SPIRIT & MATTER

BEFORE THE BAR OF MODERN SCIENCE

BY

ISAAC W. HEYSINGER, M.A., M.D.

Associate, Society for Psychical Research (London); Member U.S. Military Order, Loyal Legion; Member of the Penna Historical Society; Pennsylvania State Insane Hospital Commission; Undergraduate in Arts, Dartmouth College; Captain U.S. Arny, War of the Rebellion; Graduate in Arts and Sciences, Union University Certificate in Analytical Chemistry, University of Michigan; Graduate in Medicine and Surgery, Jefferson Medical College; Official Expert in U.S. Circuit and Sugrence Court Patent Causes, Mechanical, Chemical, and Electrical; Author of "Solar Energy, its Source and Mode throughout the Universe"; "The Light of China" (translation from the Chinese and Commentary on the Tho Teh King); "Factors of Belief"; "The Mechanism of Conversion"; "Therapeutics of North American Soils and Climates," Etc.



PHILADELPHIA

J. B. LIPPINCOTT COMPANY

LONDON: T. WERNER LAURIE



PREFACE

THE time seems to have come for a clear and dispassionate statement of the inevitable trend of Psychology, as it now is, and as it is reaching out to newer and grander fields of discovery in the realms of life, mind and spirit. We have passed the regions of darkness and doubt, and to-day it is true, in all its fulness and strength, that the greatest and profoundest students of Psychology, and of its kindred sciences, most of these sciences new, and all of them reconstructed by fuller knowledge, are agreed, with practical unanimity, that the old past theories, or hypotheses rather, of materialism, of nihilism, of empiricism, have been proven untenable and altogether worthless, and that the so-called physical sciences have never been at all capable of taking sides in the controversy which is now about ended. We have advanced so far and so surely, now, that the alternatives presented are few, as regards the general outcome, and that these are non-physical, in any sense in which the term physical has ever been legitimately employed. In other words, the transcendental has been the final victor, and we are dealing to-day with the various phases of transcendentalism, and even here we have reached a plane in which serious conflict has terminated, and psychical students are searching out, with perfect and friendly interest, the solution of the still remaining open questions. We are clearly able to see that the final conclusions lie along lines already far advanced, and that the future advances will be to still higher planes, which we already clearly see, and can more or less definitely follow and map out.

These advances are to be found described or indicated in many, many standard books, in the re-

ports and papers of many able investigators, in the work of many world-famous students and experts, but they have not, as yet, been brought together and co-ordinated, so far as I know, in a single compact volume.

With much diffidence I have endeavoured, in these chapters, to do this, and I have sought to make the book readable and interesting as well. If I have in any wise succeeded, my work will have been well done; if not, rest assured that others will take up the task and carry it on until all the world, even the uncultured world, as it is called, will witness its triumph and look back with horror upon those bad, old, dark, blind days—

"When metes and bounds were set which none might pass,
When Science closed her eyes, and could not see,
When truth was lumped, and measured in the mass,
And mind and matter seemed a great morass
Where self-engendered monsters chanced to be,—
Behold! and lo, the vast inflowing sea!"

THE AUTHOR.

TABLE OF CONTENTS

PART I

111101	
CHAPTER I	PAG
The time has arrived when the subjects of this work can be properly treated—The older theologies becoming displaced—The sharp divisions between science and religion disappearing—New conceptions of mind and consciousness—The spiritual basis of religion becoming universally recognised—The whole subject being considered now from a new standpoint—Advances in all directions—Christianity the great gainer—The foundations of Christian belief being supported to absolute demonstration by the latest science and psychology Psychology as a science—Dependent on the newer sciences for evidence—Until recently impossible to fully demonstrate—Has been opposed by an a priori—Physical research insufficient—Transcends a material basis for its evidence—The basis of psychology is the transcendental, the superphysical—Definition of the term psychology	
Authorities Cited	
Herbert Spencer — Professor Shaler — Professor James—Rev. Dr Davies—Canons Church of England—Max Müller—Rev. Dr Gladden—Romanes—Huxley—Locke—Hammond—Haeckel	
CHAPTER II	I
Argument for spiritualism—Not certain that these phenomena in general are spiritualistic—May be a greater integration, including all psychical phenomena—Natural science has failed to investigate these phenomena—Had it done so, great results would have followed long since—The transcendent importance of genuine psychology—The connections of mind and matter—The attitude of primitive Christianity—The revolt of Luther	

Authorities Cited

Romanes—Lamarck—Richet—Sir W: Crookes— Tyndall—Davies

CHAPTER III	PAGE 2I
Spiritualism in the church—Original reformers all spiritualistic — Catholic church spiritualistic — Reformation abandoned direct spiritualism, in order to secure standing against the older church—Left Bible as historic record—Yet canon of Scripture itself was from spiritualistic revelation to the old church in comparatively recent times—Imperfection of the Bible as a merely historic record—Errors of translation; validity of the books themselves—The record demands continuous spiritualistic control and revelation **Authorities Cited**	
Luther — Zwingli — Melancthon — Westcott — Dr Roberts—Lardner—Farrar—Religious Tract Society	
CHAPTER IV	28
Results of despiritualising the church—Decay of vital Christianity—Contrast with the earlier ages—Christian miracles; when, if at all, and why, were they discontinued?—The resurrection—Scientific evidence in its favour—Anecdote of an apparent resurrection	
Authorities Cited	
Moody—Bishop Bradley — Tertullian — Irenæus — Orton—Sir John Franklin—Romanes	
CHAPTER V	36
The spiritual conflict within the church—The triumph of Christianity in earlier ages—Its permanent spiritualising power — Lost in sacerdotalism — Its spiritualistic phenomena identical with the universal spiritualistic experiences of all mankind in all ages—The revolt in the 16th century—Surrender to and incorporation with materialism—An absentee God; and an impersonal Nature in control	3
Authorities Cited	
Du Prel — St Paul — Herron — Canon Barnett— Jesus—Montucci	,
CHAPTER VI	43
Causality—The fatal mistake of sectarian theology—Relegation of God and Christ to another sphere, and substitution of a blind Nature—We have no knowledge of causes except of volitional causes—Only intelligent design, and divine volition constantly acting, can explain the universe—The nearly fatal error of theology, "If there be a personal God, He is not immediately concerned with natural causation"	,

Authorities Cited

Romanes — Sir John Herschel — Lamarck — Sir Isaac Newton — Cicero — Lyte — Chopin — Newman —Romanes

TABLE OF CONTENTS	ix
2.777	PAGE
CHAPTER VII	52
The psychism of the universe—Protoplasm a machine intelligently designed and constructed—Living organisms are also intelligent designers and constructors—A constant interchange between these psychisms **Authorities Cited** Romanes—Conn—Dr Bingham	
WARRED WIII	
CHAPTER VIII	55
Spiritualism the basis of all religions, present or past, and among all peoples—All religion depends on revelation—Religion extends back to the origin of human existence—Spiritualism extends back equally, and is the means by which religions became revealed to mankind—Religious spiritualism identical at all times and among all peoples—These have been the great factors of human advancement—Intercommunion between the living and the surviving spirits of the dead never denied until recently, and then only by a few who have never studied the phenomena, or the principles on which they have been demonstrated—Spiritualism not a new thing; its denial is the new thing—It challenges investigation at all times—If it ever existed it must and does exist now **Authorities Cited** Brinton—"The Supernatural in Nature"—Tylor—Sargent—Sir Charles Lyell—Dr Davies—Rev. Dr Ellinwood — Shaler — Professor William James	
Chapter IX	61
Spiritualism before the bar of science—Has the same right to fair investigation as have other phenomena—In all experimentation conditions must be observed—Science has, however, approached these phenomena in a hostile spirit—An unbiassed mind is the first prerequisite of anyone claiming to be a man of science	
Authorities Cited	
New Testament—Mrs Ross Church—Sir William Crookes	
CHAPTER X	68
Experimental psychology—Spiritualism among the Chinese — Time, patience, and continued labour, and some expense required to investigate spiritual phenomena—The same is true of chemistry, geology and all other pursuits—A whole literature to be studied—Materials to be procured—Mediums to be consulted and often rejected—Times and conditions must be observed—There must be thought, study, comparison and investigation—An education is requisite before this study can be intelligently pursued—The same is true of chemistry, mathematics, geology,	,

Chapter X—continued astronomy, biology and other sciences—Science has until recently discredited such education—Impossible to pursue any study under the conditions formerly demanded in the name of science—It began with an a priori judgment against the whole case—This attitude concededly unscientific Authorities Cited Rev. Dr Nevius—Rev. Dr Ellinwood—Kepler—Newton	PAG
CHAPTER XI	7:
The ban of a priori—Franklin's experiments in electricity—Herbert Spencer met the facts by saying that he had settled the question on a priori grounds—Alfred Russel Wallace on a priori	
Authorities Cited	
Tyndall—Huxley — Gladstone — Davies — Franklin —Spencer—Wallace—Tennyson	
PART II	
CHAPTER XII	8
Summary of Part I.—The basis of all religions the same—Identical with the claims and practices of modern spiritualism—This universality is valid evidence of their truth—Revelation from the supernormal the common factor—Religion defined—Ethics insufficient, and of itself baseless, and will land us in misery—The integrating principle of the universe—Chief argument for the existence of God—Science the new-comer—It abandoned its own principles in professing to deal with the supernormal—The concrete results of science considered	
Authorities Cited	
Tylor — J. Estlin Carpenter — Romanes — Charles Darwin—Professor Momerie—Huxley	
CHAPTER XIII	88
Miracles—Hume's argument—Fallacies in Hume's definitions—Fallacy in his argument—Huxley denies Hume's argument on grounds which "Knock the bottom out of all a priori objections to miracles"—Wallace and Romanes demonstrate worthlessness of the position of Hume, and many other scientific men, toward miracles and spiritualism—Miracles defined—The New Testament miracles considered in the light of scientific discovery—Examples, the Resurrection considered—Living and dead protoplasm—The principle	

Chapter XIII-continued

of continuity—An intelligent agent operating in the universe—"Miracle" may be, not in defiance of, but in fulfilment of, law—The parthenogenetic conception ascribed to Jesus—Such instances numerous and physiological—Examplescited among lower animals and from surgical and medical cases among mankind—"Spontaneous generation"—The first creation narrative in Genesis—Miracles in organic life; metabolism; mental phenomena; somnambules; Mollie Fancher; X+Y=Z—Christianity a system of intellectual liberty; afterwards restricted and perverted by theology—An avenue between the seen and the unseen worlds

Authorities Cited

Hume — Wallace — Huxley — Romanes — Professor W. H. Thomson — Professor Michael Foster — Von Hartmann — Balfour Stewart — Tait — Dr Gould's "Curiosities of Medicine" — Dr Eve's "Remarkable Cases in Surgery" — Tacitus — Pliny the Younger — Kidd — G. H. Lewes — Comte — Lord Kelvin — Haeckel — Rev. Dr Sanders — Elizabeth Stuart Phelps

CHAPTER XIV . .

110

The limitations of physical science—Huxley's statement of its narrow boundaries—Jevons on the unwarranted claims of scientific writers—The unfairness of many writers on scientific subjects—Concealment of discordant facts—Scope of science far narrower than often claimed—An infallible test of a genuine man of science—The proof of unworthiness and charlatanry—The fate of the latter—The claim that our knowledge is assuming an approximately complete character erroneous—We never can comprehend more than an infinitesimal part—New and unexplained facts are divergent in extent; the more science explains the more it has to explain—The advances of science have always been made from the study of discordant and rejected residua

Authorities Cited

Huxley-Jevons-Gladstone-St John Stock

CHAPTER XV

116

The dark days of psychology—Ignorance regarding force and matter—Belief that religion was about to disappear—Only recently has science taken cognisance of anything non-material—New sciences were necessary to prepare the way—The observer of mere physics must see mind at a great disadvantage—Spiritual truths in the universe

Authorities Cited

Balfour Stewart—P. G. Tait—Sir John Herschel—Romanes—Lord Kelvin—Sir Oliver Lodge—The Society for Psychical Research—Dean Swift—Mallock—Ingersoll—Shaler—Sir William Crookes

Chapter XVI	PAGE 124
The credulity of incredulity—A priori the only fatal attitude—The scientific method—Science when fairly pursued makes absurd drafts, says Jevons, upon our powers of comprehension and belief—De Morgan on science assuming a priest's cast-off garb dyed to escape detection—Arago on scientific doubt as contrasted with incredulity—The dangers of unlimited scepticism—The dogmatism of theology compared with that of science—Ignoring undesirable facts—The gross credulity of ignorant spiritualists finds its counterpart in the gross incredulity of ignorant scientific specialists—The passing away of the dark days of psychology	
Authorities Cited	
Jevons — De Morgan — Laplace — Arago — Abercrombie — Wallace — Gregory — Ragsky — Huss — Endlicher — Diesing — Pauthot — Garnier — Trevillian — Mayo — Haddock — Lee — Atkinson — Clark—Carpenter—Schofield	
CHAPTER XVII	
	131
Physical science cannot explain its own bases—Deals only with properties and physical manifestations—Every new discovery in fundamentals shifts the whole attitude of science—Natural history was formerly but a descriptive science of forms, structures and habits—When biology arose, and was pushed to its logical end, a whole new world of nature appeared—Laboratory work grotesquely insufficient—The passage from the physics of the brain to the corresponding facts of consciousness unthinkable—The phenomenal world of lower animals, as shown in their behaviour, does not contradict our own views of the same—Appears to be a basis of independent reality to which each sentiency helps itself	
Authorities Cited	
Lamarck — Cuvier — Darwin — Graham — Wars- chauer—Tyndall—Büchner—Masson	(
CHAPTER XVIII	136
The modern patent systems founded on super- normal phenomena—Cash value of patented inventions as an evidence of the economic value of supernormal revelations—Invention does not depend upon reason; nor upon what science deals with; nor upon what observations of physical phenomena deal with—It comes like "a bolt from the blue"; "it is creation ab initio"; it is not scientific; it is instantaneous, and not only different from but opposed to reason—It is the imaging, in practical and useful form, of the unseen and un- known from a world of the unseen and unknown—A single indecomposable mental act	

144

Authorities Cited

Tennyson—Merwin on "Patentability of Inventions"—Herschel—Ladd—United States Circuit Court decisions—United States Supreme Court

CHAPTER XIX

The workshop in the subconscious department of the mind—Telepathy will not account for invention—Comes, like genius and inspiration, from a non-human psychical source—Tennyson on guardian spirits of the dead—Spiritual manifestations always with us, but we see them not because blinded with other things—Their source in an intellectual beyond—Many examples of the subconscious manifesting through the conscious mind—They emerge unsolicited, and respond to undefined wants—Error in analogy of "thresholds of consciousness" or "higher and lower" or "strata" as applied to mental phenomena—These terms useful if we use them merely as formal expressions—The scope and source of the subconscious realm considered—Found among all animals, and also in plants—Found also in the morphology of growing organisms—Sym-

Authorities Cited

pathy' universal in extent

Swedenborg — Von Hartmann — Newman — Tennyson—Romanes—Huxley—Locke—Bowen—Kipling — Archimedes — Newton — Ladd — Schofield — Montgomery — Wundt — Waldstein — Holmes — Dr G. Thompson — Barker — Agassiz — Ward — Darwin—Orton

CHAPTER XX

Memory the final battleground of empiricism — The physical theory of memory untenable—"Impressions" cannot serve, if cerebral or material—Use of these terms admissible, if we understand that they are merely used as terms and not as explanations-A dialogue involving many phases of memory—Association of ideas inadequate—A body of memories must have a single intelligence which constantly comprehends each one-Professor Bowen's example of the memory of a hundred thousand words in various languages in which a "picker," who knows each one, must bring the word to the surface as soon as needed, in its etymology, its English equivalent, its grammatical relations to other groups, etc., etc.—Analogy of a librarian finding a book desired by means of a catalogue-In case of the memory, if it is but a collection stored away, then the subconscious or conscious desire for the word must bring the word out of the collection; hence must have known what to bring beforehand; hence the collection of them is unnecessary—Physical theory breaks down, in every shape—Allied to instinct, and immaterial; and would be seen to be supernormal unless so common as to escape notice

152

Authorities Cited

Lord Bacon—Tennyson—Von Hartmann—Professor Bowen—Sir John Herschel—Kant

CHAPTER XXI

159

The sole alternatives: deity and spiritualism, or else zero and Nihilism-Encounter to-day the old odium theologicum, and opprobrium scientiæ—Science degraded by refusal to investigate every disputed scientific question—Its only enemy is a priori, which is the refusal of the will to believe, and the refusal to investigate lest it will believe-Psychology does not properly deal with how fast nerve sensations travel, or how far apart pin-pricks can be distinguished as one or two; but what it is that travels, and what it is that perceives—Shall philosophy and science pretend to deal with mentality and life, and yet not know, or seek to learn, what they are; and should science not wait to argue about them until it does know?-Behind the nebula is either God or nothing-From nothing nothing can proceed—If the psychism of man exists, then we know that there must exist a greater psychism—The "Spirit of the Universe"—It must be akin to our own

Authorities Cited

Masson — Wordsworth — Emerson — Newton — Le Conte—Professor James—Ladd

PART III

CHAPTER XXII .

167

Summary of Parts I. and II.—The principles of religion the outcome of spiritual revelation—It has always been universal—All religions embody the same principle—Moral and spiritual loftiness not confined to any—The materialistic ideas of the derivation of religion fallacious, and now abandoned—Consequences of the ecclesiastical revolt in the sixteenth century—The abandonment of continuous spiritualism in favour of "natural law"; the result—Failure of science to investigate due to a baseless a priori—These fields outside the natural sciences—Popular error as to attitude of great teachers of science and philosophy

Authorities Cited

Luther—Romanes—Haeckel—Herbert Spencer

CHAPTER XXIII .

173

The methods and acquisitions of science; the former beyond all praise, the latter limited—Scientific judgment changes with every decade—It does not comprehend the principles on which it is founded—Ex-

Chapter XXIII—continued

amples cited—Does not touch the real or vital problems of life and mind, nor of the universe—Even mathematics extremely limited—Failure of scientific men largely due to a desire to find a single cause, for which they do not go back far enough—The data not in possession of physical science—Intolerance wholly unjustifiable in present state of scientific knowledge—Psychism the factor which alone will interpret the universe—Just as scientific as light, heat, electricity or gravitation—The problems become simpler as the base is broadened—The greatest men of science always opposed to materialism or empiricism—The advent of new sciences recently which make the solution clear; disappearance of the dark days of psychology which prevailed thirty years ago

Authorities Cited

Flammarion — Nus — Kant — Sir W. Crookes— Lord Kelvin — Sir John Herschel — Lagrange — Romanes — Herbert Spencer—Paul Janet—Huxley— De Morgan

CHAPTER XXIV .

181

The new psychology-Catalogue of names of authorities in Great Britain, America, France, Italy, Germany, etc.—A victory and demonstration of the higher over the lower; a vindication of both philosophy and science—God's fatherhood and man's brotherhood mutually dependent on each other-The life-study of micro-organisms — Their psychology — Romanes change of view with larger knowledge-His new treatise "A Candid Examination of Religion," to oppose his earlier "Candid Examination of Theism"-His reasons for his former error—His new studies—His final conclusion in favour of Theism, God, Spirit, revelation and psychism-Materialists nearly all miserable, though often unconscious of the cause-"Moral satisfactions" insufficient—The converse among the spiritualists-Self-sacrifice-" The least important thing does not happen except as God wills it "

Authorities Cited

Long list at beginning of chapter; also Romanes— Binet — McCosh — Wordsworth — S. R. Crockett — Max Müller—The Author

CHAPTER XXV

191

Sectarian theology in the light of universal religion—Results of "begrudging God His own universe," and substituting "Natural Law," for God's ever-present volition and control—The fatal error of the belief that God worked once, long ago, to create, and will come again, some time in the indefinite future, to judge; and meanwhile has left the universe to "Nature," as a substitute—Sectarian creeds of this type have never

Chapter XXV-continued

been really believed by their sincere Christian followers, but have nevertheless stood as barriers against any defence on their part against materialism—Have indeed allied the churches with it—The origin of "gods"; idols representative only—Absurdity of any other position—Inherent belief in and knowledge of God among primitive peoples—Always a spirit—Psychology of the Eskimo, and of other ancient American peoples—The American race not derived, at least since the glacial period, from the Eastern continent

Authorities Cited

Jesus—Le Bon—Maya Codices—Dr Cyrus Thomas—Captain Dennett, R.N.—Parry—First Missionaries to the Eskimo—Newton—Lamarck—Sir John Herschel—Romanes—Brinton

CHAPTER XXVI .

199

Spiritualism the substratum of religion, but not identical with it—They often overlap each other—Sources of both in the spiritual beyond—Continuance of life after death the basis of both—Demonstrated by spiritualism applying scientific methods to the evidence—Mankind immutably allied with spirit universal and tetrnal—We are here in a state of probation and training for a spiritual individuality hereafter—The alternative of belief in a future existence

Authorities Cited

Christ—Stewart and Tait—Romanes—Sir John Herschel—Lamarck—Lord Kelvin

CHAPTER XXVII .

205

Popular error regarding modern writers who have been assumed to teach empiricism—Locke, Hume, Comte, John Stuart Mill, Huxley, Tyndall, Herbert Spencer and Haeckel—Majority of these not men of science—Locke totally misunderstood; he taught Christianity, God, spirits and revelation, and a future life—His attack was against the "innate principles" of Descartes, and for direct revelation—The ancient Chinese philosophy identical with Locke's view of our "faculties"—Hume's reduction to absurdity and nihilism was a joke on the defects of Locke and Berkeley—Hume believed in God—"There can be no belief that there can be no belief "—Comte abandoned his atheism in favour of what Huxley called the worship of a wilderness of apes—John Stuart Mill carried his system to an "inexplicability" of the whole, and surrendered it there

Authorities Cited

Locke — Descartes — Leibnitz — Haeckel—Wordsworth — Huxley — Hume — Berkeley — Churchill—Morell — Mackintosh — Frederic Harrison — Comte—St Simon — Mill — Sir W. Hamilton

CHAPTER XXVIII

Tyndall, Huxley, Spencer, Haeckel—Tyndall's concession, "The passage from the physics of the brain to the corresponding facts of consciousness is unthinkable "—Huxley's concession that any argument which leads to materialism "inevitably carries us beyond it "—Hammond on somnambulism—Herbert Spencer's final concession just before his death—"Consciousness is specialised and individualised "—Empiricism and transcendentalism—To handle these questions a writer must be fully equipped—Haeckel concedes that his "command of the various branches of science is uneven and defective "—This is demonstrated in his "Riddle of the Universe"—Examples cited—He deals principally with heredity and environment, neither of which he understands—His argument falls of itself

Authorities Cited

Tyndall — Huxley — Berkeley — Hammond— Herbert Spencer — Tennyson — Mrs Browning— Murdock — Haeckel — Charles Darwin

CHAPTER XXIX

Heredity—The psychology of Zoospores—Must have come with a leap—High-class mentality in progeny of lowest seaweeds—Endowments as contrasted with heredity-Haeckel's scheme of heredity erroneous, and now abandoned-There is no basis known, or which can be suspected, to account for heredity by physical means or processes-Heredity is psychical-With the development of man came a new endowment, and not a physical survival-Pangenesis insufficient, and has been abandoned—The development of latent powers psychically directed and controlled—The subconscious department of the mind—The whole of no man is incarnated in his terrestrial body-Telepathy from the infinite-The infinite energy of the universe-Protoplasm a machine, like a steam-engine, instead of a chemical product, like a jelly-Physical heredity discussed and disproven, so far as scientific knowledge can go—Examples—Haeckel relied upon Romanes—Romanes discredits Haeckel, and, on further knowledge and investigation, takes the opposite side— He had hitherto been "too deeply immersed in merely physical research "-Romanes demonstrates, in his latest work, the entire invalidity of Haeckel's theories and conclusions-Metamorphosis of insects; partheno-

Authorities Cited

Lord Kelvin — Shakespeare — Newton — Copernicus — Wordsworth — Haeckel — Weismann — Sandeman — Professor Shaler — Darwin — Sir John Herschel — Professor James — Myers — Sir Oliver Lodge — Professor Barrett — Nikola Tesla — Prof. William H. Thomson — Professor Conn — Bateson—Romanes—Orton—Oliver W. Holmes

Ъ

genesis; birth-marks

226

1	PAC	E
2	23	I

CHAPTER XXX .

Spiritualism pursues the methods of science—Sir W. Crookes' Presidential Address before the British Association—Professor De Morgan on supernormal phenomena—Modern spiritualism has never ceased to advance—Persecution has not affected the movement —Men of science have recently taken it up with triumphant results—The French Royal Academy of Sciences in 1831—The Dialectical Committee of London in 1872—The great Society for Psychical Research in 1882—Brief description of the latter—The great change in the public and scientific attitude since 1872—The investigations of Sir W. Crookes—Rejected with contempt in 1872 by the Royal Society, and twenty-five years later he was elected President of the British Association for the Advancement of Science—His remarkable address—"I have nothing to retract—I adhere to my already published statements—Indeed I might add much thereto"

Authorities Cited

Professor De Morgan—French Academy—Dr Carpenter—Dialectic Committee—A. R. Wallace—Society for Psychical Research—Sir W. Crookes—Quarterly Review—Dr Huggins—Sir Oliver Lodge

CHAPTER XXXI .

240

The only scientific basis of evolution is volition—Spiritualism coincident with a universe controlled by a psychism—Theology threw away its charter when it took up Nature as a substitute for God, whereby "God is still grudged His own universe"—But for this fatal error, there never could have been anything for religion and science to fight about—When divine volition, constantly operative, is granted, all difficulties disappear of themselves, and agnosticism becomes a mere superstition of credulity—The only tenable theory is that of Lamarck, that "there is an intelligent power which transcends nature, which was before nature, and is independent of nature, and controls nature to do its will—and this is what we call God"

Authorities Cited

Herbert Spencer — Romanes — Sir John Herschel— Lamarck — Longfellow — Olive Schreiner — Professor William James—Jalalu'd-Din (author's translation)

PART IV

CHAPTER XXXII.

245

Review of Parts I., II., and III.—Religion uniformly found among all peoples—The cognition of the coordinated presence of the individual body, the individual spirit, the spirit of nature, and the spirit of

Chapter XXXII-continued

the universe, intimate and inseparable with all mankind—Atheism produces misery at heart among those who claim to be atheists—Religions fundamentally the same—As art was repudiated by Christianity, because it had become sacerdotal, so spiritualism was repudiated by the Reformation because it had become sacerdotal—
"Natural causation" became the common god of materialism and sectarian theology-Private Christians never believed at heart these doctrines—The means of scientifically overcoming these fatal doctrines had to be created—Embryology, micro-psychology, the science of the subconscious, comparative religions, biology, anthropology, the whole of the scientific bases of true psychology, had yet to be developed—New microscopic, spectroscopic and chemical appliances had to be devised and perfected-Time was required-God was preparing to finally destroy the power of matter over mind, by means of the power of mind over matter-The work has now been accomplished, for the first time in the history of the world

Authorities Cited

Leibnitz—Romanes—and authorities previously cited on these subjects

CHAPTER XXXIII

249

Testimony of able authorities, in letters to the Dialectical Society, in favour of the truth and importance of spiritual phenomena—The cosmical spiritualism of the universe—The individual spiritualism of man— The spiritualism of lower life-organisms-Mediums-Huxley's second letter to the Dialectical Society-George H. Lewes to the same-Dr Davey, J. Garth Wilkinson, Sir Edwin Arnold and others to the same— Miss A Goodrich-Freer on crystal vision—Are crystal visions subjective or objective?-Tyndall to Dialectical Society on presence at sittings of a strongly disturber—Carpenter on "unconscious magnetic cerebration "-Trollope on opinion of Bosco that the arts of legerdemain cannot imitate these phenomena-Unconscious testimony of a great "magician" now living-Table tipping in answer to mental questions-Poltergeists-Importance of the study-Sir William Crookes and his narrative of Katie King-Her last appearance—His work on the phenomena of spiritualism, originally rejected by the scientific bodies which afterwards made him their president—His reaffirmation of the facts—Florence Cook, Sir William Crookes' scientific tests and methods—Photographs of the materialised Katie King-Spirit photographs considered -Can the invisible and intangible be photographed ?-Examples—Analogies with other natural phenomena mirage—Elementary forces involved—The phenomena of light and sound-Luminous paints, invisible end of solar spectrum-Modern views of matter

265

270

Authorities Cited

Lewes — Davey — Wilkinson — Crossland — Sir Edwin Arnold — Simpson — A. Goodrich-Freer — Earl of Stanhope — Burton — Hockley — Tyndall— James — Carpenter — Trollope — Bosco — Seybert— Lewis — Sir W: Crookes — Marmery — Professor Knott—The Author

CHAPTER XXXIV

Carlyle on miracles—Evidence by Christian converts of the reality of supernormal manifestations of Eskimo and other psychics—How much do we know of the laws of nature as actual laws?-" Have any deepest scientific individuals vet dived down to the foundations of the universe, and gauged everything there?"—
"These scientific individuals have been nowhere but where we also are "-The power of custom; philosophy is a continual battle against it-The transcendental-Psychism among the Eskimo—Angekoks converted to Christianity " are steadfast in asserting that there is an interference of some supernatural agency "-Crystal vision among the Eskimo-Personal narratives which follow are not intended to be startling, but are simple examples of the various classes of phenomena to which they relate—The catchword "Magnetism" as a substitute for an explanation; also "Hypnotism," "Suggestion," and the like-These are mere terms, like the algebraic X, Y and Z, for unexplained phenomena, phenomena to be properly explained and designated later on

Authorities Cited

Carlyle — Nevius — Dennett — Chinese Records— Sahagun — Greenland Missionaries

CHAPTER XXXV .

Practical cases continued—Crystal vision—Clairvoyance—Transferred mental power—Crystal vision, as mentioned in the Bible—Among the Eskimo—The remarkable case observed by Colonel James Smith among the Red Indians, in what is now Eastern Ohio, before the Revolutionary War—Its effect on the Indians—Manetohcoa, the old conjurer—Crystal vision among the Eastern Cherokees, reported by Mr James Mooney of the U.S. Bureau of Ethnology—The fate of Cherokee Confederate soldiers predicted—Crystal vision among the Aztecs—Tescatlipoca the god of crystal vision—Among theancient Mayas—Its universal practice to-day in Yucatan—In Peru, in Northern Chile, among the Apaches—Not difficult to acquire—Miss Goodrich-Freer's discovery of a colony in England which had developed it among themselves—Clairvoyance and supernormal revelation—Eph's bullet—Was it a case of telepathy?—Use of "Planchette" in China—Dowsing among Western nations—Exhaustive reports by Professor W. F. Barrett, F.R.S.—The Divining Rod—Interpretation of the phenomena—Analogous to

Chapter XXXV-continued

other cases of subconscious mental projection—Cases cited —Clairvoyance of the dying—Clairvoyance of a dead brother by a dying boy who did not know that his brother had died—Case of fascination of a large frog by a huge rattlesnake—The phenomena described—The influence exercised by great commanders—A river of command, Emerson calls it—Wolseley on analogous power in military commanders—Spirit rappings—Their connection with other physical phenomena of spiritualism—Professor Augustus De Morgan's experiments—His scientific qualifications—The preface to his wife's book "From Matter to Spirit"—His remarkable experience with a group of rappers—Statement of the experience of a scientific friend

Authorities Cited

The Bible—Col. James Smith—President Roosevelt—Manetohcoa—U.S. Bureau of Ethnology—The Cherokee Indian Report—Mooney—Daniel G. Brinton—Tcheng-Ki-Tong — President Martin — Professor Barrett—A. Goodrich-Freer — Professor De Mortillet — Reverend Father Roe—F. Napier Denison—Andrew Lang—Professor Krafft-Ebing—Professor Charcot—L. A. Sherman—Frank R. Alderman—Sir William Crookes—Professor Barrett—Jevons—Marmery—Mrs De Morgan—Susan Dabney Smedes — Lord Wolseley — R. W. Emerson—T. S. G. Dabney—Mrs McHatton-Ripley—Professor De Morgan

CHAPTER XXXVI

293

Experiments continued—Telepathy—Acceptance by physical science—The Hertzian Waves—Wireless telegraphy—Telepathy from the living as a difficulty to be overcome, in alleged communications from the dead -Means for overcoming the difficulty-Interjectors, accidental mis-statement, and cross-correspondences-The system of cross-correspondences carried on by the Society for Psychical Research—The alleged communicators—The percipients and so-called automatic writings—Trance phenomena—The subliminal self— Abstract of certain cross-correspondence records-Answers to questions as to the future—The charges of "malobservation" and "lapse of memory "considered - The scope and force of the objections examined-Same charges can be made against all human testimony — If valid would destroy the practice of jurisprudence — Multiple observation, and the recollected effects on others present minimise the importance of the objections-Malobservation principally applicable where the attention has been diverted—Memory may drop matter out, but cannot add new matter, excepting by conscious fraud, under cross-examination—Poltergeist case in Yucatan in the years about 1500—"Speaking like a parrot"—John L: Stephens' report of the Yucatan poltergeist

Authorities Cited

F. W. H. Myers—Dr Hodgson—Dr W. D. Bayley, S. P. R. —Mrs Piper—Principal Graham—Gurney—Sidgwick—Mrs Verrall—Journal S. P. R. —Sir Oliver Lodge—Miss Goodrich-Freer—John L. Stephens—The Cura Don Aguilar, of Yucatan—D. G. Brinton—Modern Mexico

CHAPTER XXXVII

303

Accurate prevision of death by a soldier months before, with abstract of evidence—General John B. Gordon's chapter on premonitions—The case of Wm. Shuler, Co. I., 118th Penna. Volunteers, killed at the Battle of the Wilderness, 5th May 1864—Accurate prevision; saw the place pictured months before—"Will be killed in first battle, and that early in the fight"—The spot was far beyond, in the midst of a dense wilderness, and miles within the Confederate lines—Later on "I have just five days more to live"—Before the charge, "Yes, just beyond those works, in that little cluster of woods, on the hill" (pointing with his finger), "I shall fall—I see the spot; I know it well"—How line of advance of the whole charge was deflected, so that Shuler's company came to cross this hill—His death—Verifications from military orders and movements reported in the U.S. Official War Records, not published till after the publication of Dr Layman's original narrative—The case of Captain McKavett—Monterey—The case narrated by General Oglethorpe—The Battle of Malplaquet—The recent case of William Terriss, the well-known actor

Authorities Cited

Dr A. Layman—General John B. Gordon—W. W. Shuler—J. L. Smith's History of the Corn Exchange Regiment—Dr S. Compton Smith—Dr E. R. Chamberlain—General Taylor—General Worth—Captain Henry McKavett—West Point Military Register—Boswell—Washington Irving — Samuel Johnson — General Oglethorpe—Frederick Lane—Frank Podmore—London Times—Various witnesses cited

CHAPTER XXXVIII

316

Unpublished experiments continued—Changing weights—Slate writings—Automatic writings purporting to be from spirits of the dead—Old friend of the author—His experiences—Hough, the boy medium—Experiments of Sir William Crookes, in England—Mr P.'s experiments with spring-scale; weights varied at call—His slate-writing experiments—J. K. writes on small, closed and sealed slates, in three colours—The automatically written, original record of many friends and relatives in the spirit world, by the hand of Mr P.'s wife—Character of the communications—Table tipping and rapping with same psychic—Her early death—Testimony of surviving husband—Final loss of control

Authorities Cited

The author and Mr P.—Hough—Katie King—Sir William Crookes—Slade—John King (Morgan)—Proceedings S.P.R.

CHAPTER XXXIX

325

Automatic writing experiments continued—"Interjectors" suddenly appearing—Evidential matter—Test of genuineness of the P. Record—Character of the communication—Original in possession of the author by bequest of Mr P.—Mr P.'s testimony regarding the personal value of the communications—His warning against consulting mediums for "information"—How the sittings closed—Interjector appears in a Hodgson sitting with Mrs Piper—"I was a d—d idiot"—Interjector in one of Dr Bayley's sittings—A sister (see page 295)

Authorities Cited

Mr P.—Dr Hodgson—Mrs Piper—Miss B.— Hudson—Dr Bayley

CHAPTER XL

330

Planchette case of automatic writing, in which an interjector appeared to narrate an irrelevant tragedy—Testimony of Mr Charles Morris, of the S.P.R.—Original record made at the time, by Mr Ford, one of the sitters; original planchette record still preserved—Young girl appears with narration of persecution and violent death—Totally unknown to all the sitters—Refers them to the sisters of the President of the Penna. R.R. Co.—The result

Authorities Cited

Charles Morris — Cope — Leidy — John Ford — Miss Annie McDowell — Miss Adelaide Thompson — Miss Annie Thompson.

CHAPTER XLI

334

Experiments continued — Trumpet mediums — Further experiments in prevision—Veridical dreams—Experiment of Rev. Thomas W. Illman with a trumpet medium, narrated by himself—Discovery, by message from deceased wife, of a surviving husband going into intemperance, and who was reformed in consequence—The same trumpet medium afterwards in Philadelphia—Dr Layman's conversation with Dr Holcomb, deceased, received in a lighted room—Experience of a transient visitor to Philadelphia with the same trumpet medium—Three veridical dreams before confinement, made comprehensible and verified by the birth of the child a week or more afterwards

Authorities Cited

De Morgan—Rev. Thomas W. Illman—Dr Layman—Dr Holcomb—Three Ladies personally known to the Author

CHAPTER XLII .

Reluctance to relate supernormal experiences—When this is removed they are found to be general—Materialisations—Common opinion that doctors are materialistic or atheistic—It is an error; when the veneer is removed the reverse is found to be the case—Dr Bayley's paper before a medical society—How it was received—The dean of a medical college narrates one supernormal case—A sudden change among the doctors, and dozens of cases were narrated, until after three o'clock A.M., when the meeting adjourned with many others seeking to narrate their own, also—Materialising séances—Two members of the S.P.R. describe an inexplicable dematerialisation—The author narrates a similar case which he cannot explain—The medical profession and immortality—Several apparitional cases of the dead

Authorities Cited

Sir W.: Crookes—Dr Bayley—Dr Schofield—Dr Dudley, Dean—The Author—Ridgway's Magazine—Census of physicians—Professor Barrett—T. A. Trollope—F. W. H: Myers—Lady Gore Booth—Society for Psychical Research

CHAPTER XLIII .

350

Some possible explanation of materialising phenomena—The sources of material forms have been sought to be found in the atmosphere, from void space, from the personality of the medium, or from that of those present-Our popular conception of void space erroneous—The luminiferous ether—Its constitution considered—Only differs from material substance in its lack of gravitation—Its enormous density, giving a "bursting pressure," says Sir John Herschel, of eleven billion pounds per square inch—How its density has been determined-Free ether and bound ether-Under certain circumstances "agglomerates," to some extent, with tangible matter—The free ether of space harnessed for working electrical machines and dynamos-Tesla says we will soon get it directly from space—Franklin accomplished this by his kites—Could disembodied spirits (granting such) find a framework in living and sympathising friends, and could they "agglomerate" with this even an infinitesimal fraction of the surrounding bound ether, there would be far more tangibility and weight than could possibly be required - Reference to preceding chapter on "Invention," as supernormal— Perhaps this "invention" has been already made, beyond our normal limits-A dim recognition of such a hypothesis in the nomenclature of "spiritualistic" phenomena

Authorities Cited

Sir John Herschel—Sir Oliver Lodge—Fresnel— Tesla—Franklin—Sir W. Crookes—Herbert Spencer—Lord Kelvin

365

CHAPTER XLIV .

Some personal experiments in materialisation—In discussing the ether, in the preceding chapter, the author does not seek to broach a theory—Such phenomena common everywhere, even prior to birth of history—The facts cannot be overcome, in this day of earnest work, by an a priori—An experiment of the author's, in 1902, written down at once—Phenomena were not due to confederates, nor to hypnotic suggestion—Sitting described—Appearance, so far as author could determine, of representation of deceased friend and patient—Means of identification—Family connections—Little "Patie " takes a hand—The theory of hallucination considered:

Authorities Cited

Phila: Section S.P.R.—Sir William Crookes—De Morgan—"Old Mother Wheat "—" Namouna "—The Author

Some further experiments with psychical phenomena

CHAPTER XLV

—A medium who visits Philadelphia, and is known to the author—Eminently respectable—Her family and history—Her cabinet—Commences with the phenomena of passing matter through matter, chairs, coats, handkerchiefs, etc., etc.—Time required from three to nine seconds—Hands bound together; at author's request he snapped a rubber band on in addition—Performances went on the same—Materialisations produced in her presence—Author physically examined the medium immediately afterwards—The result—Evidence for this medium's fairness—One gentleman always present for the past four years, the husband of the daughter, a Philadelphian, formerly in business here, a churchman, and a man of the highest character, who must know to a certainty if the phenomena are not genuine—The money profit relatively nothing in this case—Facts can only be rationally accounted for on the ground that the phenomena, so far as the medium is concerned, are genuine, and that she is controlled by

Authorities Cited

and the problem can be rationally solved

higher powers than her own to continue her laborious and relatively profitless work—On this basis her daughter and son-in-law must feel the same necessity,

Members of the Phila. Section S.P.R.—Sir William Crookes—Zöllner—The Author

CHAPTER XLVI .

. 372

Inconsequential character of much of the phenomena, which may yet be of extreme value for scientific purposes—The case of John Steefa—The author has no recollection of such a person—He appeared at a meeting of four friends, of whom the author was one, and

Chapter XLVI-continued

worked the table tipping—Brought back experiences of the War of the Rebellion—What he claimed to have been, and how he came to know the author—Was a coloured ammunition teamster in Longstreet's corps in the Antietam Campaign of 1862—His message, to keep up the experiments, was worthless—Occupied a couple of hours in telling his story—Another case; nonevidential book of sermons, but from what source could they have been delivered verbatim to a young girl?

Authorities Cited John Steefa—The Author

CHAPTER XLVII .

376

Visions of the sane—Apparently akin to crystal vision—Described by Galton and others—Differ from visions of the insane, in that they are not "fixed ideas," and do not dominate the personality of the observer—They are seen as externalised visions—Their brilliancy and actions—Conversations go on—They are not controllable by the will or belief of the observer—Cases narrated—The author's experiences—Do not reproduce lapsed memories; are intelligible and coherent—Do not embody prevision, revelation or, apparently, spiritualism

Authorities Cited

Galton-A patient of the author's-The Author

CHAPTER XLVIII.

383

The psychology of religious conversion—Its basis in the subconscious department of the mind—In connection, apparently, with some higher source—The subconscious described—Its connection with the normal consciousness—The phenomena of crystal vision due to linking these departments together temporarily—Religious conversion supernormal, in that it is often opposed to heredity, to will, to experience, to association and to self-interest—The subconsciousness intelligently active during coma—The organising power works during unconsciousness—Examples of conversion in author's personal experience

Authorities Cited

Professor William James—the Author—Dr J. F. C. Hecker—Dr R. H. Crooke, M.R.C.S.—"Child Pilgrimages"

CHAPTER XLIX

. 388

The summing up by Mrs De Morgan of the Bible evidence for spiritualism of the types known to-day—Her statements regarding the Word of God in the Bible—They have lost their original meaning—The rootmeanings of the word in the original languages—Its

Chapter XLIX—continued

use with those meanings confirmed by the record-Emanation, influx, inspiration—The audible voice, the impelling influence—by writing, by vision—"Enquiring at the Lord"—When the influence failed to come to Elisha he called for a minstrel—The Word of the Lord, in the New Testament-The physico-psychical means employed by Elisha in raising the dead child-The means employed by Jesus-Laying on of hands-Mighty spiritual works inhibited by unbelief-The phenomena at Pentecost—The construction of the ephod, and the "Urim and Thummim"—Their uses— Priests not required for their use—The incident of a misused modern theology; children "who sit round and sing hymns about blood and wrath and damnation with the utmost good humour "-Le Bon on religion; the master of all human agencies-Loss of religion; the most important event that could ever occur-Religion alone allows of human happiness-Mrs De Morgan connects the spiritual phenomena of the Bible with our own at the present time, and demonstrates their identity. Mutual service between the occupants of the seen and the unseen-Sir Oliver Lodge's statement in the Proceedings of the Society for Psychical Research, June 1909—Citation from the poem "Abou Ben Adhem"

Authorities Cited

Professor De Morgan—Mrs De Morgan—Various books of the Bible cited at length—The Apostle John—Elisha— Le Bon—The Word of God—Sir Oliver Lodge—Leigh Hunt

CHAPTER L .

397

General consideration of the subject—The phenomena practically conceded by the very authorities popularly supposed to deny them-Antagonistic theories have all broken down in the light of recent science-The criteria of truth-Volumes could be filled with personal narratives of supernormal phenomena—"The rareness of communication between the two worlds," says Garth Wilkinson, " is to me one of the greatest miracles; a proof of the economic wisdom, the supreme management, the extraordinary statesmanship of the Almighty "-Huxley's position as to a choice between "absolute materialism and absolute idealism"—John Stuart Mill's cul de sac of "inexplicability"—Herbert Spencer's concession, in his last paper, that our consciousness has been "individualised and specialised"— Dr W. B. Carpenter on "unconscious cerebration !-His abstract presented to the Dialectical Society—Its remarkable conclusion: "Immediate insight, which in man's highest phase of existence, will not only supersede the laborious operations of his intellect, but will reveal to him truths and glories of the unseen, which the intellect alone can see but 'as through a glass darkly ' !! —Pilate's question, "What is truth?"—The criteria of truth—Leibnitz first pointed out "universality"

Chapter L-continued

and "necessity"—The three criteria of truth as presented by President McCosh; Self-evidence; Necessity; Universality—Discussion of the above—Transcendentalism alone embraces all the above—Animism and the world-soul considered—Certain constant phenomena seem to point, in certain cases, to surviving and intelligent spirits of the dead; first, these appearances uniformly claim to be such, and there appears to be no sufficient motive, if not true, for such universal lying; secondly, the phenomena of prevision and prophecy, which seem to be of necessity intelligent and personal; and, thirdly, the well-known phantasms of the living, in which the intelligent psychical personality of those living appear to others at a distance, who are also living

Be the hypotheses or final determinations what they may, the facts are so numerous and so authentic that the time for their dismissal with an epithet has for ever gone by—The results of personal investigation by capable observers pointed out—No vein of treasure on this earth so rich, and none secured with so little labour—Lord Tennyson's lines on "The Ghost in Man"

Authorities Cited

Garth Wilkinson—Huxley—John Stuart Mill—Herbert Spencer—Dr W. B. Carpenter—Pontius Pilate—Walt Whitman—Berkeley—Locke—Professor Bowen—Leibnitz—Carlyle—McCosh—Shakespeare—J. C. Harris—Tennyson

INDEX 407

PART I



SPIRIT AND MATTER

CHAPTER I

PSYCHOLOGY AS A SCIENCE

If the time is ever to come in the religious history of the human race when what may be called God's Science of Man is to supersede theology, which is man's Science of God, that time is already here.

