformation. Lord Shaftesbury's inhuman dictum at Exeter Hall on June 30, 1873, as Chairman of the meeting convened by the Church Association to protest against the Confessional in the English Church—"Perish all things so that Christ be

magnified"-is identical in spirit with that of the Cardinal Grand Inquisitor in Schiller's "Don Carlos"—"The voice of Nature must be silent before faith." Truly, as Milton says, "Presbyter is only Priest writ large." \* The extraordinary and obstinate obscurantism and hostility to rational positive knowledge of Great Britain in our days—a country which, after her Revolution, nearly two centuries ago, was in the van of Freethought, and the guide to France and Germany-to Voltaire, the Encyclopædists, and to the principal founders of German humanism-Lessing and Kant-is, indeed, well calculated to make the reflecting patriot despair of her immediate future. All the signs of the times-social, political, moral, and intellectual—testify unmistakably to the corruption and decay of a dying epoch, and portend some sudden catastrophe by disastrous foreign war and intestine revolution, which, in our own day and generation, will, temporarily at least, dethrone her from her past and present proud position in the world.

\*By the usual irony of "Fate" Lord Shaftesbury was the principal agent in the enactment of the Lunacy Laws nearly fifty years ago, which have borne so heavily against his own most cherished faith. It may be noted that his son and successor committed suicide in Oxford Street—a tragedy that tends to indicate, by the law of heredity, more or less mental unsoundness in his more famous father.



## APPENDIX.

THE preceding encheiridion, to which we owe our introduction to the principles of Ideal-Hylozoism, was originally written as a contribution to the Journal of Mental Science, of which Dr. Maudsley was then chief editor. Its publication precisely as it was written was declined—although, after its issue in a separate form, it was reproduced at length—because of its most uncompromising argument against the Christian religion; Dr. Maudsley considering it his duty, as the literary exponent of the Medico-Psychological Association, to admit nothing into the *Journal* that was so certain to outrage the feelings of the many sincere Christians who were members of the Association. work was subsequently translated into German, and was sent for publication in the Archiv für Psychiatrie und Nervenkrankheiten of Berlin. Strange to say—remembering why it did not appear in the Journal of Mental Science-Drs. Meyer and Westphal were of opinion that it enunciated opinions respecting Supernaturalism which are now quite normal with adequately-instructed German physicians. This, we think, clearly illustrates the widely-divergent standpoints of German and English Medicine, and the application may be safely left to the reader, who will form his own opinions as to the unhappy policy of mental reservation which appears to hold sway over the English mind.

The old theory against which this work is directed is known in our day as Animism, and professes to recognise two agents in the causation of phenomena—one the *caput mortuum*, Body or Matter; the other that which animates or vitalises that body, and which is known as "Soul" or "Spirit." The principles

enunciated by Dr. Lewins are a step above Hylozoism—in other words, they declare that matter has within itself its own energy or vitality; so that what Transcendentalists call "spirit" is in reality merely Force (organic or inorganic), an innate or immanent property of matter or body itself. It must here be noted that, when we use the word "Matter," we mean nature, the All, as revealed to us by our senses, whose revelation we do not doubt; while Immaterialism is the synonym for that which is not revealed, but which is wholly imaginary and hypothetical, being the "supernatural" or "spiritual," the unproved and unprovable creation of phantasy.

On the Hylozoistic view, it is manifest that death, as in the apocalyptic vision, cannot be properly said to be, inasmuch as life is everywhere and in all things. When the organised individual man dies, he dies only as a special organisation, returning by his constituent particles into the general life of the universe. That which Platonism—and after it Christianity (vide Paul's opinion in I Corin. xv.)—refers to as "corruption" is really in itself a living process of decomposition, being the active transformation of complicated chemical compounds into

their elementary forms. As the poet sings:—

"Thus all things are but altered; nothing dies."

Undoubtedly—clearly for the wisest purpose, for the preservation of organic life as long as possible—this natural process is both unpleasing and repulsive to the outward senses. though mere sensuous feeling may and does revolt, it is really, when abstractly regarded, calculated to excite the most elevating ideas. This decay or transmutation is merely a slow burning or cremation, an oxidation; and as life itself is but slow combustion, so to a mind illuminated by right reason, and free from supernatural figments, there can be nothing terrible Materialism nowhere is more emphatically assumed in death. than in certain parts of the Bible—as, for instance, in Ecclesiastes (vide the title-page of this book), and also in the creed of the Sadducee, who said "there is no resurrection," and who denied the existence of angels and spirits. By its methods and results, however, modern physical science has brought down Hylozoism-as Socrates said of philosophy-from the heavens to the market-place, and has made it at once a simple and self-evident truth, appreciable, not only by profound

abstract intellectualists, but by even the most ordinary minds which have the slightest, commonest *modicum* of sense and logic. The very first principle of Hylozoism—namely, that there is not, cannot be, such an essence as the "soul"— is derived from the affirmation by science that motion—attraction or gravitation—is not a motor-principle in itself, but an inalienable property, a *vis insita*, of every particle of matter, and from the physiological axiom that life—motion and sensation—is the mere outcome of the physical organisation and inorganic motion combined, and is, therefore, a property of the material structure of the body itself.

In the preceding pages allusion has been made to the generalisations of Bichat and Béclard, and to the old maxim of *Ubi tres medici duo athei*. So far as Medicine is concerned, we can affirm that this third physician, if he be anything else than an Atheist (non-Animist), with respect to supernatural influences on the body, must be but inadequately master of the institutes of that art—institutes which, to a man of real, abstract mind, are as old as the sage of Kos himself—who postulated a somatic origin for every disease that "flesh is heir to"—but which are unmistakable even by the most concrete one, the normal "spatula-fingered Saxon" (vide Dr. Robert Knox's "Races of Man"), since the nosological definitions of Cullen, Sauvages, and Linnæus were superseded by

modern French Materialistic histology.

In the last (9th) edition of the Encyclopædia Britannica it is stated that "metaphysics is little more than decaying Animism, and that a large proportion of Animistic theory, before being superseded by positive science, passes through the metaphysical stage." This is also the doctrine of Comte, who taught that Animism gradually passes into positive science through metaphysics. During this process of transmutation older and grosser Animistic conceptions and imaginations become sublimated and rarefied, until at length we find them as mere essences or principles, conceptions with which meta-"Systems of ontology physics are almost wholly concerned. betray their history by a hundred clinging vestiges of Animism; and all the favourite ideas of the dialectician are to be traced in the symbolism of savage nations." One of these vestiges is the verbiage written and spoken respecting the psychical mind as a something running side by side with the cerebral action,

but distinct as phenomena, which is, we think, nothing less than nonsense and rigmarole, powerless to obscure the vision of the man who recognises that the brain thinks as the stomach digests. Both operations are personal organic functions, in no measure requiring any unnamed and unnamable immaterial factor for their performance. tunately, this mysticism finds direct encouragement from the half-hearted and equivocal manner in which Materialism has hitherto been enunciated in this country, as though truth were a thing to be half concealed or merely hinted at. Take, for example, Dr. Maudsley's "Physiology of Mind," in which the reader will find an allusion to the "unfathomable source," the "power from which all life and energy proceed, which has been from the beginning, is now, and, so far as we can see, ever shall be, and which cannot be comprehended or controlled by human thought or will, but comprehends and controls human thought and will." The great convenience of this passage and of its continuation is that it may be assented to by both the Animist and the Hylozoist, the former of whom will flatter himself by recognising therein Dr. Maudsley's testimony to the eternal existence of an all-supreme Mind, Intelligence, or Spirit; while the latter will perceive in these equivocal sentences a definition of matter based upon the recognition of its possessing every possible potentiality.