Systems have been built up, syllogisms constructed, upon false or partial premises, now demonstrated to have been such, both in theology and the natural sciences, which have involved mankind in mental and spiritual fallacies of incalculable evil to the past, present and future of the race. The data are now at hand to change all this; God's own good time has come, for the theologians, and for the advances of science for men, and the followers of science, and it has been found that these lines of advance are converging lines, and paths of the old battlefields are destined very soon to unite in one broad highway, with the spiritual and divine approaching from one direction and man's pyschical and human advancing from the other, so that the grim conflicts of old will cease, not only in the Christian religion, and among Christian peoples, but in all forms of religion, and among all religious peoples.

The broad lines of conflict are now seen to have been erroneous, among the highest men of science, philosophy and religion. As the knowledge of these momentous facts sinks downward until it is finally felt and recognised by all, we can foresee the vast shifting of human motives to higher planes, and the entire reconstruction of lower ideals and practices, until we can realise what Herbert Spencer, in one of his latest papers, Feeling versus Intellect, laid down, and which precisely coincided with Professor Shaler of Harvard University in his Interpretation of Nature ("Key to Education"); and is as follows:—

"Mind properly interpreted is coextensive with consciousness: all parts of consciousness are parts of mind. Sensations and emotions are parts of consciousness, and so far from being its minor components they are its major components. That part which we ordinarily ignore when speaking of mind is its essential part. The emotions are the masters, the intellect is the servant. . . . Considered in respect of their fitness for life, individual and social, those in whom the altruistic sentiments predominate are far superior to those who, with powers of perception and reasoning of the highest kinds, join anti-social feelings-unscrupulous egoism and disregard of fellow-men. . . . As implied above, this undue faith in teaching is mainly caused by the erroneous conception of mind. Were it fully understood that the emotions are the masters and the intellect the servant, it would be seen that little can be done by improving the servant while the masters remain unimproved. Improving the servant does but give the masters more power of achieving their ends."

And on this fundamental fallacy was based all the dogmatism and false inference of the syllogistic theology and inferential natural science of the past.

Professor William James, Professor of Philosophy in Harvard University, in his Hibbert Foundation Lectures in England, Varieties of Religious Experience,

says of this perverted theology:

"When I was a boy, I used to think that the closet-naturalist must be the vilest type of wretch under the sun. But surely the systematic theologians are the closet-naturalists of the deity, even in Captain Mayne Reid's sense. What is their deduction of metaphysical attributes but a shuffling and matching of pedantic dictionary-adjectives, aloof from morals, aloof from human needs, something

that might be worked out from the mere word 'God' by one of those logical machines of wood and brass which recent ingenuity has contrived, as well as by a man of flesh and blood. They have the trail of the serpent over them."

So the Reverend Dr Davies of the English Church

in his "Mystic London" says:

"When persons ask me, as they often do, with a look of unmitigated horror, 'Is it possible that you, a clergyman, are a spiritualist?' I am often inclined to answer, 'Yes, madam' (for it is generally a lady who puts the question in that particular shape), 'I am a spiritualist, and precisely because I am a clergyman.'" And he points to No. 72 of the Constitutions and Canons Ecclesiastical of the Church of England, "Neither shall any minister not licensed, attempt, upon any pretence whatever, either of possession or obsession, by fasting or prayer, to cast out any devil or devils."

It is for the above reasons that Max Müller, in the preface to his "Chips," says that every human institution—therefore, religion itself, so far as man can affect it—is exposed to inevitable decay. And adds: "Accordingly, a religion which is not waiting for a revival is waiting only till it be swept away."

But he says also, that "Christianity has always reformed itself, and will to the end of time continue to reform itself, by going back to the words and to the

life of Christ."

Romanes, too, puts this very clearly, by saying, just before his death, that "No one, even the most orthodox, has as yet learnt this lesson of religion to anything like fulness. God is still grudged His own universe, so to speak, as far and as often as He can possibly be," but feels absolute certainty of the continuance and growth of genuine Christianity to universal acceptance, by demonstrating that there is not one of the doctrines and teachings of Christ Himself, "Whether in natural science, ethics, political economy, or elsewhere, which the subsequent growth of human knowledge has had to discount."

What a mess this old classical theology, which

never knew or heard of natural science, ethics, political economy, "or elsewhere," must necessarily have made of Christ's doctrines and teachings. Is it any wonder that, armed as they were, and solid under their coats of mail, they could say?—

"I stood up in my pulpit high
And measured God's right hand,
And hurled the lightnings of His wrath
Across a godless land!"

I will quote, in order to show the vast change which has recently taken place in the conflict between theology and religion, from one of the papers by the Rev. Washington Gladden, D.D., LL.D. in "The Great Religions of the World," containing a series of papers by Professor Giles (Cambridge), Professor Davids (University College, London), Professor Ross (same college), Oscar Mann (Orientalist, Royal Library, Berlin), Sir A. C. Lyall, K.C.B., G.C.I.E. (Council of Secretary of State for India), Frederic Harrison, Rev. M. Gaster, Ph.D. (Chief Rabbi of the Sephardi Communities of England); and others. Published by Harper Brothers, London and New York, September 1901. I can only make the briefest extracts; the paper is entitled *The Outlook for Christianity*.

"The Christian doctrine has been greatly simplified. The elaborate creeds of a former day are disappearing. The metaphysical puzzles, in which so many minds were once entangled, are swept away. It is now well understood, among those who are the recognised leaders of Christian thought, that the essence of Christianity is personal loyalty to the Master and obedience to His law of love. Such a conception prepares the way for great unities and

co-operations."

"The past century has been a period of theological agitation and upheaval in Protestant Christendom. The progress of physical science, the use of the evolutionary philosophy, and the development of Biblical criticism have kept the theologians busy, with the work of reconstruction."

"It cannot be doubted that the Roman Catholic Church, as a whole, is sharing liberally in the growing

light of this new day. . . . That the discipline of the Church is gradually changing—becoming more mild and rational, less arbitrary and despotic—can hardly

"The old theology emphasised the sovereignty of God in such a way as to make it appear that what was central in Him was will—His determination to have His own way. 'His mere good pleasure' was the decisive element in His action. This theology was the apotheosis of will. The hard fact was disguised and softened in many ways, but it was always there —was the nerve of the doctrine. The later conceptions emphasise the righteousness of God more than His power. His justice is not chiefly His determination to have His own way; it is His determination to do right, to recognise the moral constitution which He has given to His children, and to conform to that in His dealings with them."

"This is a tremendous change; none more radical or revolutionary has taken place in any of the sciences. To be rid of theories which required the damnation of non-elect infants and of all the heathen; which imputed the guilt of our progenitors to their offspring; and which proclaimed an eternal kingdom of darkness, ruled by an evil potentate, whose ubiquity was but little short of omnipresence, whose resources pressed hard upon omnipotence, and whose access to human souls implied omniscience—is a great deliverance. The entire aspect of religion has changed within the memory of many who will read these words, we are living under a different sky and breathing a different atmosphere."

"It may be assumed that man is not only a political, but also a religious animal; that religion is an everlasting reality. Some kind of religion men have always had and will always have; things unseen and eternal enter into their lives, and will always form an integral part of their experience."

"It is through the spirit that we know Him; and He is the Father of spirits; His character is revealed to us in the life and words of Jesus; our relation to Him is shown us in the filial trust of Jesus, and our relation to one another springs from this relation. The two truths of the divine Fatherhood and the human Brotherhood are the central truths of Christian theology to-day. This has never before been true. Men have been always calling God Father, but in their theories they have been making Him monarch. He was as much of a Father as He could consistently be with His functions as an absolute sovereign. The Sovereignty was the dominant fact; the Fatherhood was subordinate. All this is changed. It is believed to-day that there can be no sovereignty higher than fatherhood, and no law

stronger than love."

This is a magnificent presentation of the religious sweep which has been passing over the old dogmatic theology of the past. The concluding words which I have quoted, "It is believed to-day," are true; it is indeed so believed, is becoming universally so believed. But is this belief to be a matter of faith alone, so that, as it came it may go, or of scientific and revelational demonstration? If the former it is but to follow our higher ethics of to-day, our wider civilisation, our broader socialistic integration, to, in fact, advance only with man's experimental advancement. This will be great, but it will be not so much heroic as inevitable. But is it also demonstratively and directly divine?—if so it can be proven, and so I may say, if it is the latter (that is, scientifically and revelationally demonstrable) then it will stand immutable as the eternal hills.

The purpose of these chapters is to bring forward, in a connected series, the changes which have taken place in the scientific and philosophical world regarding those problems and demonstrations, and the accumulated evidence, concerning what has been long known in a vague and indefinite sense as psychology. Partly by reason of the lack of means for investigation, or the ineffectiveness of the instruments used, never until recently has psychology been actually reached, except by worthless and evershifting hypotheses, co-ordinated here and there with

an isolated fact, misleading, by its want of connection as to what psychology really was, or what it could be, and of late has been actually demonstrated to be.

The very bases of demonstrable psychology were lacking, so long as science had not created the subsciences of embryology, comparative anthropology, the deeper principles of the development of living forms, the psychism of microscopic forms, and the science of comparative religions, as well as other and kindred branches of science, which are now open and available for all.

In the absence of these means of investigation and demonstration, physical science fought shy of everything which took on the guise of superstition, so that the field being narrow, and the means of research small, refuge was taken in an a priori which denied everything apparently supernormal without investigation, and only conceded, even for examination, those few physical facts and phenomena which were obvious, at first sight even, to all. As physical science continued its advance, even this physical realm became too great to be dealt with as a whole, and scientific specialists arose, with ever-narrowing specialties, and, as the whole visible field had been far too small to even enable physical science as a whole to grasp even an infinitesimal fraction of the whole, so now the specialists, by still more narrowing and splitting up their subjects, relegated much that had already been gained to doubt and negation, and the scientific world became peopled with pseudo-scientists who taught "sectarian science," just as in the religious world has been the case in all ages, and with all religions, where narrow theological creeds took the place of broader religious knowledge, and the spiritual element practically disappeared, to a great extent, from both.

When a sect selected a certain number of its texts from the Hebrew scriptures, the New Testament, the Koran, the Zend-Avesta, the Tâo Teh King, the Vedas, the Buddhistic or other scriptures, in elevating these texts into dogma the remainder of the books were relatively ignored, and partial theologies usurped

the place of universal religions.

And in like manner, when physical science occupied itself with certain narrow lines and texts, the broader fields became but mere phantasms, or dim and unsearched areas, in which to search was useless and superstitious; and hence simple denial, agnosticism, infidelity and empiricism took the only place, and each set of teachers, denying everything taught by other sets of teachers, and refusing to investigate for themselves-indeed unfitted to investigate by the narrowness of their own specialisms—substituted a broad and sweeping a priori, and denied all further and greater knowledge in the name of the scintilla of already observed and lesser knowledge, and so passed on, smiling and superstitious themselves, in the feeling (for it was but a feeling) that because the others did not know the trifling particulars which, in their minuteness, they did know, the others, in the same proportion, knew nothing else, by reason of not knowing that.

As Romanes confesses, they had been too much

immersed in merely physical research.

There is not a plough-boy who does not know that there are whole realms of knowledge outside "merely physical research"; everybody knows it, because there could be no "merely physical research" at all unless there was something not physical, or superphysical, to determine and carry on, or even to initiate, the researching.

The work of the section it is to

As Huxley says, "The more completely the materialistic position is admitted, the easier it is to show that the idealistic position is unassailable, if the idealist confines himself within the limits of positive

knowledge."

Again, speaking of Berkeley, this writer (on the popular misapprehension of whom so much of modern materialism relies) says: "The key to all philosophy lies in the clear comprehension of Berkeley's problem—which is neither more nor less than one of the shapes of the greatest of all questions, 'What are the limits of our faculties?' And it is worth any amount

of trouble to comprehend the exact nature of the argument by which Berkeley arrived at his results, and to know by one's own knowledge the great truth which he discovered—that the honest and rigorous following up of the argument which leads us to materialism inevitably carries us beyond it."

And he adds, in conclusion, "And therefore, if I

were obliged to choose between absolute materialism and absolute idealism, I should feel compelled to accept

the latter alternative."

And Locke, another of the authorities upon which materialism was mistakenly content to rest, is equally emphatic. Says Locke, "Bodies, by our senses, do not afford us so clear and distinct an idea of active power, as we have from reflection on the operations of our minds. Of thinking, body affords us no idea at all, it is only from reflection that we have that. Neither have we from body any idea of the beginning of motion"; and adds, "I judge it not amiss to direct our minds to the consideration of God and spirits, for the clearest idea of active powers." And of the faculties of the mind, as applied to what he calls reason and revelation, he says, "God having fitted men with faculties and means to discover, receive, and retain truths, according as they are employed."

The basis of psychology is the transcendental, the superphysical, and this is the ultimate, the dominant, the controlling, and the ever and everywhere present, and yet materialism, or empiricism, which modern psychology has for ever overthrown, not only has taken no account of this, but has either damned it with an a priori assumption without investigation, classing it as a superstition not to be even considered, or else has denied not only its importance but even its

existence.

As a type of this attitude, I quote the following from Dr W. A. Hammond's "Sleep and Its De-

rangements," published in 1869.
"Writers who contend for the doctrine of constant mental activity regard the brain as the organ or tool of the mind, a structure which the mind makes use of in order to manifest itself. Such a theory is certain to lead them into difficulties, and is contrary to all the teaching of physiology. The full discussion of this question would be out of place here; I will therefore only state that this work is written from the standpoint of regarding the mind as nothing more than the result of cerebral action. Just as a good liver secretes good bile, a good candle gives good light, and good coal a good fire, so does a good brain give a good mind. When the brain is quiescent there is no mind."

This is the view which Haeckel takes in his "Riddle of the Universe." "This hypothetical spirit world," he says, "which is supposed to be entirely independent of the material universe, is purely a product of poetic imagination; the same may be said of the parallel belief in the immortality of the

soul."

"We must therefore," he says, "distinguish in the substance of the soul the characteristic psychic energy, which is all we perceive (sensation, presentation, volition, etc.), and the psychic matter, which is the inseparable basis of its activity—that is, the living protoplasm. Thus, in the higher animals the 'matter' of the soul is a part of the nervous system; in the lower nerveless animals and plants it is a part of their multicellular protoplasmic body; and in the unicellular protists it is a part of their protoplasmic cell body. In this manner we are brought once more to the psychic organs, and to an appreciation of the fact that these material organs are indispensable for the action of the soul; but the soul itself is actual—it is the sum total of their physiological functions."

This, of course, was rushing into the realms of agnosticism where even the angels, like Herbert Spencer, feared to tread; but Spencer just before he died threw a flashlight ray through these dark areas, conceded that the consciousness was elementally derived or sheared off from "that Infinite and Eternal Energy which transcends both our knowledge and our imagination," and could only infer that at death its elements again lapse into the same

Infinite and Eternal Energy.

The soul, the consciousness, we may be sure, from the testimony of all really capable psychologists does not depend upon the physical structure, is not produced by the physical organism, and is not limited in duration thereby, but is, as Herbert Spencer says,

"a specialised individuality."

And this is where the trend of psychology is leading us to, in all directions to-day, and it has so far advanced that to make a retrogression now, with all the light blazing around and pouring down from overhead, is simply unthinkable. The dark ages of such speculations and assumptions have passed for ever; we are so far advanced now, by means of investigations which can have but one trend, from demonstrations which can have but one conclusion, and from a universal consensus which has taken psychology for ever away from the dogmas of a superstitious a priori, that it has been securely planted in the light of the transcendental, and the old questions of religion and spiritualism, of mind and morals, of life and its end and purpose, have been not only rescued, but glorified.

In a loose sort of way psychology is commonly defined as the science of the soul. The definition is bad, because the soul itself is only one, and a very subordinate one, of the meanings of the Greek word psyche, and also because we cannot have a science of a specific thing which the science itself is set to determine. Psychology is the science of the psyche, the well-known Greek word, which has all the following significations:—breath, in its spiritual sense, the anima of the Latins; life, spirit, the immortal part of man, as opposed to his body or perishable part; a departed soul, spirit or ghost; the soul or spirit of man; the anima mundi, which was supposed in ancient philosophy to extend through all lands, and through the regions of the sea, and the deeps of heaven. In Webster the term psychological is applied to whatever pertains to man's spiritual nature.

This constant spiritualistic meaning obviously differentiates psychology from materialism, em-

piricism, or any hypothesis or theory of a selfoperative or merely physical nature, and it is in this broad sense that the term is now used in science, and the sense in which I shall use the term in these chapters. Of all these Greek definitions, the most obviously applicable are those manifestations which appear at first sight to fall into, or be, in some supernormal manner, connected with what loosely goes by the name of "psychic," or "spiritualistic."

CHAPTER II

ARGUMENT FOR SPIRITUALISM

It is by no means certain that the great body of phenomena which go under the name of psychic are due to what is commonly known as spiritualism that is to say, the direct activity and presence of spirits of individuals once living but now dead. Indeed spiritualists themselves do not make any such assertion, for there are whole classes of phenomena of this kind which clearly appertain to the operations of a universally diffused consciousness, pervading space, and extended through unlimited time, and which constitutes unquestionably the source of life and mind. Among these classes of phenomena are those of simple clairvoyance, transcendental consciousness, crystal vision, telepathy, somnambulism, alternating personalities, and the like. Midway between these and individual spiritualism lie the phenomena of phantasms of the living, apparitions, or perceptions of those dying at a distance, to friends or others, the facts of so-called possession, witchcraft, vampirism, much of the phenomena of mediumship, reading of sealed letters, a portion of the phenomena of automatic writing, writing or producing pictures in the dark, mental projections, veridical dreams, some part of prophecy, discovery of missing objects, such as wills, deeds, money, dead bodies, etc., etc.

Outside of these classes of phenomena, we have a great mass of evidence going directly to establish the facts of individual spiritualism in certain cases.

It is needless to say that spiritualists themselves are the least dogmatic of all people with reference to these various phenomena. That they hold to the validity of the facts familiarly known to them with the same tenacity with which one holds to the personality of his wife and children around him, or to the relative hardness of a stone which has bruised him, or of a shower which has wetted him, is not surprising; but even the most capable mediums or go-betweens are always ready to concede that they do not understand the phenomena which manifest themselves through their personality, and they are, in fact, the most humble and anxious of all to learn from other investigators concerning these very things. Should, finally, the solution of these psychic problems be found to lie, not with the individual presence of the spirits of the dead, but with that far greater and higher spirituality "in which we live and move and have our being," they will rest there quite content, feeling that their basis of faith has been broadened, while every essential truth has been preserved.

The scientifically accepted principle of thresholds of consciousness itself presupposes a great universal ocean of that which is allied to and develops under favourable circumstances into consciousness; and psychology is making its greatest advances along these lines, but as yet they do not explain, or even tend to explain, spiritualism as a whole, in the absence of individual spirits of those once living, but they lead up to, and often connect, these phenomena with other known psychical phenomena in a most surprising

manner.

Had science turned its attention to these phenomena with even a fraction of the energy and study which such transcendental facts demanded, we would have advanced far beyond our present limits of knowledge; but, instead, it has chosen to simply ignore the facts as inconvenient, and to build an elaborate and many-storeyed edifice resting upon no foundation, not even one of sand, and now it must laboriously begin—as it has already begun—to take down this splendid edifice, stone by stone and column by column, and rebuild it anew upon the immutable and eternal foundations of God and nature. What a royal palace of truth we shall then see erected, and help to erect, for in that great work of selection of

material as well as of construction the humblest student and observer can become a collaborator with the most trained and skilful builders. And the invisible powers of nature will direct the work to its final culmination. The invisible powers of nature! Is not thought an invisible power which sets the whole mechanism of life and civilisation into action? Is not the mind an invisible power, which controls matter as a driver controls a team of mules? Is not life an invisible power, which turns back the processes of inorganic chemistry, and builds up fabrics which only endure while life lasts, being built in spite of decay and breakdown, and then, as soon as life ceases—shall we say departs?—leaves the whole dead structure to fall back into simple chemical products, away from the life-built organisation, and with putridity and dissolution, just as occurs with the dead material of the chemical laboratory. Non-vital decomposition after death presupposes vital composition before death. And is not that great "Spirit of the Universe," as Romanes, the pupil, co-worker, and follower of Darwin, called it, that which is nearest akin to our own psychism—as he described it—that organising power independent of matter and superior to organic nature and its laws—as Lamarck described it—also an invisible power?

What, indeed, does the term "nature" signify? It means that which is born. What is there that ever was born without a parent? The problem of nature is the problem of mind, and the problem of mind is the problem of life. Mind is the potter, the

body is the clay.

We are, it appears, on the very verge of the discovery of a greater integration, as Professor Richet, the learned President of the Society for Psychical Research, believes, which shall include all the psychical classes of phenomena which I have mentioned, but which shall yet not itself be any single one of them. It will include spiritualism, it will include clairvoyance, and telepathy, and prevision, but yet not be any one of these things. It will harmonise, and surround, and interpret all these mysteries

and many more; and this is the trend of psychology

to-day, and is the apology for these chapters.

To quote the burning words of Sir William Crookes, in his address as President of the British Association, only nine years ago, and in the maturity of his wondrous powers as one of the world's great scientific leaders: "I should prefer to say that in life I see the promise and potency of all forms of matter."

It is certain that no possible integration of the physical or material, in any sense in which these terms have ever been used or recognised by science, could cover more than an infinitesimal instant in the illimitable course of time, and not even so much of matter or of space, and nothing at all of force. It is an axiom of dynamics that nothing merely physical can start itself, and of philosophy that nothing without mind can produce mind. In fact, evolution itself demands this as its very first premise. As Tyndall expressed it, "Between mind and matter there exists an intellectually impassable chasm." The vast body of psychical facts which so-called spiritualists hold can only be explained on a psychical basis. The formal argument on behalf of modern spiritualism may be stated as follows :-

Up to the time of the ecclesiastical revolt of Martin Luther, and the establishment of the Protestant faith, less than four hundred years ago, and more than fifteen hundred years after the birth of Christianity, the whole Christian church, without an exception, in all its different branches, had not only held, but strenuously preached and taught, substantially the whole body of what to-day constitutes modern spiritualism. On this truth Christianity itself was obviously founded, and to it owed its entire validity and strength.

During all these fifteen hundred years, while the church was growing from infancy to nearly universal power and domination, its whole career was an unbroken record of the continuous phenomena of spiritual manifestations, including clairvoyance, clairaudience, ecstasy, trance visions, apparitions, haunt-

ings, exorcisms, psychical manifestations, voices, speech in unknown languages, descent of spiritual afflatus, visible intercommunion between the living and the dead, slate-writings, spirit pictures, automatic and direct writings, extra-human spirit control of living bodies, obsession, possession, etherealisation, materialisation and dematerialisation, alternating consciousness, spiritual healing of diseases and infirmities, spirit guardianship of those still living by friends gone beyond, intercession and mutual aid, gifts of prophecy and crystal vision, messages to and fro between earth life and spirit life, levitation, handling of fire without injury, materialisation of single parts of spiritual bodies, playing on musical instruments, and singing, by materialised spirits, direct spirit control for great and good purposes, or, in other cases, for bad purposes, by spirits of different grades or spheres, spirit lights, spirit revelations, and every sort of manifestation with which we have now become familiar through modern mediums in the present age. The only difference is that our modern phenomena are not claimed to be ecclesiastical in their nature, or under the control, specifically, of any church or creed, whereas the others were. But even then, during all those centuries, the church stood ready to adopt all the manifestations of the humblest human agencies, when their apparent genuineness had been established, and nearly all its most important socalled miracles (of Joan of Arc, for example) were the offspring of human mediums not at the time numbered among her great ones, her saints or her high officials. The country clergyman, the ignorant peasant, the weak girl, the clairvoyant woman, the student, the devout, but nearly aways the obscure and unconscious medium, first brought forth these great manifestations of the continuous life beyond and the church then took hold, investigated, and, these humble instruments, in consequence, were often raised to power and saintship; or the lower spirits which haunted places where crime had been committed or wrong endured, which entered into good men and women, and changed them, temporarily or permanently, into new creatures, these the church controlled and expelled by the great gift which its mighty Founder directly placed in its hands, and which it exercised in His Name.

In this connection, Rev. Dr C. M. Davies, a well-known clergyman of the English church, says, "I cannot see why it should be incongruous for the clergy to examine doctrines which profess to amplify rather than supplant those of revelation, any more than I can see why scientists stand aloof from what professes to be a purely positive philosophy, based upon the inductive method."

CHAPTER III

SPIRITUALISM IN THE CHURCH

But during the centuries following the Christian era, the church, by a gradual movement of accretion, such as are constantly manifested among all human organisations, came to claim, for its own ends, dominance over all spiritualistic manifestations, and to subject them either to its approval or condemnation as final, and thus claimed to speak as the sole oracle of, and wielded immediate power over, all these spiritual phenomena and manifestations, and thereby thus holding the keys, and dealing with the unseen and eternal as equal co-partners, enormously enhanced the power and authority of the church.

At the time of the Reformation nearly or quite all the great leaders, Luther, Zwingli, Melancthon and their co-workers, as firmly believed in the facts of spiritualism as the old church itself did, but in cutting themselves off from that historic organisation, and its structurally inworked traditions, they were compelled to appeal to the arbitrament of reason, with the written Bible as the sole but perfect charter and constitution, as guide and record; and to thus throw off the dominance of the old church by denying its then universally conceded, but unwarrantably dogmatic, alliance with spiritualism; for it was necessary to first do this in order to secure any locus standi for the new organisation at all. This left them the historic record, divorced from all that which preceded, or was coincident with or subsequent to it, in the teaching or practice of the church.

But this historic record to which they appealed was but the residuum, consisting of twenty-seven different writings, selected out of a much larger number to constitute the New Testament, and this selection and endorsement, which alone gave them canonical value, was not only the work of the same spiritualistic church, so much of whose other teaching they repudiated, but the canon itself was made centuries after the time of Christ, and by various councils and like authorities of the same ecclesiastical organisation, under direct spiritual guidance.

In addition to the four gospels thus approved, there were rejected more than fifty other gospels, which had been in common use among Christians, and in addition to the seventeen epistles then accepted, more than one hundred, previously accepted and used, were rejected. There are sixty-eight New Testament books mentioned by Christian fathers of the first four centuries which are not now known to be

in existence.

And the great councils which finally established the present canon only did this after centuries during which the Christian books were left to be selected or interpreted as each one might, by spiritual gifts, be able to do for himself—the books themselves (in manuscript, of course) being subject to all the vicissitudes to which other literary remains were

subjected.

As the Christian writer, Mr Westcott, says (and what the facts themselves attest): "It does not appear that any special care was taken in the first age to preserve the books of the New Testament from the various injuries of time, or to insure perfect accuracy of transcription. They were given as a heritage to man, and it was some time before men felt the full value of the gift. The original copies seem to have soon disappeared." If, during this period, God's miraculous spiritual control did not preserve the Bible, then what did?

In the "Companion to the Revised Version of the New Testament," Dr Alexander Roberts, a member of the Revision Committee, shows that the Greek Testament owes its complete form to the labours of Cardinal Ximenes, and it was not completed until the year 1514. Nearly at the same time Erasmus brought

out his edition, and his fourth edition, the result of comparison with the work of Cardinal Ximenes,

became the basis of all subsequent texts.

Of the edition of Erasmus, that distinguished author said: "It was rather tumbled headlong into the world than edited." In the gospels he principally used a cursive manuscript of the fifteenth or sixteenth century, "admitted by all to be of a very inferior character." In the Acts and epistles he chieflyfollowed a cursive manuscript of the thirteenth or fourteenth century, with occasional references to another of the fifteenth century. For the Apocalypse he had only one mutilated manuscript; says Dr Roberts, "He had thus no documentary materials for publishing a complete edition of the Greek Testament."

This will show the fragmentary character of the manuscripts, and that it was only the old church, under God's continuous spiritualistic manifestations, which saved them, or gave them any authenticity at all, and this was not done for centuries after the time of Christ. Dr Nathaniel Lardner, the distinguished writer on "Christian Evidences," says that the canon was not settled until about the year 556, and that, prior to that time, "Christian people were at liberty to judge for themselves concerning the genuineness of writings proposed to them as apostolic, and to act according

to evidence."

And the deficiencies and uncertainties in the original have been supplemented and increased by equally important errors in the translation, many of which go to the very foundation principles, and on a considerable number of which diverse creeds and denominations have been established. Canon Farrar, in his recent book, "Texts Explained," cites many such passages, to which he attaches such comments as these: "Here the wrong rendering adopted in our familiar version involves a positive theological error"; "No sense can be made of this rendering"; "The true reading and rendering are, 'They shall become one flock, one shepherd'; the importance of this correction can hardly be overestimated"; "This unfortunate misrendering,

tending to strengthen Calvinistic errors, should be corrected"; "Here the mistranslation obliterates the meaning of the whole argument"; "Nay, it was the reverse of the fact"; "That phrase" (for Christ's sake) "does not once occur in Scripture in this connotation"; "The meaning in this memorable passage is absolutely reversed by the Authorised Version"; "In the following clause the made Himself of no reputation ' of the Authorised Version loses the transcendent force of the 'emptied Himself' of the original, though on the verb in the original is based the important theological doctrine of Christ's Kenosis"; "In the Authorised Version the meaning is weakened, obscured, and almost lost"; "St Paul did not here tell the Thessalonians that the day of Christ was not at hand. On the contrary "; "Even the universally cited phrase that the love of money is 'the root of all evil' is not a correct translation, which is that the love of money is 'a root of all kinds of evil'"; "Neither 'heresy' nor 'heretic' occur in the New Testament. The words so rendered mean 'faction' and 'factious'"; "This might sound like an imputed contradiction of St Paul; but, in the true rendering, it is nothing of the kind"; and so on in hundreds of instances.

In this conceded deficiency of the original record and the errors of translation, the book itself of necessity required some authority higher than itself to even determine its facts and interpret its meaning. Not only was there to be a handwriting, but a continually inspired Daniel, and this was to be the living body of Christ, acting through the inspiration of men.

The old church thus became the guarantor of the record, and by the same spiritual agencies which it manifested in its recognition and control of the psychical manifestations during those centuries. It winnowed out and determined the records of the church, and those books which it endorsed are canonical, and those which it rejected are now esteemed as of no account, even by its opponents.

The Protestants, in accepting as infallible the dictum of the Catholic church, many centuries after

the apostolic age, thereby conceded the persistence of spiritualistic manifestations in a direct line from the earlier church, which their Protestant successors afterwards denied, while these latter, still, nevertheless, held fast to the canon itself; and hence they conceded that spiritualistic manifestations did not cease with the apostolic age, but continued long afterwards, for the miracle of saving a Bible at that late date was precisely the same as of saving one now. Christ Himself foretold, while on earth, that His followers and their successors should manifest the same spiritualistic powers and perform the same miracles as Himself, and not only this, but that others, not of His church or of His faith, nor of any church or religion, would continue to do the same in the future. as they were then doing during His lifetime, and had been during all the immemorial ages of the past.

In Exodus we read: "The magicians of Egypt did so with their enchantments"; in Leviticus, "Regard not them that have familiar spirits"; in the Acts, "A certain maid having a spirit of divination, a python, a spirit, met us, which brought her masters much gain by soothsaying." The context shows that it was a genuine gift in the opinion of the sacred

writer.

The danger to any creed, based on a written record of spiritualistic phenomena, arising from an unecclesiastical continuance of the same sort of phenomena during subsequent ages, is a real danger, for it not only multiplies interpretations, but it invites conflict, and indefinitely extends the original authorities themselves. This danger the old church (and the same is true of all compact religious organisations) sought to overcome by taking command and control of the whole field of spiritual phenomena; but Protestantism, appealing alone to the reason, necessarily gave to all its followers the same right of appeal. Hence, lest it should become an inextricable entanglement of incongruous revelations, it simply cut the Gordian knot by denying that the machinery any longer acted, or that the phenomena any longer appeared. This was a gigantic undertaking, and

required the sure support of an unyielding, gross materialism to make it effective. These utterly incompatible elements thus became mutual allies and supporters of each other, and have so continued down to the present day. It is true that many among the non-Catholic adherents have always recognised the facts as they really exist, and Christians who are firm and advanced spiritualists are now numbered by millions—but this is contrary to the unwritten law and teachings of nearly all the Protestant branches of the church—so that we have had the strange spectacle presented that the dogma and teachings of these sectarian Christian denominations and those of materialistic atheists are precisely the same, while those who believe in the actual teachings of both the Old and New Testaments, and the promises of their continuance contained therein, in repudiating atheism must also repudiate the dogmatic teachings of their own theological leaders. I say "theological," not "religious" by any means.

It is said that after the resurrection, when Christ spoke to His followers in His materialised form, and just before His ascension, He commissioned those who were to carry on His work, those who believed, and those who taught in His name: "Go ye into all the world, and preach the gospel to every creature. . . . And these signs shall follow them that believe: In my name they shall cast out devils; they shall speak with new tongues; they shall take up serpents; and if they drink any deadly thing it shall not hurt them; they shall lay hands on the sick, and they shall

recover."

To show the attitude of the Protestant church, it is only necessary to cite the following footnote to the above commission of Christ from the Annotated New Testament, published by the Religious Tract Society

of London, Mark xvi. 15-18:

"During the first age of the church, these extraordinary gifts were not only exercised by the apostles themselves, but were also conveyed by them to others. At what period they ceased cannot be precisely ascertained, but there is reason to believe that they

were withdrawn, not suddenly, but by degrees. They were important as aids to the introduction of a new revelation from God, but there was clearly no necessity for their permanent continuance. As soon as they became matters of authentic history, the record of them took their place among the evidences

of the truth of Christianity."

That the Protestant view is untenable is proven by the commission of Christ Himself, for until His followers had gone into all the world and preached the Gospel to every living creature (and that surely has not yet been done down to this day), the conditions of the charge remained valid; and as to the lack of necessity for their permanent continuance, on the ground that it was sufficient to have their record incorporated among the historic evidences of Christianity, a glance at the progress of Christianising the world, which has been going on for nearly two thousand years, and a comparison of its advances during the "ages of faith" -that is to say, of spiritualism-as contrasted with those during the present age of so-called "reason," will clearly indicate that something considerable has been lost out of the effective energy of the propaganda, and that something is the vitality of the whole crusade.

If Christ sent out His armies and commissioned the leaders for the whole war, a woeful breakdown has occurred among the latter, for the war is far from over and the cause is scarcely advancing.

CHAPTER IV

RESULTS OF DESPIRITUALISING THE CHURCH

In December 1896 the Rev. Dwight L. Moody, the celebrated evangelist, preached a sermon in Carnegie Hall in New York, to an overflowing audience, in which he said: "There is hardly a name so unpopular in the world to-day as that of Jesus Christ. Is there a nation in the world that wants Him to return to earth? Is there a state in this Union that would like to have Him come back and rule the world? Would this country, if the question were submitted to a popular vote, express a desire to have Christ on earth? Would England, or Germany, or France, or Spain, or Italy, or any other of the nations of Christendom do it? No; wouldn't Christ, if He did come back to reign, find the world in just the same condition as He found it eighteen hundred years ago ?"

In September 1899 Bishop Bradley of Manchester, New Hampshire, spoke in St Joseph's Cathedral in that city, and said: "One does not need to more than keep his ear open to note that there is among mankind a spreading disregard for authority of the state and of the church and all other authority,

including that of Jesus Christ."

Contrast with these the burning words of Tertullian, one of the great fathers of the early church, himself the son of a Roman soldier, born in Carthage, and who embraced Christianity in the maturity of his manly powers, and wrote nearly two hundred years after the Christian era, at a period which we consider to have been the very infancy of the power of the church of Christ. But, alas! how different those ages were in reality! Appealing to the Roman

people, he exclaims: "We are of yesterday, and yet we fill all your places, your cities, islands, castles, towns, courts, your very camps, your Senate, your markets, we have left you only your temples." He pictures the desolation and solitude, the general stillness and dullness, as if of a dead world, which the absence of the Christians would produce, and says, "You would have more enemies left than citizens."

And why had this great change, this miraculous conversion to Christianity of whole alien peoples occurred? Irenæus, another of the great church fathers, who was contemporary with Tertullian, and

whose testimony Tertullian confirms, says:

"On this account also His true disciples, receiving grace from Him, perform miracles in His name for the benefit of men, as each of them has received the gift from Him! For some truly and really expel demons; and others have foreknowledge of the future, and visions, and prophetic utterances. Others heal the sick and make them well, by imposition of their hands. And even now, as we have said, the dead have also been raised, and have remained with us many years. As also we have many brethren in the church having prophetic gifts, and speaking in all foreign tongues, and bringing to light the secrets of men for a good

purpose."

Speaking historically, I am not concerned in this matter to concede or reject the statement of Irenæus as to what the disciples of Jesus did after His execution -and by disciples Irenæus does not mean the apostles, but those spiritual disciples who in bodily form were alleged to be performing those same miracles, expelling demons, having foreknowledge of the future, visions, prophetic utterances, healing of the sick by imposition of hands, speaking in foreign tongues, and bringing to light the secrets of men for a good purpose, in Irenæus' own day, two centuries after the birth of Christ. It suffices for my argument that all these miracles, so-called, had been performed by Christ and His apostles, if the New Testament is to be believed, and the evidence does not depend solely on the New Testament writers, for every one

of these phenomena are common spiritual experiences throughout the whole world, both before and since the time of Jesus, and in recent years have been scientifically demonstrated, and many of the facts almost

universally accepted.

But there is one class of miracle, so-called, of which Irenæus says: "And even now, as we have said, the dead have also been raised and have remained with us for many years," which requires, in any discussion of psychology, to be considered. It is true that on the resurrection of Christ the whole system of orthodox Christianity is based, and that the miracle of raising the dead was narrated a number of times as having been performed by Christ while living as a man on earth.

But to many Christian minds, imbued with the older notions of psychology, in which an all-working material nature had supplanted an all-working, spiritual God, in which, as Romanes says, "God is still grudged His own universe," these statements appear as pure superstitions, born of the spiritual exaltation of enthusiasm, instead of the spiritual power of life. Even the orthodox are very apt to fight shy of these narratives, feeling that they are

"hard sayings."

Now, it does not concern the purposes of this book to assert that these were veritable cases, or to deny that they were; it is altogether immaterial, but it does concern the purposes of this book to show that such an exercise of spiritual power was, and still is, quite consistent with what we know of scientific

psychology, and of human experience.

Various explanations have been suggested, all based on mistakes of the observers. Discounting that of fraud, by showing that the conditions of life are such as to render this explanation, while often reasonable, not necessary, and not necessarily scientific, the principal allegation is that these were simply cases of "suspended animation." This suspended animation is like the term "hypnotism," which those who understand it least are most apt to use to satisfy their doubts.

What is the difference between a case of suspended animation and death? It is simply this: if the subject returns to animation again it is suspended animation, if not, it is death. It is obvious that this is merely begging the question. There is, in fact, no actual test of death except decomposition. But decomposition itself is no test of death if biology has any right to speak, for we find that those animals which undergo various stages of metamorphosis in reaching their final stage undergo actual decomposition throughout, at every stage, and a new animal is actually created out of the raw material, as much as though built up de novo. This, of course, is well known to modern naturalists, but was totally unknown to the older ones, who believed and taught that new organs were merely grown out of the older structure, as branches grow on trees. But we know better now. To cite a book accessible everywhere, I quote the following from Orton's "Comparative Zoology" (1884): "Every tissue of the larva disappears before the development of the new tissues of the imago is commenced. The organs do not change from one into the other, but the new set is developed out of formless matter." As the larva disappears for ever by decomposition into formless matter, that certainly is dead under the severest test of death. As the imago is developed out of the same formless matter. then, if there were remaining life, it was not the life of the larva; it was a new creation of life unless, and this is the vital point, life is not tied fast to forms, but is independent of form, and produces forms, and heredity, if we choose to call it such, is immaterial and extraneous in its work as a modifier and producer—that is to say, the larva dies as larva, but the life principle continues and rebuilds a new structure out of the raw material of the old. We do indeed "make stepping-stones of our dead selves."

Sir John Franklin, in the narrative of his expedition across Canada to the Arctic Ocean in 1819-1820, narrates that "when the weather was severe the fish froze as they were taken out of the nets; and if they were afterwards placed near the fire so as to thaw the

ice, they revived, even when they had been in a frozen state for several hours."

I can corroborate this statement; I have seen a small lake caught in a freezing snap in which the ice suddenly froze several inches deep, and locked in thousands of large fish, which the farmers quarried out like nuggets. Many days might elapse, and yet these chunks of fish and ice, if placed in a vessel of cool water, would show the fish swimming about as the ice melted.

It is a well-known experiment to revive drowned house flies by placing them on a board and covering them with a little dry kitchen salt. They will revive, either singly or in bunches, even if they have been under water for twenty-four hours or longer.

Anyone can try this experiment for himself.

Partial death is common; take the case of a gangrene of the leg from an arterial plug in the main artery; when did death of the leg supervene, and what was the test? Will boiling water destroy human life? A method of treating deep wounds on the battlefield, and arresting hæmorrhage by injecting live steam to the bottom, through a pipe, has been successfully used; and after a few days the boiled flesh, and its nerves, blood-vessels, lymphatics, etc.,

are slowly restored to life again,

Then we have those psychical departures of the spiritual, or conscious, or sub-conscious part of the mentality, and its return, and in fact examples of all sorts, which go to show that the vitality, while not apart from the body in life, is still a psychical coordinate, and was apart before the body began, is sometimes apart while the body continues, and will be permanently apart when the functions of the body have finally ceased. That is all we can say; but the facts, while they make my former statement of the ordinary test, that "if they return to life they have not been dead, if they do not return they are dead," a case of begging the question, yet, in a broader sense, it is the only test.

I was once an involuntary party to such a resurrection. When a boy of perhaps eight or ten years old, there was a fierce, hairy, red-faced and vindictive

old fellow, who was the terror of all the boys who were able to fire green apples and the like with any sort of precision, and even we innocent ones were ferociously, and with terrific imprecations, pursued by this great ogre with the enormous stick and knife which he always carried. Old Captain Zum was his name, and his occupation was to trudge from farm to farm and do such surgical work on the porcine inhabitants as

the occasion required. On one of these journeys, some miles away, he fell sick at a farmer's place, and apparently died. Every effort was made by family and physicians to save him, but in vain, and late at night he was regretfully laid out on a "cooling board" in the wash-house to await the morning. After breakfast, the "hired man" was sent to the village with the dire intelligence, and the undertaker rode out to examine the remains, and take the proper measurements, for in those days the mortuary receptacles were built to order, and not kept in stock. So another day passed while the coffin-maker plied his tools, and the bereaved family fixed up the house for the reception of the silent guest. Next morning, now the third day, a couple of men with an open spring waggon drove out to bring in the body. It was intensely, terrifically cold, and when the team reached the village store it was halted, and the driver and his assistant went in to warm up, for they were nearly frozen.

We boys, standing on the store porch, gazed over the white sheet, which marked the rise of the forehead, the stumpy nose and chin, the swell of the abdomen, the knobby knees, and then the stiff feet standing up like mile-posts, and the final drop till the sheet met the long, projecting rye-straw, which made the cleanly bed for our erstwhile enemy. Was it true? Was this the old captain in full sooth?

Slowly, boy by boy, we crept down and climbed up the wheels of the waggon, two or three on each hub, to get a better view. There he lay, cold and dead cold certainly.

I took hold of the corner of the sheet above his head, and slowly raised it, to gaze upon that wellknown face; when suddenly, instantaneously, overwhelmingly, he whirled over, rose on his elbow, and hoarsely shouted out in our faces, "What the devil

are you doing there?"

Shades of Sodom and Gomorrah! such a tumbling backward to escape; but the old captain rode home in triumph, damned his old wife and lammed his hapless daughter, and lived through eleven long seasons of green apples afterwards. Peace to his ashes: for then he died, and stayed dead.

With all the modern appliances, the old captain would have had his tombstone carved with the earlier date, and would have there lain silent beneath the sod; and all the neighbours would have dated various events as a year after, or two winters before, old Captain Zum died, had I not involuntarily re-

surrected him, as I did.

The problem is not so easy; the case is not so plain; it is simply a matter of evidence for each case; and modern psychology has no dogma, no a priori, but leaves the question of fact, while not denying that of scientific possibility. There is no scientific reason why a believer should not fully believe it; there is no reason at all why a sceptic should have to believe it—at least, not yet.

I do not sustain my view merely on assertion; I quote the following from one of the soundest and strongest men of science which the recent half-century has produced, one whose whole study was in the cold and solid fields of science, George John Romanes, of whom I shall have much to say later

on.

These are his words: "Why should it be thought a thing incredible with you that God should raise the dead? Clearly no answer can be given by the pure agnostic. But he will naturally say in reply: 'The question rather is, why should it be thought credible with you that there is a God, or, if there is, that he should raise the dead?' And I think the wise Christian will answer, 'I believe in the resurrection of the dead, partly on grounds of reason, partly on those of intuition, but chiefly on both combined; so

to speak, it is my whole character which accepts the whole system of which the doctrine of personal immortality forms an essential part.' And to this it may be fairly added that the Christian doctrine of the resurrection of our bodily form cannot have been arrived at for the purpose of meeting modern materialistic objections to the doctrine of personal immortality; hence it is certainly a strange doctrine to have been propounded at that time, together with its companion, and scarcely less distinctive, doctrine of the vileness of the body. Why was it not said that the 'soul' alone should survive as a disembodied 'spirit'? Or if form were supposed necessary for man as distinguished from God, that he was to be an angel? But, be this as it may, the doctrine of the resurrection seems to have fully met beforehand the materialistic objection to a future life, and so to have raised the ulterior question with which this paragraph opens."

CHAPTER V

THE SPIRITUAL CONFLICT WITHIN THE CHURCH

It was thus that Christianity rode triumphant over Greek and Roman philosophy and civilisation, cherished by the whole world, even to this day, as among its most precious heritages (and, indeed, the unacknowledged source of a large portion of our modern "scientific" scepticism); and it swept forward amid the fires of persecution which filled the sky with the smoke of burning victims, which lined the highways with Christian-laden crucifixes, and filled the dungeons, and made public arenas the crunching-grounds of wild beasts, fed with hosts of helpless women and tender babes, as well as martyred men, and won well-nigh universal victory. Who is so credulous as to believe that this tremendous cataclysm of old faiths, and the resistless advance and triumph of the new, among nations so haughty, hard-headed and brainy as the ancient Greeks and Romans, were but the thaumaturgical trickery of a few unknown, discredited and apostate, prestidigitating Jewish peasants?

Says Du Prel, in his "Philosophy of Mysticism":

"The condition in which the Protean transscendental Subject can be stimulated is somnambulism. It is not alone animal magnetism which can awaken this condition; there are other causes which also introduce it: as disturbances of the cerebral life, a high tension of imaginative power, profound internal agitation, and likewise inspiration of certain vapours, the use of different vegetable substances, and the influence of minerals. So that somnambulism is by no means historically confined to the knowledge of animal magnetism. We find it at all times. Som-

nambulism is the fundamental form of all mysticism. It explains to us different phenomena of remote and classical antiquity, it delivers to us the key to the understanding of the most remarkable documents of mankind, the Vedas and the Bible. But especially is it the period of mediæval culture, from the comprehension of which our modern enlightenment is more remote than ever, which we learn to understand in the study of somnambulism. Without this, not only enchantment and witchcraft, but also Christian mysticism, remain problematic; for it is from somnambulism that magic of whatever quality sets out."

And this somnambulism was the trance or inspiration under which the ancient prophets spake and the apostles wrote. When Paul was "out of the body," when the author of the Revelation saw the heavens opened, when visions were interpreted, and when the wondrous story of the creation was told, when Elisha's eyes were opened, and when Saul saw gods ascending, through all the ages of which the Bible is the record, somnambulism was the gate by which the transcendental subject was revealed, whose scope was the universe, and whose lifetime was eternity.

But when faith was lost in ironbound sacerdotalism, and sacerdotalism in Sadduceeism and agnosticism, the old spiritualistic forces of the church triumphant ebbed and sank, and slowly and reluctantly disappeared, while outside its boundaries a more free and unecclesiastical experimentalism gradually gained new ground, just as had been fore-

told when Christianity was first established.

If these phenomena of spiritualistic power, manifested over the whole world, have been only the isolated, sporadic and disconnected contacts with this great prime source, what could not be expected of Christianity in this day, were it to turn back to its original and vitalising ideals, and reunite in one grand, enthusiastic, and inspired, and spirit-charged advance with the almighty force of the living God behind it?

Many of the ablest thinkers and writers see the approaching dawn of this great movement, and perceive in modern spiritualism a new John the Baptist,

with its rough and often uncouth girdle of camel's hair, and its uncultured diet of locusts and wild honey, and, perchance, with its crown of triumphant martyrdom.

For many heroic soldiers must be shot to death between the lines before the great final advance occurs, which carries by storm the earthworks and

fortifications of the enemy.

The result of these processes of negation, in the church, of a living and inspiring faith, the relegation of the life of the church to an ancient, imperfect and uncertain record, buried in the mouldering pages of old manuscripts, of which only mutilated copies were existent, or a subsequently printed book in which the study of the living God was replaced by a super-stitious bibliolatry, when religion was cast and frozen into glittering icicles of creeds and catechisms. could easily have been foreseen. The multiplication of sects and theories has gone on and on, like a magnificent and gorgeous iceberg splintering into destruction by its own frosts and collisions, and over the tottering remains has been raised, in the name of the "Goddess of Reason" (dear to the sans-culottes of the French Revolution, and their fellows of to-day), the pseudo-scientific temple of infidelity, agnosticism and atheism. It is but one short step from belief in a dead Bible to belief in a dead God.

Says Professor Herron, of the chair of Applied Christianity in Iowa College: "Most of us accept traditions of a God who lived down through the Hebrew prophets and the early Christian apostles. Possibly some of us have an undefined sense that God was living during the Reformation and until the Pilgrims landed at Plymouth Rock. Or we are willing to believe, and that with a considerable degree of emotion, in a God who will live suddenly and immensely in some after-death world, or in some remote millennium, in which he shall sit in terrific judgment on the world. But the idea that God is living now, in the midst of a living people, inspiring and teaching them even more directly than he inspired and taught the people of centuries ago, with

revelations concerning our present problems as sure and safe as any revelations of the past, and with judgments as swift and immediate as any judgments of the future—at such a faith we grow pale, or turn

from it in anger.

"We forget that the prophets and martyrs and apostles have met their tragic ends just because they insisted that God was alive, and saying things about the immediate and practical concerns of men; that they characterised as downright infidelity the beliefs that put God into yesterday and his judgments into to-morrow."

The living surge of enthusiastic, spiritualistic and conquering Christianity, thus caught among the breakers, trammelled and scattered, has spent its energy in self-destructive eddies, and largely lost the

vitalising force which first impelled it onward.

As Canon Barnett has recently expressed it: "Morality for the mass of men has been dependent on the consciousness of God, and with the lack of means of expression, the consciousness of God seems to have ceased." The "Means of Expression" are the means of spiritualism. But out of this decadent gospel of agnosticism and negation a new knowledge is arising, and both science and religion, as soon as they cast aside their earth-grimed garments of pride, prejudice and self-sufficiency, find new and sure demonstrations of the eternally living truth at hand on every side, so that not even a half-dozen friends, who are earnest seekers, can be gotten together seriously to investigate these phenomena, among whom palpable manifestations of this living power will not appear. Spiritualists will stake their whole

case on this simple proposition.

Said Jesus, "And lo, I am with you alway, even unto the end of the world"; and, "Where two or three are gathered together in my name there am I in the midst of them." Death does not end all, and it is in this way that a new and broadening Christianity is being gradually developed, free, on the one hand, from the bigoted domination of the old theological systems, and, on the other, from the superstitious

credulity of the ignorant, as well as from the equally superstitious incredulity, which will not even look, lest it be forced to see, of modern agnosticism. Like old Barbara Frietchie, spiritualism, in an age of cowardice and faithlessness,

"Took up the flag the men hauled down."

She flung it forth in the face of the invading host, and established again the rational development of spiritual knowledge and the religious life and fellowship, by a continuous intercommunication between the great and good of this world, and those of the

life yet to come.

But this great Protestant revolt against ecclesiastical dominion, involving, as it did, the denial of spiritualism as a whole, in order to overthrow it as the most powerful supporter of the old faith, was not the first great revolt of the church. When Christianity first arose it was but a weakling, so far as this world was concerned; it grew and grew with gradually increasing momentum, so that it stood face to face and equal with the paganism of the Roman Empire, which was practically the civilisation of the world; and, as this paganism had gradually absorbed into itself the art of antiquity, so that art had become tributary to and the most powerful supporter of the ancient faith—was linked fast to it, and was gradually made its tributary and tool-the rising Christianity would have no part or parcel of all this art, for to accept art was to palter with faith, so closely were the two bound together.

If you take spiritualism out of the world you leave it very poor, and if you take art out of the world you leave it very poor also. But it was necessary, in both cases, to do this, and stern, puritanic, ascetic Christianity fought its century-long battle against paganism, and destroyed it by destroying with it the

artistic light of mankind.

The victory was won; the cross with its bloody emblems had triumphed, and the beautiful world lay stripped and desolate.

But time brought its revenges; when the ages of

Christianity had multiplied, and the gods of Greece and Rome, of Egypt and Babylon, of Phœnicia and Persia and India, had gone into exile with all their art and æsthetic and soul-enchanting symbolism, but ever merged with a battling mythology, and Christianity stood secure at last against them; then, little by little, age by age, the old arts wound again their almost unseen tendrils around the cross and the altar, and, gradually revealing their soul-compelling truth and beauty, became a part indeed, again, of the new theology, or mythology, and not only overlaid their altars, but penetrated, modified and, at last, filled with their splendid bursts of ritual, the processions of saints, the festivals, the fasts, the ceremonies of the church, until to-day the student of comparative religion traces back many of the acknowledged practices, and even beliefs, of the Christian church to times and places far antecedent to even the birth and teaching of Christ. They came in new guise, untrammelled by the nomenclature and environment of the old, but the virile truth could not be destroyed, the world-religion could not be extinguished, the revelation which preceded the New Testament, and which came in, and is identifiable in, all old religions, was continuously manifest again. So the Jesuit missionaries found these practices among the Buddhists, who came six centuries before Christ, the Spanish friars found them among the Ancient Central Americans, and missionaries found them wherever they penetrated, so that Father Montucci, the Jesuit, in his "Chinese Studies," was fain to say a century ago: "No one can doubt that the mystery of the Most Holy Trinity was revealed to the Chinese five centuries before the coming of Jesus Christ."

And it is so with the Protestant church and spiritualism. When the older church had become in its practices, but not in its faith, intolerable, and the revolt came, as it must have come, the revolt which awakened and purified the thunderstricken old church itself, it was absolutely necessary to destroy its spiritualism, for, this once destroyed, the Bible

was its sole remaining instrument, and its claims were supreme; and this, when men came to see and reflect, left nothing behind but a dubious record and an absentee God, and an alliance with materialism bald and bare; and the later changes were inevitable, in the form of a revolt from nihilism as the previous revolt was from asceticism, and the original one from paganism, and this secret revolt has filled our churches with spiritualists, while their creeds and dogmas are still of the benighted past.

A clergyman of one of our largest Protestant denominations, returning, a few years ago, from one of their general assemblies, and who spent a few days with me, said that, "If a clergyman had risen and stated what three-fourths of them honestly believed he would have been expelled by a two-thirds vote."

CHAPTER VI

CAUSALITY

THE fatal fallacy of the dominant Protestant theology could not have been more clearly stated than in the chapter on Causality by Romanes, who was not a theologian, but a great master of science, who died a firm Christian believer—who had in fact been forced,

by science itself, to become a believer.

He says: "Only because we are so familiar with the great phenomena of causality do we take it for granted, and think that we reach an ultimate explanation of anything when we have succeeded in finding the 'cause' thereof: when, in point of fact, we have only succeeded in merging it in the mystery of mysteries. I often wish we could have come into the world, like the young of some other mammals, with all the powers of intellect that we shall ever subsequently attain already developed, but without any individual experience, and so without any of the blunting defects of custom. Could we have done so, surely nothing in the world would more acutely excite our intelligent astonishment than the one universal fact of causation. That everything which happens should have a cause, that this should invariably have been proportioned to its effect, so that, no matter how complex the interaction of causes, the same interaction should always produce the same result: that this rigidly exact system of energising should be found to present all the appearances of universality and of eternity, so that, for example, the motion of the solar system in space is being determined by some causes beyond human ken, and that we are indebted to billions of cellular unions, each involving billions of separate causes, for our hereditary passage from an invertebrate ancestry—that such things should be, would surely strike us as the most

wonderful fact in this wonderful universe.

"Now, although familiarity with this fact has made us forget its wonder to the extent of virtually assuming that we know all about it, philosophical inquiry shows that, besides empirically knowing it to be a fact, we only know one other thing about it viz.—that our knowledge of it is derived from our own activity when we ourselves are causes. No result of psychological analysis seems to me more certain than this. If it were not for our own volitions, we should be ignorant of what we can now not doubt, on pain of suicidal scepticism, to be the most

general fact of nature.

"Now to the plain man it will always seem that if our very notion of causality is derived from our own volition—as our very notion of energy is derived from our sense of effort in overcoming resistance by our volition—presumably the truest notion we can form of that in which causation objectively consists is the notion derived from that known mode of existence which alone gives us the notion of causality at all. Hence the plain man will always infer that all energy is of the nature of will-energy, and all objective causation of the nature of subjective. . . . So that the direct and most natural interpretation of causality in external nature which is drawn by primitive thought in savages and young children, seems destined to become also the ultimate deliverance of human thought in the highest levels of its culture."

Many years before Romanes, Sir John Herschel had presented the same inevitable truth in his chapter

on "The Origin of Force."
"Whenever," this distinguished man of science says, "in the material world, what we call a phenomenon or an event takes place, we either find it resolvable ultimately into some change of place or of movement in material substance, or we endeavour to trace it up to some such change; and only when successful in such endeavour we consider that we have arrived at its theory. In every such change we recognise the action

of Force. And in the only case in which we are admitted into any personal knowledge of the origin of force, we find it connected (possibly by intermediate links untraceable by our faculties, but yet indisputably connected) with volition, and by inevitable consequence, with motive, with intellect, and with all those attitudes of mind in which—and not in the possession of arms, legs, brains, and viscera—

personality consists." . . .

"If it be true, then, that the conception of Force as the originator of motion in matter without bodily contact, or the intervention of any intermedium, is essential to a right interpretation of physical phenomena; and if it be equally so, on the other hand, that its exertion makes itself manifest to our personal consciousness by that peculiar sensation of effort, which is not without its analogue in purely intellectual acts of the mind; it comes, not unnaturally, to be regarded as affording a point of contact, a connecting link between these two great departments of being-between mind and matter-the one as its originator, the other as its recipient. The control we possess over the external world we are sure must arise from a capacity somehow inherent in the intellectual part of our nature, to originate or call into action this one and only agent which matter obeys in its changes of form and situation. We may hesitate about admitting into the system of created things around us so great an amount of additional or extraneous vis viva, as the totality of animal exertion since the first introduction of animal life upon earth would seem to imply. But this is not necessary. The actual force necessary to be originated to give rise to the utmost imaginable exertion of animal power in any case, may be no greater than is required to remove a single material molecule from its place through a space inconceivably minute—no more in comparison with the dynamical force disengaged, directly or indirectly, than the pull of a hair trigger in comparison with the force of the mine which it explodes. But without the power to make some material disposition, to originate some movement, or

to change, at least temporarily, the amount of dynamical force appropriate to some one or more material molecules, the mechanical results of human or animal volition are inconceivable. It matters not that we are ignorant of the mode in which this is performed. It suffices to bring the origination of dynamical power, to however small an extent, within the domain

of acknowledged personality. . . .

"The universe presents us with an assemblage of phenomena, physical, vital and intellectual—the connecting link between the worlds of intellect and matter being that of organised vitality, occupying the whole domain of animal and vegetable life, throughout which, in some way inscrutable to us, movements, among the molecules of matter are originated of such a character as apparently to bring them under the control of an agency other than physical, superseding the ordinary laws which regulate the movements of inanimate matter, or, in other words, giving rise to movements which would not result from the action of those laws uninterfered with: and therefore implying, on the very same principle, the origination of force. The first and greatest question which Philosophy has had to resolve in its attempts to make out a Kosmos, —to bring the whole of the phenomena exhibited in these three domains of existence under the contemplation of the mind as a congruous whole—is, whether we can derive any light from our internal consciousness of thought, reason, power, will, motive, designor not: whether, that is to say, nature is or is not more interpretable by supposing these things (be they what they may) to have had, or to have, to do with its arrangements. Constituted as the human mind is, if nature be not interpretable through these conceptions, it is not interpretable at all. . . . Will without Motive, Power without Design, Thought opposed to Reason would be admirable in explaining a chaos, but would render little aid in accounting for anything else."

Lamarck also, the founder of modern evolution, is equally explicit. In his "Anatomy of Invertebrates" he says, "Strange occurrence! that the watch should

have been confounded with its maker, the work with its author. Assuredly this idea is illogical and unfit to be maintained. The power which has created Nature, has, without doubt, no limits, cannot be restricted in its will or be made subject to others, and is independent of all law. It alone can change Nature and her laws, and even annihilate them; and although we have no positive knowledge of this first object, the idea which we thus form of the Almighty Power is at least more suitable for man to entertain of the Divinity, when he can raise his thoughts to the contemplation of him. If Nature were an intelligence, it would exercise volition and change its laws, or rather there could be no law. Finally, if Nature were GoD, its will would be independent, its acts unconstrained; but this is not the case; it is, on the contrary, continually subject to constant laws, over which it has no power; it hence follows, that although its means are infinitely diversified and inexhaustible, it acts always in the same manner in the same circumstances, without the power of acting otherwise."

And I may cite the following from the General Scholium of Sir Isaac Newton's immortal work on optics:—"And the instinct of brutes and insects can be the effect of nothing else than the wisdom and skill of the powerful, ever-living agent, who, being in all places, is more able by his will to move the bodies within his boundless, uniform sensorium, and thereby to form and reform the part of the universe, than we are by our will to move the parts of our bodies."

are by our will to move the parts of our bodies."
And again, in his "Principia," "He is omnipresent, not virtually alone, but substantially. In him all things are contained and moved, but without

mutually affecting each other."

Indeed it would be difficult to discover a really first-rate man of science to take the opposing view. Romanes suggestively states that, "when I was at Cambridge, there was a galaxy of genius in that department emanating from that place such as had never before been equalled. And the curious thing in our present connection is that all the most illustrious names were ranged on the side of orthodoxy." Re-

cent statistics show that in the summary of the leading American colleges and universities, religious belief increases in its percentage from the freshman year to the end of the course, so that at graduation. more than fifty per centum are firm believers in the

truth of religion.

Surely we should expect that that religion which is fundamentally established on the propositions that "God is a spirit," that God is that Spirit "in whom we live, and move, and have our being," that "Whenever two or three are gathered together in my name there am I in the midst of them," should bind itself firmly and for all time to the spiritualistic views such as I have cited from Romanes, Sir John Herschel, Lamarck and Isaac Newton, but it has not been so, and Christianity, especially among the Protestant

branches, has lost enormously thereby.

We may even go back to the heathen days of Rome, and cite Cicero's work "On the Nature of the Gods," to show that this division of belief is even pre-Christian, for Cicero says, "There are some philosophers, both ancient and modern, who have conceived that the gods take not the least cognisance of human affairs. But if their doctrines be true of what avail is piety, sanctity, or religion? . . . There are other philosophers, and those too very great and illustrious men, who conceive the whole world to be directed and governed by the will and wisdom of the gods; nor do they stop here, but conceive likewise that the deities consult and provide for the preservation of mankind."

Who would imagine for a moment that any Christian could possibly use such language as the reporters of the daily press have attributed to a distinguished clergyman, an evangelist celebrated in two continents, in one of his recent sermons delivered to an audience of thousands in Philadelphia? This is what this great theological leader is reported to have said: "It is the common cant of the day to say that Christ is here, not in the flesh, but in the spirit; that we see his presence in all the glories of the Twentieth Century. And we are asked to accept this invisible

presence in place of the Lord who has said that he himself will be with us. Was ever such nonsense?" Again, "Oh, it is well for the humbugs, the frauds, and the pretenders who encumber the world to tell us that Christ is here, is there, is everywhere. But their theory of Christ in an obscure corner, of an inner-chamber Christ, has long been exploded." He said, "Be warned in time ere it is too late, for when Jesus comes to us it will be without warning. It may be a year hence; it may be to-morrow; it may be, for all that we poor, helpless misguided creatures in our ignorance can tell, this very day. . . . As I," the speaker said, "a father, go away from my home to return, so Christ went away from the world of his children, to return."

Let us imagine, as a corollary, this vast congregation to burst forth into the glorious strains of Lyte's great prayer and hymn, and, meantime, watch the

evangelist.—

"Abide with me: fast falls the eventide,
The darkness deepens, Lord, with me abide:
When other helpers fail, and comforts flee,
Help of the helpless, Lord, abide with me:

"I need Thy presence every passing hour;
What but Thy grace can foil the tempter's power?
Who, like Thyself, my guide and stay can be?
Through cloud and sunshine, Lord, abide with me.

"I fear no foe with Thee at hand to bless:
Ills have no weight, and tears no bitterness.
Where is death's sting? where, grave, thy victory?
I triumph still, if Thou abide with me.

"Hold Thou Thy cross before my closing eyes;
Shine through the gloom, and point me to the skies;
Heaven's morning breaks, and carth's vain shadows flee;
In life, in death, O Lord, abide with me."

The evangelist's notion of an absentee God, and of course of an absentee Christ—"very God of very God"—is a distinctly pagan conception, that is, the materialistic form of paganism; for, as Cicero, himself a pagan, asks of such absentee gods "of what avail then is piety, sanctity, or religion?"

Be not distressed; listening, as we often have listened, to the rendering of Chopin's immortal

"Marche Funèbre" by a full orchestra, one hears the solemn, complex rhythm of minor chords, with their deep, pulsing beat, like the march of inevitable Fate in the Greek tragedies; the marching mourners swing from side to side with the crashing sound of each step; one sees the black led-horses drawing the caisson which bears the shrouded coffin, in which rocks to and fro the ghastly corpse, as the springless car bumps along the streets; an appalling hush rests upon all, and there is heard and felt only the hopeless march of death. God and His Christ may be sitting aloft, but they seem not to be here, under this pall. But suddenly there rises one single, clear, continuous note, flutelike, birdlike, angelic; a new element, modulating to the major key this time, has entered the scene, and, as that celestial strain rises and falls, and calls and echoes and thrills the soul, hope and joy return, heaven is felt to be here and ever has been here and all around us, God again is and has been with and in us, and one feels that living presence, that guiding spirit-presence which fills and clings to and surrounds that cry, that prayer and hymn in one, so humble in its words, so inspiring in its trust:

> "Keep Thou my feet; I do not ask to see The distant scene, one step enough for me."

It is said that Chopin, the Edgar Allan Poe of music, through the trick of some of his friends, whom he visited in the twilight, improvised this funeral march in darkness, at the piano, with his arm clasped around a skeleton mock-player seated at his side, and one hears the shock, "Earth to earth; ashes to ashes"; one feels the materialistic throb, the march, the coffin, the clay. But when the soul was liberated and was clasped and welcomed by its spirit-guardians, those clear, pure, limpid, triumphant notes of joy ascended, and we know that the earthly skeleton was all forgotten, and that loving angel forms, and the divine presence, were all around and about us.

But so we may be prepared to understand the effects of that nearly fatal error of Christian theology, by which, to use the words of Romanes,

"God is still grudged His own universe, so to speak, as far and as often as He can possibly be."

And he adds, "I can well understand why infidelity should make the basal assumption in question, because its whole case must rest thereon. But surely it is time for theists to abandon this assumption."

Now what is this basal false assumption or fundamental postulate, which Romanes puts to disprove it, in italics? "If there be a personal God, He is not immediately concerned with natural causation."

CHAPTER VII

THE PSYCHISM OF THE UNIVERSE

His demonstration of the falsity of this proposition is as follows:—"I propose to show that, provided only we lay aside all prejudice, sentiment, etc., and follow to its logical termination the guidance of pure reason, there are no other conclusions to be reached than these—viz. (a) That if there be a personal God, no reason can be assigned why He should not be immanent in nature, or why all causation should not be the immediate expression of His will. (b) That every available reason points to the inference that He probably is so. (c) That if He is so, and if His will is self-consistent, all natural causation must needs appear to us 'mechanical.' Therefore (d) that it is no argument against the divine origin of a thing, event, etc., to prove it due to natural causation."

This is in strict accord with the trend of modern psychology. To quote Professor H. W. Conn, in his "Story of the Living Machine," "If the physical basis of life had proved to be a chemical compound, the problem of its origin would have been a chemical one. Chemical forces exist in nature, and these forces are sufficient to explain the formation of any kind of chemical compound. The problem of the origin of the life substance would then have been simply to account for certain conditions which resulted in such chemical combination as would give rise to this physical basis of life. But now that the simplest substance manifesting the phenomena of life is found to be a machine [mechanical, says Romanes], we can no longer find in chemical forces efficient cause for its formation. Chemical forces and chemical affinity can explain chemical compounds of any degree of complexity, but they cannot explain the formation of machines. Machines are the result of forces of an entirely different nature. Man can manufacture machines by taking chemical compounds and putting them together into such relations that their interaction will give certain results. Bits of iron and steel, for instance, are put together to form a locomotive, but the action of the locomotive depends, not upon the chemical forces which made the steel, but upon the relation of the bits of steel to each other in the machine. So far as we have had any experience, machines have been built under the guidance of intelligence which adapts the parts to each other."

It will be seen that this scientific statement powerfully corroborates the evidence from reason, as given by Romanes, and demonstrates that what this great author predicated as the only solution, the statement of Professor Conn (which is the universal view of

modern psychology) demonstrates to be true.

But this view, these connected series of facts of organic life, demonstrate not only the immanence of a divine creative and maintaining intelligence, but they demonstrate spiritualism, and furnish an immutable basis for revelation and all forms of religion.

as spiritually revealed.

Just as man, just as all living organisms, by whatever psychic life they may have and manifest, are designers, creators and sustainers, within the limited sphere open to their opportunities, so is the Spirit of the Universe, as it were, as Romanes calls the eternal and omnipotent psychism, the designer, the creator and sustainer of the universe. This is the lesson of psychology. All are machine-builders, intelligent and purposeful machine-builders, and their psychisms are akin, as they must be, since the lesser psychisms are the outcome of the former. There certainly are such individual psychisms, such minds; no one denies that, and that with our own minds we can explore higher minds is proof of their essential likeness, "In God's own image." And that there is a ceaseless interchange between them is

the lesson of religion, of spiritualism, and of

psychology.

The Rev. Dr Bingham, of Trinity College, Hartford, makes his Italian girl say: "But are you not willing to believe, Signor, that our holy mother, the Church, cares for us, her children, in this world as well as in the next? Are you not willing to believe that she works before us and upon us her perpetual miracles and teaches us to see through the thin veil and recognise much that is going on in the world of spirits? But, ah, Signor, do you Protestants, so rich and so learned, really believe in any supernatural world at all?"

CHAPTER VIII

SPIRITUALISM THE BASIS OF ALL RELIGIONS

Not only was the old Christian church spiritualistic to the backbone; the same is true of the Hebrew scriptures and faith. The whole Bible, properly read, and as it was intended to be read, is one long, continuous and unmistakable record of spiritualism. In the light of its true reading all the "higher criticism," so called, is merely directed to the correction of historical and incidental errors, matters of detail as trifling as the correction of like errors in the records of our present mediumistic trances, or other manifestations; the record proves its own validity by comparison with what is now going on, and the Bible itself, when simply stripped of its stucco and artificial drapery, will stand forth, clear in diction, sublime in purpose, and glorious in promise for all time to come, the grandest record of authentic mediumship yet revealed to mankind.

And all the other great religions existent to-day are, in like manner, entirely spiritualistic in origin

and development.

In India, Brahmanism, Buddhism, Mohammedanism and Parseeism; in China, these same religions together with Confucianism and Tâoism; in Japan, the same with Shintoism, and also in Ceylon and Farther India; in Turkey, Arabia, Persia, Tartary; in Africa, among the American Indians pre-eminently and most purely, everywhere, wherever there is a religion at all, we find all the basic phenomena of modern spiritualism represented and acknowledged.

Among the historic religions of the past the same is true; in ancient Egypt, among those great nations

which stretched from Egypt up, along the Mediterranean to the Dardanelles, in the various religions of the great Euphrates valley, in those of the mountains, the valleys and plateaus behind the Persian Gulf, in Persia, in the religions of Greece, Etruria and Rome, among the Carthaginians and their Phœnician ancestors, among the more recent Druids, in all the islands of the Pacific, among the Mexicans, the Mayas, the Peruvians, the peoples of the Amazon, and other prehistoric peoples of every age and every country, among all these was spiritualism fully recognised, not only as a fact, but as the most important fact within the grasp of man.

The eminent anthropologist, the late Dr Daniel G. Brinton, in a recent lecture on the "Religions of

Ancient Peoples," said:

"What one person calls religion another calls superstition. No tribe devoid of religion is known to exist. No animal, however intelligent, exhibits any idea of death or exercises any religious sense. If anyone who has any religious feeling is asked his origin and why he believes in any religion there is one universal answer: it is because he believes in the God-given; that the very sentiment within him is God-given. No religion exists that does not depend on a revelation believed by its votaries. This principle belongs as much to the most primitive religions as to those of highest development. Every Indian on the plains and every savage in South American tribes has had that sublime beatific vision which lifts him above humanity into the realm of the supernatural."

The author of "The Supernatural in Nature," a religious work inscribed to the Lord Bishop of London, says: "God was prominent in the minds of primitive men, they perceived a spirit in everything, mysterious ghostliness in all dark space. No tribe or people has ever been discovered in the whole course of human history that has not a religion of some kind or

other."

Says Tylor in his "Primitive Culture": "No religion of mankind lies in utter isolation from the

rest, and the thoughts and principles of modern Christianity are attached to intellectual clues which run back through far pre-Christian ages to the very origin of human civilisation, perhaps even of human existence." Again, "The theory of the soul is one principal part of a system of religious philosophy which unites in an unbroken line of mental connection the savage fetich-worshipper and the civilised

The author of "The Supernatural in Nature" says: "All races have the idea of the soul outliving

the body in a country of ghosts."

Epes Sargent in his "Proof Palpable" says: "All times and all tribes have had their prophets, seers, sensitives, psychics or mediums. The inference is that these same powers are possessed in different degrees by all human beings, but that it is only under certain conditions of organisation, temperament or influence, that they are developed as we find them to

be in particular instances."

Sir Charles Lyell in his "Antiquity of Man" states that far back in geological times the human remains found in the prehistoric cavern in Aurignac. in France, showed that the departing spirits were fitted out with food and implements for the journey, just as among the North American Indians of the present century. And Professor Paul Broca, in discussing the life of the earliest man, as revealed in their remains, says: "Did they have any religious belief?" And answers it by saying: "They did wear talismans or amulets. Hunting nations wear similar talismans to give them luck in hunting. In either case there was some superstitious idea connected with them. Does this suffice for the statement that they had a religion?"

The Rev. Dr Charles Maurice Davies, of the English Church, in a public address delivered in 1874, says, in speaking to the spiritualists: "On the broad question of theology we can conceive of no single subject which a clergyman is more bound to examine than that which purports to be a new revelation, or, at all events, a large extension of the old; and which, if its claims be substantiated, will quite modify our notions of what we call faith. It proposes, in fact, to supply, in matters we have been accustomed to take on trust, something so like demonstration, that I feel not only at liberty, but actually bound, whether I like it or not, to look into the thing. While I recognise that my own duty clearly is to examine the principles you profess, I find this to be eminently their characteristic, that they readily assimilate with those of my own church. I see nothing revolutionary in them. You have no propaganda. You do not call upon me, as far as I understand, to come out of the body I belong to and join yours, as so many other bodies do; but you ask me simply to take your doctrines with my own creed, and vitalise it by their means. This has always attracted me powerfully towards you. You are the broadest Churchmen I find anywhere."

In 1896 the Rev. Dr Ellinwood, the Secretary of the American Board of Foreign Missions of the Presbyterian Church, an eminent writer and theologian, author of "Oriental Religions and Christianity," writes as follows:—

"Hypnotism, making due allowances for a thousand extravagances which have attended it, does seem to show that one strong and magnetic human will may so control the mind and will of its subject as by a mere silent volition to direct his words and acts. Who shall say then that a disembodied

spirit may not do the same?"

"Professor Shaler of Harvard," he says, "in his 'Interpretation of Nature' has pointed out the fact of a strong reaction against the materialism which seemed confident of dominion a few years ago. Certain biological investigators, flushed with the success of their researches, were very confident that, if they had not been able to discover the human soul with the microscope, they had at least identified, it very closely with the substance of the brain and nerves. But now, as the professor shows, science is beginning to discover realms of spirit lying beyond the physical, and of which we have as yet but the

barest glimpses of knowledge. Evidently human research has not yet finished its work and is not

ready to rest its case upon any dogmatic verdict."

Says Professor William James, Professor of Philosophy in Harvard University: "The phenomena are among the most constant in history, and it is most extraordinary that 'science' should ever have become blind to them."

The whole history of the race demonstrates by an accumulation of evidence perfectly irresistible to those who care for evidence, that the psychical, the spiritual, both in the man, and extra to the man, have been the great interacting and controlling factors of human advancement.

And these conceded factors, constituting the universal consensus of all mankind, through all the ages of mankind, have been absolutely identical, and are to-day precisely what they have always been hitherto, and everywhere, in the past. These fundamental propositions, apparently inherent in, or else revealed to the human race, and universally employed as the only basis of ethics as well as of religion, and as well of spiritualism, are as follows:-

I. A transcendental, spiritual, intelligent power, universal in scope, in space and time, and in potency, which power is the formative, preservative and

restorative agency of nature.

2. Direct and recognised action of this power upon and through a similar, but less extensive, spirituality of man, to mould, to control, and to preserve and protect the human organism, and its energies.

3. The persistence of this spiritual individuality

of man after death.

4. Intercommunion between the human spiritual personality and the like spiritualities of departed human beings, under various conditions, at particular

times, and for special purposes.

This superhuman consciousness, which constitutes the basis of all religion, ever present and ever acting, is the same consciousness which constitutes the basis of modern spiritualism; there is no difference in kind at all, and only slight differences in degree; and these

differences constantly and imperceptibly shade into each other, so that no line of demarcation can anywhere be drawn between modern spiritualism and the universal psychical or religious knowledge of all past

ages and all peoples.

In all history the fact stands out undisputed that the great principles of modern spiritualism have never been denied among mankind, save by a few modern teachers whose inquiries have been purposely confined, by deliberate choice or narrowness of vision, to the gross material plane alone, and a multitude of their ignorant followers, who, in believing that they have accepted the hypotheses of these philosophers, have, in fact, garbled them beyond recognition. Besides these, the boasted doctrine of negation, or agnosticism, has only included the lower animals, and not, it is probable, even all classes of these.

Modern spiritualism is thus not a new thing—its denial is the new thing, and it ought not logically to stand at the bar of science to establish its facts; they have been already established, for it has more and more been proven, and is now firmly established, that no belief universal in scope and in time has ever been without a foundation of truth for its basis. It is upon and by means of these very truths that science

itself has been established and developed.

But spiritualism gladly accepts the challenge, for it clearly recognises that only in the continuance and multiplicity of obvious spiritual phenomena can the truth of a future life be made universally manifest. The fountain must continue to flow in order to prove that it has ever flowed, for the forces and mechanism are, and must be, the same "yesterday, to-day and for ever."

CHAPTER IX

SPIRITUALISM BEFORE THE BAR OF SCIENCE

But when called to the bar of science, spiritualism has the same rights which science claims for itself, and if the object of the research is to be truth alone, the conditions required for successful experimentation must be observed. Who would expose a sensitised photographic plate in broad daylight, and expect anything but a blackened negative? Who, in investigating the development of language in a child, would attack it with threats and visible hostility? A pure young girl, brought before a court of ribald and sceptical accusers, to defend her virtue, would find her tongue cleave to the roof of her mouth, and her very actions would proclaim her guilt and condemn her, and her judges would glory in the triumph of her condemnation. There are experiments in chemical research so delicate that they must be conducted in darkness and silence; there are explosives of tremendous energy which the rustle of a sheet of paper will detonate, and, in the production of which, the slightest variation in manipulation during their manufacture will render their production impossible, or else destructive. The delicate observations in astronomical work are vitiated by a breath of warm air passing near the instrument; in microscopy the highest powers require to have the lens immersed in fluid to prevent dispersion; in the study of the anatomy of such relatively developed organs as the ultimate visible nerves even, a whole lifetime must be devoted to the production of a few partially completed specimens. Even in the spinning and weaving of delicate threads and fabrics, unless the temperature and humidity be constantly maintained of exactly the

requisite quality, the whole product will go to pieces and the manufacture will be a failure. The same is true of delicate metallurgical manipulations—the conditions must be most carefully studied, and their demands must be fully accepted and rigidly complied with, failure, even then, following as frequently as success, in many cases.

But in investigating spiritualism, every condition prescribed, not by the medium or by the spirits perhaps, but by those forces which are about to be investigated, is looked upon as an evidence of fraud. Scientific men have demanded the right to prescribe their own conditions in an investigation of which they

do not claim to know even the first principles.

But they do not stop to consider that these contacts, and transmissions, and phenomena, are between intelligent individualities, through exceedingly imperfect instrumentalities at best, and that the possibilities of communication depend on a multitude of conditions largely unknown to us, and almost entirely unknown to and untried by the communicating intelligences themselves. "Scientific" incating intelligences themselves. vestigators of this sort have a totally unwarranted superstition, as a rule, which can only be ascribed to a survival from the "ages of faith," and which is that a disembodied spirit, if there be such a thing, as soon as it has left its earthly tenement, becomes a sort of little god; that it instantly changes into an extremely intelligent, extremely powerful, and practically omniscient and omnipresent being, and that, notwithstanding all this, it can still be summoned and ordered about at will, not like the genii of the East, by means of a talisman whose power they recognise and obey, but at the will of a sceptic, whose authority they do not recognise, and whose conditions they do not and cannot, by their very nature, accept, and whose attributed powers they do not claim to possess.

Who are the people to be benefited by these manifestations, granting that they are genuine? Is it those who have lived their life on earth, and gone on to new duties and new progressions, or those to whom they return under untold difficulties to deliver a

message which will convince a doubting world, left behind for ever, of their continued existence, and so make life for us here nobler and better and higher? They do not need us at all—that is certain, for we know that when we shall have passed beyond, if future life exists, our thoughts and hopes and advancement will be no longer chained to a mortal world. Everybody who considers or believes in a future life at all believes this. And in such case, if there be a call at all, it can only be the call of pure benevolence, or else the dark shadow of earth-bound crime or sorrow, which brings or binds the spirit here; and to lay down rules and conditions without thought, knowledge or consideration; to "demand results" under penalty of condemnation as frauds; to put them under a cold, merciless questioning in which every higher aspect is ridiculed, and a catch-examination carried on for exposure—this is the same as for a drowning man to spit in the face of one who would come to his rescue. It is of these that Christ said they would not be persuaded, "though one rose from the dead."

Imagine the actors who would be willing to act gratuitously before an audience of scoffers and hooters. It is said in the New Testament that even Jesus was unable to produce any considerable manifestations among the people of Nazareth, "because of their unbelief" (Matthew xiii. 58; Mark

vi. 5).

Spiritualists do not claim that the surviving personalities which manifest themselves are "little gods" at all; they are, many times, chattering old women, or babbling curates, as Huxley describes them. The question is not whether they have suddenly become sublimated into celestial paragons by merely escaping from a putrefying and disintegrating garment of flesh, but whether they escape at all. What these chatterers and twaddlers, when they are chatterers and twaddlers, seek to do is to convey to us the actual certainty of what religion asks us to accept in many cases by mere faith, as faith is often understood. The general of an army in a difficult

and unknown country, with the unseen enemy hidden in front, does not ask that the poor ignorant slave, the loyal peasant, or the devoted partisan shall come in from beyond the front, and stand up and speak in terms of educated style or scientific accuracy. What the general wants to know is where this messenger comes from, what he has seen, how he has escaped, and information about the country and the people beyond. And to secure this, so as to produce conviction of the truth of the statements, he does not rely upon a single incomer, or messenger; but he picks up dozens, if he can, of all sorts and conditions, persons who are most unlikely to have been together previously, or who could have conspired to get up a story to deceive. Here is where good judgment and sound reason come in, and here is where the commander proves his right to command, and by this test his fitness is determined, and the campaign carried on to success. There is no other way.

Consider the opposite case. Suppose the commander should say, "The personal scouts I have sent over have not returned; I do not know what is beyond; those who purport to come into our lines from over there are ignorant and uncultured, and though I can readily understand them, and they come from all parts of the country beyond, and all report the same state of affairs, yet I take no interest in what they say, even if the facts are true, and, in fact, I don't believe, on a priori principles, that there is any other force over there anyway"; and, instead of investigating, should go back to the rear with his staff, to deliver a lecture on protoplasm as the physical basis of life, at an honorarium of three

hundred dollars.

An amusing instance came to me recently of this twaddle business—an apparently educated man narrating his experience with a medium. He said that he intended to apply a test which would satisfy him, and so he wrote a name and a question on one piece of paper, and another name and another question on a second piece of paper, both the names being of persons now dead but whom he had known

here. These papers he concealed in his pocket. The medium called out one name and the corresponding question, and, as the narrator stated, the question was correctly answered—because it was an easy one, he said.

The medium then said, "You have another name and question on another piece of paper, and the spirit whose name is thereon written says you ask, 'What

is electricity?""

The narrator said to me, "I put that on as a certain test, because if she was a spirit she would certainly know, and if she didn't answer correctly I would know that the medium was a fraud, and the spirit bogus." "Well," I asked, "what answer did you get?"

The answer, he said, was that in his present state of knowledge she could not convey to him an explanation which would satisfy him, but that if he was there as she was, he would know and feel the

nature of the answer.

"Well?" I said. "Why, that was all tommyrot," he replied, "and convinced me that the whole affair was bogus."

I asked him if he knew what electricity was, and he said no, that that was what he wanted to find out. I asked him if the friend (a girl), who professed to answer, knew what it was before her death. "No, certainly not," he replied. Then I asked him why he expected her to know as soon as she passed over into spirit life, and his reply was, "Why, if she was a spirit, she would know everything, of course."

Mrs Ross Church, who assisted Sir William Crookes in many of his Katie King investigations, in her wonderful book, "There is no Death," says: "There are two classes of people who have done more harm to the cause of spiritualism than the testimony of all the scientists has done good, and those are the enthusiasts and the sceptics. The first believe everything they see or hear. Without giving themselves the trouble to obtain proofs of genuineness of the manifestations, they rush impetuously from one acquaintance to the other, detailing their experiences

with so much exaggeration and such unbounded faith that they make the absurdity of it patent to all. They are generally people of low intellect, credulous dispositions, and weak nerves. They bow down before the influences as if they were so many little gods descended from heaven, instead of being, as in the majority of instances, spirits a shade less holy than our own, who, for their very shortcomings, are unable to rise above the atmosphere that surrounds this gross and material world.

"Who has not sat at a séance where such people have made themselves so ridiculous as to bring the cause they profess to adore into contempt and ignominy? Yet to allow the words and deeds of fools to affect one's inward and private conviction of a matter would be tantamount to giving up the pursuit of everything in which one's fellow-creatures

can take a part.

"The second class to which I have alluded—the sceptics—have not done so much harm to spiritualism as the enthusiasts, because they are, as a rule, so intensely bigoted and hard-headed and narrowminded, that they overdo their protestations, and render them harmless. The sceptic refuses to believe anything, because he has found out one thing to be a fraud. If one medium deceives, all the mediums must deceive. If one séance is a failure, none can be successful. If he gains no satisfactory test of the presence of spirits of the departed, no one has ever gained such a test. Now, such reason is neither just nor logical. Again, a sceptic fully expects his testimony to be accepted and believed, yet he will never believe any truth on the testimony of another person. And if he is told that, given certain conditions, he can see this or hear the other, he says, 'No! I will see it and hear it without any conditions, or else I will proclaim it to all a fraud.' In like manner, we might say to a savage, on showing him a watch, 'If you will keep your eye on those hands, you will see them move round to tell the hours and minutes,' and he should reply, 'I must put the watch into boiling water—those are my conditions

-and if it won't go there, I will not believe it will

go at all.'

"I don't mind a sceptic myself, as I said before, but he must be unbiassed, which few sceptics are. As a rule, they have decided the question at issue for themselves before they commence to investigate it."

and the same of th

CHAPTER X

EXPERIMENTAL PSYCHOLOGY

I have spoken in a previous chapter of the identity of spiritualistic manifestations with those embodied in the records of various historic religions. Almost all ethnologists, anthropologists and students of comparative religion and folklore are fully aware of the remarkable identity between the various spiritualistic phenomena encountered in diverse ages, and throughout the world. In fact, wherever tapped, we find the human strata flow with the same phenomena and the same beliefs, in their origin and mode of operation.

But I may mention here, more as a specific illustration than as a corroboration, the state of spiritualism in the oldest as well as the vastest empire on earth, the Chinese. I would refer to an unimpeachable source also, as the whole evidence is from Christian experts, experts not only in our own religion but in the life, language and customs of the Chinese themselves. Much of this can be found in the remarkable book by the Rev. Dr John L. Nevius, for forty years a missionary in the interior of China, entitled "Demon Possession and Allied Themes, principally in China," and the introduction to which work was written by the Rev. Dr Ellinwood, Secretary of the American Board of Foreign Missions of the Presbyterian Church. The work was published in We must discount the "Demon" element in the title, as that is a concession to the theological. but not psychological, differentiation predicated between these phenomena and those of our Bible, and other bibles of other peoples. Dr Nevius, who was a very eminent Chinese scholar, did not rely upon his own observations alone, but, as he states, he sent out a circular of inquiry, and "in answer to this circular communications were received from all parts of China," from missionaries and native Christians

exclusively.

In a little list of the phenomena encountered, and which were almost universal, I find clairvoyance, planchette, singing in unknown languages, poltergeists, double consciousness, spirit journeys, tableturning, levitation, prophecy, possession, mediumship, speaking spirits, writing spirits, materialisation, and all the other phenomena of modern spiritualism.

How did this identity occur, if it had no basis in fact? Certainly the Chinese did not get it from us, for we find all this in Chinese annals dating back from two thousand to three thousand years, and even more. If we got all this from the Chinese, by what route did it come, and when, for we find it in all the bibles of all the races, and among all the peoples, thousands of years ago? We find it in prehistoric America. Whether Mongolian, Caucasian, Negro, Malay, Red Indian or Mexican, Maya or Peruvian or Carib, it is all the same. Now account, if you can, for these facts, if it is a fraud, a race delusion, or a mere gross

superstition.