While men persist in retaining the pre-scientific creed of the passivity and inertness of matter, the testimony of physical science and the dictates of common sense and reason will be alike disregarded. When, however, the automatism of matter has been recognised, the necessity for a second non-material factor to supplement the supposed passivity of matter itself will be no longer felt, and Hylozoism—plus the recognition of the relativity of human knowledge—will be recognised by all who are not, through theological bigotry and prejudice, imper-

vious to reason.

Obviously enough, the principles of the author of this work are capable of being appreciated by even the most unabstract, and we may add the uninstructed, intellect. They require no special preparation either in philosophy or physics, common sense alone being able to decide upon their merits. Reduced to its simplest elements, the question is whether we do or do not see, hear, touch, taste, and feel by virtue of our brains, which are confessedly also the seat of all ideation, and whether or not all our senses and ideas are somatic, organic functions, precisely as is muscular motion. It seems to us almost ludicrous—except for the issues involved—to find eschatological obscurants, savants, and metempirics indulging in mystery and perplexity over a problem so simple as this. To affirm that we do not think with our cerebral hemispheres, or that, if we do, these are but the agents of an immaterial principle lodged within them, appears to us completely unworthy serious notice.

On page 17 of this book it is stated that its cardinal principle cannot be considered older than the year 1687. This is true, so far as the "definite shape," which only mathematical demonstration could give it, is concerned; but it must here be observed that the ancient Greek philosophers were by no means strangers to the idea of gravitation. An eminent commentator—Mr. Lewes—has happily compared the difference between the ancient Metaphysic and modern Positive Science to that between guessing and knowing. He speaks of the assertion often made by writers on the subjects of philosophy and "natural philosophy"—as we English still continue to use this term—that Empedokles, Demokritos, and others, were more or less familiar with the theory. Of course, among the Greeks it was nothing more than a theory, a vague hypothesis, which it remained—so far as it was not wholly lost sight of until elevated by Newton into a positive demonstration. Karsten sums up the difference between the ancient hypothesis and modern knowledge by saying that "Empedokles poetically adumbrated that which to after ages was demonstrated by mathematical reasonings by Newton."\* The old speculations, however, were speculations and nothing more, and as such their value may be said to have been but little. Dogmatic teaching could not with any show of propriety be based upon them. From the modern law, demonstrated by Newton, we obtain a generalisation which many thinkers of the eighteenth century distinctly realised—for example, Lord Bolingbroke and the whole school of English Deists, of whom John Toland, the intimate friend of Leibnitz, was probably the most learned —and from this generalisation we arrive at most positive results

<sup>\*</sup> Empedocles poeticæ adumbravit idem quod tot seculis postea mathematicis rationibus demonstratum est à Newtono.

-results which have effected a complete revolution in the thought and development of human nature. We understand why it was that the ancient Ionian philosophers endeavoured to substitute one plain monistic theory for the dualistic folly which prevailed on all sides. This dualism was not the creation of transcendental metaphysics, but merely the remains of pre-historic Fetichism. Thus we see that from the first Materialism was a protest against superstition, against the idolatry which caused men to prostrate themselves before the creations of their ignorance and uncontrolled imagination. Lange says that "the first attempts to escape from these contradictions [of Dualism], to conceive the world as a Unity, and to rise above the vulgar errors of the senses, lead directly into the sphere of philosophy, and among these first attempts Materialism has its place.\* Considering, then, how well prepared was the Grecian mind for the reception of truer views of man's nature, we can understand how great has been the world's deprivation from the late application of observation and study of the great, ever-open book of Nature itself. It is surely lamentable to know that a Demokritos did not openly deny that man was of a two-fold nature, yet went so far as to make the "unseen man" a purely material thing, compounded of "fine, smooth, round atoms, like those of fire," which permeate the whole body and produce the varied phenomena of life. This assumption was in no sense an Animistic one as expounded by Stahl; it was rather that "primitive conception" alluded to by Tylor, which regarded the thought-producing nature of man as "a thin, vaporous, material substance."† This "soul" of Demokritos's theory bears no resemblance whatever to the shadowy, immaterial principle of the so-called "higher Animism" of Christianity. On the contrary, it is a thing of material consistency, possessing material properties, and moving by material and mechanical laws. It is truly astonishing to reflect upon the fact that it required more than two thousand years to prove that matter was, as Demokritos believed, sufficient to carry on its own operations, unaided by any "principle" foreign to itself in character. How easy, simple, and lucid would the soul-theory of the Abderite have appeared had its conceiver been able to anticipate modern

<sup>\*</sup> Geschichte des Materialismus, chap. i.

<sup>†</sup> Encyclopædia Britannica, 9th ed., article "Animism."

Physics and Medicine in the demonstration that the intellectual faculties were wholly dependent upon the condition of the hemispherical ganglia of the human brain! How great would have been his triumph, how different would have been the whole current of subsequent human history, could he have shown his disciples and opponents that the seat of thought was in the grey matter of the encephalon; could he have adduced such facts as those quoted, in a preceding part of his work, from Professor Hughes Bennett in support of his statement; could he have shown that, in proportion to our slicing away this cortical substance, so do we proportionately blunt and destroy memory, volition, and intelligence—all that the Animist points to as distinctively proving the existence of an Immaterial vital essence in man!

"The brain proper," writes Dr. J. Hughes Bennett, "furnishes the conditions necessary for the manifestation of the intellectual faculties, properly so-called, of the emotions and passions, of volition, and is essential to sensation." Dr. Lewins has on page 22 cited the noteworthy passage in continuation of this, in which Dr. Bennett shows the absolute correlation, the identity, between the cineritious matter of the cerebrum and the various mental manifestations. So early as the year 1842 the medical-phrenologists did good service by constantly insisting upon the fact that all thought is brain function, and nothing more. In an address to the Phrenological Association of London, Dr. Engledue said: "What is organised matter? Merely a collection of atoms, possessing certain properties and assuming different and determinate forms. What is brain? Merely one variety of organised matter. What do we mean by cerebration? The function of the brain—one of the manifestations of animal life, resulting from a peculiar combination of matter. The varied changes of form which this matter assumes give rise to the numerous manifestations of cerebration in the different tribes of beings; and the varied changes of cerebration in the same being originate in molecular alterations—merely other expressions of a new condition. Cerebration, then, expresses the manifestation of a series of actions resulting from the properties possessed by a particular portion of organism—brain—when acted upon by appropriate stimuli. In the same way as organism generally has the power of manifesting, when the necessary stimuli are