It is not all necessary that investigations of these phenomena should be deemed unscientific or inaccurate, because entered upon and carried through with minds absolutely without prejudice in any direction whatever. This is, indeed, the only attitude of genuine science. The researches of Kepler and Newton and of all the great lights of science were of this character. In fact, aggressive scepticism is absolutely fatal to any sort of scientific progress. It warps everything it touches, and vitiates every result obtained. It is no more defensible or tolerable than the simple and unquestioning faith of those who accept everything that turns up at a séance. The safe rule is that of St John, to "Try the spirits," but not to condemn them first and try them afterwards, or not at all. A careful, honest, unprejudiced and continued series of experiments will convince almost anyone, even if conducted

among a few personal friends only, that there is absolute truth in these manifestations, be their sources what they may, and that they are extrahuman in character, and are, at all events, entirely compatible with the universal belief, which has always prevailed, as to the validity and character of the phenomena. Startling effects need not be expected, but they are unnecessary, for the slightest results are of just as much importance to the scientific investigator as those of the most astounding character. And even these latter will sometimes occur most unexpectedly. But a single experiment is totally worthless. Pat, on being told that feathers in a pillow were nice to lie on, took a feather and laid it on a rock, and socked his head down on it—"Howly blazes," he ejaculated, "if one of thim is as hard as that, what would a whole pilly-full be like?"

No one need expect to learn anything practically about spiritual phenomena who is not willing to give time, patience and continued labour, and incur some expense besides. The same is true of chemistry, geology, or even of work in a machine shop. There is a whole literature to be studied; there are materials to be procured; there are mediums to be consulted and often rejected after many consultations; there are times and conditions to be observed; there must be thought, study, comparison and investigation.

One must go through this education, just as education of every other sort must be acquired. But as a chemist after long study and practice becomes recognised as an authority in chemistry, so the same is true of a mathematician, a geologist, an astronomer, an anatomist, or a student of any branch of science or knowledge; but it is far different in the science of spiritualism. Here among so-called men of science the very opposite opinion prevails; not only do they refuse to investigate themselves, but they consider that those who have investigated longest and most carefully know least about it, and are not only arrant frauds, but arrant fools as well.

There is an Arabic proverb which says, "Ask advice of the traveller, not of the learned"; but in

these cases the rule is to turn the traveller out of court, to deny him a hearing, to pour contempt and obloquy upon him, and then sit down in a comfortable library, after a good dinner, and prove that what they thought he meant to say was all a pack of lies, and that, irrespective of his credibility or experience as a witness, on the broad ground of immaculate, heaven-sent and infallible a priori, not the genuine a priori however, but their own little, vain, ignorant, and perpetually exploded a priori. That is the thimble-rig by which the ball can be put under any cup by these ingenious and self-satisfied charlatans.

How any branch of knowledge could be successfully pursued under such conditions it is impossible to understand. But it is by no means necessary, for it is well known that the world of science has always advanced by impacts from without, and not by movements from within. Whenever the aggregated movements reach a certain momentum, and produce a certain outside pressure, the world of science, like an amœba, takes them into its body, and adjusts itself to a new centre of gravity, and then rests as a whole again, while the processes of deglutition, digestion, assimilation and nutrition proceed within. When another great series of facts presses upon it with sufficient force, the process is repeated, and it is thus that science has grown. This conservatism is often of value, but that the process described has been the actual one pursued, anyone can readily demonstrate by considering that all the facts of all the natural sciences were discovered and incorporated successively, and that, in any science, it is only necessary to go back a few years to find a totally different set of facts, a totally different set of deductions, and totally different hypotheses and theories. The same will be true in the future, and that science only deserves the name which is ever and willingly shifting its ground, and thereby ever advancing. There is no advance in what stands still; there is no discovery in the fear of what may be discovered; and there is no truth in concealment to save a theory. There is rascality there.

One of the most inexplicable things in the whole history of human knowledge has been the attitude which modern science in general, and especially through many of its recognised leaders, has taken with reference to the question of extra-human consciousness. It is not that it was a new question sprung upon it—the question was as old as mankind, and was always proven and accepted as proven by mankind in general; it was not that it was unimportant, because it is concededly of transcendent importance. If human consciousness itself is the highest of all human things, then its origin, development and extension are of its very essence. The fundamental difficulty, in reality, was not that consciousness should survive after the transition called death, or that it should be an extension or focalisation or development of an extra-human outlying consciousness; these were not the primary difficulties, but the fact that consciousness should exist at all. It was only by an unscientific familiarity with this fact that its recognition as a fact was not accorded its stupendous importance; for the thing itself, if conceded, takes away in the concession nearly the entire difficulty in recognising or demonstrating other forms or survivals of consciousness. If men can be known to live at all in Europe, it is not much more difficult to accept the demonstration that men also live in Asia or America, or that the men of one country have been derived from sources in other countries, by immigration or accident.

CHAPTER XI

THE BAN OF a priori

It is an astounding thing that men of science, instead of studying the forms of consciousness in general, with the same care and labour which they have bestowed upon types of paleontology and their connections, and without bias or prejudice, should abandon all this field at hand, and go back for a basis to a hypothetical quality called "irritability," which was then compared with physiological bile secretion or the "aquosity" of water, and endeavour to thus painfully trace, with futile results, the long line of consciousness up to a Shakespeare. And, in the face of all this, Professor Tyndall was still honest enough to declare that between matter and mind there existed an intellectually impassable chasm; Huxley declined to accept the title of a materialist, and yet many leaders of these classes of physicists left the whole realm of living nature at their feet and all around them, to burrow in soil replete with death, and not with life.

Dean Swift, in his celebrated tale of Gulliver, had his mythical hero discover a place where the philosophers and men of science spent their whole lives amid filth and nastiness, in endeavouring to extract the already expended sunshine from cucumbers, or restore human offal to its food state again, and we must indeed go to such sources to find an analogue. Huxley himself, in his answer to 'Mr Gladstone and Genesis,' defined science, in his lucid

style, as follows :-

"To my mind, whatever doctrine professes to be the result of the application of the accepted rules of inductive and deductive logic to its subject matter, and accepts, within the limits which it sets to itself, the supremacy of reason, is science. If nothing is to be called science but that which is exactly true from beginning to end, I am afraid there is very little science in the world outside mathematics. Among the physical sciences I do not know that any could claim more than that each is true within certain limits, so narrow that, for the present at any rate,

they may be neglected."

But when a committee of the London Dialectical Society was formed, in 1868-1869, to investigate these very questions, and, if possible, extend these limits, and composed of thirty-three of the most capable men in Great Britain, of whom the celebrated Alfred R. Wallace was one member, and the Rev. Dr Charles Maurice Davies, of the English Church, another, and Mr Huxley was invited to become a member, to investigate these very questions, in the precise manner demanded by him, for science, he replied as follows:—

"SIR-I regret that I am unable to accept the invitation of the Council of the Dialectical Society to co-operate with a committee for the investigation of 'spiritualism'; and for two reasons. In the first place, I have no time for such an inquiry, which would involve much trouble and (unless it were unlike all inquiries of that kind I have known) much annoyance. In the second place, I take no interest in the subject. The only case of 'spiritualism' I have had the opportunity of examining into for myself, was as gross an imposture as ever came under my notice. But supposing the phenomena to be genuine—they do not interest me. If anybody would endow me with the faculty of listening to the chatter of old women and curates in the nearest cathedral town, I should decline the privilege, having better things to do.

"And if the folk in the spiritual world do not talk more wisely and sensibly than their friends report

them to do, I put them in the same category.

"The only good that I can see in a demonstration

of the truth of 'spiritualism' is to furnish an additional argument against suicide. Better live a crossing sweeper than die and be made to talk twaddle by a 'medium' at a guinea a séance. I am, sir, etc.,

T. H. HUXLEY.

"29th January 1869."

An eminent writer, commenting on this ex-

traordinary letter, remarks:

"If (as the Professor would probably have admitted) a very large majority of those who daily depart this life are persons addicted to twaddle. persons whose pleasures are sensual rather than intellectual—whence is to come the transforming power which is suddenly, at the mere throwing off of the physical body, to change these into beings able to appreciate and delight in high and intellectual pursuits? The thing would be a miracle, the greatest of miracles, and surely Professor Huxley was the last man to contemplate innumerable miracles as part of the order of nature; and all for what? Merely to save these people from the necessary consequences of their misspent lives. For the essential teaching of spiritualism is, that we are all of us, in every act and thought, helping to build up a 'mental fabric' which will be and will constitute ourselves, more completely after the death of the body than it does now. Just as this fabric is well or ill built, so will our progress and happiness be aided or retarded."

Is not this of importance enough to interest a philosopher or a physicist? Can anyone for a moment consider the stupendous results to every individual, to the whole human race present and future, to the cause of education, morality and justice, to have it known beyond doubt or question, and to the meanest as well as to the highest intellect, that, as we sow here we shall reap there; that ignorance here develops its full penalties there; that wrong and oppression here must be paid for in agonising growth again from far down in the scale, and over long, long periods of time, till final release shall come by toil and privation compared with which

every unjust pleasure here is not of a feather's weight, and that even then the endless, remorseful memory will perhaps remain—was all this a thing not of sufficient interest to make it worth some trouble and

annoyance?

The same criticisms were made upon all original investigators; when Franklin experimented with his kites, his work was ridiculed in similar fashion, and when his papers on lightning conductors were exhibited to the French Academy they were ignominiously thrown out. He was asked "Of what use is all this kite-flying?" and his noble reply still has, with accumulated momentum, its original force—"Of what use is a baby?"

The baby now carries mankind on the wings of the wind, speaks through the free air from continent to continent, and will soon be the dominating power of the world, and Franklin, even though he had done no more, would stand at the front among the great apostles of science. Where now are his de-

tractors?

In 1869 a writer in *The New York Tribune* narrates a conversation with Herbert Spencer, on the question of the communion of spirits with mortals, in which Mr Spencer "met the facts by saying that he had settled the question on a priori grounds."

This is the favourite, in fact the only way, in which this question has ever been settled against the

facts.

But Alfred Russel Wallace, in considering these subjects, says: "If there is any onething which modern philosophy teaches more consistently than another, it is that we can have no a priori knowledge of natural phenomena or of natural laws. But to declare that any facts, testified to by several independent witnesses, are impossible, and to act upon this declaration so far as to refuse to examine these facts when opportunity offers, is to lay claim to this very a priori knowledge of nature which has been universally given up." Ah no! The problems of nature and life are not of this sort. To ape the a priori of science is to ape the a priori of God.

For, to quote Tennyson's "In Memoriam,"

"Life is not as idle ore;
But iron dug from central gloom,
And heated hot with burning fears,
And dipped in baths of hissing tears,
And battered with the shocks of doom
To shape and use."

PART II



CHAPTER XII

SUMMARY OF PART I.

In the previous part of this work I have endeavoured to show that the basis of all religions, of whatever race, country or age, was the same, and that this basis is precisely identical with the claims and practices of modern spiritualism. I also endeavoured to show that none of these various religions ever claimed to be the sole source of the phenomena manifested at their birth, if any of them can be said to have had a birth, excepting with the birth of man himself, for, as Tylor says, in his "Primitive Culture," "The thoughts and principles of modern Christianity are attached to intellectual clues which run back through far pre-Christian ages to the very origin of human civilisation, perhaps even of human existence."

I have also endeavoured to show that this universal belief, in all times and ages, and among all peoples, is valid evidence of its truth—that is to say, it was either created into man when man was first created, or else was revealed to him as a spiritual complement, and these spiritual powers were put into his possession, with spiritual intercommunication between the individual intellects or spirits of the race, and also with outside contact with and recognition of that other and higher and vaster part of intellect or spirit in which "we live and move and have our being."

I have endeavoured to deal with religion as a whole as well as with its special sub-religions or divisions, and these different religions may be comparatively higher or lower in the scale as we may conceive them, but they are God's living and mani-

81

festing witness in every age and to every people; and I have shown that the grand psychical conceptions underlying them are fundamentally as high and pure in the earliest as in the later ages, and among peoples low in the scale of humanity as among those

higher.

Human dwellings, be they dug-outs, or of mud, stone, brick or marble, and however diverse they may be in extent, architecture or external appearance, are substantially identical within. Some are larger and better furnished, some have many chambers, others but a few; but every one has a recognised place for cooking, one for eating, one for sleeping, and one for rest, ease and the higher life, and we note these things at once, and they are the evidences to us that each is a dwelling-place for men, simply because men are essentially alike, and the wants and adaptations and satisfactions of one are the wants and adaptations and satisfactions of all.

The intelligent view brings the common revelation, because it comes from the experiences of our common humanity. So it is with the recognition of the Divinity and of the future life, which are inseparable. God reveals Himself through all religions, just as humanity reveals itself through all dwelling-places, and our religious knowledge could not be so uniform unless there were a common source of intuition and knowledge, and the only possible source is revelation, free and uniform, from a divine original, which, while working on a living free will in men, is yet "the same yesterday, to-day and for ever."

Let me quote here the following from Professor J. Estlin Carpenter, of Magdalen College, Oxford:—

"But we now know that the Bible is by no means the only collection of religious teaching which antiquity created. The last century has brought to light the mighty literatures of the empires and peoples of the East. From the Nile to the Ganges, from the ancient mounds of Mesopotamia to the temples of China and Japan, whole libraries have been recovered, showing that everywhere among the more advanced peoples religion has embodied itself in law and hymn, in story and prayer. The student finds again that his idea of revelation must be widened; he cannot seclude one literature in a sacred enclosure, and declare all the rest profane. He must frankly treat all by the same methods, apply to all the same tests, and judge all on the same principles. In doing so he wins one result of incalculable importance. Religion appears as something that is practically universal, a part of the higher experience of the whole race. That may not be a demonstration of its truth. But it proves that in one side of his nature man has been always seeking after the unseen; and in one aspect his efforts to find it may be described as the response of his spirit to the constant appeal of the boundless world confronting and surrounding him, 'Understand me, interpret me, trust me, and work with me,' and he adds, 'to these testimonies each generation makes its own additions, so that the record continually gains in weight and significance.""

Romanes defines religion as follows:—"By the term religion I shall mean any theory of personal agency in the universe belief in which is strong enough

in any degree to influence conduct."

That is to say, religion demands, acknowledges, and is essentially based upon a personal, spiritual, superhuman, operative agency in the universe acting upon man. Bear in mind that *personal* does not imply personality in the human sense (the Bible tells us God is a spirit), although we do not yet know the extent and scope of what we call our "personality"; it certainly, as we now know, transcends our physical body, and has phases and connections far transcending what, only a few years ago, science ignorantly decreed it to be.

Spiritualism in all its broader aspects is thus included in religion; but not that emasculated system of earth-bounded morality, without religion, or without regard to religion, which passes under the name of ethics, and ethical culture, pure and simple, and which has its cult, as Comte tried to manufacture a god, out of a composite humanity, just as photographers make a composite photograph of

a thousand women, or other people, to show the "type," when the result is to show an ingeniously contrived picture of a monstrosity which never existed on earth or elsewhere, and without sense, soul or intellect—a sort of Frankenstein, with disjecta membra juxtaposed from everywhere, and with soul and individuality lost in the nowhere.

Ethics is all right in its place, but it is a consequence, not a cause, not of what each one thinks he believes, or believes he thinks that he would like to do, but of learning what he ought to do; and there is no learning without a better informed teacher, and no knowledge which does not come from a higher source of knowledge; simple, common, cheap, physical evolution in itself negatives all such factitious and sporadic systems: no stream can rise higher than its source.

These are the "moral satisfactions," Romanes, "which always land us in misery." distinguished writer and man of science well says, in his latest writings: "Physical causation cannot be made to supply its own explanation, and the mere persistence of force, even if it were conceded to account for particular cases of physical sequence, can give no account of the ubiquitous and eternal direction of force in the construction and maintenance of universal order."

"To account for this universal order," he tells us in another work, "it seems but reasonable to conclude that the integrating principle of the whole—the Spirit, as it were, of the Universe—must be something which, while holding nearest kinship with our highest conception of disposing power, must yet be immeasurably superior to the psychism of man."

And he defines nature as something which "thus becomes invested with a psychical value as greatly transcending in magnitude that of the human mind as the material frame of the universe transcends in its magnitude the material frame of the human body"; and adds, "if the ultimate constitution of all things is psychical, the philosophy of the Cosmos becomes a 'philosophy of the Unconscious' only because it is a philosophy of the superconscious."

Says Charles Darwin, in a letter written in 1873: "The impossibility of conceiving that this grand and wondrous universe, with our conscious selves, arose through chance, seems to be the chief argument for the existence of God."

As no one can believe what it is impossible to conceive, this statement of Darwin amounts, in his view, to a demonstration, if "our conscious selves" have any existence, for in the absence of consciousness, or mind, or intellect, there is no faculty or means for conceiving or believing anything whatever.

Professor Momerie, of King's College, commenting on Darwin's letter, says: "Whoever believes in its accidental origin must have a singularly constituted mind. In comparison with such a supposition, the most extravagant vagaries of a theological fanatic, the wild imaginings of a raving lunatic, are calm and

sober sense."

I have endeavoured to show, with the universal knowledge and acceptance of the facts and phenomena of spiritualism everywhere and in all ages, that the later-born physical sciences, the new-comers, had no right whatever to put it on trial against an a priori. and condemn it unheard. They had the right to put it under examination and carefully observe and determine its facts and phenomena, and their interpretation and validity, just as these sciences had to do with the other beliefs and phenomena of the past, such as the tides, ball-lightning, meteorites, the ether, the atmosphere, the stars of space, and, later, the phonograph, the phenomena of steam, electricity, heat and light, etc., but this is precisely what the newborn science did not do, what it refused to do, in fact, and could not be made to do.

It abandoned, in dealing with these phenomena, the scientific method, which alone gives a science any possible value or scope, in favour of an a priori, which is the death of science, and the suicide of its methods; I have shown that this a priori was in itself a grosser superstition than the fetich cult of "a rag and a bone and a hank of hair" amid those mid-jungle and apelike Africans, who, with leaps and howls and slash-

ings, "Worship Mumbo-Jumbo in the mountains of the moon." The "scientific method" is the only correct method, but to confuse what passes for scientific method, in dealing with these subjects, with valid scientific achievements, is to reason in a circle, and beg the question when the first break in con-

tinuity is reached.

As for these concrete achievements of physical science, in the form of solid, boiled-down and permanently settled questions, fundamental in character, subject to no further revision, and going to build up a completed structure which, as it approaches completion, will require no overhauling of what has been already secured and built in, no reversal of what was so confidently bottled up and labelled, and no intellectual shame for what was so boastingly spread out for the public to admire and accept, I have already quoted the words of Huxley, one of the most prominent of the physicists of his day, so many of whom sought to crowd the minds with fancies in the guise of facts (as our school teachers do, with exploded theories of physiology, and untenable hypotheses of the action of unfamiliar foods and drinks, and all sorts of ipse-dixits, to the neglect of reading, writing, ciphering, morals and conduct), but this eminent authority nevertheless conceded that "Among the physical sciences I do not know that any could claim more than that each is true within certain limits, so narrow that, for the present, at any rate, they may be neglected."

Now if this statement means anything at all, it means that in order to learn the available amount of actual and original scientific proof, and its true limits, in any of the physical sciences, one may take a pair of compasses and describe the very minutest circle he can possibly draw, and then, the limits are "so narrow that, for the present, at any rate, they may be

neglected."

I fully understand this, of course, as applied to the scientific treatment and results in dealing with the great fundamentals of science, but it is not I who say this, but one of its greatest apostles.

Yet many eminent physicists of those days have set up spirit, as it were, like a lying malefactor, on so-called trial, and who yet would hear no witnesses. Even the tragic old church wanted witnesses to properly damn a soul. But these dreamers, sitting by the rushlight of a fatuous a priori, "damned it like a gentleman," without soiling their perfumed fingers. But how?—As the Light Brigade, "Theirs not to reason why," charged with its sabres, a few hundred strong, the forts, batteries and armies, accumulated and prepared during years of labour, and then staggered back broken and defeated. Said the French marshal who looked on, "It is magnificent, but it is not war."

CHAPTER XIII

MIRACLES

In this second part of my book I shall endeavour to deal more especially with the relationship existing between the methods of spiritualism and the method of science, which is the only method of reaching truth in our present stage of human existence, for even intuitional knowledge, first-hand knowledge, must stand at the bar of scientific method. As the sacred writer says, we must "prove all things, and hold fast to that which is good."

One of the most powerful arguments of modern physicists against so-called miracles has been based on Hume's argument in the tenth chapter of his work on Human Understanding, and this argument pleased its author so much that he prefaced it by saying, "I flatter myself that I have discovered an argument which, if just, will with the wise and learned be an everlasting check to all kinds of superstitious

delusion."

He first states two definitions of a miracle, both of which, by the way, are philosophically and scientifically defective. The first definition is that it "is a violation of the laws of nature," which it would only be possible to assert if we assume that we know all the laws of nature. But the Author of all the laws alone knows all the laws, which could only reach us by revelation, certainly not by human experience, and this revelation is one of the very things which his argument is intended to disprove.

The second definition is that it "is a transgression of a law of nature by the Deity or by the interposition of an invisible agent." The error is that if it is by the Deity then it is not a transgression, because the Deity,

having been thus named by Hume, is assumed to be the author and operator of all the laws of nature; if "by the interposition of an invisible agent," then, if the agent be already known, even if invisible, it is not a miracle at all, while, if it be unknown, it may yet become known later on, as all known agencies of nature have become known; so that it cannot be considered a transgression of any laws until mankind has ceased to investigate and discover because nothing more is left us to investigate and discover—that is, until mankind has ceased to exist, for certainly mankind can never become omniscient, and at that time it will not matter what the answer may have been.

Hume then lays down his great discovery as follows:—"There must therefore be an uniform experience against every miraculous event, otherwise the event would not merit this application. And as an uniform experience amounts to a proof, there is here a direct and full proof, from the nature of the fact, against the existence of any miracle, nor can such proof be destroyed, or the miracle rendered credible, but by an opposite proof which is superior."

If "an universal experience" is to have the validity given to it by Hume, anyone can see that it must have destroyed his whole argument, since, as I have shown, the universal experience of all past ages throughout the world was for, and not against, the facts of spiritualism, including so-called miracles, so that those who solitarily endeavoured to deny these were themselves setting up a miracle against cold and sober law. But Hume himself, though used as a cudgel by so-called men of science, was in no sense a man of science at all, and his whole argument has repeatedly been riddled into worthlessness, and its false assumptions and contradictions fully exposed.

As Mr A. R. Wallace says, "It is radically fallacious, because if it were sound, no perfectly new fact could ever be proved, since the first and each succeeding witness would be assumed to have universal experience against him. Such a simple fact as the existence of flying fish could never be proved if

Hume's argument is a good one; for the first man who saw and described one would have the universal experience against him that fish do not fly, or make any approach to flying; and his evidence being rejected, the same argument would apply to the second, and so to every subsequent witness; and thus no man at the present day who has not seen a flying fish alive, and actually flying, ought to believe that

such things exist." Thomas H. Huxley, writing on Hume's assumed law of miracles, puts the matter in a nutshell, the whole question turning on the sufficiency of evidence, which is what spiritualists have always contended for. "Nobody can presume," says Huxley, "to say what the order of nature must be; all that the widest experience (even if it be extended over all past time and through all space) that events had happened in a certain way could justify, would be a proportionately strong expectation that events will go on happening, and the demand for a proportional strength of evidence in favour of any assertion that they had happened otherwise. It is this weighty consideration, the truth of which everyone who is capable of logical thought must surely admit, which knocks the bottom out of all a priori objections either to ordinary 'miracles' or the efficiency of prayer, in so far as the latter implies the miraculous intervention of a higher power. No one is entitled to say, a priori, that prayer for some change in the ordinary course of nature cannot possibly avail."

Romanes is equally emphatic in his opposition to Hume. He says, in his "Thoughts on Religion": "As an illustration of impure agnosticism take Hume's a priori argument against miracles, leading on to the analogous case of the attitude of scientific men toward modern spiritualism. Notwithstanding that they have the close analogy of mesmerism to warn them, scientific men are here quite as dogmatic as the straitest sect of theologians. I may give examples which can cause no offence, inasmuch as the men in question have themselves made the facts public viz.:—refusing to go to a famous spiritualist;

— refusing to try, in thought-reading [Note: On the whole I have thought it best to omit the names]. These men all professed to be agnostics at the very time when thus so egregiously violating their philo-

sophy by their conduct.'

And he is equally severe with regard to faith. He says: "What a terrible hell science would have made of the world, if she had abolished the 'spirit of faith' even in human relations. The fact is, Huxley falls into the common error of identifying 'faith' with opinion."

The distinction of course is that, while faith is a product of the intuitive and supernormal, opinion is a product of the reason and normal. This will be

fully treated in a succeeding chapter.

This question of miracle is by no means as simple as it might seem. The miracles of one age are the scientific phenomena of the next. The purpose, even, of a miracle may be subserved perfectly if it be performed by means of natural laws unknown to the performer, and received as a miracle by the observers, equally ignorant of the same natural laws. And this indeed may be extended, in our present state of knowledge, to all phenomena the direct explanation of which is unknown. A telepathically received notice of a coming eclipse communicated in a dream to an Indian medicine-man totally ignorant of the possibility of calculating eclipses, and by him revealed to his fellow-tribesmen, equally ignorant, as a prophecy by a dream spirit, would in so far be a geniune miracle, while to us behind the scenes it might appear as an unconscious deception. Before the days of the phonograph, had such an instrument been operated in secret in any company, whether scientific or not, there would have been but two possible explanations, the one that it was fraudulent, and the other that it was supernormal; and, excluding the former, which could have been done, the latter would have been the only possible explanation, for all our scientific as well as popular knowledge excluded as possible the simultaneous rendering of the various tones and progressions of a multitude of instruments in a complex

harmony, by means of a single metal pin travelling along a single groove in a wax cylinder. Until the days of Newton the tides were miraculous, and to this day gravitation still continues to be miraculous, and so of all the fundamentals of knowledge or science which have not been searched out and explained (not merely named, for that is no explanation), and few of them, if any, have been so searched out and explained.

"Do you believe in miracles?" I was sneeringly asked in one of our discussions. I asked my questioner what he meant by "miracles," and he replied, "I mean the New Testament miracles, such as changing water into wine, and the like." "Oh," I said, "I thought that you referred to real miracles, such as the growing of a stalk of grass, or the chick in the egg"; whereat he was surprised, for he evidently knew all about such matters, which were, doubtless, not miraculous at all. Then I told him that while I had nothing to say, pro or con, as to the actual occurrences in question to which he referred, yet I fully believed in the scientific possibility of a great many of the so-called Bible miracles, and that without considering their divine origin in any exceptional sense at all; and that it seemed strange to me that while sceptics readily accept production by a fortuitous clashing of chemical atoms, of living protoplasm, a most complicated substance, they are ready to deny the possibility of a like production, when mind and purpose are superadded, of mere wine, a liquid hardly complicated in its composition at all. Perhaps it was that the one was a record, and dangerous, while the other was a pleasant fancy to the dilettanti.

The difference, chemically, between water and wine is very slight, and, if wedding parties in those days were like some that I have attended, there would have been quite enough carbon dioxide in the atmosphere to supply that requisite element, outside of other possible sources; and as for flavouring

ethers!-

[&]quot;The river Rhine, it is well known,
Doth wash your city of Cologne;—
But tell me, Nymphs! what power divine
Shall henceforth wash the river Rhine? 14

To convert water into wine would require much less of change than to convert apples into alcohol, or starch into sugar, both of which are constantly

being done on a large scale.

To put such a "miracle" on the lowest plane possible, I might mention that in the fall of 1864, while we were facing Richmond in Virginia, a couple of our keen-witted sutlers learned that the paymasters were about due, and borrowed from the division commissary a number of empty molasses barrels, through the bung-holes of which they inserted a few sprigs of spruce or white pine, and then filled the barrels with water, setting them out in a sunny nook. By the time the paymasters had filled the soldiers' pockets with more cash than many of them, at the time, knew what to do with, the "miracle" had been performed, and a pretty good article, certainly a very stiff article, of spruce beer was on tap, and it was ladled out at a dime a tin-cupful, and the stock on hand was exhausted in a few hours. The only miracle was in applying the inventive idea to the matter in hand.

I adduce these simple examples, not to deny the moral effect of what occurred at the wedding narrated in the gospels, but merely to show that the "continuity of nature" required a very slight shake, if any at all, to take psychical advantage of the physical transformations constantly going on everywhere.

As for the miracle of driving the "demons" out

As for the miracle of driving the "demons" out of the demoniacs, and into a lot of swine, that is perfectly credible, if the phenomena of obsession by earthbound spiritual presence is to be accepted; and the evidence for poltergeists and obsession is about as strong, and from as high sources, as human testimony can make it. As for Jonah's triumphant odyssey into and out of the "great fish," there is nothing scientifically incredible in that story. I am not sure that it was even narrated as an actual occurrence, but analogous cases have often been reported, one of a Norwegian sailor, I believe, who pretty nearly duplicated the old missionary's experience. I once, myself, cut out of a moderate-

sized water-snake a large live frog, a considerable part of whose cuticle had been already macerated or digested away, and the animal hopped off with a grunt of thanks—possibly towards Nineveh, which

was a great country for bull-frogs.

As for the Resurrection, I have discussed that elsewhere in these chapters, with excellent authority in its favour, but in the present uncertainty as to the presence or absence of life in doubtful cases, it is impossible to argue the matter intelligently until science can present some simple and certain test of death,

which it has not yet been able to do.

Says Professor William H. Thomson, in his address in 1892, before the Philosophical Faculty of Columbia College: "In the whole sisterhood of the sciences it is biology which depends most on inference for her very life. Strip biology of everything except the concrete knowable, and it would be hard to imagine what a congress of biologists would find to talk about. If they began with mentioning living protoplasm—what is life?—how much do they know? that's the word now know, that said protoplasm is living, or not living, or how much living, or when it began to live, and what it does when it stops living?"

Professor Michael Foster says: "The difference between a dead human body and a living one is still, to a large extent, estimated by drawing inferences

rather than actually observed."

Even after death, bodies exhumed are often found to have continued to grow hair, which, short and scanty when buried, is now found to be long and

massed up.

The problem of life is enormously larger than self-styled physical specialists ever dream it to be. Says Lord Kelvin, in *The Fortnightly Review*, March 1892: "The influence of animal or vegetable life on matter is infinitely beyond the range of any scientific inquiry hitherto entered on. Its power of directing the motions of moving particles, in the demonstrated daily miracle of our human free-will, and in the growth of generation after generation of plants from a single

seed, are infinitely different from any possible results of the fortuitous concourse of atoms."

Von Hartmann, in his "Philosophy of the Unconscious," adduces an example, from the severing one of the annelids, of this unconscious power of life: "If cut in two by a cross section nature builds up each of the severed parts into a perfect animal again, reconstructing a head with its proper appendages for the lower half, and a tail and its adjuncts for the upper one. "It would seem," says Von Hartmann, "as if there must be present in each of the severed parts an idea of what was wanting in order to build up again the whole typical form of the species; and this idea is the pattern or model according to which the unconscious works. From each of the cut ends a minute drop of protoplasm exudes, and this is quickly and deftly moulded in each case into such prolongations of the alimentary canal, the blood-vessels and nerves, as are needed respectively for the upper and lower half of the animal as a whole, several organs in one of the reconstructed moieties having nothing analogous to them in the other. Merely physical causation, blind mechanism, cannot explain such a process: Will and Intellect must co-operate in the work."

Professor Thomson describes the development of a whale: "When his material body is too small to be seen by the naked eye, dwelling in an ocean of food the size of a pin's head, he is a greater living thing than when his bulk is more than that of two thousand men, because by that time he has outlived most of the capacities which were in that vanishing speck of matter with which he began. In that little mass of protoplasm there was something which not only determined how every cell in his future body should come into being, even as parts of legs and feet which he would never use throughout his life, but keep tucked up deep within his body; but, doubtless also that he should develop some things derived, not

from his parents, but from his grandparents."
Say Stewart and Tait, in their "Unseen Universe,"

"We are led from these two great laws, as well as from the principle of Continuity, to regard, as at

least the most probable solution, that there is an intelligent Agent operating in the universe, one of whose functions is to develop the universe objectively considered; and also that there is an intelligent Agent one of whose functions it is to develop intelligence and life."

So Professor Thomson says: "The facts of sleep and awakening point more, in our opinion, to a visitor from outside who can take up one of the two instruments as he chooses, in the human music-hall, and can play with them any variety of melodies, because it is he and not the instrument who is the real cause of the music."

"In fine," say Stewart and Tait, "we conceive that the New Testament plainly asserts that what Christ accomplished was not in defiance of law, but in fulfilment of it; and that his ability to do so much was simply due to the fact that his position with reference to the universe was different from that of

any other man."

Even the virgin conception of Jesus (which has proved to be one of the most serious difficulties confronting even many devout believers) is not at all incredible or unscientific. Among the lower animals such examples are very common. Silkworms are now habitually hatched from virgin eggs, as experience shows that they produce better fibre, and Dr Loeb has recently been hatching out starfish and medusæ indifferently by parthenogenesis, or bisexually, as he added a solution of magnesia salt or not to the surrounding menstrum. Even among human beings the productions of large portions of a human fœtus, with many parts organised, from unquestionable virgins, for example female infants of from two to six years old, are not uncommon, and there are a number of cases reported in which whole fœtuses are found as false conceptions in the male. Anyone curious in these matters may read of many such cases in Dr Gould's "Curiosities of Medicine," a recent work, or Dr Eve's "Collection of Remarkable Cases in Surgery," published in 1857 by the J. B. Lippincott Company of Philadelphia.

Among the cases related in the latter work, which were operated surgically, are (1) a female child of two years and nine months pregnant with her sisterdeath; (2) Tumour in the rectum containing the debris of a fœtus-extirpation (the case of a little girl aged six years); (3) A testicle containing fat, hair, bony and cartilaginous formations—castration; (4) An imperfectly developed fœtus in the right testicle of an infant; (5) Fœtus in a fœtus. In this case a young woman was delivered of a living six or seven months' child, the latter having a large membranous sac containing a placenta and a dead fœtus of about four or five months; (6) a human fœtus developed in the mesentery of a boy fourteen vears old--death. Another remarkable case is recorded at length in this work of a girl of two years and nine months old, who apparently was afflicted with ascites. She died about three hours after the doctor's arrival, and he was permitted to make a post mortem examination. Within the abdomen was a large membranous sac, containing between three quarts and a gallon of semi-putrid yellow water. "Within this cavity was found a monster, or imperfect child, and also an animal substance of a whitish colour. The monster weighed one pound and fourteen ounces. The substance weighed two ounces, was rather of an oval figure, and was connected to the child from which it was taken by a cord that had some faint resemblance to the umbilical." Of this fœtus itself, the author says, "Its thighs were drawn up to the abdomen, and attached to it in places; the left resting on the shoulder and reaching as far as the back part of the head; the right resting or pressing on the back of the right hand. The left leg is imperfect, and lies back along the thigh, to which it has grown. The right leg is also imperfect, its foot is suspended over the head. On one foot are three toes; on the other a small appearance of two. From the knees to the shoulder there is considerable perfection of form. Its sex is indistinctly marked; the indications are of the feminine. The left arm should rather be called a stump than an arm, it has no hand: at the end of the stump is a nail. The right arm is large and long, it has three fingers and the thumb. The head is very imperfect; it rests upon the breast between the knees. It has neither ears nor eyes, not appearance of any substitute for either; no mouth, nor anything that has a near resemblance to it. There is on the left side of the face, or rather that region of the head which the face should occupy, a small prominence which contained three teeth, one canine and two incisors; they are all about the size of the teeth of a child of two years old. On the back part of the head is hair of dark or rather of an auburn colour, eight or nine inches long. The body is seven inches long and ten inches in circumference. The thighs six to eight inches in circumference. The arm five inches long; the stump not quite four inches in length."

Certain psychical phenomena of a suggestive character accompanied the progress of this case. "She was of the ordinary size of children at her age, had dark hair and eyes, and would have been handsome, but for a gloom and melancholy that sat upon her countenance, which made her appearance peculiarly interesting. She looked like a child of grief. Her countenance exhibited evidences of a good understanding, and her little tongue confirmed it. During the last nine months of her life she had strongly marked, the 'longings' of pregnant females."

It is very credible that by mere psychical control and the substitution of order for disorder in development, such an offspring might have been born living and perfectly formed, and reached adult life, to all appearances similar to human beings produced by the sexual union in the normal manner. Whether it ever occurred or not I do not know, but such an event is not at all incredible, and may have occurred in other cases besides the one I am considering. It is to me, indeed, a curious fact that critics should have undertaken to prove that it could not have occurred in Judea, by showing that similar births had been reported elsewhere, and that therefore all these cases were to be rejected.

I have spoken of the dogmatic temerity of a physical specialist in dealing with the problems of life and mind, as foreign to him as physical pursuits are to a dogmatic theologian. But there are comparatively few of these physical specialists who will turn on their own specialty and abuse it in the name of a psychology of which they are, in such case, concededly and necessarily ignorant. In fact, instead of fouling their own nest, they are more apt to conceal and pervert everything which threatens it; they are ready to "fight at the drop of a hat." But when theologians of a certain type, filled with a little cheap and pinchbeck physical science, become aroused, they bring to mind the opening words of Elizabeth Stuart Phelps in her "Singular Life": "Perhaps there is no greater curiosity of its kind than that of a group of theological students discussing science."

Only recently an ecclesiastical trial has been going on—a clergyman of this type, of one of the churches which claims to date its hierarchy back to Peter, having "written a book." This clergyman's defence was that he believed the Bible, and was honest. But he wrote in his book, "Jesus did not succeed because He was born of a virgin or because He was reported to have arisen bodily from the dead. These legends concerning Him are the result, not the cause, of the marvellous success of the man. These stories were told of Him only because the simple folk could in no other way adequately express their conception of the greatness of Jesus. Only a virgin-born could be as pure as Jesus; only a son of God could be as great as Jesus; only a life more powerful than death could have the strength of Jesus."

Now see his statement, which follows, of what he conceives to be a scientific fact. "If we are told of a certain being in human form, born of a human mother, expressing consciousness in human speech, living a human life and dying a human death, we naturally predicate of such a one a human fatherhood as well as a human motherhood, for universal experience bears witness to the fact that everyone who is the child of

a human mother is also the child of a human father. To overcome this presupposition, which is established by universal experience, would require testimony of overwhelming force. The burden of proof lies with those who deny, not with those who assert, the validity of universal experience to establish a given fact."

Of course, this is Hume's infidel argument against miracles, which I have just considered, and which all men of science have long since abandoned, because, if it were valid, science itself could never have had a beginning, or, if science had been miraculously planted where it now is, it could not advance another step. When such men as Alfred Russel Wallace, George F. Romanes and Thomas H. Huxley unite in demonstrating its fallacy, and, indeed, absurdity, it is evidence of something extremely weak in the mental constitution of a clergyman to have it revamped in the hands of a so-called "Christian," to attack the foundations of Christianity! For, as St Paul has said, without this "Our hope is vain."

Contrast this pseudo-scientific argument with Thomas H. Huxley's noble words on the same subject: "Strictly speaking, I am unaware of anything that has the right to the title of an 'impossibility' except a contradiction in terms. There are impossibilities logical, but none natural. A 'round square,' a 'present past,' 'two parallel lines that intersect,' are impossibilities, because the ideas denoted by the predicates, round, present, intersect, are contrary to the ideas denoted by the subjects, square, past, parallel. But walking on water, or turning water into wine, or procreation without male intervention, or raising the dead, are plainly not impossibilities in

this sense."

The burden of proof is quite the opposite from that of the critic, if there is any God at all, with any considerable spiritual power. For example, if Christ was altogether different from all other men recorded in history, and if His system was enormously higher than the system of all other men, then the "presupposition" is that He was created differently, either psychically, or physically, or both. We know by the testimony of two contemporary pagan writers, Tacitus and Pliny the Younger, that Christus, "in the reign of Tiberius, was put to death as a criminal by the procurator, Pontius Pilate"; and that, "Christians were accustomed to meet before daybreak, and sing a responsive hymn to Christ as to God."

Now the fallacy in the Christian critic's argument is that the "simple folk could in no other way adequately express their conception of the greatness of Jesus." But if you take away these two differences thus denied, there was no greatness in Jesus for "simple folk"; because all He offered them was the opportunity to be crucified, head downwards if they preferred, or to be boiled in oil, or fed to wild beasts or the like, and to live a life of self-sacrifice and meanness on earth, and get nothing for it afterwards; for if Christ remained dead there was no reason to suppose that any of them could do better. The critic has, in other words, put the cart before the horse. If these phenomena of Christ were real, then there was some reason to sing hymns to Him as to God, but if not, then the only God the heathen knew was the variety of them in their mythology, which were certainly quite different. There is ample evidence of the resurrection; the lost gospels, recovered in fragments, are full of it, and the mere course of events narrated everywhere, the transformation of the apostles, the spiritual power, the great cyclic movement which swept all the diverse creeds together for the first and last time in history, demonstrate that the greatest psychical powers were then at work, and science, even the boldest science, is now taking heed. It is a bad time to-day for the theological Christian to turn his head aside, and spit.

The statement in the Gospel according to St Matthew is as follows:—"Now the birth of Jesus Christ was on this wise: When his mother Mary had been betrothed to Joseph, before they came together, she was found with child of the Holy Ghost [see Revised Version]. And Joseph her husband, being a

righteous man, and not willing to make her a public example, was minded to put her away privily. But when he thought on these things, behold, an angel of the Lord appeared unto him in a dream, saying, Joseph, thou son of David, fear not to take unto thee Mary thy wife: for that which is conceived in her is

Now what the statement of this rational theologian in his own book really means is that the mother was a deceiver; the husband was a victim of trickery; the son was illegitimate; his claims were fraudulent; his resurrection a lie; and his ascension either foolishness or blasphemy, just as this critic has either relegated God to the same myth as Christ, or still left him as a surviving superstition. The crucifixion is the only scrap of reason left, and of this, the same line of reasoning, and assumption of facts a priori, would lead him to say, with Tacitus, that "Christus was put to death as a criminal," and, by the rational Jewish and Roman laws, justly.

Science, when properly understood, or when looked at even by a smatterer, gives no countenance to such opinions at all. Its scepticism is much broader, and is not directed against these few alleged facts of Christianity, but against the basic principle of every form of religion. There are very few men of science who, if they had reached the stage of acceptance of religion at all, would not accept Christianity with all its marvels (for religion itself is a marvel, only to be accepted by the recognition of the marvel of marvels, mind and will, in man and outside of man, with all its controlling spiritual powers), as the best, highest, most scientific and commonsense of all religions of all time. The only basis, in fact, which such critics have, is that attitude of physical causation which certain theological, and most physico-scientific, writers have united in accepting a priori, from a perverted view of the smallest possible experience, and which, as Romanes says, "grudges God his own Universe."

It is said that once in the interior of Arkansas a Baptist congregation expelled their preacher for lying.

He narrated, on his return from a clerical visit to Fort Smith, that he had seen men making ice a foot thick. As the Lord could not make ice more than three and a half inches thick in that country, in the winter, to say that a man could make it a foot thick in the summer was a tale so contrary to reason and experience as to be ridiculous, and the preacher was turned out of the church for his preposterous lying.

Says Benjamin Kidd, in his "Social Evolution":
"A rational religion is a scientific impossibility, representing from the nature of the case an inherent

contradiction of terms."

Says G. H. Lewes (himself an advocate of Comte), in his "History of Philosophy": "There cannot, consequently, be a religious philosophy, it is a contradiction in terms."

And Huxley, in *The Nineteenth Century* of February 1889, in dealing with Comte's "Religion of Humanity," asserted that he would as soon "worship

a wilderness of apes."

I have already quoted from Huxley that "It is this weighty consideration, the truth of which everyone who is capable of logical thought must surely admit, which knocks the bottom out of all a priori objections either to ordinary 'miracles,' or the efficiency of prayer, in so far as the latter implies the miraculous intervention of a higher power."

Stewart and Tait, in their "Unseen Universe,"

Stewart and Tait, in their "Unseen Universe," say, "In fine, we conceive that the New Testament plainly asserts that what Christ accomplished was

not in defiance of law, but in fulfilment of it."

Lord Kelvin speaks of the "demonstrated daily miracle of our human free-will," and much more, of

course, of the divine free-will.

Says Romanes, in his posthumous book, "Thoughts on Religion": "Modern agnosticism is performing this great service to Christian faith: it is silencing all rational scepticism of the a priori kind. In every generation, it must henceforth become more and more recognised by logical thinking, that all antecedent objections to Christianity founded on reason alone are ipso facto nugatory." And again,

"It is a general, if not a universal, rule that those who reject Christianity with contempt are those who care

not for religion of any kind."

Haeckel, in his "Riddle of the Universe," says: "I recommend those of my readers who are interested in these momentous questions of psychology to study the profound work of Romanes." But Romanes says "the carnally-minded would not be affected by any amount of direct evidence even though one rose from the dead—as indeed Christ shortly afterwards did."

Professor William H. Thomson, in his "Materialism and Modern Physiology of the Nervous System," says: "Incredulity is based wholly upon supposed personal experience, and will believe nothing else. Hence, it cannot be reasoned with, as it is always scornful in its reliance on this often most fallacious testimony. . . This mental trait often equally illustrates its nature, as a mental weakness, by the same persons who are incredulous about some things, exhibiting in other things the most facile

credulity."

The space, too much, I fear, which I have given to this case, is not on account of its individual importance, which is trifling, but to emphasise the fact that one totally unequipped to deal with such questions at all should plunge in, in the gratuitous effort to disrupt the foundations of a great religion, following alone those old-time speculators who wrote by a priori in times when the means of actual knowledge were not at hand; and to furnish others with a warning example of how little they should be beguiled by such sporadic and self-conceited writers, happily combining in one effort, directly or by implication, the "blatant ignorance or base vulgarity" which Romanes applied, in like case, to those "who care not for religion of any kind," and so attack that one which is nearest, and the head which is highest. Such men, when properly understood, are not dangerous, they are useful.