applied, the phenomena which we designate by the term life, so one individual portion—brain—having peculiar and distinct properties, manifests, on the application of its appropriate stimuli, a peculiar and distinct species of action, which we propose to call cerebration. If the sum of all the bodily functions, life, be not an entity, how can the product of the action of one portion of the body, brain, be an entity? Feeling and intelligence are but fractional portions of life." The question we have here italicised is a crucial one. We may just as logically assume the existence of a separate essence or principle "behind" muscular motion as to postulate such an entity as the inspirer and mover of the brain. We are not concerned the search after final causes being irrational and insoluble—to inquire into the why and the wherefore of cerebration any more than we are to account for or explain any other incomprehensibility. We simply recognise its existence, note that thought is brain function, and accept the logical inference that matter, when duly organised, is capable of manifesting that which we call intelligence. In like manner we know, on the testimony of our senses, that the rose and the lily have different fragrances. This fact we accept as indisputable, but we know not, and do not seek to know, why it is so. As Dr. Engledue tersely but vigorously puts the matter: "We see no better reason for supposing that the manifestation of cerebration depends on the excitation of cerebral matter by an 'essence,' a 'principle,' the 'mind,' than we do that the bile or the saliva are secreted by their respective glands through the instrumentality of the same or some other essence. We do not speak of liver principle or salivary principle. We see a certain arrangement of particles in the form of an organ called liver, and a certain kind of blood sent to it; the result is the secretion of a particular fluid, which we call bile; further than this we cannot go; no other organ is so organised, no other organ produces a similar secretion." It may be said that this analogy is not perfect, inasmuch as the secretion of the liver, bile, can be seen and felt and otherwise made apparent to the senses, while intelligence, or thought, is a something intangible, known only by, to, in, and through itself. This is true; but the reference to the liver and its function is not an analogy, but an illustration of man's utter inability to explain any one function of his nature. In one respect, however, and that an

all-important one, there is an analogy between these-namely, that though the respective functions of the brain and liver are wholly different, yet bile cannot be secreted without the one. nor thought be manifested without the other. Intelligence is neither more nor less than the resultant, the outcome, of the organisation, and the chief difference between inorganic and organic bodies is no more than this—that the latter necessarily possess from their own proper conditions a something altogether foreign to the other. Having a nerve-system, they also possess sensibility; but every nerve in that system is as purely material as is the log of oak or the pile of granite. If we affect the nerves, we also affect the sensibility; if we injure the ganglionic nerve-centres, we deaden the feelings of their possessors, whether man or brute. Thought, the "fulness"—as Parmenides termed it—or consequent of the organisation, is just as surely affected by any interference with the hemispherical ganglia of the brain. If we impair or destroy the vesiculo-neurine, we also impair or destroy the intelligence. The latter is developed in equal ratio to the growth of the brain; and if the higher feelings, judgment, consciousness, etc., are sometimes found to be strong and active when the "grosser body"—as the Animist has it—has become feeble, and perhaps paralysed, it is because nerve-tissue and cerebral matter are in themselves more indestructible than other portions of the body which have not the same reparative powers. This is not a loophole by which the Hylozoist seeks to escape from a dilemma, but is a fact fully borne out by modern Medicine. Dr. Carpenter —himself opposed to Materialism—says: "There is no part of the organism of man in which the reconstructive activity is so great, during the whole period of life, as it is in the ganglionic substance of the brain. This is indicated alike by the enormous supply of blood which it receives (for of that large amount which goes to the brain as a whole, by far the greater proportion is distributed to the 'grey matter' of the cerebral convolutions, of the sensorial centre, and the cerebellum); by evidence furnished by the presence of the products of its oxidation in the excretions that it undergoes a 'waste' proportioned to the demand made upon its functional activity," etc.\*

We can clearly trace consciousness, and especially its definite

<sup>\* &</sup>quot;Principles of Mental Physiology," 4th edition, page 341.

forms, perception and ideation, to the grey vesiculo-neurine, or cineritious matter, of the encephalon, the peculiar colour of which is due to its extreme vascularity. Further than this, no progress by way of discovery can be made; it is the ne plus ultra alike of the metaphysical darkener of plain issues and of the physical experimentalist in chemical laboratory or observatory, who makes himself ridiculous by transcending the limits of the human mind in eschatological attempts to trace the transference of molecular motion into sensation and thought. As well might these sciolists pretend to "explain" the causation of the various secretions and excretions of the body from one uniform fluid—the arterial blood. The goal thus arrived at, however, is perfectly satisfactory to the rational inquirer and true philosopher, who finds that—as the great histologist, Bichat, maintained in his celebrated "Treatise on Life and Death "-life is not due to the fancied union of body and spirit, but is the sum of the functional activity of the material

organism.

In maintaining with what some may call dogmatism the doctrine of the unity of man's constitution, Dr. Lewins is fully justified by the incontrovertible nature of the basis of his position, of his fundamental principle. This Brain Thesisas we ourselves term it—of the indissoluble union of mind and matter is fully demonstrated by the patent, unconcealable fact that every attempt, by whomsoever made, to dissociate these has proved utterly and absurdly preposterous and untenable. True it is that we often find men of world-wide reputation for their researches—even such distinguished medical reformers as Sir William Lawrence and Dr. Maudsley-refusing to declare against the possibility of a "life beyond the grave." What, however, does this reticence indicate? Not that their own data are fallacious and unstable-they themselves would repudiate that—but that they lack, in a country like England, the courage of their convictions, or else that they altogether fail to grasp the entire range of the mighty problem in the solution of which they affect to be interested.

Without the shadow of a doubt—for which, in sober truth, there is no room whatever—the very first position of nine-teenth-century Materialism—or Hylozoism, as it may as properly be termed—is that there is not in man any such thing as a "soul." Motion and sensation—i.e., life—are nothing more

nor less than the results of physical organisation and inorganic motion—the latter being, as the author of the preceding pages happily calls it, a vis insita of all matter, however constituted; and being properties of inorganic matter itself, the very notion of the latter being animated by spirit is eliminated, and must be regarded as illogical and supererogatory. Metaphysicians may define and divide into a hundred different "departments" the consciousness and intelligence of man; they may prate as they list of "psychical facts" and "physical facts;" but they cannot prove the existence of a dual nature in man,

of a mind apart from and superior to the body.

Capable as they are of indefinite explanation and popularisation, the two great principles of this work are, first, the identification of mind with brain function, and its corollary of the non-existence of a soul in man; and, secondly, the re-assertion on positive data of the Protagorean affirmation of the relativity of human knowledge. In fact, the latter position as here enunciated is derived from the same source as the speculations of the great sage, Protagoras—namely, from the most natural centre of all human inquiry—from the nature of man himself. It regards the individual as the one essential object of study, because, as Protagoras maintained, "man is the measure of all things-of those that are that they are, of those that are not that they are not." This is not Transcendentalism, or high metaphysical mysticism, but the assertion of an evident truth, that man himself is the true and only source, standard, and measure of all human thought, and of all the objects of human thought-microcosm and macrocosm combined, "man being in little all the sphere." This was the great speculative discovery of the ancient disciple of pure reason, and it is one which, even though the canons of the Newtonian physics and of modern physiology had never been discovered and formulated, would remain for ever an undeniable truth. Protagoras fully recognised the subjective nature of all knowledge, whether of conception (ideation) or of preception; and, therefore, the particular and individual was with him the measure of the universal, the Ego identical and conterminous with the universe. Outside and apart from himself and his own proper cerebration, the world, if world there were apart from himself which, of course, he could not determine, since he could not escape from himself—was nothing but a cipher, a nonentity.

We know that all things whatever, whether physical perceptions or the productions of ideation, are ultimately reducible to cerebral phenomena—that they are acts of cerebration. There is to us not anything perceptible or conceivable until such an act has been performed by the sole medium of consciousness. Knowing nothing of cerebral physiology, Protagoras yet distinctly asserted this, because he referred everything to his one standard of consciousness, the seat and organs of which are the hemispheres of the cerebrum. Thus he was able to recognise the fact that the very notions or ideas of the deities before whose shrines the Athenians prostrated themselves were nothing more, when analysed to the ultima ratio, than idols of their own creation, concerning whose real existence in another unknown sphere it was impossible either to make dogmatic affirmation or negation. Of the "force behind nature," as Professor Carpenter phrases it, we know nothing more than that the force in nature is its own material property. It is not within our power to get in the rear of the universe, nor can we even for an instant discover a coign of vantage whence we may study nature untrammelled by the fetters of our individual Egoity. This standard of the "Sophist" is termed "an arrogant formula" by Lewes, who nevertheless subsequently acknowledges, very inconsistently, that the same proposition, as expounded by Berkeley, is "incontrovertible" and "incontestable." Physical science-we may say English seventeenth-century science—has since made it evident that matter is not an inert and lifeless mass, but a self-moving agent, which is, as Protagoras expressed it, "in a perpetual flux." "While it undergoes augmentations and losses, the senses also are modified, according to the age and disposition of the body. . . . . But men have different preceptions at different times, according to the changes in the thing perceived. Whoever is in a healthy state perceives things such as they appear to all others in a healthy state; and vice versâ. A similar course holds with respect to different ages, as well as in sleeping and walking. Man is, therefore, the criterion of that which exists: all that is perceived by him exists; that which is perceived by no man does not exist" (cited by Lewes, "History," vol. i.). Here we find, first, a recognition of the existence of a self-moving matter for which no separate vital principle is claimed or postulated; and, secondly, a Sensationalism which binds irrevocably the perception of matter to the laws of the organisation by which it is perceived. The whole passage is as purely Ideal-Hylozoistic as though it had been written in the nineteenth century after Jesus "Christ," and as though Protagoras had recognised the full meaning of the great discovery of Newton, and had mastered the data of modern physiology. The last sentence we have quoted is explained alike by the cardinal proposition of Protagoras and by his initiatory sentence in the treatise for which he was exiled. That which—we may paraphrase it—is perceived by man exists to man; that which is not perceived-including all the gods and goddesses of the Pantheon, and all the ghostly wanderers by Styx and Acheron-man cannot predicate of as existing. Here, indeed, there is no dogmatic Atheism; certainly nothing savouring of anti-Theism; but the maintenance of a principle which can, and will yet assuredly, be made the basis of a common-sense rule of life, by which man the individual will progress in virtue and happiness, and upon which the foundations of society will be firmly established and secured. Nevertheless, though Ideal-Hylozoism does not, cannot deny the existence of a Supreme Intelligence, it asserts as incontestable that each one of us, whether lofty intellectualist or unabstract clown, is to himself the only possible Deity, beyond whose conceptive and formative potentialities it is impossible for him ever to range. There is not one single attribute ascribed by theologians to God which the Brain Thesis of the Ideal-Hylozoist does not also claim, and truly, for the human mind itself, for that which is both noumenon and phenomenon, the "maker of all things visible and invisible." While we are not at liberty to say that a Supreme Intelligence does not exist, we are absolutely certain that, if there be such, it has left us in all respects masters of ourselves and controllers of our destinies. We can fully endorse the sentiment, and even one apparently Hibernian hyperbole, of that best of the poems of the mystic George Herbert, "Man:"-

"My God, I heard this day
That none doth build a stately habitation
But he that dwells therein.
What house more stately hath there been,
Or can be, than is man, to whose creation
All things are in decay?

[Ultimately Self.]
For man is everything,
And more—

Nothing has got so far
But man hath caught and kept it as his prey;
His eyes dismount the highest star;
He is in little all the sphere;
Herbs gladly heal our flesh because that they
Find their acquaintance there."

The mind unbiassed by prejudice, and capable of grasping abstract ideas, will have no difficulty in comprehending the purport of the Thesis enunciated in this book. It gives the coup de grâce to all religion, which is—no matter under what form or by what name it is called—neither more nor less than the self-idolatry arising from man's projection into the heavens of an imaginary Supreme Being as malignant, unjust, revengeful, and variable as his creator-man. The reader who would wish to trace the manner in which all races of men have made "gods like unto themselves," as Xenophanes has it, may profitably study Feuerbach's "Vorlesungen über das Wesen der Religion;" but we need say nothing more upon this point, inasmuch as, if our second principle—that of relativity—be conceded (and who can possibly controvert it?), it necessarily follows that every God-idea, whether Brâhmanic, Mosaic, Christian, or Mohammedan, must be necessarily anthropomorphic, springing, as it does, from the conceptive function of man's brain alone.

The various religious inventions of man, by proscribing the sane light of reason and nature, have proved dire curses to the whole human race:—

"O hapless race of man! when that they charged the gods with such acts, and coupled with them bitter wrath, what groanings did they then beget for themselves, what wounds for us, what tears for our children's children!" \*

The Archbishop who declared that "death is a frightful thing" was governed by the same fatuous spirit as that which originally

\* Lucretius, "De Rerum Natura." The reader will do well to refer to this most philosophical poem—especially to lib. v., 1155-1192—for an eloquent picture of human folly as exemplified in man's creation of whips to scourge himself.

compelled men to "draw near with vows to seek the mercy of the gods, and ask in prayer, with fear and trembling, a lull in the winds and gales." Blind alike to the science and signs of the times, the official head of England's Church is, in relation to his age, on a level with his predecessors of evil augury—A'Beckett, Cranmer, and Laud. His immediate forerunner in the metropolitan See—Dr. Longley—was not ashamed to confront, in the way of refutation, the modern discoveries in geology and palæontology with the obsolete and purely

visionary chronology of Archbishop Usher.

It will be noticed that the author of this book declares that Bible animism is the natural result of the structural arrangement of the Asiatic brain. All persons thus constituted live, as it were, in a supernatural atmosphere; in every occurrence of their lives, even the most trivial, they trace the finger of the Deity or the intervention of his messengers (angeloi), seeing "God in clouds" and hearing "him in the winds." As an example of this may be noted the fact that a recent traveller in Morocco—the dominant race in which country is of pure Arabian descent-administered a Seidlitz powder to a Moor, first giving the alkali and then the acid. At the effervescence and consequent evolution of gas the Moor was astounded and delighted, firmly believing that an evil spirit had been dislodged from his interior. It is difficult for the stronger, better-disciplined occidental intellect to understand what is really the normal condition of mind among Eastern peoples, to realise their veneration—as strong to-day as it was two thousand years ago-for persons subject to attacks of epilepsy. We do not doubt for an instant that Paul was—as our author insists—a victim to this disease. Before the occurrence outside Damascus he was a fiery partisan, a Mosaic zealot, who, in pursuit of the enemies of his religion—the heretical and schismatic Nazarenes-went about breathing out "threatenings and slaughter," and being, as he himself, in his excited manner, declared before Agrippa, "exceeding mad against them." His conversion did not, as Christian writers ludicrously pretend, effect a radical change and transformation in his nature. the contrary, he was the same religious enthusiast, the same fanatic; only his hyper-religious fervour had been diverted into another channel, making him thenceforth even more zealous for Christianity than he had been formerly against it.