I think that few thoroughly capable men of science, philosophy or religion, will now dispute the

conclusion of Romanes, that "the outcome of the great textual battle [higher criticism] is, impartially considered, a signal victory for Christianity," and that "the Epistles to the Romans, Galatians and Corinthians, have been agreed upon as genuine, and the same is true of the Synoptics so far as concerns the main doctrine of Christ Himself."

As regards the so-called miracle of Belshazzar's feast (and by the way, archæology has now recovered Belshazzar and all his doings), that was simply a case of slate-writing of a type familiar everywhere to-day. Not even prevision was required, as the enemy was already at the gates, and attacking, and the end, to an observer, was obvious. It is late in the day to discredit the possibility of slate-writing. Sir William Crookes long ago reported that he had seen a detached hand come down upon a table before him, in his home, in full daylight, striking on the table with a solid body producing loud sounds. While much slate-writing is fraudulent, there is an ample residuum of the genuine.

Even the old creation narrative in the first chapter of Genesis, which is very ancient (but certainly not so that later one in the second chapter), bears evidence of divine revelation in a high degree, and would do so in a still higher degree, if it were accurately translated. Giving Brachit its correct sense, when used in the construct state, as its form shows it to be here employed, it means that the "beginning" simply refers to the beginning of the series of events about to be described, just as old nursery tales began, "Once upon a time," or a recipe in cooking, "First, catch your hare." But the three statements, first, that grass grew before the appearance of the solar body; second, that the progression was from grass to aquatic animals, and thence to land animals; and, third, that the order of development was from fish through reptiles and then birds, and thence to mammals (which would seem to the uninstructed to be most unnatural), are all strictly scientific, but were unknown even to science until very recently indeed.

I may add that the fear of "spontaneous genera-

tion," so-called, which seems to haunt the religious mind as an ever-present danger, is all unnecessary. Knowing as we do that living protoplasm is a machine and not a chemical compound, we know also that life appeared comparatively recently on earth, and that new forms of life are constantly arising, so that some time there must have occurred "spontaneous generation," which, by the way, was not spontaneous at all, but under direct control, as we now know that everything else is. Infact, the careful student will see by the language used in the beginning of Genesis that some such "spontaneous process" was employed. The ordinary translation is accurate enough here, except that the word translated God in the original is "Aleim," a plural, and used with the plural verb. "And God said, Let the earth put forth grass," "And the earth brought forth grass," "And God said, Let the waters bring forth abundantly the moving creatures" (literally, swarm with swarmers); these were the minute forms of animal life in the seas. Now here comes a new word, "God created the great seamonsters" (literally, fashioned them). "Let the earth bring forth the living creature." These were the smaller forms of terrestrial life. But now again, "God made the beast of the field." The minute and simple beginnings of life, we thus see, are treated quite differently from these later and higher forms.

With a God "in whom we live, and move, and have our being" there is nothing spontaneous, except

in our own mind, and in God's will.

Benjamin Kidd, in his "Social Evolution," well says that "the deep-seated instincts of society have a truer scientific basis than our current science."

The miracles which occur within the confines of our own bodies are, many times, as inexplicable as any that are charged as occurring outside. The mere process of metabolism is utterly incomprehensible if we run it out to its logical conclusion; and the mental miracles are equally incomprehensible. So hard-headed a materialist as Dr Hammond, whose "Sleep and its Derangements" was written from the standpoint that "when the brain is quiescent there is no mind," was compelled, in one of his clinical cases, to say of a somnambule, "I was entirely satisfied that she did not see—at least with her eyes," and again, "the sense of sight was certainly not employed, nor were the other senses awake to ordinary excitations." In the case of Mollie Fancher, in Brooklyn, N.Y., who has been examined during many years by the most eminent neurologists, we have surely a living miracle. She has for many years been blind, paralysed, without apparent sensation, without food and almost without drink, without the performance of any of the ordinary bodily functions, and yet she is bright, clear, intelligent, and I have recently seen a letter received from her most beautifully and correctly written-and, as Dr Hammond said of his case, "She did not see-at least with her eyes."

The phenomena attending the case of the Rev. C. B. Sanders, D.D., of Meridianville, Alabama, published in a little book, in 1876, entitled "X+Y=Z; or the Sleeping Preacher," are a series of miracles.

Stewart and Tait in their "Unseen Universe" discuss the question of miracles very fully. They say: "Let us here pause for a moment and consider the position into which science has brought us. We are led by scientific logic to an unseen, and by scientific analogy to the spirituality of this unseen. In fine, our conclusion is, that the visible universe has been developed by an intelligence resident in the Unseen.

"Of the nature of this intelligent agency we are profoundly ignorant, as far as science is concerned. So far as science can inform us, it may consist of a multitude of beings, as the Gnostics have supposed, or of one Supreme Intelligence, as is generally believed by the followers of Christ. As scientific men we are absolutely ignorant of the subject. Nor can we easily conceive information to be attainable except by means of some trustworthy communication between the beings resident in the Unseen and ourselves. It is absolutely and utterly hopeless to expect any light on this point from mere scientific reasoning. Can scientific reasoning tell us what kind of life we shall find in the interior of Africa, or in New

Guinea, or at the North Pole, before explorers have been there; and if this be so, is it not utterly absurd to imagine that we can know anything regarding the spiritual inhabitants of the unseen, unless we either

go to them or they come to us?"

These authors cite the fact, usually studiously ignored on the one side or the other, but never on both, for obvious reasons, that the doctrine of the Christian system is "pre-eminently one of intellectual liberty, and that while theologians on the one hand and men of science on the other, have each created their barriers to inquiry, the early Christian records acknowledge no such barrier, but on the contrary assert the most perfect freedom for all the powers of man.

"We have now," they continue, "reached a stage from which we can very easily dispose of any scientific difficulty regarding miracles. For if the invisible was able to produce the present visible universe with all its energy, it could, of course, a fortiori, very easily produce such transmutations of energy from the one universe into the other as would account for the events which took place in Judea. Those events are therefore no longer to be regarded as absolute breaks of continuity, a thing which we have agreed to consider impossible, but only as the result of a peculiar action of the invisible upon the visible universe.

"When we dig up an ant-hill, we perform an operation which, to the inhabitants of the hill, is mysteriously perplexing, far transcending their experience, but we know very well that the whole affair happens without any breach of continuity of the laws of the universe. In like manner, the scientific difficulty with regard to miracles will, we think, entirely disappear, if our view of the invisible universe be accepted, or if indeed any view be accepted which implies the presence in it of living beings much more powerful than ourselves. It is of course assumed that the visible and invisible are and have been constantly in a state of intimate mutual relation."

The final conclusion of these writers is the follow-

ing: "The truth is, that science and religion neither are nor can be two fields of knowledge with no possible communication between them. Such a hypothesis is simply absurd. There is undoubtedly an avenue leading from the one to the other, but this avenue is through the unseen universe, and unfortunately it has been walled up and ticketed with 'No road this way,' professedly alike in the name of science at the one end, and in the name of religion at the other."

The state of the s

CHAPTER XIV

THE LIMITATIONS OF PHYSICAL SCIENCE

So long as religion, or its pervert theology rather, bars the avenue against science with the dictum of dogma, and the lash of anathema, its followers, like frightened sheep, will hide in the recesses of the hills and in caves; and so long as science, or its pervert materialism rather, bars the way against spiritualism with the dictum of a priori, and the lash of superstition, its followers will also hide among the rocks, speculating in what they cannot see, and listening for the shout of victory which never comes, and never can come, from physical science. For physical science, to be physical science, must of necessity steer clear of the non-physical; but if it unfortunately does more, and denies it, then by this denial it cuts off not only its connection with all the universals, but leaves itself bare and naked when any of the great final questions are asked.

Huxley found the realm of exact physical science very small; as I have already quoted, he says: "If nothing is to be called science but that which is exactly true from beginning to end, I am afraid there is very little science in the world outside mathematics."

But mathematics, considered as a science, is amenable to precisely the same criticism. Jevons, in his "Principles of Science," says: "I am inclined to find fault with mathematical writers because they often exult in what they can accomplish, and omit to point out that what they do is but an infinitely small part of what might be done. They exhibit a general inclination, with few exceptions, not to so much as mention the existence of problems of an impracticable character. This may be excusable as far as the immediate practical result of their researches is in question, but the custom has the effect of misleading the general public into the fallacious notion that mathematics is a perfect science, which accomplishes what it undertakes in a complete manner. On the contrary it may be said that if a mathematical problem were selected by chance out of the whole number which might be proposed, the probability is infinitely slight that a human mathematician could solve it. Just as the numbers we can count are nothing compared with the numbers which might exist, so the accomplishments of a Laplace or a Lagrange are, as it were, the little corner of the multiplication table, which has

really an infinite extent."

And this concealment of the difficult problems, or the incompatible phenomena, is not confined to this science, but extends to every science, and to nearly every popular writer on these subjects. In astronomy the inexplicable and apparently irreconcilable facts are studiously ignored, and yet they must, unless explained, eventually overturn the whole accepted cosmology as hitherto taught. For example, the movements of the planets around the sun are ingeniously deduced from a series of purely hypothetical movements assumed to occur within a slowly condensing gaseous, and finally liquefying and solidifying, flattened sphere, rotating in void space, and undisturbed by outside attraction. Yet our entire solar system, sun, planets, satellites and comets together, is itself moving, as a whole, almost directly to the north with a velocity and momentum enormously greater than all the internal movements of the system combined, and the alleged origin of the planetary movements is not only inadequate to explain, but irreconcilable with, this drift through space; for all the stars of space are themselves drifting in every conceivable direction throughout space, without regard to each other, and at all sorts of velocities. This great fact alone should make pause in the theories propounded, but they have not done so, and there are thousands of other facts equally divergent, but they

are rarely mentioned or commented on; and the same is true of every other of the natural sciences. The late President of the British Association, Lord Salisbury, as I have already said, very graphically pictured mankind, with all its boasted knowledge and science, as occupying a small oasis of dim and flickering light in the midst of an illimitable ocean of impenetrable darkness.

There is one infallible test by which the genuine man of science may always be known: if he devotes his time and labour to, and manifests a strong interest in, the observation and investigation of those residua which are not in accord with preconceived opinion; in the pursuit of alleged facts which do not fit into the scheme of hypotheses and theories with which he is familiar; if, in fact, he is earnestly seeking, at all times, for evidence against himself and his antecedent views; then that man is a genuine follower of science.

But if, on the contrary, he closes his eyes and ears against alleged facts, and declines to investigate them, under any terms and conditions, either from a priori considerations of his own, or else from lack of interest, that man, whatever his reputation or alleged acquirements may be among his followers, or his fellowmen, is not, in the truest and best sense, a genuine

man of science.

The lines of human advancement are strewn with the remains of such men, some of whom were reputed great in their day and generation, but who have been abandoned and overrun by their fellow-men or by posterity, as faithless to the sacred cause, and now lie "unhonoured and unsung," for the penalty is as inevitable as it is merciless, which truth exacts, because these men not only bring true science into disrepute, but effectually block its highways.

As Jevons well says: "In the writings of some recent philosophers, especially of Auguste Comte, and in some degree John Stuart Mill, there is an erroneous and hurtful tendency to represent our knowledge as assuming an approximately complete character. At least these and many other writers fail to impress upon their readers a truth which cannot be too

constantly borne in mind-namely, that the utmost successes which our scientific method can accomplish will not enable us to comprehend more than an infinitesimal fraction of what there doubtless is to comprehend. Professor Tyndall seems to me open to the same charge in a less degree. He remarks that we can probably never bring natural phenomena completely under mathematical laws, because the approach of our sciences towards completeness may be asymptotic, so that, however far we may go, there may still remain some facts not subject to scientific explanation. He thus likens the supply of novel phenomena to a convergent series, the earlier and larger terms of which have been successfully disposed of, so that comparatively minor groups of phenomena alone remain for future investigators to occupy

themselves upon."

"On the contrary, as it appears to me, the supply of new and unexplained facts is divergent in extent, so that the more we have explained the more there is to explain. The further we advance in any generalisation, the more numerous and intricate are the exceptional cases still demanding further treatment. . . . We may rely upon it that immense, and to us inconceivable, advances will be made by the human intellect, in the absence of any catastrophe to the species on the globe. . . . Any one of Mr Darwin's books, admirable though they all are, consists but in the setting forth of a multitude of indeterminate problems. Why orchids should have been formed so differently from other plants, why anything, indeed, should be as it is, rather than in some of the other infinitely numerous possible modes of existence, he can never show. The origin of everything that exists is wrapped up in the past history of the universe. At some one or more points in past time there must have been arbitrary determinations which led to the production of things as they are."

Professor Huxley, in his reply to Mr Gladstone, referred to mathematics as a perfect science; but Jevons says: "The problems which are solved in our

mathematical books consist of a small selection of those which happen from peculiar conditions to be solvable. If our mathematical sciences are to cope with the problems which await solution, we must be prepared to effect an unlimited number of successive integrations; yet at present, and almost beyond doubt for ever, the probability that an integration taken haphazard will come within our powers is exceedingly small. After two centuries of continuous labour, the most gifted men have succeeded in calculating the mutual effects of three bodies each upon the other, under the simple hypothesis of the law of gravity. Concerning these calculations we must further remember that they are purely approximate, and that the methods would not apply where four or more bodies are acting, and all produce considerable effects upon each other. There is reason to believe that each constituent of a chemical atom goes through an orbit in the millionth part of the twinkling of an eye. In each revolution it is successively or simultaneously under the influence of many other constituents, or possibly comes into collision with them. It is no exaggeration to say that mathematicians have the least notion of the way in which they could successfully attack so difficult a problem of forces and motions. As Herschel has remarked, each of these particles is for ever solving differential equations, which, if written out in full, might belt the earth."

And yet these are the "simple" means by which materialists seek to do away with the "complex" problems of psychology; such men have no more true comprehension of the real physical facts behind physical phenomena than has the most ignorant and superstitious Congo African, and their faith is of the same order of superstition, and equally blinds them to facts just as potent, or more potent, than those they assume. It is of these incompatible residua that Sir John Herschel has said that almost all great astronomical discoveries have been disclosed from the examination of residual differences. "Nothing," says Jevons, "is more requisite for the progress of

science than the careful reading and investigation of such discrepancies. In no part of physical science can we be free from exceptions and outstanding facts of which our present knowledge can give us no account. It is among such anomalies that we must look for the clues to new realms of facts worthy of discovery. They are like the floating waifs which led Columbus to suspect the existence of the New World."

And yet those men of science who disdain to examine these waifs, which obviously point to the existence of some new world of science, and who heap with ridicule and opprobrium those who would interrogate these waifs and learn their hidden significance, are not genuine men of science, but simply advocates who would pervert an argument and conceal or ignore a fact, or a multitude of facts, which chanced to fall in the way of their pet theories, or their publicly expressed earlier opinions. As St John Stock says: "Suppose I do find the unseen to be the haunt of ungrammatical ghosts, what then? It has its high life, I suppose, as well as its low. This world itself is vulgar or practical according to the light in which we look at it. Do not reject well-attested narratives merely because they sound grotesque. He is not a faithful lover of truth who would not go through dirt to meet her. 'One vision of her snowy feet is worth the labour of a life.'"

CHAPTER XV

THE DARK DAYS OF PSYCHOLOGY

Professors Balfour Stewart and P. G. Tait, in their well-known "Unseen Universe," in the very preface, sound a warning against the false assumptions of pseudo-science. "As professors of Natural Philosophy," they say, "we have one sad remark to make. The great majority of our critics have exhibited absolute ignorance as to the proper use of the term Force, which has had one and only one definite scientific sense since the publication of the 'Principia'; as such men are usually among the exceptionally well-educated, ignorance of this important question must be almost universal."

Ignorance of the proper sense of this term is almost universal among scientific specialists; to find it properly used we must go to the broadest men of science alone. In the hands of narrower writers it seems to have an individual identity so as to be measured en bloc, like ice, or potatoes. As Sir John Herschel, Sir William Crookes, Romanes, Lord Kelvin, Sir Oliver Lodge, and all the greater physicists point out, we know nothing of abstract force at all, any more than we know of abstract light or heat, and the only force we can have personal knowledge of is that of volition, and as our own volition acts, on a minute scale, much in accordance with the actions, on a grand scale, which we see all around us, we can easily account for such force in the same way, but, as Sir John Herschel says, "constituted as we are," we cannot do so otherwise.

Force is but a manifestation, and we only recognise it by seeing something change place, or else infer that something can change place; either it has been made

to change place or it can be made to change place; and the manifestation acts upon our senses just as the oscillatory movement of the luminiferous ether at high velocity acts upon our retina, and we call this light; or as a like strain in the ether gives us what we call electricity. If all bodies were equally endowed with "strain" there would be no strain; if all bodies were equally endowed with "force" there would be no force. And this is where the only possible endowing agent comes in, the only agent which can differentiate and direct force or strain, and that, so far as we know, is volition. When we pass that boundary, we enter the realm of fantastic superstition, in which both observer and observed are meaningless. We have, in such case, surely and certainly, reached Hume's ultimate, nihilism, which, as I have said elsewhere, was a brilliant reductio ad absurdum of that great practical jester, for he did not believe it himself, and said so.

This march of physical science to the gap, and the starting back in horror at the abyss, is graphically and humorously told by Stewart and Tait, as

follows:-

"Ignoring all but the physical universe, and applying the principle of continuity to its phenomena, the members of this school were indubitably led to most important generalisations regarding the method of working of that great system. They even drove back, with much success, and very properly, certain detachments of theologians who had occupied portions of the field in an unwarranted manner. So far the Genius whom they had summoned up appeared to be the very principle of order. But things wore a different complexion as time went on. It was fancied that historical Christianity must disappear, and that the belief in the reality of a future state must follow after it. They were surrendered. But it was extremely startling when the Genius invoked, not content with what he had already devoured, broadly hinted that the whole visible universe would furnish an acceptable sacrifice—then even the most extreme partisans of the school began at length

to be alarmed. It was too much to be borne, that a Genius summoned up in the very name of order should turn out to be a demon so insatiate as this! Must the whole visible universe, indeed, arrive at such a state as to be totally unfit for the habitation of living beings? The individual they were content to sacrifice, perhaps even the race, but they would spare the universe. Undoubtedly, if it be possible to pity men who could so easily dispense with Christianity and immortality, they had at length got themselves into a deplorable dilemma. For the principle they had invoked was absolutely without pity, and in the most heartless manner continued to point towards sacrifice of the visible universe. This, they were told, was only a huge fire, and must ultimately burn itself out. Nothing would be left but the ashes—the dead and worthless body of the present system."

This was, as regards Christianity, and religion generally, the attitude of many of the leading men of physical science in those dark days about 1878, only four years before the great society for Psychical Research flung its broad banner of light across the blackness of that night—nay, not the blackness of the night, but the blackness of the mephitic clouds which hid and blinded men to the brilliant sky, lit with countless stars and constellations, and woven across by the shuttles of planets, and satellites, and comets, and meteoric streams, and peopled, who knows?—by what myriad hosts of life and intellect.

But the clouds were indeed dark in those dark days and nights. Embryology was all unborn; the psychological studies of microscopic life had scarce begun, and were all misunderstood; anthropology was a thing of shreds and patches; comparative religion was degraded by supercilious smiles, or the paraphernalia of an exploded devil; and men's eyes were fixed, if fixed at all, on the physical basis of life, on the jargon of a tumbling chemistry, and intellectual men were "immersed in merely physical research."

Had a new Dean Swift emerged then, we should

not have to amuse ourselves with his embattled philosophers, and those men of science who fought to the death over whether cakes and vegetables should be cut in triangles or in squares, and whose most earnest pursuits were to extract the sunshine out of cucumbers so as to use it over again.

The infection was, apparently, almost universal.

Mallock, in his satirical "New Republic," makes one
of his most brilliant characters say, "Christianity
took three hundred years to supplant polytheism;
atheism has taken thirty to supplant Christianity."
Romanes himself, in explaining the error under

which he lay when he wrote his earlier work ("The Candid Examination of Theism"), which was published in 1878, says, "Moreover, in those days, I took it for granted that Christianity was played out, and never considered it at all as having any rational bearing on the question of Theism. And though this was doubtless inexcusable, I still think that the rational standing of Christianity has materially improved since then. For then it seemed that Christianity was destined to succumb as a rational system before the double assault of Darwin from without and the negative school of criticism from within. the book of organic nature, but likewise its own sacred documents, seemed to be declaring against it. But now all this has been materially changed. We have all more or less grown to see that Darwinism is like Copernicanism, etc., in this respect; while the outcome of the great textual battle is, impartially considered, a signal victory for Christianity."

We all know how Colonel R. G. Ingersoll was, in his lectures, glad to point out in prophecy, that within a few years every Christian church was to be

converted into a music hall.

Since those days the cautious critic has noted a great change—what would be a miraculous change were we not able to see clearly now that the elements of disintegration, which began by disintegrating spiritualism, bore within themselves their own disintegration, and by virtue of the very agency which was invoked to destroy religion, but which, instead,

destroyed its own old materialism for ever, and left it as a monument of that dangerous partial knowledge from which men are now turning in horror.

Even in those dark days, the clearest-headed fully perceived the utter inadequacy of the weapons forged to attack the spiritualism of the unseen universe.

Mallock, in his same "New Republic," makes another of his characters, who frequently lectured before the Royal Institution, say, "Pray do not think that I complain of this generation because it studies Nature. I complain of it because it does not study her. Yes," he went on, "you can analyse her in your test-tubes, you can spy her out in your microscopes; but can you see her with your own eyes, or receive her into your own souls? You can tell us what she makes her wonders of, and how she makes them, and how long she takes about it. But you cannot tell us what these wonders are like when they are made. When God said, 'Let there be light, and light was, and God saw that it was good' was he thinking, as he saw this, of the exact velocity it travelled at, and of the exact laws it travelled by, which you wise men are at such infinite pains to discover; or was he thinking of something else, which you take no pains to discover at all?"
Say Stewart and Tait: "It is only within the last

Say Stewart and Tait: "It is only within the last thirty or forty years that there has gradually dawned upon the minds of scientific men the conviction that there is something besides matter or stuff in the physical universe, something which has at least as much claim as matter to recognition as an objective reality, though of course far less directly obvious to our senses as such, and therefore much later in being detected. So long as men spoke of light, heat, electricity, etc., as imponderables, they merely

avoided or put aside the difficulty.

"When they attempted to rank them as matter—heat, for instance, as caloric—they at once fell into errors, from which a closer scrutiny of experimental results would assuredly have saved them. The idea of substance, or stuff as necessary to objective existence very naturally arises from ordinary observations on

matter; and as there could be little doubt of the physical reality of heat, light, etc., these matters were in early times at once set down as matter.

"This endeavour to assign a substantive existence to every phenomenon is, of course, perfectly natural;

but on that account very likely to be wrong."

While naturalists turned their attention only to the physical, they necessarily ignored everything non-physical, and this led to a still greater error, for they were compelled to bridge the breaks physically, for they had nothing else to work with, and since this was impossible, they were obliged to "force the balance-sheet," by altering figures in every column, and making false entries, or cancelling those entries incompatible with their methods and purposes, their methods being the only ones known to them, and their purposes merely to present a sum-total which

would satisfy the uninstructed observer.

Professor Shaler, of Harvard, in his "Interpretation of Nature," says: "That which the naturalist sees of animal mind he sees at an immense disadvantage. In the first place, he cannot perceive the mind of any being directly; he can only infer the mental constitution of the creature from its acts, and these acts are performed by parts that are, in most cases, utterly unlike those with which he is accustomed to see emotion expressed. It is only when the creatures belong to the upper part of the animal kingdom and are akin to himself in the nature of their emotions and their modes of expression, that he can attain much certainty in his observations. Moreover, the whole training of the naturalist, as it is now pursued, tends to blind him to the observation of such obscure things as the mental phenomena of nature. Every pursuit, if it becomes devoted to its ends, creates an idol of prejudice in the mind. With the naturalist it is the idol of clearness, what we might perhaps better call the idol of evident fact, that is created. Accustomed to see all with which he deals, the invisible is sure to be with him the non-existent. Every now and then some experience tells him that the invisible element in the operation of this life is really greater

than the visible element. He sees, for instance, the little transparent sphere of the egg, apparently no more specialised than a small bit of calf's-foot jelly, yet he knows that it is charged with the history and the profit of a hundred million years of life, which it will hand down to the beings which are to come from it. Despite these lessons, which he may have at any hour of his work, the naturalist must bow before the matter-of-fact, and shun this indefinite field. His life must be in the open day of plainly seen things. There are few naturalists, and those mainly of the class that did not enter on the study of zoology by the anatomic path, who have shown any skill in the study of the mental parts of animals."

With an equipment like this, it is obvious that these physical specialists are of all scientific men those least qualified to discuss the spiritual. Yet they are usually the first and loudest to deny a future life, and why? Simply because they know nothing about the facts which pertain to the solution. They are agnostic, ignoramus, and by virtue of not seeing the soul in the dissected carcass, they "Rush in where

angels fear to tread."

Professor Shaler clearly sets forth their utter incapacity to even discuss such questions, as men of

science.

"The attitude of scientific men," he says, "-to-wards the doctrine of the personal immortality of the soul appears to be a matter of much interest to the public. Every teacher in this field of inquiry finds himself subject to frequent interrogations as to the measure of his belief in a future life, and he readily discovers that his answers have an undue weight with those who hear them. There is hardly sufficient reason for this desire to ascertain the views of naturalists concerning a problem which clearly lies beyond their province. The rules of their calling limit them to considerations which have a place in the phenomenal world alone. If they go far from the facts with which they have to deal, they transgress the limits of their clearly defined field, and enter wildernesses which they have no right to tread. If

they essay journeys there, they must make them

without the semblance of authority."

Again, "The sturdy, self-satisfied denials of immortality; the confident statements of men who said there was no soul because they could not find it with the knife or weigh it in the balance, were put forth in the days when naturalists had but begun their in-

quiries in the phenomenal world."

"There is abundant room," says this eminent man of science, "for spiritual truths in the universe. In fact, our modern physical science is ever tending away from the crude conceptions of matter held by the ancients. It seems now as if the end of the long dispute between the materialists and the spiritualists may soon come to an end through the growing conviction of physicists that all matter is but a mode of action of energy; that the physical universe is not a congeries of atoms, which are inert except when stirred by the dynamic powers; that all phenomena whatever are but manifestations of powers. In other words, the students of nature are now nearer to those who have trusted to the divining senses than ever before."

CHAPTER XVI

THE CREDULITY OF INCREDULITY

THE earnest student, the true student, of science must not, cannot, be deterred from her pursuit by any grotesque narratives or absurd beliefs; it is here pre-eminently that the field of genuine science lies. Tap nature where you will, it is inscrutable until investigated, and the inscrutable means either the superstitious or the unconquered. If the former, you will never know it until you have conquered it, and until conquered the whole field is inscrutable. A priori is the only fatal attitude; that kills at the first footfall. It is not only among the vulgar that the pursuer meets with the grotesque; if he would avoid

that, he must steer clear of science.
"Scientific method," says Jevons, "must begin and end with the laws of thought, but it does not follow that it will save us from encountering inexplicable, and at least apparently contradictory results. The nature of continuous quantity leads us into extreme difficulties. Scientific method leads us to the inevitable conception of an infinite series of successive orders of infinitely small quantities. If so, there is nothing impossible in the existence of a myriad universes within the compass of a needle's point, each with its stellar systems, and its suns and planets, in number and variety unlimited. Science does nothing to reduce the number of strange things that we may believe. When fairly pursued it makes absurd drafts upon our powers of comprehension and belief."

Under such circumstances, it seems quite as easy, at least, to accept, as a phenomenon of rational psychology, even the ghost of Benjamin Franklin as a mere survival from his conceded earthly existence

as it would be to run down this infinite gamut of infinitely diminishing solar systems, by pursuing a detailed description carried onward to its logical conclusion, which is obviously nowhere at all, though undeniably scientific. And as for human testimony, a thousand credible witnesses will stand up for the ghost where not one will appear as the personal witness of a single infinitesimal planet out of even the largest of the galaxies which constitute any one of the myriads of ever-diminishing universes circling within the compass of a needle's point. And yet these dogmatic pseudo-physicists, and penny-a-liners of science, talk with contempt of mankind's credulity, blind faith, superstition, as though everything inside their own boundaries was absolutely plain and clear and comprehensible—and very simple and coherent indeed.

The late Professor De Morgan, with stinging sarcasm, says of these very people: "The overbearing minister of nature, who snaps you with his Unphilosophical! Unscientific! Degrading! as the clergyman once frightened you with Infidel, is still a recognised member of society, wants taming, and will get it. He wears a priest's cast-off garb, dyed to escape detection."

On the contrary, read the noble words of Laplace,

in his "Analytic Theory of Probabilities."

"We are so far from knowing all the agents of nature, and their various modes of action, that it would not be philosophical to deny any phenomena merely because in the actual state of our knowledge they are inexplicable. This only we ought to do: in proportion to the difficulty there seems to be in admitting them should be the scrupulous attention we bestow on their examination."

It is not the scrupulous attention that we deplore but the refusal to give any attention at all. The phenomena in question we know are difficult, and often elusive; but their importance, if established, there is no living person who can dispute, nor that they are transcendently the most important in the whole realm of human knowledge. All that psychology asks is to be examined and investigated; the consequences are abundantly able to take care of themselves. Nor is the investigation especially difficult, as a scientific task.

Says Arago (Annual Bureau of Longitudes): "Doubt is a proof of modesty, and it has rarely injured the progress of the sciences. One would not be able to say as much of *incredulity*. That one who, outside pure mathematics, pronounced the word *impossible*, is wanting in prudence. Reserve is above all a necessity when he is dealing with the

animal organisation."

And Abercrombie, in his "Intellectual Powers," says: "An unlimited scepticism is the part of a contracted mind, which reasons upon imperfect data, or makes its own knowledge and extent of observation the standard and test of probability. In receiving upon testimony statements which are rejected by the vulgar as totally incredible, a man of cultivated mind is influenced by the recollection that many things at one time appeared to him marvellous which he now knows to be true, and he thence concludes that there may still be in nature many phenomena and many principles with which he is entirely unacquainted. In other words, he has learned from experience not to make his own knowledge his test of probability."

In fact, this denial without practical knowledge, by so-called scientific specialists is, look at it as we may, simply vulgar; as vulgar as for those of the "new-rich" (whom we ridicule), when raised from indigence and ignorance suddenly into an atmosphere far above their training and capacity, to criticise the art, literature or acquirements of their new surroundings. You would be astonished to know how much vulgarity of this sort exists among so-called scientific specialists who go outside their own narrow feeding-grounds. Occasionally they get to quarrelling among themselves, and then everybody can see and laugh

at the maverick strain.

The dogmatism of theology finds a full counterpart and co-worker in her newer sister, dogmatic science. The scientific pursuit is a noble one to espouse, the work is grand beyond comparison, the fruits are already priceless and vast, but specialties always narrow the field of vision of the specialist, and the time for dogmatism has not yet come, and will not come for ages, if at all.

As Professor Jevons well says: "It might be readily shown that in whatever direction we extend our investigations and successfully harmonise a few facts, the result is only to raise up a host of other

unexplained facts."

How fatal to the cause of scientific advancement then, and how prolific in still greater difficulties, must be the effort to conceal those unpalatable facts which do not fall into the category of some half-wrought-out hypothesis, or to ignore those which alone would make the work worth doing, or save it from merited condemnation. Alfred Russel Wallace applies this criticism with stunning force against Dr Carpenter, referring to the close of the fourth chapter of his elaborate work on "Mental Physiology," in which he nevertheless boldly attempts to settle the whole question of the reality of such facts.

"It is, we suppose, owing to his limited space that, in a work of over 700 pages, none of the wellattested facts opposed to his views could be brought

to the notice of his readers."

The names and facts thus suppressed or ignored by Dr Carpenter went to the very heart of Carpenter's book. No honest man could have passed them over without mention, or an attempt even to controvert them; but Dr Carpenter was unable to controvert these already published facts, for they were universally known, and so "saved his face," as the Chinese say, at the expense of his scientific standing, and his lasting fame. The men of science referred to by Mr Wallace, who were entirely ignored by Dr Carpenter, were such as Dr Gregory, Professor of Chemistry of the University of Edinburgh, Dr Ragsky, Professor of Chemistry, Vienna, Dr Huss, Professor of Clinical Medicine, Stockholm, and Physician to the King, Dr Endlicher, Professor of Botany, Vienna, Dr Diesing, Curator in the Imperial Academy of

Natural History, at Vienna, Pauthot, Dean of the College of Medicine at Lyons, Garnier, Physician of the Medical College of Montpelier, Sir Walter G. Trevillian, Dr Mayo, Professor of Anatomy and Physiology, King's College, and of Comparative Anatomy in the Royal College of Surgeons, Dr Haddock, Dr Edwin Lee, Mr H. G. Atkinson, F.G.S., Dr Clark, and a number of others.

When Dr Carpenter wrote his "Mental Physiology," the series of wonderful books by Dr Alfred T. Schofield, M.R.C.S., commencing with his "Force of Mind," had not appeared, crowded with citations, as they are on every page from the highest authorities (see his "Unconscious Mind"), nearly every one of which would have negatived all the seven hundred pages of Dr Carpenter's "Mental Physiology; but that was Carpenter's good fortune, while living.

and very bad fortune, indeed, when dead.

But it is not only the credulity of scientific specialists, and their consequent unfairness, for credulity is ever unfair, that has retarded the growth of scientific investigation and acceptance of spiritualism, but the credulity and ignorance of many of those who are most devoted to spiritualism. Those who deny everything without investigation are well matched by those who accept everything without investigation. Mrs Ross Church (who aided Sir William Crookes in his studies of the Katie King Phenomena), says these latter "are generally people of low intellect, credulous dispositions, and weak nerves." How shall we designate the former class? Shall we call them of high intellect, incredulous dispositions, and strong nerves? We must guard our terminology if we should attempt to do this, because incredulity itself is simply credulity. There is no real difference between them. To believe a thing is to believe that thing, and to disbelieve it is to believe an opposite thing, and, unless after a fair trial and evidence as complete as possible, one credulity is just as credulous, weak-nerved, and of as low intellect as the other credulity. How many of you have thought of this dominating truth? Yet it is

fully recognised by science, as Arago long since stated: the only correct attitude, until the evidence has been fully heard, is doubt, or "suspension of judgment," as it is called; from that attitude evidence, as it is presented and accumulates, will, or ought to, incline the mind to one side or the other. But the classes I have referred to, the pro and con of credulity, as I may call them, are altogether and equally outside the pale of science. Not that there is not much in the public phenomena and performances of spiritualism which is fraudulent and tricky, nor that the alleged results are not often the productions of those who have made a study of deceiving the people, and trifling with the holiest emotions of sorrowing and bereaved friends. But this is true of all things which come under the cognisance of mankind, and yet, notwithstanding, the truth can be obtained and recognised even in a world so deceptive at first sight as this world is. On this ability to sift out truth is based the whole system of our jurisprudence, whereby, out of an untruthful witness even, by care and skill, the unquestionable truth can be wrung. It is on the accumulation and co-ordination of evidence, independent evidence, that much dependence is justly placed-it is incredible that a vast multitude of witnesses, of all ages and all countries, should always be able to lie in precisely the same way about an innumerable multitude of apparently accidental facts. The same principles which we apply universally in acquiring and extending all knowledge, are equally applicable here, and the case is greatly simplified by the fact that the experiments can be repeated, and similar results obtained, by means of careful and continued attempts among any few selected friends; between man and wife, and through human subjects with which studied deception would be abominable, and incredible; and in a host of ways by which fraud and deception can be as rigorously excluded as in any other branch of life and knowledge—nay more, for here we meet with conditions which prove the facts by the silent sense of conviction or evidence within each one of us.

For men of science to ignore all this-to walk in darkness, when only their own self-held cloaks withhold the light, to work offal into food, when the whole universe teems with living sustenance, to juggle with words and phrases, to conceal, distort or prevaricate in order to support a preconceived hypothesis, or establish an a priori proposition—that is what spiritualists object to. And the dark, disgraceful day is rapidly passing away. The momentum has become so great now, that the danger is of too swift an advancement, and spiritualists are themselves asking each other in anxiety-what shall be done when the great rush for cover comes?—when those who have so long stood in the forefront of the opposing forces have come over en masse, and with that easy assurance, with which we are all so well acquainted, cry out that they have always believed in its truth, and always said so, and that their great and only cause of complaint has been that the spiritualists themselves never went half far enough?

CHAPTER XVII

PHYSICAL SCIENCE CANNOT EXPLAIN ITS OWN BASES

In considering the achievements of science, or of the physical sciences in general, I do not wish it to be understood that nothing has been gained in these various sciences. On the contrary, the gains have been enormous, and have immeasurably advanced life and civilisation. But these are not the sort of achievements of which the scientific specialists feel especially proud, or of which they boast, for these achievements are those of systematic weighing and measuring—that is to say, simply descriptive—and do not advance our actual knowledge of nature to any considerable extent, while they very much facilitate the business and system of life.

Wherein science has failed in achievement is in dealing with the very foundations on which it stands. In every case it starts with a simple superstitious assumption, which it never seeks to account for, and having made this assumption of what it does not understand, and which attracts little attention because it is about something familiar even to the unscientific, then science takes the physical manifestations of the moment, presenting themselves at hand, and simply gives us their weights and measure-

ments.

This of course does not touch the primary conceptions, or their assumptions, and in consequence (as in the overturning consequent on the newer discoveries relating to matter, radium, electricity, the X-rays, etc., etc.), when these residua, or foundations rather, have been actually investigated, the whole system of weights and measurements requires revision, and the older assumptions have to be aban-

doned, and a new start made, with other assumed bases, and other interpretations to account for the phenomena of the now assumed new bases.

For example, granting gravitation, science has given us its scale of attractions, and the tables or rules of its various physical phenomena, but it does

not explain what gravitation is or can be.

Granting solid bodies, it gives us their weights, colours, hardness, chemical properties, combinations, etc., etc., but it does not explain what a solid body is or can be.

So of liquids, and so of gases; so of all the hard, basic facts of nature; its achievements here are infinitesimal, but in giving what are called the *laws* of this, or the *laws* of that, science is profuse, but the different behaviour of these various substances do not constitute *laws*, any more than the behaviour of cats and dogs, and not half as much as pertains to an Arctic animal which, brown in summer, turns white in winter, or how a peacock's tail builds up a series of perfect eyes out of hundreds of separate feathers, each with its thousands of separate branches. It is descriptive science pure and simple which it really deals with, like descriptive botany, or descriptive mineralogy, or what was formerly called "natural history," while we think it is dealing with real things.

Now this natural history will illustrate what I mean. Until recently the study of the forms and structures, the varieties, the species, the genera, and the habits and customs of animals, constituted what went under the name of "natural history." It was extremely useful to man; it planned, and mapped out, and illustrated, as geographers do, the political divisions as it were, the habits and customs, skin, joints and hair and the like, of animal life; but it had nothing to do with the "how and why" of these

various creatures.

When, finally, the ultimate questions of animal life came to be searched out (almost accidentally), then biology quite unexpectedly popped into existence, and as soon as biology became a living thing, it led the searchers back and back, and suddenly and

inevitably struck upon psychology, and biology has been travelling along with psychology ever since, and

always will be.

It resulted simply from the running out of clues without prejudice—that is, without an a priori—but which running out science and theology had both sternly forbidden. When, a century ago, Lamarck set his attention to the study of invertebrate animals which study science itself, in the way it studied animals, deemed praiseworthy, this great constructive as well as analytical, man of science (and these two qualities are extremely rare in their union in any one person) was inevitably carried back into biology, and he was the first who dared it. But Cuvier, then the greatest living authority on natural history. crushed Lamarck by his terrific power over the scientific world, and above him the whole theological Catholic world piled its mountains of "blasphemy," the Protestant world of "impiety," and Lamarck and his teachings lay flattened out and abandoned beneath the cairn, till Charles Darwin, amid like obloquy, dug him out of his grave, and with sterner mien and greater help "faced a frowning world," bearing the same standard, a half-century later.

At this time theology was a little frightened, and science and materialism had gone into partnership, and infidelity had a controlling interest in the concern. And just as Lamarck was driven back to the discovery of a providence superior to material forms, and a God who made and executed continuously His own will in and before His own creatures, so he came upon the greater and lesser individual psychisms of the universe—and among them what belongs to spiritualism—and, hence, all those scientific and theological tears, for both the materialistic scientific, and the materialistic theological, world well foresaw the in-

evitable outcome of his discoveries.

Concerning the true scientific scope of modern physical science, as contrasted with its self-assumed extensions into what it cannot touch, and for which it has no physical data, or rather for such imagined extensions on the part of mere specialities, or even the greedy and superstitious public (superstitious when they want to believe what they would like to believe), I will quote the following from Professor Graham's "Creed of Science": - "Science is often, in our days, characterised as atheistic. What is the justice of the charge? It depends on what we mean by science and what by atheism. If we mean by science, as in strictness we should, a knowledge of the laws of phenomena, their regular sequences and conjunctions, the discovery of which is the business of science, then science is not and cannot be atheistic, no matter what meaning we attach to 'atheistic.' But if we mean by science, what those who bring forward the charge mostly mean—namely, some of the philosophies professedly based on the conclusions of science, as materialism, positivism, evolution—then it depends on what these several philosophies conclude respecting the First Principle and Ultimate Reality of things. ... A state of chaos, whatever may have been the crude beliefs of men, there never was in the cosmos nor ever can be. The existence of God as the eternal support of the universe, as the inmost nerve and essence of thought, is our guarantee to the contrary. And this belief is confirmed by science."

Says Dr Warschauer, of Oxford and Jena, in his "Anti-Nunquam": "No method of investigation known to the laboratory has ever laid bare the process -which yet we shall be scarcely called upon to denyby which nerve stimuli are transmitted into sensations or ideas; no amount of scientific observation and experiment furnishes us with more than the knowledge that certain phenomena are regularly followed by other phenomena, or can prove that phenomenon A causes phenomenon B: yet we all believe in the reality of causation. Moreover, all science really rests on certain prior assumptions transcending scientific proof. It is clear that Huxley's agnostic formula breaks down just because it proves too much, and would make us agnostics on many things besides

religion."

Science does not even know how a blade of grass

grows, or how it can grow.

Says Tyndall: "The passage from the physics of the brain to the corresponding facts of consciousness is unthinkable. Were we able even to see and feel the very molecules of the brain, and follow all their motions, all their groupings, all their electric discharges if such there be, and intimately acquainted with the corresponding states of thought and feeling, we should be as far as ever from the solution of the problem," and adds, "The chasm between the two classes of phenomena would still remain intellectually impassable."

And even Büchner, rank materialist as he was, was compelled to concede that "we do not know how spirit can be defined as anything else than as something immaterial in itself, excluding matter or opposed

to it."

Says Masson, in his lectures before the British Royal Association: "The fact may be dwelt on that, where the means of comparison among animals exists, notions of the phenomenal world possessed by one do not seem to contradict those possessed by another. The dog's world seems to corroborate man's, and man's world the dog's, and on this feeling generalised not only our sport but all our action proceeds. Is not this as if there were a basis of independent reality to which every sentiency helped itself according to its appetite, but in such manner that all can co-operate?

"There are, within our view, countless gradations of sentiency, all busily existing—from those infinitesimally minute creatures which the microscope reveals to us swarming in and among the mere interstices of things till invisibility is reached, up to ourselves, the chief possessors of the earth, and the last and highest of the visible scale. . . . Must this supposition be closed abruptly when we come to Man?"

CHAPTER XVIII

THE AMERICAN AND ALL OTHER PATENT SYSTEMS, FOUNDED ON SUPERNORMAL PHENOMENA

I have spoken of the various sorts of evidence in favour of spiritualism—religious, psychological,

philosophical, anthropological and scientific.

But there is a mass of direct evidence in favour of the supernormal to which I have not yet referred which is perfectly overwhelming and indisputable. which is accepted by every court in Christendom, and is well known to lawyers, but of which science is in utter ignorance, while yet science itself acts as the humble handmaiden and assistant of these enormous results of direct spiritual revelation. Not only that: the well-being of all our people is so closely interwoven with these revelations that one half their tangible property and more than half their prosperity is directly due and dependent on these supernormal revelations. The question is often asked, if supernormal revelations are true, why do the spirits not tell us something of use, instead of chattering like old women or curates? Here we have use enough, and results enough to convince the most sceptical and satisfy the most avaricious. Yet it is purely secular, so that superstition cannot discredit it on the one hand, nor sectarian religion condemn it on the other, while, as I have said, science is running all its workshops to scatter its beneficent results broadcast over the world.

Many years ago the cash market value of these revelations in the United States alone was estimated at more than ten thousand million dollars, with an annual increase of more than twenty per centum.

If these revelations and their practical results throughout the world were utterly eliminated, the

137

world would instantly fall back more than two

thousand years into barbarism.

Yet I do not know that this great body of irrefutable evidence has ever been handled as a whole, and flung en masse against the intrenchments of materialism, empiricism or devitalised Christianity. This is what I propose, in a few words, to do.

Science does not deal with invention; invention is a finding—not a finding out, but a finding; and a new discovery is not a reasoning out, or something picked up from books or people; but something newly uncovered from the mass of utterly unknown things.

To illustrate the cash market value of a single one of these supernormal revelations, the right to practically use which for a few years inured to the recipient and his legal representatives alone, I quote the following from a magazine article on the invention

and use of the telephone:-

"The decision that made this condition possible was a most tragic thing. It meant hundreds of millions of dollars to a small group of men in Boston and ruin to hundreds who had embarked in the telephone business under one or the other of the interfering patents. But, of far graver importance even than this, it meant the stifling and monopoly of a public utility that, under free competition, would have saved thousands of millions to the people of the United States."