. In the preceding pages we find a touchstone the application of which serves most effectually to dispose of the alleged miraculous phenomena by which the sudden attack of Paul was accompanied. It has always been a tradition in the Church that this Apostle's "thorn in the flesh" was epilepsy, which is a disease more directly ruinous to the mental equilibrium, more injurious to the mind, than even to the body.\* We know how very seriously Mohammed was affected by attacks of this neurosis, and Bacon's comparison between the serenity of Augustus and the impulsive, irregular nature of his uncle, Julius Cæsar—who, like Napoleon, was an epileptic—will show that this disease may be the exciting cause of such extraordinary energy as Paul, Cæsar, Mohammed, and Napoleon displayed. "For Julius," writes Bacon, "being of an unquiet and uncomposed spirit—as those who are troubled with the falling sickness for the most part are." That Paul's was an unquiet nature is manifest from the perturbed character of his whole career subsequent to his "conversion." He "laboured more abundantly than they all "-that is, than all the other apostles-although he, true to his diseased imagination, attributed his restlessness to the "Spirit of God" within him. During the coma or trance in which he lay in the city of Damascus the illusions of Paul's imagination were most vivid, and were subsequently, as a matter of course, attributed to God, with whom he thought he held direct communication. Like Mohammed and Jesus, with—

"The quick spirit of the Universe
He held his dialogues; and [he] did teach
To him the magic of [his] mysteries:
To him the book of Night was opened wide,
And voices from the deep abyss revealed
A marvel and a secret."

Thanks to Medicine, which is, in its widest sense, including its latest phase of Alienism, the science of human nature, the true and complete exponent of life and mind in health and disease, we are enabled to dispose of all the claims urged on behalf

<sup>\*</sup> Very much progress has been made, during the last thirty-five years, in our definite knowledge of brain diseases through the impetus given to their study by the Lunacy Laws of 1845, and the reforms in Alienist Medicine consequent on the enlightened and philanthropic labours of Dr. John Conolly at Hanwell.

of such special revelations and divine inspirations. In how great a degree human life has been oppressed and perverted by an unavailing reliance upon unsubstantial fantasies of cerebral exaltation and derangement, we cannot pretend to affirm. Our own experience, however, and the lessons of history teach us that life, under the influence of supernaturalism, is a miserable parody of what existence should and might be. Step by step, as we trace the painful record of man's development through the ages, from prehistoric Fetichism, we involuntarily re-echo the lament of Lucretius—

"Tantum potuit religio suadere malorum!"

Nothing but evil, as we find it expressed by the author of "Life and Mind," can result from the continued retention—hypocritical on the part of some, though arising from ignorance with the many—of a system whose only foundations repose upon disease-begotten delusions, which must, so long as their influence remains unbroken, stand as impediments in the way of the proper development of the human race. The welfare of mankind absolutely depends upon the elimination of the false, absurd, irrational theory of existence inculcated by theologians and religionists. Religion itself is discredited and discreditable, being, as it is, the offspring of neuropathic mystagogues, of bent and distorted minds, whether Christ's,

Mohammed's, Gautama's, Comte's, or Swedenborg's.

To substitute one ideology for another is not the object of the preceding synopsis, which launches forth no new speculation or hypothesis, but merely the demonstration that beyond matter and function there is nothing cognisable by man. This position is quite sufficient to negative at once and for ever all notions of a "spiritual" agency, and to establish irrefutably and incontrovertibly the truth of Hylozoism. The foregoing treatise expounds both on the medical and physical side the plain fact that there is no Immaterial principle, spirit, element, or essence in man beyond his hemispherical ganglia and their proper function, and thus does away with the fancied necessity which has led to the formation of every form and fashion of religion. Without the brain and its function—that is, without cerebration—we can have no idea of anything whatever, either in the domain of perception or conception, real or ideal This is what is meant by the affirmation that man can think

nothing but himself, that he cannot decide anything outside the circle of his own being, his own Egoity—a circle whose periphery is the universe, since there can be no other possible universe to man. Hence it follows that we must ignore everything transcendental, all that is termed teleology and eschatology, all that transcends, or pretends to transcend, matter and force, of which our own bodies and "minds" are a part.

As a part of nature, as the microcosm of the macrocosm, man can have no connection with aught beyond that which he recognises in nature. Nature—that is, all things—being relative, not absolute, has, so far as we are concerned, only to do with man. "Except in relation to the eye," says Moleschott, "into which it sends its rays, the tree has no existence." This all-embracing Theory completely reverses the visionary standpoint of Berkeley by making the standard and measure of all things that which must ever remain our ultimate noumenon and pro-plasm, the material vesiculo-neurine of the brain. Beyond this neither realist nor transcendentalist can ever soar; the utmost that any assumer of gods or devils can do is to prostrate one portion of his natural physical faculties to another.

Man is not called upon to weary himself with "much study" of the inscrutable, and the continued endeavour to explain the nature of life and the so-called mystery of the universe is, because of its assured failure, both illogical and ridiculous. Among modern specialists there are many who go beyond reason itself in quest of the "mystery of existence," who-like Dr. Tyndall-irrationally imagine the transference of molecular motion into intelligence to be a fit theme for explication. We repudiate all such eschatology, claiming to do no more than expound the sole positive position which is undoubtedly based upon well-known established data of physics and of Physic. We take the facts of Gravity, non-Levity (anti-Phlogiston), and the absence of any immaterial factor or agent in "animal" function, and we find that each of these is convertible into a principle which will be found absolutely fatal to the retention of any form of Immaterialism or Supernaturalism whatever. The Thesis here postulated is one the antitheses of which must be reductiones ad absurdum. We "explain" no ultimate fact, and steadily refuse to be beguiled into those labyrinthine mazes of metaphysics and of eschatology which have, during countless ages, rendered man purblind to the plain truths of his own nature, and which have led from nothing to nowhere. The "obsolete traditions" which are, as our Author's Preface says, now "reprobated by the judicial sanity of the age as untenable hypocrisies and anachronisms," we reject as such; but we do not wish to supersede them by other delusions and visions created by the fruitful parent of all religious systems and impositions. We are precluded—or, rather, forbidden-by logic from assuming two reasons for phenomena when one is all-sufficient. Knowing that matter is active, not passive, we are under no necessity of interpolating a second active agent. Medicine has long since banished the alleged "divine essence," or emanation, of Pythagoras and the Christian from every other organ of the body: why, we ask, should we, neglecting the more recent lessons of Alienism, retain it in the brain?

The doctrine of Relativity cannot be considered, by any abstract thinker, as a mere fancy Idealism. This endeavour failed entirely in the hands of those Realists who ignorantly argued against Berkeley as though he denied the evidence of the senses, whereas the whole of his position tended to confirm this evidence. Nothing can be more clearly apparent than that the main object of the author of the "Principles of Human Knowledge" was to substantiate the revelations of the senses. With him all that was perceivable had a real existence—an existence in the perceiving mind, which is the only possible measure and standard of existence. He was "not for having any man turn Sceptic [i.e., a universal doubter] and disbelieve his senses—on the contrary, we give them," he wrote, "all the stress and assurance imaginable; nor are there any principles more opposite to Scepticism than those we have laid down."

We are confident that so keen a thinker as Berkeley, had he lived to-day, would never have attained the conclusion that spirit was all in all, and that matter had no real, proper existence. In Professor Huxley's statement—made in the Fortnightly Review, vol. xvi.—that he is not a Materialist, because he is "utterly incapable of conceiving the existence of matter if there is no mind in which to picture that existence," we find a childish inability to soar above the Animism which has for thousands of years chosen to regard mind as a separate exist-

ence. If reason and modern science are right in their deductions, it is absolutely certain that there is neither in "brute" nor organic matter anything more than what Bichat luminously termed the propre vie. The hypothesis of a vital principle is, therefore, most irrational, because, if mind is but an outcome of matter, it is absolutely certain that what we may call the conscious Egoity, which pictures to itself existences, will never be absent from an organisation of which consciousness is as much a function as is muscular motion. Dr. Huxley has received a somewhat more liberal education than many other savants of distinction; but, nevertheless, his inability to soar beyond his own speciality into the mighty realm of abstract reason is but too apparent from the extract we have given above. What can be more illogical and absurd than to find one who proclaims that men are "conscious automata" directly afterwards contradicting himself by asserting, what is clearly equivalent to stating, that the self-moved possesses a moving influence, or principle, the existence of which is incompatible with automatism?

## "Ask of the learned the way: the learned are blind."

But the blindness is, we think, one fostered by self-interest. is strange that persons who make discovery their ruling passion, to which they sacrifice the harmony, equilibrium, and happiness of their lives, should obstinately refuse to recognise simple truths when they are brought "quite under their noses." Like the astronomer in the fable, while gazing at the stars they fall into the ditch at their feet. Such has always been the case, however; the German proverb rightly expresses it when it says that "the simplest and nearest things are always the last to be discovered." Bacon, the prophet of modern science, was an incorrigible heretic with respect to the Copernican system, and to the theory of terrestrial magnetism, which he condemned as an illustration of the effects of false reasoning; Harvey, the circulator (in Latin, a quack), as he was offensively termed when he published his discovery, was induced by some crotchet of his own respecting the absorbent function of veins to deny Aselli's discovery of the lacteal system of absorbent vessels, mesenteric glands, and thoracic duct; Columbus was ridiculed by practical pilots; Franklin's identification of lightning with electricity was greeted with guffaws

of derision at a meeting of the Royal Society; and, lastly, the outsider Edison—who, like Watt and Stephenson, has done more good, or evil, as the case may be, than all the Fellows of the Royal Society now living—has never had the "right hand of fellowship" extended towards him by the

scientific Dons of the age.

We have, however, said more than enough to show that we need be under no concern regarding the reticence, reservation, and apparent blindness of scientists to the true purport and results of science. The time is at hand when such disloyalty will be judged by the light of events. As stated in the preceding treatise, "Natural Science is bound in conscience to divulge *all* her results, however much they may conflict with contemporary prejudices, in order to satisfy the human mind, and leave it free for the further pursuit and enjoyment of truth."

On page 29 of this work the following occurs: "Higher than himself no man can think, his own perceptions and conceptions constituting his entire universe." This is, as we before remarked, no new discovery or transcendental hypothesis, but the emphatic reiteration of the Protagorean doctrine, that "man is the measure of all things," and of the main position of Berkeley's "Principles of Human Knowledge," that the "objects of knowledge are ideas, and nothing but ideas."\* Undoubtedly "potentially the mind already includes within itself all that can be thought" (Lange), because there can be no doubt that our own cerebration makes for us the ideas—the things—which Berkeley claims to have "shown to exist only in the mind that perceives them," and of whose noumenal existence it is impossible for us to possess any knowledge whatever.

Respecting the external world, we have no other guide than our own perceptions and sensations. As to what things are per se, as apart from ourselves, all is uncertain. We learn from Optics that we ought to see things inverted, or upside down,

<sup>\*</sup> Vide Lewes's "History of Philosophy," Fourth Epoch, Idealism. We cannot help expressing regret that a man so capable of abstract thought as was the late Mr. G. H. Lewes should have seen in Relativity nothing more than the acknowledgment, as he himself puts it, "that human knowledge is not the measure of all things." Such a statement shows how much the writer was unable to comprehend the Egoism of Pretagoras and Berkeley, or indeed, to put it plainly, the first principles of common sense.

and there is really nothing to show us that we do not thus behold them. Kepler made a learned attempt to explain this in his "Supplement to Vitellio"—an attempt, however, which only resulted in demonstrating that such an explanation was an impossibility.\* When once we are enabled to grasp, what is really a matter-of-fact intuition, that at bottom every thing, whether subjective or objective, is really cerebral, the issue and result of our own generative Egoity, we obtain a guide to, and interpreter of, all the characters and claims, however absurd the latter may appear, of all the religious founders and revelation-led religious reformers of the world. Of all ideas, whether transcendental or degrading, man himself is the genitor or progenitor. We have no practical concern with the things belonging to any other beings than ourselves. Thus, when Jesus declared that he was the "light of the world," or the "Son of God," he merely identified his Egoity with the universe. Ages before he ever appeared in Galilee calm reason conducted the sage of Abdera—Protagoras—to the same conclusion; but the latter was not, like Jesus, a morbid enthusiast, and therefore he was not deluded into fancying himself a divine teacher-a something superior, by virtue of his origin, to the rest of his fellow-men. To the man of real enlightenment, who is able to conquer prejudices, while retaining his intellectual balance, the pretensions of Jesus are essentially commonplace, yet being not the speciality of an individual, but common to the whole human race. Since, according to our Thesis, man must be everything he really feels himself to be, such pretensions, when based upon feeling, and not the results of falsehood and affectation, can be of no practical significance whatever. If we choose to assume the existence of a Deity-the Nous of Anaxagoras, or the God of the Jews-as the Proedros or presiding intelligence of the universe—an assumption which it is impossible for any one to refute, since it is not possible for him to get at first causes—it is clearly evident that every individual man must be his son, as Iesus declared himself to be. St. Paul himself dimly shadows forth this truth to the Athenians in his quotation from the Greek poet. Since, however, we are all, on this hypothesis, justified in making such a claim, and since it can be no special distinction for us to be what all are equally

<sup>\*</sup> Vide "Life of Kepler," chap. ii., in Sir David Brewster's "Martyrs of Science."

with ourselves, what do we gain by advancing an assertion of this relationship while retaining precisely the same relative position to our fellow-beings? From his own point of view—which is quite as good as that of the Positivist, being that of his own Egoity, which is to him the all in all—the mystagogue is perfectly correct in fashioning the world as it appears to him. The fact, however, that he does not recognise the absolute impertinence and purposelessness of his mysticism, and of the mythus which has led captive his reason, shows that his brain,

his mentality, is in unstable equilibrium.