The case was simply this: a number of persons claimed to have each been the first, true and sole inventor of the telephone, a thing never known to anyone on earth before, and its mechanical reduction to practice. The contestants in the interference had the public records of the alleged first discovery or invention before them, and then claimed to have previously made the same invention. Only one could have done so first, and the whole case before the United States Supreme Court was not to determine who would secure advantage, or who sustain loss, but simply to determine who was the first to find out and put into useful form with diligence, the first

working telephone the world had ever known, used, or conceived, and then give public notice, and secure

protection in the legal manner provided.

Science deals with reason, induction, deduction, observation, experience, necessity, classification, weights and measurements, modifications and applications, and the like, but never with invention. Science deals with interpretation, not with creation. Invention, on the part of a man of science, spells condemnation of science and its methods. Nature wants to be courted, not superseded; she wants a follower, not a critic; she wants a lover, not a dreamer. what physical nature asks for from physical science. And what is asked for from materialistic philosophy is the interpretation of the phenomena of nature, not its supersession. But this new evidence deals not at all with what physical science deals with, and nothing at all with what philosophy deals with, but comes down like a flash, strikes "like a bolt from the blue," suddenly, completely, overwhelmingly, and stantaneously—and almost at once new money makers are spinning and speeding all through the land, new kinds of industry spring up like enchantments, and man's horizon broadens and broadens, with new sky-light and star-light, and "the world and all that therein is, the round world and they that dwell therein," are transformed for ever and ever.

Suppose that were true, would not that be evidence? It is true and it is evidence; and science and religion have only missed it because it comes unheeded, like Tennyson's flower growing in the crannies of the old

stone wall:

"I hold you here, root and all, in my hand, Little flower—but if I could understand What you are, root and all, and all in all, I should know what God and man is."

I will not puzzle you any longer; you would never guess it; it is the patent system, and the army of patents, eight hundred thousand strong in this one country alone. I refer specifically to the American, but it is equally true of the patent systems of all other nations.

Not one of these eight hundred thousand patents could have been granted, not one of them could have been sustained if it depended on any one of those factors with which the physical sciences or

materialistic philosophy deal.

A new device which is the result of reason, or induction, or deduction, or observation, or experience, or necessity or classification, or weights and measures, or modifications and applications, or interpretations of known nature, is not a patentable invention at all, cannot be patented, and, if inadvertently patented, the patent will be thrown out by the first United

States Court it is brought up to appear before.

This is not a new thing to courts and lawyers, nor to inventors, to their sorrow, when make-believes, but it will sound so strange to you perhaps that it will appear ridiculous. You will say: Why, look around everywhere; everything pretty nearly has been patented or mixed up with patents, and they all embody well-known scientific principles and applications. So they do, but they didn't beforehand. You know of the old farmer urging his grown-up but bashful son to hunt up a suitable girl and get married. To his tearful protest the old man said: "Why, what's the matter with you? Didn't I have to get married too?" "Yes," came the hopeless response, "but you married mother, and you want me to go out and marry a strange gal."

I have said that patentable inventions came down like "a bolt from the blue," and that reason had nothing to do with them. You will find that reason is not merely indifferent, but is an actual obstacle to invention, which is intuitional, instantaneous, ex-

traneous and revelational.

I shall quote briefly from Merwin's "Patentability of Inventions," a standard authority on patent law, one of the highest in fact, and from some of the United States Circuit and Supreme Court decisions bearing on these points. I quote first the follow-

ing:—
"An idea is not an invention, if it be in the nature

of an inference."

"Whatever is logical deduction from something else is not invention."

"Reasoning is not invention."

"An inference drawn from the known relationships of things is not invention."

"Inference is not invention."

"Analogous use is not invention."

"Utility from special knowledge of the properties of bodies is not invention."

"Size or extension is not invention."

"Improvement in degree is not invention." Change of arrangement is not invention."

"Knowledge of physical facts is not invention."

"Union of different devices is not invention."

The summary is as follows:—" It appears, then, that the process of mind called for by the statute is not that of ordinary reasoning, or inference, or deduction. Whenever the mind advances from the known to the unknown by a transition natural to the ordinary, uninstructed intellect, there is no invention. Inference, then, is a criterion of what is *not* invention."

It is clear then that invention is not scientific; it is the opposite of science, for the above definition of what is *not* invention is precisely the correct de-

finition of what science is.

I will now quote from what Merwin calls "The test of what is invention." "The phrases used by the courts," he says, "to describe invention are very few; Inventive genius; 'the genius of an inventor'; 'the inventive faculty'; 'invention' as distinguished from mechanical or technical skill; 'invention' as distinguished from construction; 'ingenuity' as contrasted with the judgment of a skilled workman."

"Invention," he says, "is thus difficult to define,

"Invention," he says, "is thus difficult to define, because the idea expressed by it is a simple and elementary one. Invention, as we have already hinted, is that process of mind which *creates*. It is the giving birth to a new idea capable of physical embodiment."

Consider these momentous words, create, give birth. "Invention means," says the distinguished author, a lawyer writing for lawyers and courts, "something that no other word means, it is the creating of some-

thing new; it is not a mere modification of an idea already existing, but an addition to the stock of ideas."

He defines it as the whole intellectual image, of which the material thing sought to be patented is the

copy and the embodiment.

Here then is the keynote, here is the creation, here the new birth. It is an intellectual image of a thing not yet put into material form, and never before existing among men, so far as known, which yet, when put into material form, will operate and be useful. Try the great creation of God, and test it by this little creation of man, and you will find them to be identical. Now, whence came the intellectual image to this man, of what never existed before, what never was on earth before, but which, when reduced to practice, will add to the sum-total of man's heritage and God's endowment? There was only one possible source, extra-human, supernormal, a spiritual gift from where spirits are, veritably, "a bolt from the blue."

To continue from the author I am considering; "Invention is imagination," he says "(that is imaging), it is the very opposite of reasoning or inference; it is a single act of the mind; rather an instantaneous operation than a process. It has no stages, the essence of it is that it dispenses with them."

"In the process of reasoning or inference the conclusion is reached both gradually and inevitably. The mind is led on from one point to another, until it reaches a conclusion from which there is no escape. Whereas, when the mind invents, it starts with the conclusion. The conclusion flashes, so to say, upon the mind. The conclusion, therefore, either carries conviction with it, or it has to be verified; for the mind does not perceive how it has been reached."

"Reason could never lead one to the truths and ideas which are the subjects of invention; in fact, most often it leads directly away from them. And it is for this reason that invention is so difficult and comparatively so rare. It is not a sort of elevated reason; it is a faculty which differs in kind from reason, which often, in truth, is free to act only when

reason has been thrust aside, and its conclusions ignored, nay, denied."

"Invention then is in the nature of a guess. The mind leaps across a logical chasm. Instead of working out a conclusion, it imagines it."

The nature of this "creative guess," this "imaging" of what is to be but never has been, which will operate as a mechanism when it is afterwards put into material form for the first time, cannot come from the personal, physical man himself, with his sum-total of reason, observation and experience. He finds the integration complete, and put into his hands ready for use. What worked out these integrations, and gave to him only the beneficent and complete conclusion? There is an integrating power far beyond our highest conceptions. Says Sir John Herschel, of these integrations, even among physical atoms, "Their movements, their interchanges, their 'hates' and 'loves,' their 'attractions and repulsions,' their 'correlations,' and what not, are all determined on the very instant. There is no hesitation, no blundering, no trial and error. A problem of dynamics which would drive Lagrange mad is solved instanter. A differential equation which, algebraically written out, would belt the earth, is integrated in an eyetwinkle."

The flash of these inventions comes sometimes in a dream; so the method of making shot came, in a dream, like a flash, to an ignorant woman, the wife of a shot-moulder, and revolutionised the art of shotmaking in an instant. I know other cases of valuable inventions revealed in sleep. This is why great inventions are usually made by those totally outside the realm to which their discoveries pertain. Those in the rut work by reason and fail; to those outside, in due time, for the wants of man, there comes the flash of inspiration, and the world rolls over on to a new facet, and a new light is kindled for all time.

Says the United States Circuit Court, in the case of Blandy vs. Griffith, "Invention brings into activity a different faculty. Their domains are distinct."

Says the United States Supreme Court in the

Reckendorfer case, "Mechanical skill is one thing, invention is a different thing. The distinction between mechanical skill and its convenience and advantages and *inventive genius*, is recognised in all cases."

"Invention," says Merwin, "is characterised by an absence of conscious effort and by instanteousness of operation."

Tmagination, here, seizes upon the true, though

extra logical, conclusion."

"An intuition is a single, indecomposable, mental act; an inference is a mental passage from one thing to another."

"Invention is an act of vision. There is no invention until this act is performed; but no effort can ensure its performance, and the performance is instantaneous, and unaccompanied by conscious

effort."

"The thought or experiments which precede an invention are only gropings in the dark. However accumulated, they prove nothing, and they do not necessarily lead to anything. The inventive thought does not depend upon them, and cannot be verified by them. Reasoning is unravelling, and invention weaving. Reasoning is an analytic, invention a synthetic process. In one case a truth is drawn out; in the other it is constructed."

If this weaving, if this synthesis, if this construction, if this materialised vision, was never before in or of mankind, then it was from something outside mankind, and, as it was the result of a mental vision, it was psychical; if, on the contrary, this weaving, this synthesis, this construction, was ever before in or of mankind, then it was not an invention, not a new discovery, not patentable, and not sustainable even if patented. It must answer to the test of the Ancient Mariner:

[&]quot;We were the first that ever burst, into that silent sea."

CHAPTER XIX

THE WORKSHOP IN THE SUBCONSCIOUS DEPARTMENT
OF THE MIND

Badly stated, as I have, for brevity, been compelled to do, I must ask you each individually to think this question of invention out. You will find its springs inevitably in the sources of genius, inspiration, mediumship, clairvoyance and spiritualism. I speak from experience. It comes up from the depths of the subconsciousness, of course, but if the subconsciousness is an original creator it is so by its direct connection with the great psychism of the universe. As it is so rare a phenomenon, it is more likely that it comes, as Swedenborg, and Von Hartmann, and other great psychologists, agree, from influx or revelation.

If it was new among men, it could not have come telepathically from any other living man, or else we will have to try to imagine where that one got it, but it might have come telepathically, from surviving spirits of those once living, and who, inspired with the inventive faculty on earth, have, in their greater freedom after death, worked the problem out, and put, for the welfare of their unforgotten race, the conclusion, like a flash, by a vision, in the still watches of the night, into those receptive hands. It would be worthy work for those gone before.

And, somehow, this seems more reasonable to me, though I may be wrong, than that the Great Spirit of the Universe should be concocting, for some individual man here, the vision of a sewing-machine or a phonograph. Universal instincts, whether among insects or higher, or lower, animal or vegetable life I can readily conceive of as directly implanted by creative wisdom to make the gift and transmission of

life capable and useful, and so of faith (not opinion, with which, says Romanes, it has often been unwarrantably confused), honour, truth, justice, courage, manhood and womanhood, fidelity, and all the fundamentals of higher life and mind, or the divinely endowed faculties which Locke took as his stock in hand, with which to start mankind along, or revealed religion, or even the cyclic changes of nations, the rise of great leaders, the great intermittent and fluctuating periods of art from one people to another; but I feel sure that, among those great individual souls which have gone beyond, and are still advancing, still breathing a higher and nobler life, there must still be that love of our own living ones left behind which would enlist their efforts, as a loving mother, I feel certain, would still seek, as a guardian spirit, to watch over and guide her loved ones' feet, from that realm where, says the glorious hymn of Newman:

"We shall see those angel-faces smile Which we have loved long since, and lost awhile."

I will quote some beautiful lines from "The Ring," by Tennyson, which will illustrate my meaning, wherein the father says to his young daughter:

"Fear not you! You have the ring she guarded; that poor link With earth is broken, and has left her free, Except that, still drawn downward for an hour, Her spirit hovering by the church, where she Was married too, may linger, till she sees Her maiden coming like a queen, who leaves Some colder province in the North to gain Her capital city, where the loyal bells Clash welcome—linger, till her own, the babe She lean'd to from her spiritual sphere, Her lovely maiden princess, crowned with flowers, Has enter'd on the larger woman-world Of wives and mothers."

When a little child, brought up in a mining region, I have often gone down the deep shafts, and once went down my father's well, nearly a hundred feet deep—they roofed it over afterwards—and looking up, in the broad noonday, I saw the heavens

sprinkled with the heavenly stars; but when I reached the surface again, the busy, humming, material, workaday world, they were gone. Were they gone? One poor, deceptive sense told me that they were gone. But my soul knew better, child as I was. Had they emitted sound, I could have heard them still; had they been near enough, I could have touched them still; had they had odour or taste I could have smelled or tasted them still. The stars were not gone; it was the medium through which I saw them; it was the cutting off of all those baffling earth-rays, it was the extinguishing of all those discordant vibrations, which enabled me, and me alone, or such placed like me, to see them in all their truth and beauty.

And so it is with spiritual manifestations; they are always with us, they are ever around us, they are always manifesting themselves, and communicating with us, but we see them not, because we "see as through a glass darkly," we feel them not, because we are bewildered by the rough, coarse and commonplace. But let only the God-given light come, the direct light, let the scattered earth-light be cut off,

and lo!

"We shall see our Pilot face to face."

The source of these ideas from the beyond is not far to seek, if there is an intellectual beyond; but if there is none such, then we must relegate all these magnificent inventions, and all that they have done for civilisation, for the race, and for mankind, to that limbo of blind superstition, where credulous imbeciles grovel in the dirt before

"A rag, and a bone, and a hank of hair."

Professor Bowen, in his work on Modern Philosophy, in considering Von Hartmann's great system, "The Philosophy of the Unconscious," says: "In respect to the processes of reminiscence, reasoning, induction, discovery, composition, invention and several others, Hartmann justly observes that everything depends on the right thought occurring at the right moment.

And this happy suggestion is invariably the work of the Unconscious. Vainly do we rack our brains with persistent conscious effort and research to find the word for the riddle or the solution of the problem; it will not come at our bidding. And then suddenly, perhaps after a considerable interval of time, during which we had discharged the subject from our thought, and perhaps when we were idly musing on some other theme, just what we wanted flashes upon us as by inspiration. The man of science is quite as dependent as the poet, or the wit, on these gleams of light coming from the unconscious. Archimedes stepping out of a bath, or Newton idly gazing when an apple falls from the tree, suddenly calls out Eureka! and the problem which may have perplexed him half a lifetime is spontaneously solved. What remains is easy enough, and may be slowly elaborated in conscious thought; it is only, through the reasoning process, to bring the new truths into harmony with those previously known, and thereby to determine their classification and place in a system. The premises being given in immediate intuition, through inspiration from the Unconscious, the right inference from them follows, as it were, mechanically, being drawn as easily and correctly by a simpleton as by a man of genius; in fact, says Hartmann, it follows necessarily, just as a ball propelled by two forces must move on the diagonal which is the resultant of their combined directions."

There is no person who is not familiar with this process in his own experience. "I have it just on the tip of my tongue; wait a minute, it will come to me."

"It will come to me?" Who is the me? What

is it that comes, and whence comes it?

Professor Ladd, whom Schofield characterises as "a vigorous supporter of the old and narrow school," says, in his "Philosophy of Mind": "A thinker on any problem finds the truth shot up from the hidden depths below; it appears presented for seizure to consciousness as the gift of the Unconscious. In similar fashion are the happy hits of inventors, the rare achievements of art, bestowed upon the mind rather than consciously wrought out by it. Nor can

one fail to notice as significant, the connection of all such experiences with the condition and nature of 'tact,' of 'instinct.' If the credit is to be given, as it were, to the unconscious activities of our own mind for these results in consciousness which follow states of unconsciousness, such credit must be extended quite indefinitely. For the credit of much of our most brilliant and impressive acts in consciousness undoubtedly belong not to consciousness; it belongs to somewhat or to some One of whose doings we, as conscious egos, are not immediately conscious."

Professor Montgomery, writing in Mind, vol. vii., says, "We are constantly aware that feelings emerge unsolicited by any previous mental state, directly from the dark womb of unconsciousness. Indeed, all our most vivid feelings are thus mystically derived. Suddenly a new irrelevant, unwilled, unlooked-for presence intrudes itself into consciousness. Some inscrutable power causes it to rise and enter the

mental presence as a sensorial constituent."

Wundt, whose authority on mental phenomena few will question, says in his "Physiological Psychology": "The traditional opinion that consciousness is the entire field of the internal life cannot be accepted. In consciousness psychic acts are very distinct from one another . . . and observation necessarily conducts to unity in psychology. But the agent of this unity is outside of consciousness, which knows only the result of the work done in the unknown laboratory beneath it. Suddenly a new thought springs into being. Ultimate analysis of psychic processes shows that the unconscious is the theatre of the most important mental phenomena. The conscious is always conditional upon the unconscious."

One must note that Ladd and Wundt speak of "shot up from the hidden depths below," or "work done in the unknown laboratory beneath it." These metaphors must be kept in mind as metaphors only, for while they are necessary in picturing "states," they bear no relation at all to "facts." There is no above or beneath in consciousness or unconsciousness;

there may be a within and a without, because there is an individuality, and an area outside, which bounds the individuality more or less definitely, so that these interjections are not from any physical or mental area beneath, but are either from the individuality itself, or extra to the individuality. I give this caution because metaphors and analogies are so dangerous to handle, and so apt to lead to false conclusions.

That this knowledge is not, in many cases, from the individuality itself, what I have said of the patentability of inventions will demonstrate, since the catalogue of barriers to patentability, which I have cited, includes all our normal faculties, any one of which, as the factor, will suffice to exclude a patentable invention at all.

"A stroke of genius" is not a stroke of genius at all if it is borrowed, learned from others, worked out, or stolen.

Says Waldstein in "The Subconscious Self":
"It is through the subconscious self that Shakespeare
must have perceived, without effort, great truths
which are hidden from the conscious mind of the
student."

Oliver Wendell Holmes tells us that Sir W. R. Hamilton discovered quaternions while walking out with his wife; he "felt the galvanic circle of thought close, and he saw the fundamental relations between I, I and K, just as he used them ever afterwards."

Dr Holmes also says: "Our different ideas are stepping stones; how we get from one to another we do not know; something carries us. We (our conscious selves) do not take the step. The creating and informing spirit, which is within us and not of us is recognised everywhere in real life. It comes to us as a voice that will be heard; it tells us what we must believe; it frames our sentences and we wonder at this visitor who chooses our brain as his dwelling-place."

Dr G. Thompson, in his "System of Psychology," says: "I have had a feeling of the uselessness of all voluntary effort, and also that the matter was working itself clear in my mind. It has many times seemed

to me that I was really a passive instrument in the hands of a person not myself."

These are familiar experiences; who does not recall the saying, when a difficult or, at the time, an insoluble question of business or the like suddenly confronts us-" I will sleep on it"? What, sleep on it ?-if sleep is but the period of brain quiescence or of fantastic or worthless dreams; as Dr Hammond says, "When the brain is quiescent there is no mind"?

Ah, no; quoting from Professor Barker's "Foundation of Habit in Man": "Mind may be predicated of all animal life, in one sense or another; and we may also favour the view of Agassiz and others that a spiritual element is the organising cause in every embryo cell, determining its development."

And not only mind in animal life, but mind, and mostly the subconscious mind, in vegetable life as well.

Dr Ward, the paleo-botanist of the United States Geological Survey, Curator of the Botanical Department, United States National Museum, in his Memorial Address on Charles Darwin, says: "Darwin looked upon plants as living things. He did not study their forms so much as their actions. He interrogated them to learn what they were doing. The central truth, towards which his botanical investigations constantly tended, was that of the universal activity of the vegetable kingdom—that all plants move and act. He has, so to speak, animated the vegetable world. He has shown that whichever kingdom of organic nature we contemplate, to live is to move. He says that 'plants acquire and display this power only when it is of some advantage to them,' but asks, whether animals display this power except when it is of some advantage to them; and answers, certainly not. Every leaf, every tendril, every rootlet, possesses the power of spontaneous movement, and under nearly all circumstances actually exercises that power."

The speaker, in his Memorial Address, continues: "Darwin has actually solved the great problem of phytology so long supposed to be incapable of solution -viz. Why does the root grow downward and the stem

upward? Briefly and roughly stated, the answer to the question is that, as the bursting seed pushes out its two germinal points, these circumrotate from the first, and thus explore their surroundings for the means of benefiting the plant. To employ Darwin's own words, they 'perceive' the advantage that would result from the penetration of the soil on the one hand, and from the ascent into the free air and sunlight on the other, and through the pre-Darwinian law of the 'physiological division of labour,' the one becomes geotropic and the other heliotropic."

So the epiblast in the growing fœtus reaches around and unites along its raphe or seam, and grows together only here, to enclose the body and its contents, "perceiving" beforehand the union which it must effect. And so the little pole-bean stalk, as it sends its first tendrils out, reaches around for a support. Take a stick, and set it in the ground a couple of inches away, and see the little plant bend over and reach out to twine its tendrils around it. Just before it reaches the stick, pull it up and stick it in the ground on the opposite side, and it is really pathetic to see the movements before the plant finds out whither to bend again; repeat this at different points, and you can make the little plant travel at will, without reaching its "heart's desire" at all. The plant will as clearly manifest its bewilderment and disappointment as if it were a dog. I have often, when a boy, done this to a poor little bean-stalk, until I was actually ashamed of myself. But my mother loved plants and flowers: she was one of those who could "sing to the flowers," and they heard her.

CHAPTER XX

MEMORY THE FINAL BATTLEGROUND OF EMPIRICISM

I have long foreseen that the field of memory is to be the final battleground between psychology and any materialistic or empirical theory of the universe—and

that psychology will be the winner.

For ages memory was looked upon as a series of "impressions," or "physical records" kept in cells or pigeon-holes, as it were, in the brain. But with our advances in science these views soon became untenable; but the old terminology still persists, and we are deluded thereby precisely as we are deluded by any false definition of terms, or by the want of accurate definition.

Lord Bacon, among his eidolons, gave this eidolon of form a prominent place, because, having become familiar with a term, the term soon becomes, if we are not careful, a description, and will be used to explain the unknown, while it itself is equally unknown. is as though we should speak of x and y as equal, or unequal, and thereby come to look upon x and y, which are quite unknown quantities, as real quantities themselves, instead of symbols of the unknown, and which cannot explain anything, because they are themselves the very things to be explained. It is so with the terms Hypnotism, Telepathy, Unconsciousness or Subconsciousness, and a multitude of other terms and phrases. This is why every term must be defined precisely, before using it. A bright young visitor in a company of members of the Society for Psychical Research one evening said that all we were discussing could be easily explained by hypnotism. I asked him what he meant by hypnotism, and he answered that if we were going to split hairs in that

way, there was no use in prolonging the discussion. That was pro. Now, this one is con. At a like meeting, a visitor presented a case or a problem of occult character, and explained it, as he thought, by reference to Carpenter's theory of unconscious cerebration, but was not at all himself satisfied with the explanation, although he knew that it could be explained physically. I suggested that perhaps it might be explained by Abracadabra. He said he had thought of that too, but believed that it did not fully account for it either. Seeing signs of amazement somewhere, he suddenly asked me what I understood by Abracadabra. "Blest if I know," I replied. And that, surely, ended the discussion, for he became angry, to my regret.

And so of memory; it is like the sunrise, which men have seen daily for thousands of years, and not a soul knew that it was an earth-sink, or turn-over, instead of a sunrise;—however, we still call it sunrise, although we know better now. So of memory, we call it an *impression*, and while psychologists know that it is not an impression at all, but a memory, we

still call it an impression.

It is easy to clear up the fallacy; every living soul has the material at hand; but nobody bothers about it, any more than he does about sunrise. Yet the whole past, present and future of the race, and of spiritualism, psychology, religion and humanity are involved in the disputed definition of memory, and, until that is settled, we *must* bother about it. When we fully understand this memory, it will be like Tennyson's flower in the crannied wall.

"I hold you here, root and all, in my hand, Little flower,—but if I could understand What you are, root and all, and all in all, Then I should know what God and man is."

Here is a little hypothetical dialogue which I wrote out some years ago, such as are occurring every day. If anyone can explain it, or even indicate any conceivable means by which it can be explained, on a physical or empirical basis, it will be more than any-

one as yet has been able to do. And yet it is so

homely and simple as to be almost ridiculous.

A young student at college meets his classmate, after a vacation, and says to him: "Jim, I got your letter about old Aleck being drowned in your cistern; why, you haven't any cistern."

"Yes, the one you fell into when you visited us several years ago, when we were boys. It was the day that mother went away to Uncle John's funeral.

What day was that?"

"It was the 3rd of July; we were thinking of making a kite, in the barn; but it wasn't a cistern; it was a spring."

"Yes, but the spring dried up, and father con-

verted it into a cistern."

"I didn't know that, but the old spring-house is indelibly photographed on my memory. I can see it now with the beehive alongside it."

"No, that was a wasp's nest; one of them stung you on the neck. The beehives were up behind the

barn."

"Then I never saw them. That was the day you

shot at Johnson's old duck and missed it."

"Yes, and when we acted it out afterwards for old Aleck, I can see the old fellow's face gradually draw up into puckers, and his grin broaden and broaden, till he finally tumbled off the stump amid peals of laughter."

"By Jove! how the lines of his face jumped back and reversed themselves; I really thought he should take to crying. He blamed it on the old duck, too,

but your mother blamed it on me."

"No, on me, and I guess a licking was due me for shooting at that duck; but I never got it, and only last year mother told me that she had begged me off."

"She winked at me when you weren't looking. I'll bet the old place appears quite changed with the

spring-house gone."

"No, the spring-house is still there, but it's a wood-house now. Do you know where the wood-house used to stand?"

"Do I? I've got that axe-scar on my ankle yet."

Now this trifling little dialogue is simply to show that memory, comparatively speaking, from physical impressions on the brain-cells or elsewhere, is impossible. The theory of "associated ideas" is called in to connect these utterly discrepant factors together, but we must beware here of the underlying fallacy which any theory of such association of ideas with a physical substratum implies. If the whole set, so to speak, are associated, they are associated as a set, and since they are awakened or touched upon from so many directions, and touched upon at so many points (or must be if they are to be thrown into associated contact, as it were, by a thousand diverse accidents), the association must be extended and extended, until all ideas whatever are connected up with all other ideas whatever, and the fabric falls. by its own weight, as well as by the demonstration of fact, which each of us can make, and must make every moment of our lives. We would have to become, in fact, like the old German farmer in Pennsylvania, who, charged with being land-greedy, replied: "Why, I am not land-greedy, all I want is choost the land what jines on to mine." Or it would be like that hypothesis of continuously copulated telepathy which makes all the knowledge of anyone whether past or present, the common knowledge of all, and everyone, of course, practically omniscient.

But there is one quality or character of memory which is studiously concealed in presenting the physiological conception of memory, and it is a curious

example of Lord Bacon's eidolon of form.

I cannot better express this than by citing Professor Francis Bowen, of Harvard University, in his discussion of Von Hartmann's splendid "Philosophy of the Unconscious." Had Von Hartmann not feared to follow where his own system inevitablyled, he would have left behind him the greatest work on the subject ever given by mortal man, if we may except a single one, the eighty-one short chapters which make up the Tâo-Teh-King of Lâo-Tsze, the ancient Chinese philosopher, who wrote twenty-fivehundred years ago, especially when collated with the commentaries of his

almost equally illustrious follower, Kwang Tsze, who

wrote a century and a half later.

Says Professor Bowen in his "Modern Philosophy": "We need to have an adequate conception of the magnitude and importance of the work which memory has to do, before we can rightly understand how far its operation depends upon 'that power not ourselves' which Hartmann calls 'the unconscious.' An obvious illustration will make this point clear. Many educated persons, in this country as well as in England, know enough of at least four languages, Latin, French, German or Italian, and English, to be able to read any common book in either of them with about equal facility. The whole number of English words, not including purely technical terms or mere derivatives, is at least forty thousand; and that portion of the vocabulary of either of the other three languages, which is at command of a well-educated foreigner, is probably half as large. Among the treasures of memory in such a mind, therefore, must be reckoned at least one hundred thousand mere words, all of which, with some trifling exceptions for onomatopæia, are symbols as arbitrary as the signs in algebra. What a countless multitude of individual facts and familiar truths in science and ordinary life are either wrapped up in these words, or exist side by side with them in any well-informed mind! Certainly such a mind is far more richly stocked with words and ideas than the British Museum is with books. That admirably managed institution, suffering from the embarrassment of riches, maintains a full staff of well-trained librarians; and one of them, after rummaging the catalogue and the shelves for perhaps ten minutes, will triumphantly produce any volume that may be called for. But the single invisible librarian, who awaits our orders in the crowded chambers of memory, is far more speedy and skilful in his service. A student reads a page of French or German in a minute, and for each of the two or three hundred groups of hieroglyphs printed on it, 'the unconscious' instantly furnishes us whatever we call for, either its meaning, or its etymology, or its English equivalent, or its grammatical

relations to other groups in the same sentence, or any of the associated ideas in a little world of knowledge of which this one word forms the centre. We have no conscious clue with which to direct ourselves in the search; it is enough that we have an interest in the point to be remembered, that we need it for the work which is in hand, and instantly it is produced

out of the vast repository."

Now, let us look a little further into the above statement, with reference to the theory of material or physical impressions. The invisible librarian, at the call of the mind, must bring into cognisance of the mind the corresponding impression out of, say, these one hundred thousand word-signs alone, not speaking of the billions of billions of other impressions accumulated through a lifetime. To do this, of course, the "picker," as I call this invisible librarian, must know what word the mind is in need of, and also where to obtain the corresponding physical impression. But if the picker knows beforehand what the word is for which it is looking, then it already knows it before hunting up the physical impression at all, and in that case the law of parsimony forbids that an elaborate mechanism and room for physically recording impressions should be employed, when the "picker" knows all the words as needed, before he hunts them up in their pigeon-holes, and can produce them at will. For, if the "picker" does not know beforehand, he never will know, for no one can find a certain thing among thousands, who does not know what he is looking for.

Therefore, if the "picker" is not physical, the whole essential fabric of memory is spiritual; if the picker is physical, then the picker itself will need a guide, and this new picker will be the real picker, and there is a still wider breach of the law of parsimony, for we have only multiplied confusion by introducing

another intermediate dummy.

Association of ideas can play no part in reading an unknown book, or in writing one, so far as memory is concerned, for the ideas are still to be acquired from the very book itself, or else from the inventive mind itself, and they cannot be associated until acquired

and co-ordinated. And in writing a letter all the sentences are new, and the juxtapositions of all the ideas are also new, else it would not be a letter, but a copy; and in the latter case the statement still remains true of the original from which the copy was made.

As a matter of fact, the whole of memory belongs to that psychical world which Sir John Herschel described, in which will is complemented with motive, power with design, and thought with reason, which is not a chaos, and in which the movements of the atoms and molecules are so co-ordinated and controlled. that "a problem of dynamics which would drive Lagrange mad is solved instanter, while the movement goes on, and in which a differential equation which, algebraically written out, would belt the earth, is integrated in an eye-twinkle."

They are allied with that instinct which Kant declared to be "The voice of God," and Von Hartmann the "Action of the Unconscious"; but not that pseudo-scientific notion of instinct, as a memory survival from earlier forms, ages before, and from progenitors which were less informed, instead of better informed, and which could not possibly have known the very thing which their successors are assumed to have learned from them—and how? By physical memory—impressions, transmitted through countless generations, and a series of pickers, equally countless, travelling along, pari-passu, all to teach ants, for example, the best place to bite a man, before men were created.

CHAPTER XXI

THE SOLE ALTERNATIVES: DEITY AND SPIRITUALISM, OR ELSE ZERO AND NIHILISM

SPIRITUALISM is merely encountering to-day the old odium theologicum, and opprobrium scientiæ, which all new light and all new science has ever encountered, and is religiously damned with the same "bell, book and candle" as have been encountered by all great scientific reforms; its validity is found to be established as soon as the clues have been run out, but that did not matter so long as science refused to run them out, and its greatest, its only enemy is that same old a priori, which has held back the knowledge of man, by the refusal of what Professor James calls "the will to believe," or what is the same thing, the will to examine.

So, the value of science to man is in nowise diminished by a full and fair knowledge of what it really has done, and how, and on what basis it has done it, but it is immeasurably degraded by its denial of, or refusal to investigate, the actuality of the very bases on which it is established; and still worse, of its agnostic denial of any human ability to search out and determine these fundamentals of life and mind. Wherever science put down an a priori, you may mark well that, starting with and taking cognisance of the mere apparent phenomena of physics, it has worked merely with weights and measurements, and so doing, and so doing alone, as soon as it strikes the unknown it creeps behind the Moloch of superstition, into whose red-hot gridiron bars it has already helped to fling the hapless few who have been looking, and proving, and thinking, instead of merely talking, and talking, and talking.

What matters it, as dealing with psychology, how long it takes a sensation from a pin-prick to travel from the finger to the brain or spinal cord and back again? The question obviously is, how does it

travel at all, and what is it that travels?

So of the distance at which two calliper points on the skin will feel as one prick, or as two? or what appears when an ignorant savage tries to count above five, or all the formal, descriptive and mechanical results in the physics of life and mind? That is not psychology at all. What is life, what is mind, what is perception, what is reason, what is memory, what is remorse, what is art, or love, or genius, or intellect, or whatever makes man differ from and superior to the brutes, and the brutes superior to crude matter? Why do living things grow internally, and why, when, like Niagara, whole cataracts of the intimate molecules of worn-out cells and detritus are pouring off continuously, and new ones growing in everywhere, so that a man is constantly dying and being made over, does the living organism remain the same? Is not a man with a leg and arm off still the same man? Is he not the same man as he was years ago? is it that works while we sleep, and never wearies, while our consciousness has to sleep one-third of the time in order to work the other two-thirds? What is that picker which travels through a series of invisible dictionaries of forty thousand words each, and instantly put on your tongue the word your consciousness feels the need of, in any known language, but does not itself know how to express? And when the picker misses fire, as it were, what is it that pops the missing word up, as Ladd says, "shot up from the hidden depth below" (indeed, an intelligence with knowledge and power has shot it up), while you, perchance, are talking about crops, when the word was wanted when you were talking an hour ago about Egyptian hieroglyphs? What man is sufficient unto himself? Yet what is sufficient at all on this earth, excepting man? and he only, as Ladd says, when "the giftofconsciousness" has been bestowed upon the mind. Far be it from any of us to decry the practical results of science, but equally far be it from us to decry the higher work of those who are able to deal with the foundations of science, and especially far be it from them to decry what they have never honestly tried. A fop was asked, "Do you speak French?" and replied, "Ah, I have nevah twied, but I daresay I could if I should twy."

The a priori professor of science, however, would have answered: "There is no such thing as French; I never speak anything but English, and am proud of it; I have settled the French question long ago, on

a priori grounds; they merely jabber."

Says Masson, in his lectures on "Recent British Philosophy," before the British Royal Institution: "Shall philosophy pretend to regulate the human spirit, and not know what is passing within it—to supervise and direct man's thinking, and not know what they are?" We can all admire, indeed, and understand, the feeling of Wordsworth when he says:

"Great God! I'd rather be
A Pagan suckled in a creed outworn,
So might I, standing on this pleasant lea,
Have glimpses that would make me less forlorn."

These great questions of mind are not insoluble; granted that mind exists—and who denies it?—and that it is operating all around and within us, it ought to be the simplest of all the problems of science to solve. And it would have been solved long ago, and by the scientific method, had science even tried to solve it. Only to-day is it awakening to the task. It is shameful to say it, but until recently it was dealt with as a mere metaphysical superstition, or a sort of brain secretion, volatile and fugitive. Yet mind itself was the instrument they used to deny the existence of mind. As Emerson says, in his poem of "Brahma,"

"They reckon ill who leave me out, When Me they fly, I am the wings."

And it must be solved or we die, for such was the penalty of the riddle propounded of old by the Egyptian sphinx. Masson clearly gives us the solution; indeed the solution is everywhere except where it was looked for. Says Masson: " I cannot conceive anything as resulting from the experience of a zero; and unless I start with a human mind definable as zero, I must allow a very definite amount of prior bequest in that human mind wherewith to grasp and mould experience. Or, if empiricism [materialism] pushes the dispute further back, . . . still, at every stage the assertion recurs, 'We are not yet at zero; something is antecedent, something structural and predetermined, even here.' Or, if at last, somewhere behind the Nebula, we do reach Zero, or Nothingness, what becomes of Deity? Is Deity at the back of the original zero or Nothingness, out of which all else has been evolved or convolved empirically? Then either Zero would have remained such, and, as from nothing nothing can come, there would have been no evolution whatever, or else the true origin of the whole evolution is not Zero but Deity."

It is a solemn truth that the alternative is either Deity or nihilism; there is no other. And with a Deity once granted, even so sceptical a leader as John Stuart Mill concedes that revelation is but ordinary

and normal, and to be expected.

And this spiritual revelation is the basis of all religion, and it is the basis of all spiritualism as

well.

And this belief is not merely a belief, such as the childhood belief that the moon is made of green cheese, but like the other old belief that the moon influenced the tides, and which science, after Newton had pointed the way, long after indeed, took into its body and made a part of its structure. It is a valid immutable belief, this knowledge of the psychism of the universe, and its revelations to the kindred psychism of man, both by direct evidence in all ages and places—among all mankind—and by the even still more controlling fact that there is no alternative; it is either God or zero, and from zero, however multiplied, nothing can come. There is no evolution from zero—try it on a slate; if one boy has no apple and

another boy has twice as many, he will still have no

apple.

But if we come from God, little as our psychism is, if you multiply it by an infinite psychical universe, you will have an infinite God, and, by knowing ourselves at the best, we know Him also; and can trust, honour and serve Him and ourselves, and carry out His eternal purposes.

Says Professor Joseph Le Conte, the eminent geologist and biologist, of the University of California,

in his "Religion and Science":

"That man is an immortal spirit is the doctrine of Scripture: it is more; it is the basis of all religion and morals and virtue, and, indeed, all that ennobles our humanity. It is also a datum, a clear revelation of consciousness. Belief in this is immediate, intuitive and universal in all minds unplagued by metaphysical subtleties. We may learn to disbelieve, we naturally believe. Belief of this rests on precisely the same basis as our belief in external Nature. The one is a direct revelation of sense, the other a direct revelation of consciousness. Both, therefore, are equally certain, far more certain than anything can be made by proof. These are the foundations, the starting points of reasoning, not the goal of reasoning. They are the bases, the underlying condition of philosophy, not the subject matter of philosophy.

not the subject matter of philosophy.

"There are, then," he says, "two bases of philosophy, in fact, two poles of existence—matter and spirit . . . matter the thing perceived, spirit the thing perceiving—matter the revelation, spirit the interpreter—matter the passive, spirit the active principle. Without a belief in spirit, therefore, not only can there be no religion, no virtue, but there can be no philosophy or science; there is no longer any

significance in man or in Nature."

This is the very reverse of superstition; it is the acme of hard-headed common-sense and demonstra-

tion and certain knowledge.

And see where this psychical individualism of man, at its best, leads us; see what it does for man's brotherhood and God's fatherhood, and how it takes

.

hold, with hooks of steel, of each one of us, as soon as we see it presented in the divine psychism of an honest human life, and how the spiritual power of an eternal Fatherhood rises in its revelation above the human creeds and the entanglement of sectarian theology.





CHAPTER XXII

SUMMARY OF PARTS I. AND II.

In the first part of this work, I endeavoured to show that religion was as old and as universal as mankind; and that the principles of religion were the outcome of spiritual revelation to man, or else of a primarily implanted revelation in man; but that, at all events, no tribe, no race, no people, in any age, was devoid of religion; and I cited the most recent investigations, which have fully overthrown the earlier and more dogmatic teachings of a less developed anthro-

pology.

I also showed that the basis of every religion is spiritualistic, that their principles are those of modern and ancient spiritualisms, and that the phenomena relied upon to establish them among men were identical with all the various phenomena of spiritualism. Even the religion of Islam, perhaps the most rationalistic of all religions, starts with a transcendent miracle as its basis; that the Koran was not only a direct revelation from God, but was an autograph from God, so that, to alter or vary a line or letter is to betray God Himself by forgery.

I have endeavoured to show that all historic religions embody the same principles, and are based on the same truths, and that the prehistoric or un-

historic religions are identical with these.

I have also shown that in moral and spiritual loftiness the earlier religions are not deficient, but that many of them are far higher, by any spiritual or divine test that we can apply, than many later ones, and that in all primitive religions the great overgod is found intact, and the recognitions of direct communication with man are full and explicit,

not only between man and God, but between man

and individual spirits.

I have shown you what all advanced anthropologists now agree upon, that the Spencerian notion that religion came from ghosts and dreams is absolutely futile, and falls not only by its own weight, when we undermine the false data and hypotheses on which it was built, but totally fails to interpret the religions of earlier peoples, or to account for the phenomena of

later religions.

Dealing with the Christian religion, and with the Hebrew faith and practice of which it was the outcome, I have shown that, prior to the Reformation in the sixteenth century, the whole Christian religion, without dissent or cavil anywhere, was spiritualistic to the backbone; but that this spiritualism, which was precisely like the spiritualism of to-day, had become the property of the church, and was condemned when practised outside its sacerdotal boundary, while yet its existence everywhere was not denied, either by church or people.

I showed also that Luther's revolt was only possible by depriving the old church of its spiritual dominance, for that church believed and taught spiritualism, that both it and its religion were from Christ and His apostles, and not from the New Testament, but that, on the contrary, the church preceded and produced the New Testament, and was the direct

and spiritual body of Christ, and nothing else.

To give the Protestant revolt any *locus* at all, it was necessary to repudiate the whole spiritualism of the time, as claimed by the old church, and to fall back on the New Testament as a purely historic document, or a collection of historic documents.

This involved two fallacies, but this position was absolutely necessary if the revolt, as carried out, was to succeed at all. I am not denying the beneficence of, or necessity for, the revolt; I am merely citing facts.

The first fallacy was that while the spiritualism of their own day, in the old church, was denied by the reformers, the same spiritualism had nevertheless

given the Protestants their own Bible; for the validity of the canon, which cast out three-fourths of the originally accepted documents, was only possible by a great spiritualistic intervention, and this occurred but a few centuries before the Protestant revolt, and long after the time of Christ. And hence, the old church asked, why not such intervention afterwards?

The second fallacy lay in the fact that the authorship of most of the writings of the New Testament was anonymous. Hence, in the absence of direct, continuing, spiritualistic revelation, valid to make or unmake the whole record, there was no evidence of

any authentic revelation or Bible at all.

These errors forced Protestantism into a position which has done enormous harm. It was the conception of a great anonymous God, who had made a mutilated and written record, and left it for man, and then abdicated until the far-off time of the promised judgment. As a consequence, materialistic science, then about being born, uniting in this crusade, which suited its needs exactly, flung natural causation, instead of divine control, into the government of the universe, and atheism made common cause with this

practically suspended theism.

Says Romanes: "The conflict of science and religion has always arisen from one common ground of agreement, or fundamental postulate of both parties—without which indeed it would plainly have been impossible that any conflict could have arisen, inasmuch as there would then have been no field for battle. . . . Quite apart from modern science all the difficulties on the side of intellect (or reason) which religious belief has ever encountered in the past, or can ever encounter in the future, whether in the individual or the race, arise, and arise exclusively, from the self-same ground of this highly dubious hypothesis. The hypothesis or fundamental postulate in question is, If there be a personal God, He is not immediately concerned with natural causation."

Here we see the momentous consequence of divorcing religion from a continuously acting, spiritualistic volition and revelation, and so divorcing it from its basic truths and phenomena, in fact, from

all that is commonly called "spiritualism."

In the second part of this paper I endeavoured to show why modern science, as erroneously conceived of, has failed to investigate the universal spiritualistic phenomena which crowded upon it on every side; that this failure was due to an a priori, a prepossession, a state of mind which assumed before investigation that there was nothing to investigate; and I showed that this a priori was as gross a superstition as that of the lowest and most degraded savages; nay, a grosser one.

I showed that whenever scientific men investigated these phenomena they were convinced of their actuality, and that those scientific writers who refused to investigate were obliged to sustain their published theses, and other writings, by perverting or ignoring opposing facts, and suppressing all

opposing evidence.

I also endeavoured to show that that question was not one of mere communication between those now living and the spiritual individualities of those already dead, but that the new psychology involved much more, and that probably integrations were at hand which would include all apparently supernormal phenomena, without actually being limited in interpretation to any single one, or any single class of

these, itself.

I also endeavoured to show that the physical sciences, dealing simply with the surrounding and temporary phenomena of physics, were totally incapable of investigating, with these data alone, any of the propositions on which the physical sciences themselves were founded; that by these sciences alone we could know nothing of causation, of the infinite, of time and space, of life or of mind, of matter even, or of spirit. That what the physical sciences really could take cognisance of, so to speak, were such facts as a set of barnacles on a mighty ocean steamship could consider, when carried along through unknown seas, neither knowing to what they were attached, nor anything of the mechanism or structure of the vessel

which carried them, or of the minds and forces which directed and moved them, or of the boundless universe around. It could not be otherwise. And I have shown, from the words of the most eminent of the teachers of physical science, that these statements are true, and that the actual concrete achievements of physical science in these directions are mostly confined to simply observing, recording and classifying, the facts which came before them, and often not even most of these.

In the third part of this work I shall endeavour to show that the whole basis of materialism

is a mistake in source, as well as in fact.

I use the term "materialism" not in a restricted sense as dealing with our conceptions of what we regard as matter, but in the accepted broader sense, as contradistinguished from transcendentalism; as synonymous with empiricism, in which the material or substance, or phenomenal, is self-sufficient in itself; as automatic, so to speak, and as divorced from any controlling, extraneous or invoking spiritual intelligence and control; as, in fact, as stated by Romanes, a universe in which no personal God is concerned in causation, in which divine volition is not the ever-present factor, and in which spiritualism is but a man-implanted superstition.

I shall endeavour to show that the great thinkers and writers, on whose testimony the popular views of believers in materialism rest, not one of them, ever taught or believed anything of the sort, that they have been totally misunderstood, and that their actual beliefs and teachings were quite the opposite; when not the opposite, that they were led into failures conceded by themselves; and that when such beliefs were justly even attributed to them, before they ceased writing they explained or recanted the views attributed to them; and in the single case of Haeckel, that he acknowledged his incompetency to deal with the problems he treated, that his facts were scientifically misstated, and that, finally, the very authority, Romanes, on whom he most relied, after Haeckel's

work had appeared, and after Romanes had actually studied the questions for himself, repudiated the whole scheme of Haeckel, and redemonstrated, and fully accepted, the spiritualistic position as already established.

CHAPTER XXIII

THE METHODS AND ACQUISITIONS OF SCIENCE

THE methods of science are beyond all praise, but they are simply the methods of common-sense. As Davy Crockett said: "Be sure you are right, then go ahead," or as the old English cook-book said: "First, catch your hare." Adding to these the common-sense maxim that no man can be judge, jury, witness and executioner at the same time, we have the whole method of science in a nutshell.

When pursued with infinite patience, it is Godgiven; when pursued with earnest industry, it is an inspiration; when pursued with fairness and breadth

and unbiassed honesty, it is divine.

But it is hedged with human limitations, and the scientific judgment of one decade is not that of the previous decade, and may not be at all the scientific judgment of the next. Flammarion, the French astronomer, relates that a scientific friend of his, Eugene Nus, sardonically dedicated one of his works as follows:—

"To the Memory of all Savants, Breveted, Patented, Crowned with palms, decorated and buried, Who have been opposed to the rotation of the earth, To meteorites, To galvanism, To the circulation of the blood, To waves of light, To lightning rods, To daguerreotypes, To steam-power, To propellers, To steamboats, To railroads, To lighting by gas, To magnetism, And all the rest.14

The arraignment is not overdrawn; on the contrary it might be greatly lengthened. And this relates to little facts which came directly under scientific cognisance. When we reach the basic facts which alone make the acquirements of science valid, the whole field is befogged, and there is very little actual

light of science anywhere.

For example, the physical sciences are all based on gravitation, and yet, as I have already stated, there is not a man of science in the world who can tell you what gravitation is. Not only this, but it contradicts every axiom of physical science itself. A thing cannot act where it is not; and yet gravitation acts across "void" spaces of millions of millions of miles. A force cannot be provided with hooks to reach across space and pull objects, nor can there be a gravitational push, for Maxwell showed that lines of pushing force by their impingement would set every bit of concrete matter in the universe ablaze in ten seconds.

Chemical affinity works in unknown and diverse ways in different substances, yet no one can tell why. The atomic theory has long been known to be untenable, in fact, it contradicts the principles of specific heat, and is only held to as a working hypothesis; yet what is there to take its place? Nothing which

science has found.

We have predicated the ether to explain the phenomena of light, heat and electricity, yet the ether is altogether incompatible with any other physical substance known to science. We even hold fast to the emission-terminology of light, while we have abandoned the emission theory for another, which, itself, from phenomena which it cannot explain, is doubtful.

No one can explain a sun-spot; no one can explain the proper motions in all directions, and at all velocities, of the stars; no one can explain anything that really needs explaining; while Kant's table of antinomies gave a series of scientific propositions, one alternative of each of which must be true, yet of which both, scientifically speaking, are inconceivable. Who knows what infinity is? and yet who knows

how there can possibly be only a finite universe? In measuring an infinite universe an inch and a thousand million miles are precisely of the same dimensions. If we descend the scale, we can divide and subdivide to infinity, and yet one rotating system, infinitely small, is relatively as large as our own solar system, or any other, however large, and we have not yet begun in our descent to the infinitely little.

The real problems are not investigated by science at all. We spend our time in teaching school-book science, that is, sure-enough science, and such men as Sir William Crookes and Lord Kelvin look on aghast.

When the phonograph was first exhibited before the French Academy of Sciences, says Flammarion, a distinguished member rose and demanded that the miserable ventriloquist be dragged out from under the machine, and exposed to the wrath of the genuine men of science there present. And six months later, when phonographs were selling at ten dollars apiece, the same savant proclaimed again, on pure a priori, that "vile metal could never reproduce human"

phonation."

Take, by chance, a mathematical problem out of the mass; Ievons says that the chances are a million to one that it cannot be solved at all, and that we do not even know how to approach it. Yet Sir John Herschel tells us that the atoms, those wonderful atoms, "involve all the ologies and all the ometries, and in these days," he says, "we know something of what that implies. Their movements, their interchanges, their hates and loves, their attractions and repulsions, their correlations, their what not, are all determined on the very instant. There is no hesitation, no blundering, no trial and error. A problem of dynamics which would drive Lagrange mad is solved instanter. A differential equation which, algebraically written out, would belt the earth, is integrated in an eye-twinkle; and all the numerical calculation worked out in a way to frighten Zerah Colburn, George Bidder, or Jedediah Buxton."

But he does not pause here; like Romanes, he pursues force to its ultimate, and declares that force,

any force, all force of which we have cognisance "is connected with volition, and by inevitable consequence with motive, with intellect, and with all those attributes of mind in which personality consists."

It was against this spiritually manifested basis that Herbert Spencer rang the changes of his a priori, which settled it without investigation; and in which Huxley took little interest, and Hume dreamed that such things were to be gotten rid of as superstitions, by the popular vote of a few friends in the gallery. Not searching in these fertile fields, where then did the men of physical science of those days search? In those fields of which Sir John Herschel, in continuing, says: "Will without Motive, Power without Design, Thought opposed to Reason, would be admirable in explaining a chaos, but would render little aid in accounting for anything else." It must not be forgotten that in accounting for the universe by a series of accidents without significance, the accounting itself is one of these very accidents, and is itself equally without significance. The motto must be "All or none."

Paul Janet, writing so long ago as 1864, when rational psychology, we may say, was just emerging, wrote in the preface to his work, "The Materialism

of the Present Day," as follows :-

"The fact which explains the success of materialism is an inclination, natural to the human mind, and very powerful now—viz. the inclination to unity. People want to explain all things by one single cause, one single phenomenon, one single law. This tendency is, no doubt, a useful and necessary one; without it, no science would be possible; but of how many errors is it not the source? How many imaginary analogies, how many important omissions, how many fanciful creations have resulted in philosophy from the love of a useless simplicity? No one denies, of course, that unity is the ultimate substratum of things, both at the beginning and at the end. No one denies that one and the same harmony governs the visible world and the invisible world, bodies and spirits. . . No doubt matter and mind must have

a common reason in the thought of God, and there it is that we should seek their ultimate unity. But what eye has penetrated so far? Who can imagine that he has explained that origin common to all creatures? Who can do so except him who is the reason of everything? Above all, what weakness, what ignorance it is to limit the real existence of things to those fugitive appearances which our senses perceive; to take our imaginings as the measure of creation, and to worship, as the new materialists do, not even the atom which had, at least, some semblance of solidity, but an 'I know not what'; nameless in every language, and which we might call 'infinite dust'!"

Can we now see why so eminent a man of science as Huxley justly drew the physical circle of solid and sure enough scientific achievement so small that he could advise us to neglect as worthless even the minute residuum left within its invisible boundaries?

Surely there is ample room here for modesty, but except among the very greatest leaders of science we find very little of it, and among specialists, as a rule, none at all. All honour to such leaders as rule the world of science, but let us not be beguiled by the imitation, school-book science, which claims and gives, as solid chunks of wisdom and demonstration, crude speculations presented as facts, which disprove themselves as soon as printed, and which will not bear the test of even a penny-dip without instant disap-

pearance.

Someone has said to me: "You are hard on science"; I am not hard on science; I was born into an atmosphere of science, I breathed it in the home circle, I have always loved and followed science, and for the past forty years I have done almost nothing else. Science is systematised knowledge, and far be it from me to decry knowledge at all, and still further to decry the systematisation of knowledge. But when I see the bigotry of men who claim to speak for science, but the latchets of whose shoes they are unworthy to unloose, when I find sham and charlatanry take the place of honesty and investigation, when I find the whole basis of genuine science flouted and repudiated in the name of an *a priori*, which is the exact measure of a man's unfailing ignorance and conceit; then I want to sound just one note of warning, for an intellectual shame has been put upon science which it does not deserve, and should not be made to bear.

What is wanted is to see science put on her spectacles, and get honestly down to hard work on these difficult but universal and most important subjects.

When that time comes, and it is rapidly coming, psychism, in its broadest sense, will be tried by a jury of its peers, and the verdict will be in accordance with the evidence of all mankind, everywhere and from the beginning, and will not represent merely a selfsufficient ignoring of the whole testimony, and an a priori prejudgment of the whole case. The facts will not be superciliously thrown aside, the evidence will not be perverted or garbled, inconvenient facts will not be suppressed, the truth will be elicited, as it would be by skilled lawyers, and the opinion rendered, as it would be byable and impartial judges, and science will then win a crown of imperishable glory. Nay, more, in that day the judgment will be found reflected upon and applicable to many other great problems, now the despair of science, and solid achievements will come in all directions.

I have also been asked, if science has so often changed its position, how do you know that what you claim as scientifically true of these demonstrations and conclusions will not also be displaced in favour

of something else?

I do not know, but I do know that psychology is coming to its own, simply because every other explanation has gone to the wall as inadequate and unsupported while this is left, and is the only explanation left to account for the facts. I do not believe, to use a State of Maine colloquialism, that we are going to "learn dumber." Philosophy in every age and of every grade has always held to the spiritual theory. Not a valid system of philosophy has ever been presented of which this is not true. Science, to save its own position, has always contended that philosophy

was worthless, that it was speculation and imagination. But now science has proven itself worthless to account for its own facts, and cannot explain its own fundamentals; and nothing is left but to take up the flouted problems, and go over the abundance of evidence from clouds of honest witnesses, and for science to deal with these problems in a wider way, and then, unless the universe and mankind are one huge and ghastly jest, we will have to land in transcendentalism, and when science examines transcendentalism, as it examines light, heat and electricity, it will find that these problems and those of the other phenomena of nature are identical. If there is a greater integration at hand, which will include all the phenomena of psychism, it can only be by including the physical as well. The supernatural will have disappeared, but the supernormal will remain.

And I know this; that never has a universal consensus prevailed among mankind in which further research has not demonstrated the presence of a great truth; that the phenomena encountered, not only in spiritualism, but in every branch of religion and science, nay, of common life even, are inexplicable, except by taking in psychism as a prime factor; and that the problems become simpler every time the base is broadened, and the demonstrations become clearer and surer in the same proportion. Everything is leading directly away from brute matter as it was once taught, into mind as it expands and broadens before and around us, and mind, which is what we think with, can never be displaced, so long as we have to use it to think with; but must improve and increase as rapidly and as certainly as we dispassionately take hold, observe, study, think and demonstrate. The knowledge of infinite things is within our grasp; shall we take it?

Scientific teachers have been in the habit of speaking too much ex cathedra. It has been said that much of the dogmatic teaching of the clergy has been due to the fact, that when preachers stand up in their pulpits and jaw, nobody else has a right to jaw back.

The Bible tells us that the countenance of a friend sharpeneth the countenance of a friend, and that is what is happening to-day with science. As Professor De Morgan said of those pseudo-teachers, "They need taming, and will get it? They wear a priest's cast-off garb, dyed to escape detection." Such people need to rub against each other and against other

people more and harder.

Do not for a moment imagine that all men of science are of that ilk. A third of a century or more ago the prospect was black indeed; they were manufacturing, or going to manufacture, living protoplasm in gallipots; and believed and taught that the physical basis of life was a chemical glue, crawling, or getting ready to crawl, all over the bottom of the sea; and that, with but another short step, it could be compounded in the chemist's laboratory. But living protoplasm never was so compounded, and it never will be; for we now know that living protoplasm is a living machine, and, like all operative machines, can only be produced by intelligence of a purposive character; and with the general disappearance of this school slowly passed away the dark clouds, and a new era dawned.

But we must not forget that the fault was not altogether with these teachers; new means, and, in fact, whole new sciences, came into existence almost with their disappearance, and their greatest crime, for some blunders are worse than crimes, was their dogmatising on insufficient data. Of this they were guilty, and thereby they betrayed science, and fed the lowest passions of an ignorant and credulous public.

The newer and greater psychologists and men of science and philosophy are all with us to-day. What we have to encounter now is that dumb inertia born in those old, black days of brute matter and empirical materialism; and in its remaining progeny, those half-taught followers who, like clay-eaters, stick to their diet of mud, because they stopped learning, when their old half-blind leaders ascended to heaven

and learned better.

CHAPTER XXIV

THE NEW PSYCHOLOGY

What galaxies of undying names now blaze in the sky of a redeemed, a re-created psychology, based

on psychic life!

În Great Britain, Sir Oliver Lodge, Sir William Crookes, Professor Barrett, Balfour Stewart, Tait, J. J. Thompson (brother of Lord Kelvin), Lord Kelvin himself, just deceased, Balfour, Mrs Sidgwick, Mrs Verrall, Piddington, Graham, Sandeman, Freer, Kidd, Myers, Bramwell, Podmore, Momerie, Warschauer, Sir Archibald Geikie, Lord Rayleigh, Alfred Russel Wallace, Schiller, Leaf, Mallock, Lang, Sully, Ward, Schofield, and a host of others; in America, Professor Conn, Professor James, Shaler, Thomson, Le Conte, Brinton, Hilprecht, Hyslop, President Butler, President Van Norden, Nevius, Boris-Sidis, Langley, of the Smithsonian, Brooks, Gibier, Jordan, Stallo, Quackenbos, President King, Hodgson, dead but vesterday, as it were, and whose loss the world deplores; in France, Richet, Flammarion, Flournoy, Récéjac, Dujardin, Du Bois-Reymond, Du Prel, Janet, Ribot, Binet; in Italy, Balbiani, Vignoli and others; in Germany, Baer, Virchow, Von Hartmann, Wundt, Zöllner, Fechner, Pfeffer, Gruber, Fol, Strasburger, Engelmann, Nussbaum, Klebs, Zopf, Bütchli, Stein, Künstler, Lochman, Ehrenberg, Bunge, Koelliker, and a hundred others, even De Vries and Weismann, nor can we leave out Haeckel, who in his later writings unconsciously concedes so much against materialism; and these names are but a small sparkle, as it were, out of a radiant sunburst. The whole psychological world has awakened.

As it is a victory of the higher over the lower,

of intelligence over ignorance, of demonstration over a priori, of honest scientific methods over a physical hypothesis which begins with the world around us and runs into a cul de sac both backwards and forwards; as it is a vindication of both philosophy and science, and a recognition as well of the loftiness and dignity of man and his universal mental structure and belief; as it cannot fail to lead to a living knowledge of man's brotherhood and God's fatherhood. instead of a vague and ineffective routine, and so transform all our ethics, and make oppression and selfishness opprobrious, as it must; and as it spells freedom, it inevitably points to a higher and fuller future life. But there is one eminent writer and man of science of whom I wish to speak more especially, because my own experiences have been a humble counterpart of his. It is the late lamented Romanes. Born and nurtured in a somewhat loose orthodoxy, as years passed on there came doubt, then infidelity, and surrender to materialism; then again, as the work went on, and the horizon widened, doubt once more, but this time doubt of materialism, and then came like a rush the fierce demand for more and harder work, continued for years, for deeper investigation, for broader study, and demonstration followed demonstration, the old black structure of nihilism split into cracks, its lath and plaster fell away, and the whole crumbled before the light of investigation and trial, and at last there came final certainty of the dominating truth, and intellectual peace and spiritual rest.

Among the great factors of these demonstrations was the study of the psychism of lower animals, the psychology of living creatures too minute to be seen except with high-power microscopes; not merely monocellular organisms, but living forms far below the cell itself, and which heretofore had been wholly unknown and unsuspected. Here are thinking, feeling, sporting, living creatures, with memory, friendship, love, with likes and dislikes, and manifesting the power of deliberate choice; in fact, with all the acts and movements, with all the mental and psychical attributes manifested in man, in kind, and, in many

cases, with a wondrously intelligent foresight. Here we have choice, intention, memory, fright; as Binet says: "In both vegetable and animal microorganisms phenomena are encountered which pertain to a highly complex psychology, and which appear quite out of proportion to the minute mass that serves them as a substratum."

It is the microscopical mass, the matter, the material, which serves these living bodies as a substratum, and here we find the same wonderful psychical phenomena working in this substratum (and only restricted in degree by physiological structure), as that which surrounds and penetrates living man to-day. If this was evolution, it did not come by slow degrees, but came with a leap. I am sure, I know, that no competent observer can possibly penetrate these arcana, and not return as firmly convinced of God and religion, of psychic life apart from physical structure, and living structure built up alone by the living hand of a living and mind-giving God, as he is convinced that he can see, and think and reason. It is a divine panorama moving before his eyes; it is a living garden which blossoms out in man into human soul and highest reason; and it is a psychic life which would shame man, if man himself had not this psychic life as well, and of it much more. And it bears widespread the buds, not the promise, but the living buds of future life. God opens wide all His doors down there.

George John Romanes, Cambridge graduate, the young friend and companion, pupil, able assistant and co-worker with Charles Darwin, and his expounder and commentator after his teacher's death, orthodox in childhood, was at once immersed in the world of scientific blackness and materialism of his day, and followed physical biology as one of its most learned and able students and writers. His works are in every library; his fame is world-wide.

In those darker days from which, while ever striving to emerge, he had not yet emerged, in 1878, he published a short treatise, "A Candid Examination of Theism," which was the best and strongest of the

books till then written opposing the spiritual philosophy of man, and with a sceptical conclusion, which was extensively and triumphantly quoted by the opponents of true psychology. No wonder Haeckel loved Romanes—then.

But twenty years later, and not long before his death, he entered upon a new work, "A Candid Examination of Religion," in which he says: "When I wrote the preceding treatise I did not sufficiently appreciate the immense importance of human nature as distinguished from physical nature, in any inquiry touching Theism. But since then I have seriously studied anthropology (including the science of comparative religions), psychology and metaphysics, with the result of clearly seeing that human nature is the most important part of nature as a whole whereby to investigate the theory of Theism. This I ought to have anticipated on merely a priori grounds, and no doubt should have perceived, had I not been too much immersed in merely physical research."

His final conclusion is as follows:—" 1st. Gradual evolution is in analogy with God's other work. 2nd. It does not leave Him without witness at any time during the historical period. 3rd. gives ample scope for persevering research at all times."

The "witness" referred to is revelation from the divine or spiritual. Intelligent souls, seeking minds, can learn no greater lesson than from these posthumously published and fragmentary papers of Romanes, edited by Gore, and published under the title

"Thoughts on Religion."

What a picture Romanes, who had been through it all, paints of the soul-starving misery of a materialistic philosophy, one not merely without spirit, but without indisputable communication between the spiritual and ourselves. Constituted as we are, I would be willing to stake the whole validity of spiritualism on this eternal sense of starvation alone; it is not only totally inexplicable without spiritualism, but it contains the direct proof within itself, and requiring no other evidence, under two of the three criteria of direct truth formulated by President McCosh, to which I shall later refer. Says Wordsworth:

"Trailing clouds of glory do we come From God, who is our home."

People who have never had a home, never known parents, absent friends, or protectors, can never know what it is to be homesick. Homesickness is a direct proof of a home. Speaking of the misery of those who deny or heed not the "internal intuition of divine origin," as Romanes calls it, this great original investigator and scientific writer continues:

"Some men are not conscious of the cause of this misery; this, however, does not prevent the fact of their being miserable. For the most part they conceal the fact as well as possible from themselves, by occupying their minds with society, sport, frivolity of all kinds, or, if intellectually disposed, with science, art, literature, business, etc. This, however, is but to fill the starving belly with husks. I know from experience the intellectual distractions of scientific research, philosophical speculation, and artistic pleasures; but am also well aware that when all these are taken together and well sweetened to taste, in respect of consequent reputation, means, social position, etc., the whole concoction is but as high confectionery to a starving man. He may cheat himself for a time -especially if he be a strong man-into the belief that he is nourishing himself by denying his natural appetite but soon finds he was made for some altogether different kind of food, even though of much less tastefulness as far as the palate is concerned.

"Some men never even acknowledge this articulately or distinctly to themselves, yet always show it plainly enough to others. . . . It has been my lot to know not a few of the famous men of our generation, and I have always observed that this is profoundly true. Like all other 'moral' satisfactions, this soon palls by custom, and as soon as one end of distinction is reached, another is pined for. There is no finality to rest in, while disease and death are always standing

in the background. Custom may even blind men to their own misery, so far as not to make them realise

what is wanting; yet the want is there.

"I take it then as unquestionably true that this whole negative side of the subject proves a vacuum in the soul of man which nothing can fill save faith in God."

We have here the testimony of a great student, a great leader, a great teacher, an expert, who has himself gone through all these experiences, and whose life has been largely cast among the living exemplars of the great truth that men may have everything to make them happy, everything to gratify their desires, everything to satisfy their wants, everything to occupy their minds, wealth, fame, reputation, pleasure, travel, work or idleness as they prefer, intellectual pursuits, scientific recreations, material advantages, everything—ay, everything but one, and that one is faith in God, which is spiritualism, and without that all they have palls by custom, is but as high confectionery to a starving man, things to cheat themselves with, and with it all, with all that this world can give, they but feed their starving bellies with husks—they are filled with misery, and miserable even though blind to the cause of their ever-present and obvious misery.

On the other hand are those who have nothing, who have poverty, privation, lack of friends, lack of help, lack of opportunity, lack of everything but one, and that the spiritualistic faith in God, and yet for whom, in this world, this spiritualism has no earthly or physical reward, amid this tangle of ever-present selfishness, but who yet grasp with a wild joy, and hold fast in a death-grapple, to that sole thing which makes life worth having, and makes our lives worth living. It will not be always so, it is growing better day by day, and when the whole world has seen and knows-then the great earthly reward will come for all, as well for those who now feed on husks in misery as for those who feed on the great provender of the spirit. But even to-day this is the promised reward; hark to the message; it is a Christian hymn, but, far

more, it is a universal, spiritual hymn, the hymn of self-sacrifice:

"'Is there diadem, as monarch,
That His brow adorns?'
'Yea, a crown in very surety,
But of thorns.'

"'If I find him, if I follow,
What his guerdon here?'
'Many a sorrow, many a labour,
Many a tear.'

"'If I ask him to receive me,
Will he say me nay?'
'Not till earth, and not till heaven
Pass away.'"

Think of Thermopylae! and then think of a successful speculation in stocks! "Many a labour, many a tear!" Ay, many, till the round world, and all that therein is, has learned its higher life; and this lesson spiritualism alone can teach and bring

home to every wandering soul.

"Do right to the widow, judge for the fatherless, give to the poor, defend the orphan, clothe the naked, heal the broken and weak, laugh not a lame man to scorn, defend the maimed, and let the blind man come into the sight of thy clearness. Keep safe the old and young within thy walls. Whenever thou findest the dead, take and bury them."

That is the teaching of spiritualism; for "God is

a spirit."

Mr S. R. Crockett, in his "Adventurer in Spain," apostrophises a donkey who has broken his tether. "He had found a good bank of grass, fenced about with succulent reed, enduring bed-straw, and spiced with the thistle of his ancestors. He had all at command. His sides were plump with the fulness of them. The clear water of a canal was on the other side of the way to drink from when he was athirst. Cudgel had thwacked his sides, and would do so again. But he had forgotten the past, and never learned to forecast the future, wherein he was a better philosopher. His mind to him a kingdom was—the realm of the present. It was shut in by twitch

grass, barriered by ground ivy, and down the long vista which is futurity he would see only infinite thistle and infinite wild teasle. Death—he had never even heard of that. He had, indeed, seen things that lay still—things that the futile two-legged put into deep holes. But these were only asleep, and too wise to waken. Besides, the like would never happen to him. He had to be roused up that his panniers might be placed astride his back, and sometimes his master would mount up behind—but why think of such things? Had he yet eaten all the thistles? No? Worlds and worlds of thistles without end! Amen!"

How like Romanes' description of this ilk among

the two-legged!

Contrast with this the beautiful picture of the aspiring religious soul, from the "Memories," of Max Müller, whose entire competency, as a student of all

religions, no one will question:

'Here, where the waterfall has clothed the grey rocks on either side with green moss, the eye suddenly recognises a blue forget-me-not in the cool shade. It is one of the millions of sisters now blossoming along all the rivulets and in all the meadows of earth, and which have blossomed ever since the first morning of creation shed its entire inexhaustible wealth over the world. Every vein in its leaves, every stamen in its cup, every fibre of its roots, is numbered, and no power on earth can make the number more or less. Still more, when we strain our weak eyes and, with superhuman power, cast a more searching glance into the secrets of nature, when the microscope discloses to us the silent laboratory of the seed, the bud and the blossom, do we recognise the ever-recurring form in the most minute tissues and cells, and the eternal unchangeableness of Nature's plans in the most delicate fibre. Could we pierce still deeper, the same form-world would reveal itself, and the vision would lose itself as in a hall hung with mirrors. Such an infinity as this lies hidden in this little flower. If we look up to the sky, we see again the same systemthe moons revolving around the planets, the planets

around suns, and the suns around new suns, while to the straining eye the distant star-nebulæ themselves seem to be a new and beautiful world. Reflect then how these majestic constellations periodically revolve, that the seasons may change, that the seed of this forget-me-not may shed itself again and again, the cells open, the leaves shoot out, and the blossoms decorate the carpet of the meadow; and look upon the lady-bug which rocks itself in the blue cup of the flower, and whose awakening into life, whose consciousness of existence, whose living breath, are a thousandfold more wonderful than the tissue of the flower, or the dead mechanism of the heavenly bodies. Consider that thou also belongest to this infinite warp and woof, and that thou art permitted to comfort thyself with the infinite creatures which revolve and live and disappear with thee. But if this All, with its smallest and its greatest, with its wisdom and its power, with the wonders of its existence, and the existence of its wonders, is the work of a Being in whose presence thy soul does not shrink back, before whom thou fallest prostrate in a feeling of weakness and nothingness, and to whom thou risest again in the feeling of His love and mercy—if thou really feelest that something dwells in thee more endless and eternal than the cells of the flowers, the spheres of the planets, and the life of the insect—if thou recognisest in thyself as in a shadow the reflection of the Eternal which illuminates thee—if thou feelest in thyself, and under and above thyself, the omnipresence of the Real, in which thy seeming becomes being, thy trouble rest, thy solitude universality—then thou knowest the One to whom thou criest in the dark night of life: 'Creator and Father, Thy will be done in heaven as upon earth, so also in me.' Then it grows bright in and about The daybreak disappears with its cold mists, and a new warmth streams through shivering nature. Thou hast found a hand which never again leaves thee, which holds thee when the mountains tremble and moons are extinguished. Wherever thou mayst be, thou art with Him, and He with thee. He is the eternally near, and His is the world with its flowers

and thorns, His is man with his joys and sorrows. 'The least important thing does not happen except

as God wills it!'"

This, of course, is the "grand sweet song" of the eternal spiritualism of the universe. We hear it in darkness and sorrow, we lift our eyes to it in the glorious heavens; it surrounds and leads and follows us, and death is but a transition from place to place, and not from something to nothingness.

"The bright celestial wheels, God's glorious starry wheels, Before their awful majesty the staggered vision reels; 'Twixt sun and outer planet A billion leagues to span it,

Ten thousand times that vast expanse to reach the first fixed star; And evermore, as space recedes, new countless millons are,

Star clusters jewel-dyed, which flush and pale,

Sun-couples, slowly wheeling,

Vast nebulæ, revealing New sun and world births in their eddying trail, And man dare lift his comrade eyes with God, and pierce the veil.

"The slow sepulchral wheels, The hearse's solemn wheels,

That bear the sacred form whose lips eternal silence seals; The cortege slowly creeping,

The mourners softly weeping, While friends recount, with measured voice, the virtues of the dead; The dead? Nay, new processions now are passing overhead,

Not to leave a fellow-mortal at the grave, But to welcome the supernal Home again to life eternal,

To lead to higher realms the set-free slave, Higher far than e'er the most aspiring mortal dared to crave."

CHAPTER XXV

SECTARIAN THEOLOGY IN THE LIGHT OF UNIVERSAL RELIGION

What a sharp comedown it should be for the evangelist I have already referred to, who says that the idea that Christ is here on earth with us is nonsense, and that those who believe such nonsense are encumberers of the earth. This heathen notion of an absentee God, as I have already explained, derived from a careful culling, instead of a broad knowledge, of scripture, is altogether due to the sectarian alliance with materialism, which Romanes characterised as a fatal mistake, by which nature is made the producer and sustainer, and God is relegated to a seat somewhere aloft, a proprietor, as one may say, who takes no account of the working of his own establishment, but only turns up at pay day, while Satan, the locum tenens, is always at hand to obstruct and confound. No one could carry on a successful business in that way.

It is not the evangelist who is important to me, but he represents a type of that form of Christianity which has made religion almost impossible among its abject disciples as a vitalising power; and which, by its example to the public, has swept countless millions into infidelity. Primary schools, and even schools for adults, are hard to keep in order at best—let someone, during school hours, call out to the pupils that the teacher has gone off home, and then

watch for the ensuing émeute.

Here is a local newspaper item in point:

"Lights went out for half-an-hour last night in the University dormitories, due to a broken dynamo at the power-house. There was a general rush for the triangle, and an ear-splitting din arose from tinhorns, pistols, tin-pans and throats. Fireworks and red fire were set off. In half-an-hour the lights were on again and the students studying harder than ever."

But this latter would not have happened, if the lights were not to be relit until the Day of Judgment.

To this absentee sort of theology I much prefer the religion of the little girl who, returning from one uncle's funeral, and with sickness prevalent among many of her relatives, prayed for poor dear auntie, and for Cousin Charlie, and for little Cousin Mamie, who is so sick, you know, and for mama and for poor papa, who is not at all well, and then concluded, "And do you, O Lord, take right good care of yourself too, for if anything happens to you, we will all go to pieces."

Or that of another little girl who, trying in vain to drive her dog back, at last indignantly exclaimed to him: "I know that God follows me around everywhere, and watches everything I do, and I'm not going

to have you trapesing after me too."

The whole difficulty is simply and solely due to the strange fact that, with the bulk of the people, with all of such people, creation is looked upon as something which took place in the past, and that nature is something acting in the present as a substitute. It is this theological notion that has relegated God and Christ to a distant heaven, where they are sitting beside each other to the sound of music, and have left the devil to look after the souls. and nature to look after the bodies; and the allied materialistic-science notion that, since souls cannot be physically seen, or smelt, or tasted, they do not exist. Nature, they say, performs and looks after everything, and yet nature itself is concededly so blind that it can itself not see, nor can it smell or taste, though it is supposed to manufacture seers, and smellers and tasters. Conceive for one moment that creation has never ceased; that it is always going on; and always will be going on, and the whole difficulty vanishes. God is in heaven; but heaven is wherever God is, and, if God is omnipresent, then heaven is anywhere and everywhere. As Christ said: The kingdom of heaven is within yourselves; and the human body is the living temple of God, and the universe His workshop. We are in this vast workshop, where machinery is not merely being used, but is being built, and being designed, and planned and carried out, yesterday, to-day and for ever; and volitions and intelligence are everywhere, and creative power and intellect are never absent for an instant.

That religion is too deeply embedded in the very structure of mankind to permit even society to continue except on a religious basis is clearly pointed out by Gustave Le Bon, in his "Psychology of Peoples." The author is himself intensely rationalistic, in the larger sense of the term, but he is compelled to say: "Among the various ideas by which the peoples have been guided, the ideas which are the beacons of history, the poles of civilisation, religious ideas have played too preponderating and too fundamental a part for us not to devote a special chapter to them. Religious beliefs have always constituted the most important element in the life of peoples, and, in consequence, of their history. The most considerable historical events, those which have had the most colossal influence, have been the birth and death of gods. With a new religious idea a new civilisation is born into the world. At all the ages of humanity, in ancient times as in modern times, the fundamental questions have always been religious questions. If humanity could allow its gods to die it might be said of such an event that, as regards its consequences, it would be the most important event that had taken place on the surface of our planet since the birth of the first civilisations."

"Moreover, if at the present day our old society totters on its foundations, and finds all its institutions profoundly shaken, the reason is that it is losing more and more the beliefs on which it had existed up till now. When it shall have lost them entirely, a new civilisation, founded on a new faith, will necessarily take its place. History shows us that peoples do not long survive the disappearance of their gods. The civilisations

that are born with them also die with them. There is nothing so destructive as the dust of dead gods."

We say to one who is about to be overwhelmed by disaster, who suffers beneath the slings and arrows of outrageous fortune, who is about to face the unknown wonders of death, and what lies beyond, "Be a man!" If Le Bon is right, and he is right, this is the same as to say, "Be a religious man," for that is conceded to be the only manhood which counts or which can count in our present world, with our present civilisation, our present knowledge and our faith and hope and charity. With these we are triply armed; without these we are poor, miserable and defenceless indeed.

But Le Bon is wrong in believing that men create their own gods, in the sense that they consciously make images representing nothing, if that is what he means by the phrase, and then convert them into gods, and worship them. They may make images of their gods, that is, embody in representative form the intuitional and disembodied gods which are implanted in their souls. Anything else than this is nonsense. If positivism erred so far, in making humanity in mass a deity, and the result was so preposterous that Huxley could only say of it that he would as soon think of worshipping a wilderness of apes, how much more preposterous to imagine that men deliberately set themselves to work to manufacture gods, not to represent, nor to embody, the conception of, nor to present to conscious sight pre-existing gods, but to actually manufacture them de novo, in cold blood, out of stone, mud or stick, and then crouch down and worship them.

The artist must have the model in his soul far more vividly than that which he afterwards reproduces in colour, or bronze, or marble; the architect must see his completed structure before he puts pencil to paper; the bridge-builder must see his bridge in all its form and material before he puts it into shape; and the inventor must have his invention ready for

use before his reduces it to practice.

Men could never endow their gods with super-

natural powers, unless they had cognisance, before they made them, of supernatural powers; and if they had this knowledge beforehand, then the supernatural powers were the gods, not manufactured by them, and what they did was simply to give them tangible representation.

In the illustrations contained in surviving Maya manuscripts and codices of Yucatan, Borgian, Dresden, Troano, etc., written by the Maya priesthood long before the Spanish conquest, the whole process of manufacturing their idols is depicted. And the Mayas were among the most religious peoples of

antiquity.

Here we see one man chopping out the figure of the face with a hatchet, another boring out the eyes, another chiselling the nose into shape, another painting the figure; and Dr Cyrus Thomas, in his study of the manuscript Troano (U.S. Government Contributions to North American Ethnology, 1882), says: "The idols, while in the process of manufacture, are usually represented by the heads only; those yet not painted or ornamented, without any other lines than those necessary to show the parts or organs, as in Fig. 33, which shows also the method of Carving (see Plate XV.*); those which are painted or ornamented (Fig. 34). One of the instruments used by them in carving their wooden images, I judge from its form, as shown in Fig. 35, was metallic."

Imagine, if you can, a tombstone-maker carving a slab, "sacred to the memory," etc., in which the object to which the memory was sacred was to be the tombstone itself! That would not be ignorance or

insanity, it would be idiocy.

Captain Dennett, R.N., in his narrative of Parry's second voyage to the Arctic regions, inserts about a hundred pages relating to the psychic life of the Eskimos, from the records of the first Christian missionaries who visited these natives, and which description is of extreme interest. I will make a few very brief extracts:

"Before any missionaries arrived in the country, Greenlanders were supposed to be gross idolaters,

who prayed to the sun and sacrificed to the devil, that he might be propitious to them in their fishery. Mariners were led to these conclusions from the discourse of the natives, which they could not understand, and from a variety of circumstances."

"But after obtaining a more intimate acquaintance with their language, the missionaries were led to entertain a contrary opinion, from their various notions concerning the soul and spirits in general, and from their evident anxiety about their probable state after death. From free conversations with the natives in their perfectly wild state, in which, however, care must be taken to make no personal applications, and not to insist upon any duties to which they are disinclined, it is very apparent that their forefathers believed in a Being who resides above the clouds, and to whom they paid religious worship." "A company of baptised Greenlanders one day

expressed their astonishment, that they had spent their lives in a state of such complete ignorance and thoughtlessness. One of the party immediately rose up and spoke as follows: 'It is true, we were ignorant heathens, and knew nothing of God and of a Redeemer; for who could have informed us of their existence, before you' (addressing the missionaries) 'arrived. Yet I have often thought, a Kayak with the darts belonging to it does not exist of itself, but must be made with the trouble and skill of men's hands; and he who does not know the use of it easily spoils it. Now the least bird is composed with greater art than the best Kayak, and no man can make a bird. Man is still more exquisitely framed than all other animals. Who then has made him? He comes from his parents, and they come again from their parents. But whence came the first man? He may have grown out of the earth. But why do men not grow out of the earth nowadays? And from whence do the earth, sea, sun, moon and stars proceed? There must necessarily be someone who has created everything, who has always existed and can have no end: he must be inconceivably more powerful and skilful than the wisest of men; he must also be very good, because everything that he has made is so useful and necessary for us. Did I but know him, what love and respect should I feel for him? But who has seen or conversed with him? None of us men. Yet there may be men too, who know something about him! With such I would willingly converse. As soon therefore as I heard from you of this great Being, I believed you immediately and willingly, having for a length of time longed after such information.' This declaration was confirmed by the statements of the others with more or fewer circumstances. One of the company made this additional remark: 'A man is formed differently from all other animals. These serve each other for food, and all are for the use of man, and have no understanding, but we have an intelligent soul, are subject to no one in the world, and yet are anxious about futurity. Of whom can we be afraid? Surely it must be of some mighty spirit who rules over us. Oh. that we but knew him! that we had him for our friend!'"

It will be seen that this argument is precisely that of Newton, Lamarck, Sir John Herschel and Romanes, whom I have already quoted. It entirely contradicts the views of Le Bon, that, "Doubtless it is man who created the gods, but after having created them he promptly became their slave. They are not the offspring of fear, as Lucretius affirms, but of hope, and

for this reason their influence will be eternal."

I would like to add that while Le Bon's notion is altogether untenable, yet it is not in itself a dangerous one, for I have shown in my chapter on Invention, which is an act of creation also, that the invention itself, to be both "new and useful," must come not from one's own conscious creation out of nothing, but practically by revelation through the subconscious; so that Le Bon's contention might be apparently valid, while actually false; it is the study of the subconscious department of the mind which is reconciling the apparent contradictions. My purpose in quoting the Eskimo, among the poorest and least advanced of the American natives, is to show that if what Le

Bon asserts of primitive man is true, then it is equally true of our latest scientific demonstrations.

To contraindicate the idea that these Eskimo beliefs and demonstrations might have been a residuum from European or Asiatic sources, it is only necessary to study their cults, even in the few pages of Dennett, to perceive that while they harmonise, generally speaking, with prehistoric American cults and practices, they are entirely at variance with the corresponding ideas of the Eastern world—that is to say, if these beliefs came from the Eastern world to the Eskimos, then they came to all prehistoric America from the same source. We know now, as ethnologists have demonstrated (see Brinton and others), that the exact reverse is the case; that if there was priority, it was for America; that such implanting must have gone back to interglacial times at least, for human remains and productions have been discovered in various places in America dating back to that remote epoch, notably near Trenton, N.J., where they had been found in abundance, deep down in the glacial drift, which came down with the icecap from the north. That this eastern priority did not exist is also shown by the conceded fact that all American languages have a polysynthetic type of their own, while the languages of the Eastern world are not polysynthetic at all; America developed and grew independently of Asia, Africa, Europe or Polynesia.

CHAPTER XXVI

SPIRITUALISM THE SUBSTRATUM OF RELIGION, BUT NOT IDENTICAL WITH IT

In the previous chapters I have endeavoured to show that the phenomena of spiritualism are in a large degree identical with those of religion; and that the sources and lines of communication in the case of spiritualism are to a great extent identical with those of religion; not only of one religion, but of all. Is spiritualism then identical with religion? By no means. Many leaders and teachers in spiritualism have somewhat loosely but erroneously held this opinion, to the great detriment both of itself and of religion; and whole bodies of Jews and Christians, and of other religions, have started back from this apparent danger so violently as to blindly fling themselves into materialism, or rationalism as it is euphemistically called, to escape this apparently obvious peril.

Because one sort of commerce is carried over a railway, does that bind all transport over the same line to that class? Because one great writer has written books of inestimable value on religion, does that make his books on history, or his novels, equally books on religion? Because Christ spoke parables, are all His records and miracles to be considered

parables?

Because spiritualism and religion always, one may say, overlap each other, does that imply any identity? So physiology, anatomy and pathology overlap each other; so the history of the Jews and the religion of the Jews overlap each other; so astronomy and chemistry, geology and paleontology, life and death, spirit and matter, overlap each other, nay more, they

measure each other, but does that imply that they are identical?

What then is the binding force which holds religion and spiritualism together? It is the common union of the seen and the unseen. It is the embodiment of the union with Stewart and Tait's "Unseen Universe." It is what Romanes described as the Spirit of the Universe, and Lamarck as that spirit, independent of matter, which forms and rules all things; and Sir John Herschel as volition manifesting upon the material, and Lord Kelvin as the perpetual miracle of life.

Spiritualism comes from the beyond, through the subconscious department of the mind, and so does religion. The revelations are from the beyond; in one case from departed spirits possibly; from the spirit of the universe possibly; from telepathy often doubtless; from some outside and undetermined intelligence almost certainly in many cases; and it comes with power to act on the mental and spiritual within us, and upon our own physical and the

physical around us.

So does religion; but religion, while it comes in the same garb, and from an outside source, comes also from a divine source; that is the radical difference, yet not always a difference. Still, religion tells its own story; but as spiritualism fulfils its appointed lot in teaching us to know by demonstration, and not accept by a hazy and blind faith, that we live on after death, so, as it were, it comes to prepare the way for religion, to make its paths straight; it does this often in uncouth and unsanctified ways, and is strong only in the earnestness of purpose which, through every difficulty, will iterate and reiterate the grand controlling teaching: "It is I"; "I am alive"; "There is no spiritual death"; "I am alive, intelligent, awake, broad-minded, and (in most cases), happy." Now then, with this in hand, if it is demonstrated (and it certainly has been) religion gets its solid foothold and base, and, as Huxley said, ridiculing the "religion of humanity," we are no longer listening, in this religion, to "a wilderness of apes."

Under the foundation of religion lies this basic proof of a future life—without that, all religion is an ignis fatuus; spiritualism, rough and often mean; little and babbling; cheap and chattering; with its fishwives, curates, soldiers, cowboys, Indian girls, so near to the heart of nature; with its sailors who often swear; merry spooks like German kobolds; poltergeists; friends, relatives, sisters, brothers, wives, father and mother, baby, children, even stillborn babes, grown-up sons and daughters, partners in business, men we have known and admired, sweethearts, lovers, the kind and unkind, truthtellers and liars, "all sorts and conditions of men" decarnated, come and tell us the truth, or else play with us, or cheat us, or fancy for us, and, even so, prove the truth, and they do all those multitudinous things in all those multitudinous ways which, from our knowledge of them, we should expect, if real, and the absence of which would make them to us unknown and negligible quantities.

Christ said of little children, "Suffer them to come unto me, for of such is the kingdom of heaven." So

we may learn wisdom from babes.

Perfection does not belong to us here or hereafter, but progression does. For example, there is not a sane man living who believes that by any amount of acquirable knowledge he can ever become omniscient, nor, by any amount of acquirable power, omnipotent, nor, by any increase of goodness, perfect; and hence, since we know by the mere contemplation of the universe that there is something perfect in its intelligence, power, universality, vision and foresight, we can all of us know that we may be shavings from that great spiritual sphere, but that we can never have the rotundity, power, majesty and perfection of that sphere. It isn't right, it isn't reasonable, that we should.

We can be just as good, and wise, and great, and useful, as we can be, and that is precisely what we ought to try to be; we know not what successive spheres of light we may traverse through eternity, nor even if actual eternity is for us; but the war is

won if we win survival after death, and all the rest we can trust implicitly to the power which made us and preserved us.

And just as we the little, are, in type, comrades of God the universal, so is spiritualism the little,

comrade to religion the universal.

And with this, the soul misery, the starved-onhusks, the cheated-with-vanities, of Romanes, will pass away like a tale that is told, and life and mind

will have a new meaning, and a new destiny.

If it should turn out, if it has turned out, that the materialistic, empirical, atheistical propaganda of what has so often gone under the name of science, of physical science, is all a mistake, when attempting to cross the impassable chasm, the unthinkable chasm, which lies between mind and matter, between spirit the worker and the material universe, the worked in and on, and for which propaganda physical science must transcend our physics, which is all it has or can have, then we can see the terrific result of such a mistake upon mankind, past, present and future.

If we are allied to spirit, universal and eternal; if we are here on probation, as Romanes says; if we are to stand still, advance or retrograde, as we make use of the opportunities of this life of probation; and, if we live after death, and there must make a fresh start with our acquired capital here, continue on, willy-nilly, and continue our advance there as we have advanced here; stand still, earthbound there, as we have stood still, earthbound here; or retrograde there, or endeavour in speechless agony to catch up, to cling to something, as a drowning man catches at straws, to save ourselves there, and in pain, sorrow, remorse, darkness and degradation; only in some degree and at some time helped, as may be, by the purer spirits weeping tears of sorrow for our misery, and whispering words of hope and encouragement amid the long blackness of despair, is it not then a frightful mistake?

It is indeed a frightful mistake; and one may well ask, how could such a mistake have occurred? and how could so many millions of mankind have fallen into this error, and subjected themselves to this delusion?

The path of duty is not always easy, but the reward is as great as it is inevitable.

"Of all the words the language bears
Of splendour or of beauty,
Of faith to God or truth to man,
The noblest one is Duty.
It brings a zest to every joy,
A balm to every sorrow,
It lifts the weary heart to-day,
And nerves it for to-morrow."

But men are prone to seek the reward without the toil; and it cannot be done. Says the old hymn:

"Shall I be carried to the skies
On flow'ry beds of ease,
While others fought to win the prize
And sailed through bloody seas?"