The name given to himself by the Deity with whom Moses was fabled to have held intimate communion expresses the idea held by Augustine of Hippo—namely, that the world could not exist if it were not in the thought (consciousness) of God. This supreme Egoism is evidently derived from the Egyptian mythology, wherein the Lord of All, "looking round," and beholding nothing but his own conscious existence, anticipated Descartes by denominating himself "I Am." That his disciples should have worshipped Jesus was the necessary consequence of the latter having, from his identification of himself with the "I Am," who was "before Abraham," gradually come to worship himself. The oneness of man with all other matter is an identity depending, not upon chemical data, but upon ideal principles. From this imperfectly-understood relativity arose all the resemblances between the parables, apologues, etc., of Gautama and Jesus, because both made their own Egoity the standard of all things. The Divine Being whom Jesus called his father was but the man Jesus revealed to himself, and the enthusiast's mystic and confused knowledge of this, long ere he began his public "ministry," undoubtedly appeared to him in the light of a direct illumination. Henceforth his pathway lay clear before him-his mission was to "give light to those that sat in darkness and in the shadow of death."

"Open thy soul to see,
Slave, and thy feet are free;
Thy bonds and thy beliefs are one in kind,
And of thy fears thine irons wrought
Hang weights upon thee fashioned out of thine own thought."\*

Recognising the true character of the Oriental mystic, we are compelled to rank him among those "madmen who have made

<sup>\*</sup> A. C. Swinburne.

men mad." He endeavoured—no doubt honestly believing in his own superiority, at least, until towards the close of his career, when it is abundantly evident that the process of disillusioning had begun—to realise the inchoate dreams of youth, in complete ignorance of the practical and political impossibilities which stood in his way. Friction with the world of man emancipates all save the megalomaniac from their youthful visions of grandiose self-importance. With pity, not contempt, we can contemplate the character of Jesus, who was led to arrogate as special to himself man's common sympathy with the kosmos. However unconscious of his power, the dullest, least abstract man is the architect of the world and the creator of all things. Moreover, in speaking of the influence of the character of this village artisan, we must be careful not to overestimate it, as we should do were we to lose sight of the great impulse given to Christianity by the enlistment on its side of the arts of architecture, music, and painting. Take, for example, the Virgin Mary, who must have been-since she was an Oriental—old and wrinkled at the time of the crucifixion. Nevertheless, the Catholic boasts of her influence in inspiring devotion—an influence due mainly to painting, the foremost name in which is that of Raffaelle, the debauchee whose excesses are said to have proved fatal at the premature age of thirty-seven. Like other "Christs" by whom he was preceded and followed, Jesus was necessarily doomed to an ignominious failure; but the supernaturalists and visionaries of succeeding ages have been able, by means of the system based upon his extravagant assumptions, to gratify the promptings of irrational emotionalism.

The reader will not fail to note that Dr. Lewins affirms that all our efforts should be directed towards the equilibrium of the bodily functions; towards the attainment of a synthetic union between the subjective and objective aspects of our organisation; the establishment of a complete harmony between ourselves and our surroundings, the healthy condition of childhood. All thought, in so far as it is excessive and abnormal, is "the bane of life," and "demon," which Byron terms it. Such application of one portion of our nature ought only to be indulged in in youth, while we are, as the Germans have it, im Werden, in the formative stage of existence. This is a truth well known to and appreciated by "men of the

world," and successful professional men, doctors and lawyers, who having made large fortunes, desire their sons to lead other lives than their own—to be country squires, cavalry officers in regiments rarely selected for foreign service, and the like. With such men as these savants and literati cannot for a moment compare. The higher life, as compared with the narrow epicier-like existence of the specialist, despite his assumption, wherever possible, of ill-sustained superiority, is that of the country gentleman, the dignified clergyman, and we may add, with perfect accuracy, that of the well-fed contented peasant whose life is a well-balanced one, a state of what our author happily calls bienaise. Pessimism is now almost a universal disease. From drawing-room and workshop the same lugubrious cry of "Cui bono?" is heard respecting life. It almost seems as though our philosophical schools had restricted their curriculum to the Burial Service, and that society, in its profound wisdom, had taken its biology from that compilation. "Surely every man," says the Psalmistand the Pessimist re-echoes the wail-"walketh in a vain show: surely they are disquieted in vain. . . . For all our days are passed away in thy wrath; we spend our years as a tale that is told." Truly the time is now ripe for a change, for that palingenesia—that reversion to nature—which we are told is now absolutely necessary for the preservation of the race. When we are able to reduce all normal mental phenomena to healthy sensation, we shall be free alike from sickly aspirations after immortality and heaven, and from the neuropathic nightmare of existence which represents it as a hell. Instead of specialist-like—wasting our time in endless thought-analysis, instead of perverting the scheme of Nature—if scheme there be—in the rage for discovery, or in the consideration of final causes, or the possible influences upon the world of supernatural powers, we shall then practically realise that action, and not contemplation, is what we need, and what the service of man demands. As individuals, we must learn that our functions are to be normally exercised, that such exercise is both pleasurable and beneficial, and that not prayer, but action and self-reliance, are essentials to human welfare. This hedonism of "Life and Mind" has been, we read on page 23, confounded by a well-known scientist with sensuality. The same charge was—as has often been shown and often refutedbrought against the "system" of Epicurus. "By destroying," cries the irate religionist, "the belief in immortality, you loosen the bonds of morality!" Nothing can be farther from the truth than this statement. The doctrine of immortality has never led, and never can now in its decrepitude conduce, to the formation of a virtuous and manly people. On the contrary, it has directly caused more wrong-doing than all the other assumptions of theology. That which moralists term the res innoxiae utilitatis was discovered by humanitarian promptings. As Ennius has it—

"The man who shows the wanderer his way,
From his own torch, as 'twere, another lights,
Nor is his lessened by the other's gain."

Were there any foundation for the belief that life and mind is the result of a divinely-imparted immaterial essence, there would then be only one religion open to our acceptance namely, Pantheism. For if one form of matter, one particular congeries of atoms, were thus animated by "spirit," we must logically assume that all the universe is so vivified. We could thus refute all notion of worship of an omnipresent Deity by means of the very theological tenet of omnipresence. For a God cannot be omnipresent without filling all space and all that space contains. If absent from any single molecule or atom, he cannot be omnipresent; and on the omnipresent doctrine there could be no room for anything but Deity. On this assumption, therefore, Pantheism would be the only rational supernatural or divine hypothesis; and as we ourselves must be part of the universal Being, all worship of a Deity becomes pure hylotheism and self-worship.

It is, however, evident that we know nothing of "spirit"; except as the vis viva of matter. We accept the maxim of Sir W. Hamilton, that in the world of man there is nothing great but mind, because man can only appreciate himself and his ideas. This human standard is the only possible one by which we can judge all things. In man's universe there is only man's individuality, the Ego, in its subjective and objective phase. We behold things in a vesture of our own making; even our own anatomy is an apparition of the cerebrating organ. If no God or demon is revealed to us, if it be absolutely impossible for us either to deny or affirm their existence,

it follows that all religion is also impossible. The worship of a nonentity is an absurdity, and Deity is a nonentity if we have no means of knowing whether such a Being be in existence. "The proper study of mankind is man," and the promotion of the complete harmony of the individual and of society in the aggregate, the amelioration of the conditions of life, can only become possible by the recognition of the fact that man is a vessel "complete, polished, and round" in himself, and that he has to trust solely to himself, inasmuch as any reliance upon things beyond his ken can be nothing more than trusting to the vain pictures and figments of imagination.

Dr. Lewins asserts that the acceptance of Materialism is now obligatory upon the modern "conscience." It is so, and all science that refuses to confront this obligation, whether from ignorance or time-serving—an obligation rendered more necessary by the revelations of modern Alienism—is altogether behind the time. Ordinary doctors refuse to consider mental problems, and it is only since 1845, when the Lunacy Acts came into operation, that it has been effectually demonstrated that the brain is the exclusive organ of mind, and that it is altogether

independent of any hypothetical spirit.

The main purport of the preceding work is briefly summed up in the concluding political forecast, and also alluded to in the author's preface. The present condition of civilised society is radically evil, and calls for a remedy which cannot fail to be one of violence, amounting to a sanguinary revolution in human affairs. Bacon's picture of a declining nation applies perfectly to the present condition of England, with her unparalleled industrial development in science, art, and luxury, and her painfully-contrasted extremes of wealth and poverty. To what good is all our boasted progress in these directions if we ourselves are losing ground and physically degenerating? In a paper read by its author, Dr. Hack Tuke, in the Psychological Section, at the annual meeting of the British Medical Association in Cork, in 1879, attention was drawn to the dire effects produced upon the young of both sexes by the ever-increasing demands made upon their intellects by teachers, competitive examinations, and the curriculum of studies in force in our schools. "Too rapid an acquisition of knowledge," says Dr. Tuke, "the attempt to master too many subjects, is a part of that Jehu-speed at which we are now

driving, whether in business or science. Knowledge so gained 'proves but a bad nourishment in the concoction, as it was heedless in the devouring.' So said Milton in his day. What would he have said now? Competition is not confined to trade. Our examination boards [the medical; but the remark applies to every branch of the competitive system] have, in truth, not escaped from its influence. . . . Professor Humphry has protested in terms of strong disapproval against the system of examinations now too generally pursued, and we of all men ought to join our voice with his in the endeavour to stem the current of this excessive and indiscriminate brain-stuffing. 'Knowledge grows, but man stands still—that is to say, the intellect and powers of man are no greater now than they were in any of the past known ages—in the days, for instance, of Homer or of Plato, of Confucius, of Buddha, or of Moses; no more powerful to mould the material at hand, whereas the material has vastly increased."

High pressure in the arts and sciences is the great evil of our time, as Dr. Aitkin, Professor of Pathology in the Army Medical School, Netley, graphically points out in his "Science and Art of Medicine." The statistics of lunacy show that cerebral disease is increasing with every decennium, and that it has already attained the really appalling proportion of one medically-certified lunatic—not to mention the slighter forms of nervous disease—in every three hundred and forty-eight of our population, as the following statistics will show:—

Ratio of lunatics and idiots to population per 10,000-

1859					18.67
1869					23.63
1879					27.77 *

Neuropathy, insania, and pauperism!—this is our vaunted civilisation. Despite the enormous expense of sanitary reform in London, on the improved sewage of which alone millions have been expended, the rate of mortality has not diminished, but still amounts to 22 per 1,000, as it was more than thirty years ago when the ill-requited and neglected Dr. G. A. Walker sounded the knell of intra-mural interments and the tocsin of

<sup>\*</sup> Since this was written some increase of this ratio has taken place. The mortality per 1,000 has, on the contrary, diminished, and now stands at under 19.

graveyard reform. The fact that England ha's one ratesupported pauper to about every thirty persons conveys a fruitful source of reflection upon our national security, the stability of our vaunted civilisation, and the "progress" which is really decadence. Savants may pile discovery upon discovery, until, as was the case with Michael Faraday, the desire to "discover" becomes a real mania; but the life that is wholly given over to such pursuits is a mis-spent one, and is, as an example, positively injurious to society. The whole burden of "Faust"—which, commenced in 1769 and only finished in 1831, occupied Goethe from youth to old age—is to trace the gradual development of a superior mind, a perfect man, from contemplative to active pursuits, from the library, laboratory, museum, and observatory, to the Court, the camp, and, finally, to the execution of colossal works of engineering and the like. In truth, the perfect man is not given to dreaming, or to unduly exercising any one portion of his nature. Savants, such as Faraday, who, pedant-like, stick throughout their whole lives to contemplative pursuits, are, as we have often asserted, inferior natures, like the famulus Wagner of Goethe's great tragedy.

Only active men, men of balanced minds, can ever really lessen the miseries which infect human society, and, at the same time, feel that their lives are happier and better for the benefits they confer upon mankind. The true philosophy of life can only follow upon the acceptance in all their purport of the principles enunciated in this work. Our Thesis is directly opposed to brooding thought and endless analysis, and to all such misapplications of energy as endeavour to soar beyond the only noumenon knowable, by man—his own thinking organ, the brain, the pro-plasm of all visible phenomena, the maker and unmaker alike of gods and devils, of invisible Pantheons and Pandemonia. In the present confusion of utterances, the bickerings and contentions of theologians of all the Churches and so-called philosophers of the Schools, the human mind is sorely perplexed for solid ground on which to rest. Happily for mankind, Freedom of Thought is not based upon physical discovery. The formative period passed, we can devote our mental powers to the study of ourselves-an inquiry higher and better than the investigation of physical phenomena. We need not labour to establish a new sacerdotalism-that of the

Scientist—upon the ruin of the old. Of the two, we would, perhaps, prefer the theological, inasmuch as we believe that in it the humane and emotional are more fully developed. Successful Scientists are rather too much disposed towards intolerance for us to welcome them as the priests of the future. The vicious spirit displayed by Professor Huxley in his "Man's Place in Nature" towards Professor Owen can hardly be surpassed by any *odium theologicum*, and such Popes are even less to be desired than those of Rome. Indeed, Professor Huxley himself conceded the superiority of men of action in his address at the inauguration of the statue of Priestley at Birmingham.

We would have every reader who accepts our position prove that he believes his highest duty to be that due to himself and society. He should show to all an example of the only rational worship—namely, the service of the great king of the universe, the one family of Man. The ideal we should all strive to attain is the *summum bonum* of human happiness. Healthy bodies and sound minds, these are that ideal. His duty to himself the individual must learn from his own consciousness, and, if he keep a well-balanced mind, he will not fail in this. The duty we owe to society we learn from society, the consensus of the aggregate being corroborated by the cerebration of the one.

In conclusion, we would express our earnest desire that, discarding the baseless fiction of supernaturalism, and banishing every unworthy motive, our countrymen will acknowledge the truth which is really obligatory upon them, will supersede the old figments by the only rational principles of life, and will thereby promote that progress in virtue, happiness, and social stability which can easily be realised if we be true to ourselves and to the dictates of reason and common sense, from which supreme tribunal there is no appeal.

THALASSOPLEKTOS.

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