Men were very ready, nay, anxious, to learn of some way by which the end of life might better become the end of all things for themselves, than that they should have to bear the responsibility of a fathomless, perchance an unhappy, if well-deserved, future. When men are drafted out from the ranks for execution, it is better to draw a blank than a number; though they well know that it would have been better still to draw a promotion. But promotion must be worked for; desertion comes more easy, but only for the moment.

And when physical science appeared before them as a one-eyed and impassive god, who spake as one with authority, and promised eternal death and silence, they turned with a jest—"Well, we'll be a long time dead," and thought that they could be happy with that, but Romanes showed that they were all miserable together, whether among the pursuits of physics, the gathering and scattering of wealth, the dissipations of frivolity and fashion, and indeed beneath every covering sham, which they flung over their poverty and nakedness. I think he was right; I have known many such myself, and they are a

dissatisfied lot, one and all, each seeking to diminish his own misery by a propaganda to make others believe the same thing, and "come into the crowd," which is ridiculous, and would be, even if they were convinced and sincere.

CHAPTER XXVII

POPULAR ERROR REGARDING MODERN WRITERS WHO HAVE BEEN ASSUMED TO TEACH EMPIRICISM—LOCKE, HUME, COMTE, MILL

IF one recites a few names only of those who have influenced this degeneracy or indolence of thought, he will find that after Locke, Hume, Comte, John Stuart Mill, Huxley, Tyndall, Herbert Spencer and Haeckel have been named, he will have exhausted nearly the whole catalogue of those who have, in modern times, and especially for Great Britain and America, brought about the propaganda of materialism which is now so happily passing away.

The majority of these men were not men of science at all. But, when their true attitude is investigated, it will be found that they actually disclaim the very views attributed to them, and on which the gospel of

nihilism has been established.

Locke, perhaps, stands first; and on his teachings are founded the beliefs that the animal man, having mere irritability, from contact with a disturbing factor, as a worm shrinks when touched, writes the sum and substance of all his knowledge on a tabula rasa, a blank page, and so has developed, from contacts with his environment, also physical, the man as we know him, from the clodhopper up to Shakespeare.

Yet nothing can possibly be more wide of the mark. Locke was first, last and all the time, a devout and consistent Christian; and it is only by omitting his introduction, and his definitions, that any such travesty of his views could have acquired

vogue.

The controversy, in fact, was against the then pro-

pounded theory of "innate principles," as contrasted

with divinely implanted faculties.

As, for example, Locke says: "God having fitted men with faculties and means to discover, receive and retain truths, according as they are employed."

Again: "How much of our knowledge depends upon the right use of those powers nature hath bestowed upon us, and how little upon such innate

principles," etc.

So of revelation: "Reason," he says, "is natural revelation, whereby the eternal Father of light, and Fountain of all knowledge, communicates to mankind that portion of truth which He has laid within the reach of their natural faculties: revelation is natural reason enlarged by a new set of discoveries communicated by God immediately."

Our organs themselves, according to Locke, are God-given. "We cannot believe it impossible," he says, "to God to make a creature with other organs, and more ways to convey into the understanding the notice of corporeal things than these five, as they are usually counted, which He has given to man,

etc."

Again: "I judge it not amiss, by this intimation" (of active and passive power), "to direct our minds to the consideration of God and spirits, for the clearest

idea of active powers."

You will see at once, from these brief extracts, that Locke was not only a theist, but a believer in and demonstrator of continuous revelation, and of God, and spiritualism. How far astray then must physical science, in teaching materialism, have gone, to seek to impress Locke into its motley ranks!

Locke's philosophy, when properly understood, was not at all directed against spiritualism, but on the

contrary was directly in its favour.

What he attacked so relentlessly was the Cartesian theory of innate ideas, which, having been boldly stated in the philosophy of Descartes, was afterwards taken up and still more thoroughly elaborated by Leibnitz. Both these men were among the greatest mathematicians known to history, and there is no

more materialistic science than that of pure mathematics.

This theory of innate ideas posited, in the embryo organism as a part of its equipment, certain embryonic ideas which, later on, would expand and culminate in many of the developed forms of ideas and beliefs. It had, or was capable of having, a materialistic foundation, and, in fact, the *physical* theory of heredity, which I will consider later on, in connection with Haeckel, is practically one of innate ideas, with a basis of physical ids or plasms, inherent in the minutest bit of invisible living protoplasm, inherited for millions of years, perhaps, through unnumbered generations, to grow and mature as the living form grows and matures, and to be again transmitted, by its living particles, to the minutest bit of living protoplasm, in the offspring, for uncounted generations yet to come.

It was this physical theory that Locke strove to supplant by substituting direct spiritual contact and

revelation, with and from God and spirits.

Certain sects of Christians, and still larger sects of other religions, have clung to this theory of innate ideas, which, indeed, came down from heathen times, but, as a source of intuition or even of instinct, the swing of the pendulum is now toward the Kantian view that instinct, like this other, is "the voice of God."

That man brings a spiritual endowment is most certain, and that his constitution itself is permeated, inbred or surrounded, with a subconsciousness and a receptivity for acquiring spiritual food, is unquestionable—this is the "faculty" of Locke, or as Words-

worth says:

"Trailing clouds of glory do we come From God, who is our home."

But they are clouds that we trail; they are faculties, capacities and habits, and forms; each is "after its kind," but these are not "innate ideas," but the soil in which subconsciously acquired ideas are and will be implanted, as a complement to the conscious ideas which come from observation and experience.

Much has been said by me in the preceding chapters concerning this inspiration or intuition; and, referring especially to the chapter dealing with the Patent System, it seems to me that we will be able to understand very clearly what this intuition is, which in Locke's system was to replace "innate ideas."

It is incredible, for instance, that the idea of the sewing machine or telegraph should have been innate in all animal life from time immemorial. If this were so, there could indeed be no priority or right in invention; nay more, all possibilities of the future must be carried indefinitely along in complete form from the pre-amœba, and, worse still, uncounted millions of valuable ideas which must perish for ever unfructified, for no one can contend that the human race ever can exhaust all possible ideas. This again contradicts the law of parsimony, which is, in fact, the rule of common-sense.

Here, in an invention, we have an intuition; but this is not an idle dream; it is a practically working intuition, and a practically working intuition of an invention is of the same order as a practically working intuition of a solar system, or a universe, both reduced to practice in the production of developed forms of crude matter. It, of course, can be said that solar systems create themselves, but I have never heard anyone say that a steam-engine or a phonograph could create itself; these kinds of little things require a creator, and if the creation was an intuition which no man ever before consciously had, or knew of, or knew of the means to reduce it to practice, before this particular man (for if there had been such before him, then the invention was not patentable), then it surely came to him from without, and that without was the source of that intuition at that time, and, if of that intuition, then it is the source of other kindred ideas and intuitions. So intuitions are not dreams, but revelations.

I have heard many materialists (I use the term in the sense in which Mr Huxley used it) talk about Hume, but I have never heard one of them talk Hume himself. In Hume's reduction (he never believed it himself, by the way) the physical world of Locke disappeared, because we could only understand matter by means of mind, on which concession Berkeley assumed the individual mind or consciousness to be the sole factor; but Hume found no more warrant for individual mind than for individual matter, and so this disappeared also, leaving clouds of unmeaning consciousness floating about in an immaterial chaos, which by their contacts emitted sparks, then split up again, and again reunited, as we see clouds do in the sky. As Winston Churchill says of two of his characters, "the wires of their lives had crossed, and since then had crossed many times again, always with a spark." As Morell says, in his work on the "Speculative Philosophy of Europe": "The philosophy of Hume, as a whole, originated and fell with himself. A more partial and less daring scepticism might, probably, have gained many followers; but it is the inevitable result of every system, professing universal unbelief, to destroy itself." As Sir James Mackintosh well says, "there can be no belief that there can be no belief."

Auguste Comte is another materialistic philosopher who is always quoted at second-hand. I refer to him, because it is said that there is one man who still believes in him, and a good many of our ethical-culture friends believe also that they think they believe in him too. Comte was a disciple of St Simon, the theistic French Socialist. But in building his great work on positive philosophy he abandoned the religious basis of St Simon, and certainly constructed a magnificent system, a sort of Aladdin's palace, but it had no foundation and would not stand alone. Later on, it is said, he fell in love with a married woman whose untimely death caused him to revise his atheism. But Comte had already left his great philosophy with nothing in it higher than man, so that he was compelled to get his God out of this human coterie, or else recant his whole lifework; and when recantation once begins, no follower has any confidence left as to where it may end. So Comte dealt with religion, "which," says his biographer, "he conceived to be the complete harmony of human existence, individual and collective, or the universal unity of all existences in one great Being, whom he calls Humanity." The fallacy, as I have shown before, in this work, lies in the fact that there can be no such universal unity or community of all human existences, in the absence of a common source or parentage, and to find that you must go back, beyond, and outside our present humanity. But even Comte abandoned his own basis of universal unity in finding all sorts of exceptions in higher, isolated examples, and these he made the subjects of worship by various homages and festivals, and reformed the calendar, naming the months after these (on his theory) pathognomonic freaks.

We now come to John Stuart Mill, whose name looms largely, from his logic and philosophy. It would be impossible to trace his work here; all I can do is to show that in the fulness of his power, and after all his labours, he was obliged to confess that his artificial and laboured system broke down, and was

futile.

Starting with Hume's ultimation, "there are thoughts and feelings"; on this radical basis alone he built his "constructive idealism." It was on the phenomenon of memory and states of present and past consciousness, that his whole theory broke down, and he was brave enough to confess it. He says: "We are here face to face with that final inexplicability at which, as Sir William Hamilton observes, we inevitably arrive when we reach ultimate facts: and, in general, one mode of stating it only appears more incomprehensible than another, because the whole of human language is accommodated to the one, and is so incongruous with the other that it cannot be expressed in any terms which do not deny its truth. The real stumbling block is perhaps not in any theory of the fact, but in the fact itself. The true incomprehensibility perhaps is, that something which has ceased, or is not yet in existence, can

still be, in a manner, present — that a series of feelings the infinitely greater part of which is past or future, can be gathered up, as it were, into a single present conception, accompanied by a belief in its reality."

CHAPTER XXVIII

TYNDALL, HUXLEY, SPENCER, HAECKEL

In dealing with John Tyndall as a sheet-anchor for materialism, I need only repeat his statement that between mind and matter there is a chasm intellectu-

ally impassable.

Scant comfort will the materialist obtain from Huxley. I do not refer to his popular lectures, but to those writings in which he was dealing with intellectual forces equal to his own. For example, when, discussing Berkeley, he says: "The honest and rigorous following up of the argument which leads us to materialism inevitably carries us beyond it."

Huxley's misfortune was that he lived in the early dawn of a new psychological age, and the data were not in his possession which his own positions demanded. He has always presented to me the picture of a man of great power, struggling toward the higher light, but trammelled, bound down, and almost strangled by physical theories which he could not controvert, and was driven, against himself, to try to accept, while still striving for the coming day, which he felt must come, but which had not yet arrived.

What noble words are these! "For anything that may be proved to the contrary, there may be a real something which is the cause of all our impressions; that sensations, though not likenesses, are symbols of that something; and that the part of that something which we call the nervous system is an apparatus for supplying us with a sort of algebra of fact, based on these symbols. A brain may be the machinery by which the material universe becomes conscious of itself. But it is important to notice

that, even if this conception of the universe and of relation of consciousness to its other components should be true, we should, nevertheless, be still bound by the limits of thought, still unable to refute the arguments of pure idealism. The more completely the materialistic position is admitted, the easier it is to show that the idealistic position is unassailable, if the idealist confines himself within the limits of positive knowledge."

Even Dr Hammond, who wrote: "Just as a good liver creates good bile, a good candle gives good light, and good coal a good fire, so does a good brain give a good mind. When the brain is quiescent there is no mind," was compelled to admit that "consciousness is latent in the spinal cord as long as the brain is in a state of activity, and that the faculty of memory

does not reside in it at all."

In one of his clinical cases of somnambulism, indeed, he conceded his whole position. For there this young woman performed all the actions only capable of being done by sight, and yet his precautions were such that, he says, "I was entirely satisfied that she did not see—at least with her eyes." And of the same case he again says, "the sense of sight was certainly not employed, nor were the other senses awake to ordinary excitations."

I have but one word to say of Herbert Spencer, so recently dead. His more than thirty great volumes are still with us, crammed with facts, not always the whole of the facts, or stated in the best way, but when once started on a defective basis, what was the poor

man to do?

I will tell you what he did. Just before his death he put out a little volume, "Facts and Comments," of which he says, "The volume herewith issued I can say with certainty will be my last." It was thus the last will and testament, as it were, of this remarkable man, and it concludes as follows, in his article on "Ultimate Questions":—

"But it seems a strange and repugnant conclusion that with the cessation of consciousness at death, there ceases to be any knowledge of having existed. With his last breath it becomes to each the same thing as

though he had never lived.

"And then the consciousness itself—what is it during the time that it continues? And what becomes of it when it ends? We can only infer that it is a specialised and individualised form of that Infinite and Eternal Energy which transcends both our knowledge and our imagination; and that at death its elements lapse into the Infinite and Eternal energy whence they were derived."

In view of the long series of works issued by Herbert Spencer, each one of which had become an anchor to hold him fast against winds and currents, this is all the most ardent lover of truth could hope for, from this author, and far more than one had any

right to expect.

When examined, it concedes the insufficiency of any materialistic or agnostic philosophy based on his earlier writings, and enables us to correct this last statement by the concessions he makes in stating it. He says that our consciousness is "specialised and individualised"; now, if derived from that Infinite and Eternal Energy, must not that Infinite and Eternal Energy also be individualised and specialised? If they are of the same order (and, being the same in derivation, they must be of the same order) they must both be inevitably so.

He infers that, at death, the elements of this "specialised and individualised" consciousness of ours will lapse into the source from which it was

derived.

But there is no ground for such inference, if our consciousness is specialised and individualised; the most that can be said is that this is a question to be settled by evidence. Spiritualists claim that they have this evidence; all religion of every type and land and age claims this fact also; our own consciousness, as Spencer says, finds such an opposite ending "strange and repugnant." Now what argument can be adduced in its favour? If these individualities are pushed out or escape, to become specialised, to learn and to suffer as they become individualised, what

would be gained by having them again absorbed into, or fall into, the same source from which they were derived? Would they add anything to the knowledge, power or happiness of that great source? What is all our trials, and pain, and grief, and care, and worriment for, in such a case? We come back battered, broken and empty-handed, and no one, no origin, no source, nothing, is or can be bettered or benefited by this incessant push and pull. And what pushes, and what pulls? Spencer here has been betrayed by a false analogy with the physical phenomena of gravitation, and his hypothesis was only tenable in those pre-scientific days when philosophers taught that "Nature abhors a vacuum." We know better now. Says Tennyson:

"That each, who seems a separate whole,
Should move his rounds, and fusing all
The skirts of self again, should fall
Remerging in the general soul,

"Is faith as vague, as all unsweet:
Eternal form shall still divide
The eternal soul from all beside;
And I shall know him, when we meet;

"And we shall sit at endless feast
Enjoying each the other's good.
What vaster dream can hit the mood
Of love on earth?"

Some of the men I have named were known as idealists, some semi-materialists, some materialists, and some alternately one or the other, but the type was the same in all. Just as I showed you that credulity and incredulity were different presentations of the selfsame unscientific superstition, so constructive idealism and "crass materialism" are the same. Whether materialism be conceived of as extended into idealism, or the reverse, provided they are conceived of as automatic, self-derived and self-operative, they are alike; they are all dealt with by the same arguments, and arrive at the same result. The essence of these two is the same, and they depend upon empiricism for their logic, just as spiritualism depends upon transcendentalism for its basis.

Hence these two sharply differentiated and contradictory theses are known as the empirical on the one side, and the transcendental on the other. The empirical finds its home and faith in the contemplation and rationale of what we see about us, handled by syllogisms, and walled in by agnosticism; on the contrary, the transcendental, as its etymology implies, "climbs beyond," and finding that empiricism leaves unconsidered not only everything outside its microscopic field, but even the ground which it occupies, it finds these fundamental questions forced upon it. and having mind, soul, intellect and life in its possession, uses these tools in the only way possible, and to the whole extent available and sure, and hence finds the source of mind, soul, intellect and life, in the only conceivable source of mind, soul, intellect and life; and thence deductively traces down the line by rigid experiment, but with a field limited only by the universe and eternity, and with sources and origins only compatible with the universal, and with intelligence kindred with our own. The one works in a dark room with a rushlight, the other in the open fields with the sunlight; one finds a nebula and a stone wall, the other infinite spirit and an eternal God. As Mrs Browning said, amid the tragedy of life and death.

"I smiled to think God's greatness flowed around our incompleteness, Round our restlessness, His rest."

To quote from Murdock, cited in Webster's Dictionary, "Transcendentalism claims to have a true knowledge of all things material and immaterial, human and divine, so far as the mind is capable of knowing them. And in this sense the word transcendentalism is now most used."

You will see that such majestic demands require that the spiritualism of the universe shall be cognisable, that God is a spirit, that the psychism of the universe is akin to and interpretable by our own psychism, and that all religion is, in its essence, the revelation from God and the reception by man of divine truth.

Beyond all question every one of these great truths

has been scientifically worked out and demonstrated. It is not for those who have never tried it to deny it; it is not for those whose pet superstition is incredulity to deny it; it is not for physical science, which has erected a lawn-tennis netting of transparent a priori, to sit behind it and nurse its misery—there are too many looking on, but it is, for all this ilk, to get down to work, and we well know what happens to every honest investigator who does actually get down to work, and keep working.

There are many other names beside those I have referred to, which will come to you, but the men I have mentioned are types of all the various classes, and are those who stand in the popular eye, for materialism in all its various garbs. But there is yet one who must be considered, because he is the most recent, and his work is so materialistic and at the same time so popular, that "when all else fails," as the quack medical advertisements run, the sceptics consult Haeckel, and particularly his "Riddle of the Universe."

For the skilled student this is a good book to read, because the author unconsciously uncovers himself, shows his partialities and shortcomings so luminously that one can see precisely how the reader is sought to be misled, and how, if the facts were correctly and scientifically stated, the conclusions would be precisely

the opposite.

After what I have already said in these chapters, you will all agree that to properly handle these subjects, and especially for popular reading, a writer must be thoroughly capable and excellently equipped. You will recollect that even Romanes was obliged to revise his whole work on these subjects, and take opposite ground, as soon as he had gone deeply into biology, psychology and anthropology, and that he confessed that he would have learned the truth long before if he had not been "too deeply immersed in merely physical research!"

Now, have we so capable a man, in all the various sciences that the occasion requires, in Ernest Haeckel, as a teacher? He says in his preface, "My own

command of the various branches of science is uneven and defective, so that I can attempt no more than to sketch the general plan of such a world-picture, and point out the pervading unity of its parts, however imperfect be the execution." Haeckel's latest book is more defective even than his earlier ones, but the essential ideas are the same. The factors employed are heredity and environment, neither of which has he correctly stated, as understood in biology. To illustrate this, I will quote the following:—"By these empirical facts of conception, moreover, the further fact of extreme importance is established, that every man, like every other animal, has a beginning of existence; the complete copulation of the two sexual cell-nuclei marks the precise moment when not only the body, but also the soul of the new stem-cell makes its appearance. This fact suffices of itself to destroy the myth of the immortality of the soul, to which we shall return later on. It suffices, too, for the destruction of the still prevalent superstition that man owes his personal existence to the favour of God."

His argument, you will see, falls of itself, for there are probably millions of living beings never born of sexual union at all, for every one that is so born. Silkworms are now always bred from virgin mothers, and for one case of amphimixis (sexual generation) there are uncounted millions of karyokinesis (asexual generation), and, many times, the same animal reproduces indifferently by one mode or the other. The "souls" must here be in a mixed-up state surely. But his whole description of sexual generation is false. There is no "fusion" as he says there is; he says nothing of the centrosomes, those commanding generals who marshal their chromatin into platoons from a distance, march them about like soldiers, and order one-half to break to the rear and march off the field; nothing of the polar bodies; nothing of the chromosomes; nothing of the independent psychic life and antics of the zoogonidia, the zoospores, living animals far below the smallest cells, and the offcast of vegetable growths as low as seaweeds. Where was "copulation" there? In fact, he ignores, perverts

and conceals, all the essential keynote facts which we should expect from the *a priori* of a man who has been writing, as he says, for a generation with an imperfect and defective command of the various branches of science of which he claims to treat.

Charles Darwin, unfortunately, for he fully understood the truth, used "environment" without qualification at times, and this has become a shibboleth with the half-educated. Environment, or surroundings, as it means, has of itself no power to modify anything. A man walking along a road comes to a long, steep hill. The hill does nothing; if he sits down there it is just as though there were no hill; but if he undertakes to climb the hill, then the exertion he puts forth modifies the man, but it was not the environment which modified him. It is the overcoming, or failure to overcome, which acts, and that is inside the man, is part of his endowment or acquirement, is a part of the man himself; environment is nothing in itself; the man is everything.

CHAPTER XXIX

HEREDITY

So of heredity. If the earliest forms of animal or vegetable life were secretly endowed with the genius of a Shakespeare, or Newton, or Copernicus, or other almost superhuman men, then I could understand how some subconscious memory, reaching on from generation to generation, for millions of years, might leave us some heredity, amounting to perhaps the intelligence of zoospores or bacteria. But how a man like Lord Kelvin should have obtained his ability and knowledge, by a survival of memory from an amœba, or from an invertebrate of the Devonian, or a vertebrate of the Triassic, is incredible to me.

Even if true, Haeckel and his friends would have to explain where these suddenly endowed ancestors obtained all their knowledge, which they certainly never needed and never used, and whether, if such sudden endowments were flying about, one of these might not better have struck Lord Kelvin in the nineteenth century, than a tadpole in the year one. And how James Watt and Eli Whitney and Elias Howe could have gotten the steam-engine, the cotton gin, and the sewing machine from a polyp a quarter of an inch long, ten million years ago, and which never got its head above sea water, except by accident, is also

incredible to me.

I believe in heredity; as I have already said, I believe with Wordsworth, that,

"Trailing clouds of glory do we come From God, who is our home."

But Haeckel's scheme of heredity (which Weismann, in far more scientific, and more dainty, but only

tentative, form, struck in his Germ-Plasm Theory) is all wrong; the system of fusions and averages which Haeckel thought he saw, or had heard of, do not exist. Later researches of the most eminent authorities are totally at variance with what he asserts of heredity, as a physical process of physiological units.

Says George Sandeman, in his "Problems of Biology ": "I have no theory at all as to the nature of the essential differences of germs. Only, we cannot find it in their chemical or structural or physiological properties. When a somatic cell, for instance, reproduces the whole form, we cannot fail to recognise that it does so, as it were, in spite of its particular functions and its particular structures. And we are not, on the other hand, surprised to learn that what can be known about the particulars of germs leads us no nearer to an understanding of their form-determining properties. We can only say that we do not know the essential differences of germs and of protoplasms in this respect, and that what differences we do know appear to be wholly accidental and irrelevant to this unknown essential difference. This seems to be equivalent to the admission that there is no difference of germs or of protoplasms in terms of which the possibilities of form might be, even formally, expressed; and, for my part, taking all the evidence together, I believe that this is the case.

"Yet popular teaching ordinarily proceeds upon the ground that there is a special protoplasm for every specific, and therefore for every individual form, and the nature of this protoplasm is the complete determination of the individual form. Now we know enough to be able to contradict this statement, so long as it takes into account any of those qualities of protoplasm which are or which may be known. But when it has recourse to qualities which we neither know nor can know (that is, when speculation without facts takes the place of investigation), then we can only leave it alone as a hypothesis which is not aware

even of its own difficulties."

The only possible solution, this writer believes, is in a "unity of feeling" of the organism. He says,

"Now this unity of feeling is a thing by itself, in that there came into it all the parts and experiences of the organism. It it thus like an agent which understands all that is going on, only that in the latter case every difference in the organism has its place as an explicit difference in the mind of the agent, whereas in the case with which we have to do the resultant state of feeling is an apparently homogeneous unity, for which each change in the body has its value, but in which each loses its character as a separate thing. The unity of feeling has the additional advantage of being a fact, whereas the agent is not a fact."

The action is psychical, of course, corresponding to the vis medicatrix naturæ of the living organism.

It is not physical, hence must be spiritual.

It belongs to the same category as instinct, which Von Hartmann characterises as clairvoyance from the

unconscious, and Kant as the voice of God.

Professor Shaler, in his "Interpretation of Nature," deals with this question of heredity very fully. The physical organisation of man can in no wise account for his advancement. The author says: "The success of man has been due, not to any very peculiar accomplishment of an organic kind, for in his frame he is much like his kindred, the anthropoids. It has been won by an entire change in the limitations of his psychic development. When we come to man, we appear to find the old bondage of the mind to the body swept away; and the intellectual parts develop with extraordinary rapidity, while the frame remains essentially unchanged."

This alone would lead us to deal most cautiously with any charge that these factors, "the dominant characteristic of man," could be a physical survival from lower organs or organisms which are devoid of this dominant characteristic, "which enables us to

class man as an entirely new kind of animal."

Professor Shaler emphasises the necessity of this caution, and shows that even materialistic naturalists have yielded their consent. He says: "Gradually it has been forced upon them that they too have to assume the intangible if they would take any firm

steps in explaining the series of facts with which they have to deal. A large part of this caution is due to our study of organic phenomena, especially in that part of the biologic field where the investigator has to consider the marvellous truths of inheritance. In face of the facts of descent, the most pragmatic naturalist is sure to learn some caution in his criticism of philosophers and theologians."

Referring to the theory of pangenesis, which Darwin offered tentatively only, Professor Shaler says: "Admirable as is the hypothesis of pangenesis when considered merely as a daring feat of the scientific imagination, it is evident that it utterly fails to satisfy the first condition of a theory, namely, that it shall bring a portion of the unknown within the limits of the understanding. It does not in the least extend or simplify our conception, but leaves us in the densest fog of speculation.

"The way in which the generational transmission is affected not only goes quite beyond our field of knowledge but appears also to transcend the limits

of the scientific imagination."

The only conclusion, he says, at least at the present time, is that matter even in its simpler states of organisation in the atom, or molecule, may contain a practically infinite body of latent powers, as contradistinguished from latent physical properties. This is in substantial accord with the views of Sir John Herschel, that mind is the key that unlocks the vis-viva, not the vis viva itself, but the hair-trigger which by the lightest touch explodes a mine.

Professor James, in his "Varieties of Religious Experience," says: "The subconscious self is nowadays a well-accredited psychological entity; and I believe that in it we have exactly the mediating term required. Apart from all religious considerations, there is actually and literally more life in our total soul than we are at any time aware of. The exploration of the transmarginal field has hardly yet been seriously undertaken, but what Mr Myers said in 1892 in his essay on the Subliminal Consciousness is as true as when it was first written. 'Each of us

is in reality an abiding psychical entity far more extensive than he knows—an individuality which can never express itself completely through any corporeal manifestation. The Self manifests through the organism; but there is always some part of the self unmanifested; and always, as it seems, some power of organic expression in abeyance or reserve.'

"In it many of the performances of genius seem also to have their origin; and, in our study of conversion, of mystical experiences, and of prayer, we have seen how striking a part invasions from this

region play in the individual life."

Again: "God is the natural appellation, for us Christians at least, for the supreme reality, so I will call this higher part of the Universe by the name of God. We and God have business with each other; and in opening ourselves to His influence our deepest

destiny is fulfilled."

Says Sir Oliver Lodge, in his Presidential Address before the Society for Psychical Research in 1902: "To tell the truth, I do not myself hold that the whole of any one of us is incarnated in these terrestrial bodies; certainly not in childhood; more, but not perhaps so very much more, in adult life. What is manifested in this body is, I venture to think likely, only a portion, an individualised, a definite portion, of a much larger whole. What the rest of me may be doing, for these few years while I am here, I do not know; perhaps it is asleep; but probably it is not so entirely asleep with men of genius; nor, perhaps, is it all completely inactive with the people called 'mediums.'"

Says Professor Barrett, in his Presidential Address in 1904, "If telepathy be indisputable, if our creaturely minds can, without voice or sensation, impress each other, the Infinite mind is likely thus to have revealed itself in all ages to responsive human hearts. Some may have the spiritual ear, the open vision, but to all of us there comes at times the echo of that larger Life which is slowly expressing itself in humanity as the ages gradually unfold. In fact, the teaching of science has ever been that we are not isolated in, or

from, the great Cosmos; the light of suns and stars reaches us, the mysterious force of gravitation binds the whole material universe into an organic whole, the minutest molecule and the most distant orb are bathed in one and the self-same medium. But surely beyond and above all these material links is

the solidarity of Mind."

Says Nikola Tesla, the electrical discoverer, in one of his lectures: "Nature has stored up in the universe infinite energy. . . . We are whirling through space with an inconceivable speed, all around us everything is moving, everywhere is energy. . . . Nature's immeasurable, all-pervading energy, which ever and anon changing and moving, like a soul animates the inert universe. . . . Far beyond the limit of perception of our senses the spirit still can guide us."

Says Prof. William H. Thomson, in his "Materialism and Modern Physiology of the Nervous System": "Now with the fact obstinately remaining that mind is a great reality, Huxley himself often maintaining that it is the first of all realities, what is there inconceivable about its separate existence, merely because we are unacquainted, at present, with the conditions of such a separate existence? On account of that deficiency, must we suspend further inferences, and return to matter and force, which already we have been told can give no intimation of what mind is although we know that there must be such a thing as mind?"

Says Professor Conn: "At the present time we know of no such simple protoplasm capable of living activities apart from machinery, and the problem of explaining life even in the simplest form known, remains the problem of explaining a machine. . . . We are apparently as far from the real goal of a natural explanation of life as we were before the discovery of protoplasm."

In "Bateson's Problems of Heredity," republished from the original English edition by the Smithsonian Institution, in 1902, this careful writer, Fellow of the Royal Society, says: "While in other branches of physiology such great progress has of late been made, our knowledge of heredity has increased but little. Let us recognise from the outset that as to the essential nature of the phenomena of heredity we still know absolutely nothing. We have no glimmering of an idea as to what constitutes the essential process by which the likeness of the parent is transmitted to the offspring. . . . Of the nature of the physical basis of heredity we have no conception at all. No one has yet any suggestion, working hypothesis, or mental picture that has thus far helped in the slightest degree to penetrate beyond what we see. The process is as utterly mysterious to us as a flash of lightning is to a savage. We do not know what is the essential agent in the transmission of parental characters, not even whether it is a material agent or not."

Among the examples cited by Bateson are two species of pea, permanent and long established. One is a tall stem, the other a dwarf. When these are cross-bred, either the one or the other progeny reappears unchanged, or else the new offspring is much taller than the taller of the two parents. I wish that I could reproduce more of this evidence. But I can do better, for I can quote from Haeckel what his own opinion of, and reliance on, Romanes was, and then show you what befell Romanes when he did what Haeckel confesses that he himself did not do, and how Haeckel is put to shame by his chosen exemplar.

Says Haeckel: "To George Romanes we owe the further development of Darwin's psychology, and its special application to the different sections of psychic activity. Unfortunately, his premature decease prevented the completion of the great work which was to reconstruct every section of comparative psychology on the lines of monistic evolution. The two volumes of this work which were completed are among the most valuable productions of psychological literature. . . . The distinguished psychologist gives a convincing proof that the psychological barrier between man and the brute has been overcome. . . I recommend those of my readers who are interested

in these momentous questions of psychology to study the profound work of Romanes. I am completely at one with him and Darwin in almost all their views and convictions. Wherever an apparent discrepancy is found between those two authors and my earlier productions, it is either a case of imperfect expression on my part or an unimportant difference in applica-

tion of principle."

Now, when Haeckel had finished his "Riddle of the Universe," Romanes was already dead, regretting with tears that his work was only half finished; but the last work of Romanes, in completion of his psychology, had not yet appeared, having been published posthumously. Had Haeckel seen these small thin volumes of Romanes, the fruit of his deeper studies and investigations, he would either have revised his own eulogy of Romanes, or else the text of his own Riddle. For Haeckel has left us a riddle which Romanes has fully answered, but not as Haeckel expected—and you will not find the answer in Haeckel at all, because Haeckel had ceased to study before Romanes had actually begun. Says Romanes: "Physical causation cannot be made to supply its own explanations." "When I wrote the preceding treatise [in 1878], I did not sufficiently appreciate the immense importance of human nature, as distinguished from physical nature, in any enquiry touching Theism. But since then, I have seriously studied anthropology (including the science of comparative religions), psychology and metaphysics, with the result of clearly seeing that human nature is the most important part of nature as a whole whereby to investigate the theory of Theism. This I ought to have anticipated on merely a priori grounds, and no doubt should have perceived, had I not been too much immersed in merely physical research.

"I now perceive two well-nigh fatal oversights which I then committed. The first was undue confidence in merely syllogistic conclusions, even when derived from sound premises, in regions of such high abstraction. The second was, in not being suffi-

ciently careful in examining the foundations of my

criticism, that is, the validity of its premises.

"In that treatise I have since come to see that I was wrong touching what I constituted the basal argument for my negative conclusion. Therefore I now feel it obligatory on me to publish the following results of my maturer thought, from the same standpoint of pure reason."

Here is the summary of a few of the results:

r. Disbelief is easier than belief, if in accordance with environment or custom, and is usually due to indolence, and is never a thing to be proud of. To believe requires a spiritual use of the imagination, and very few unbelievers have any justification, either intellectual or spiritual, for their own unbelief.

2. Probation is the only rational explanation of life.

3. Agnostics must investigate religion, even if it is to be considered only as intuitional.

4. In considering the hypothesis of design, it can be verified by the organ of immediate intuition, which

is supplementary to the rational.

5. The attitude of scientific men towards spiritualism, especially with such phenomena as those of mesmerism to warn them, shows that "scientific men are quite as dogmatic as the straitest sect of theologians. These men all professed to be agnostics at the very time when thus so egregiously violating their philosophy by their conduct."

6. If choice has to be made between mysticism and agnosticism, "the mystic might claim higher

authority for his direct intuitions."

7. It is on all sides worth considering (blatant ignorance or base vulgarity alone excepted) that the revolution effected by Christianity in human life is immeasurable and unparalleled by any other movement in history.

8. The theory of causation lands us in mystery;

volition is the only known cause.

9. "The common hypothesis on which all disputes between Science and Religion have arisen, is highly dubious." He says that theologians have

played into the hands of materialists by even conceding that "if there be a personal God, he is not immediately concerned with causation." In fact, he demands, and science and religion demand, a volitional and ever-causative God, ever present and in full and active control.

10. Huxley falls into the common error of

identifying "faith with opinion."

II. Gradual evolution is in analogy with God's other work.

12. "It does not leave him without a witness at any time during the historic period."

13. "It gives ample scope for persevering re-

search at all times."

14. "The integrating principle of the whole—the Spirit, as it were, of the Universe—must be something which, while holding nearest kinship with our highest conception of disposing power, must yet be immeasurably superior to the psychism of man. The world-eject thus becomes invested with a psychical value as greatly transcending in magnitude the human mind as the material frame of the universe transcends in its magnitude the material frame of the

human body."

Indeed it is almost certain that the processes of heredity are non-material. I have already quoted from Orton's note that in the metamorphoses of insects, "every tissue of the larva disappears before the development of the new tissues of the imago is commenced. The organs do not change from one into another, but the new set is developed out of formless matter." There are neither cells nor nuclei left, there is no type or pattern to build on, that the eye of science can detect or suspect. It is, so far as physical appearance goes, a creation de novo, and certainly, since there is and must be a guiding principle to create constant forms out of formless matter, that principle cannot be one of form, but of that which acts without form-or, as Lamarck says, "independent of matter."

But there is other evidence in overwhelming mass: the well-known birthmarks imprinted on the unborn

offspring, with location, form and obvious design, from a prenatal mental shock to the mother, are entirely inexplicable on any physical theory. There is no possible physiological connection from mother to feetus which could locate, at a specific place, and in directive relation, upon an unborn child, the indelible imprint, with the hair, shape, jaws, colour, legs, tail, etc., of a great dog, grasping at the throat, and sprawling down the chest, to correspond with the similar attack of a real dog, of like breed, and also of great size and fury, which had attacked and attempted to throttle the mother, until dragged off, a few months before the birth of the child, then in fœtal life. have had such a case in my practice, in a woman long grown-up, and so marked from birth, and with the history which I have narrated from the mother. Indeed, medical history is full of such instances, and of many still more wonderful, and which can only have a psychical interpretation. I refer also to the cases mentioned by Professor Oliver Wendell Holmes, an eminent medical authority, in the Epistolary Chapter (xvi.) of his well-known "Elsie Venner."

CHAPTER XXX

SPIRITUALISM PURSUES THE METHODS OF SCIENCE— SIR WILLIAM CROOKES' PRESIDENTIAL ADDRESS BEFORE THE BRITISH ASSOCIATION

The late Professor De Morgan, many years Professor of Mathematics, and afterwards Dean of University College, London, a Cambridge graduate, where he took his degree as fourth wrangler, who studied for the bar, and was a voluminous writer on mathematics, logic and biography; who was for eighteen years secretary to the Royal Astronomical Society, and was a strong and influential advocate for decimal coinage, a man of world-wide celebrity as a leader of scientific thought, wrote, in 1863, in the preface to "From Matter to Spirit," a work of his wife, as follows:—

"I am perfectly convinced that I have both seen and heard in a manner which should make unbelief impossible, things called spiritual, which cannot be taken by a rational being to be capable of explanation by imposture, coincidence or mistake. So far I feel the ground firm under me. But when it comes to what is the cause of these phenomena, I find I cannot adopt any explanation which has yet been suggested. If I were bound to choose among things which I can conceive, I should say that there is some combination of will, intellect and physical power, which is not that of any of the human beings present. But, thinking it very likely that the universe may contain a few agencies—say half-a-million—about which no man knows anything, I cannot but suspect that a small proportion of these agencies—say five thousand—may be severally competent to the production of all the phenomena, or may be quite up to the task among them. The physical explanations

which I have seen are easy, but miserably insufficient, the spiritual hypothesis is sufficient but ponderously difficult. . . . The spiritualists, beyond a doubt, are in the track that has led to all advancement in physical science: their opponents are the representatives of those who have striven against progress. . . . I have said that the deluded spirit-rappers are on the right track: they have the spirit and method of the grand time when those paths were cut through the uncleared forest in which it is now the daily routine to walk. What was that spirit? It was the spirit of universal examination, wholly unchecked by fear of being detected in the investigation of nonsense. . . . Again, the spiritualists have taken the method of the old time. . . . The spiritualist appeals to evidence: he may have enough or he may not; but he relies on what he has seen and heard. assumes that there is a world of spirits, it is no more than all nations and all ages have assumed, and many on alleged records of actual communication, which all who think him a fool ought to laugh at. If he should take the concurrent feeling of mankind as presumption in favour of such a world—a thing which may be known-he is on more reasonable ground than the opponent, who draws its impossibility—a thing which cannot be known—out of the minds of a very small minority."

Again he says, "The rapping spirits, their views, should they be really human impostures, are very, very singular. In spite of the inconsistencies, the eccentricities, and the puerilities which some of them have exhibited, there is a uniform vein of description running through their accounts which, supposing it to be laid down by a combination of impostors, is more than remarkable, even marvellous. The agreement is one part of the wonder, it being remembered that the mediums are scattered through the world; but the other and greater part of it is that the impostors, if impostors they be, have combined to oppose all the current ideas of a future state, in order to gain

belief in the genuineness of their pretensions."

Modern spiritualism has never ceased to advance,

in spite of a persecution as rigorous and general as many of those physical persecutions of old, for opinion's sake, which depopulated provinces, and

slaughtered millions.

And with precisely the same effect, for the fires of persecution have brought hosts of new investigators. as persecution of the truth always does. Significant facts are appearing in every direction, which prove that a great movement in favour of spiritualism, among the learned, the trained, and the men of science, is now under way with an irresistible and constantly increasing momentum. There is hardly a great institution of learning in Europe or America which does not number among its professors and teachers more than one, and often many, who study, teach and demonstrate the principles and teachings of this philosophy. Books by eminent men of science on this subject are constantly appearing, and the correct scientific principles, which regulate the investigations, are everywhere being rigidly applied, and with telling effect.

So long ago as 1831 the medical section of the French Royal Academy of Sciences took up these questions, as related to the proximate and remote phenomena of so-called animal magnetism, and the unanimous report as published of the eminent experimenters was to establish the truth of the phenomena of clairvoyance, internal prevision, and of many psychological facts, utterly at variance with the hypothesis of Dr Carpenter, or of his school.

The Dialectical Society of London, in 1872, fully established all these and many other facts, conclusively demonstrating the existence of an extra-human intelligence, capable of acting on physical bodies to produce physical results. Concerning this body of investigators, one of its most eminent members, Alfred R. Wallace, the contemporary with Darwin.

in his work on evolution, says:

"Of this committee, consisting of thirty-three acting members, only eight were, at the commencement, believers in the reality of the phenomena, while not more than four accepted the spiritual theory.

During the course of the inquiry (which extended over two years), at least twelve of the complete sceptics became convinced of the reality of many of the psychical phenomena through attending the experimental subcommittees, and almost wholly by means of the mediumship of members of the committee. At least three members who were previously sceptics pursued their investigations outside the committee meetings, and in consequence have become thorough spiritualists. My own observation, as a member of the committee and of the largest and most active subcommittee, enables me to state that the degree of conviction produced in the minds of the various members was, allowing for marked differences of character, approximately proportionate to the amount of time and care bestowed on the investigation. This fact, which is what occurs in all investigations into these phenomena, is a characteristic result of the examination into any natural phenomena. The examination into an imposture or delusion has invariably exactly opposite results; those who have slender experience being deceived, while those who perseveringly continue the inquiry inevitably find out the source of the deception or delusion."

The general committee, in presenting its published report, referred to the "high character and great intelligence of many of the witnesses to the more extraordinary facts, the extent to which their testimony is supported by the reports of the subcommittee and absence of any proof of imposture or delusion as regards a large portion of the phenomena; and further, having regard to the exceptional character of the phenomena, a large number of persons in every grade of society and over the whole civilised world who are more or less influenced by a belief in their supernatural origin, and to the fact that no philosophical explanation of them has yet been arrived at, deem it incumbent upon them to state their conviction that the subject is worthy of more serious attention and careful investigation than it has

hitherto received."

Ten years afterwards, 1882, was established our

great London Society for Psychical Research, which now numbers nearly or quite twelve hundred living members, among whom are included many dignitaries of the church, many men eminent in science throughout the world, and many men and women of mark and rank, and the influence of the society has extended so as to receive world-wide recognition. It is to-day one of the great intellectual and scientific forces of the age. Its publications and proceedings include many volumes, its monthly journal goes to every part of the world, and its roll of officers and members it would be impossible to duplicate anywhere, in their importance and ability. It has done, and is doing, a great work for humanity and for the true advancement of science.

To show the vast change in scientific sentiment during the last quarter of a century, concerning these questions, it is only necessary to narrate the following

record of facts.

In 1871-1872 Professor William Crookes, then a Fellow of the Royal Society, sent two papers on the subject of psychic force and allied phenomena to that institution for reading and publication. These papers were both thrown out by the Council of the Society, and the papers, by a unanimous vote, it was stated,

were returned to the author.

At this time Professor Crookes was already eminent in science: he had been the editor of The Chemical News since 1859, when it was founded; was editor of The Quarterly Journal of Science; the discoverer of the metal thallium; a high authority on disenfection for diseases of cattle, in which the sanitary use of carbolic acid was first popularised; a well-known scientific writer on photography; the discoverer of the now universally employed sodium amalgamation process in gold and silver metallurgy; and an investigator and experimentalist of high repute in optics and polarised light; the practical introducer of spectroscopic analysis into England; the constructor of the spectrum microscope, and the polarisation photometer; a practical worker in astronomy for twelve months at the Radcliffe Observatory,

Oxford, in planet-hunting, transit-taking, and celestial photography; whose lunar photographs, for years, were the best extant, and who was honoured by the Royal Society itself by a money grant to carry on his work; who was one of the British Government's Eclipse Expedition to Oran; and whose inventions and discoveries in the intricate phenomena of electric-lighting in vacua made the X-rays possible, and are known wherever "Crookes-tubes" are known, and in radiant energy wherever science is recognised.

But, in entering upon the ground of spiritualism, or psychic force, he at once put himself beyond the pale, and was not only ignominiously rejected, but was scourged and humiliated, and made to "point a moral and adorn a tale," by Dr Carpenter and others, who boastfully proclaimed his rejection in their public lectures, while *The Quarterly Review* took up and carried on the attack in what Professor Crookes calls "the spiteful, bad old style which formerly characterised this periodical."

And Dr Huggins, the eminent astronomer, fell under the same ban, because he certified as a witness to some of the phenomena, and he was indirectly stigmatised as a brewer, a scientific amateur, one of those who had only attached himself to astronomy, and was treated, in fact, just as all advocates for a scientific investigation of this subject have been treated by the bigoted pseudo-physicists and their

credulous following in the past.

But, undeterred by hostile criticism, the experiments of Professor Crookes went on, and in *The Quarterly Journal of Science* for January 1874 he summarised and describedt he phenomena which he had proven, under the following classes:—

I. The movement of heavy bodies with contact

but without mechanical exertion.

2. The phenomena of percussive and other allied sounds.

3. The alteration of weight of bodies.

4. Movements of heavy substances when at a distance from the medium.

5. The rising of tables and chairs off the ground, without contact with any person.

6. The levitation of human beings.

7. Movement of various small articles without contact with any person.

8. Luminous appearances.

9. The appearance of hands, either self-luminous or visible by ordinary light.

10. Direct writing.

II. Phantom forms and faces.

12. Special instances which seem to point to the agency of exterior intelligences.

13. Miscellaneous occurrences of a complex

character.

During all the intervening years, up to the present time, his work along these lines has proceeded, and the Royal Society itself awarded to Dr Huggins the Copley Gold Medal, and the Rumford Medal to Professor, now Sir Oliver, Lodge, an eminent co-worker in these fields with Sir William Crookes (for the British Government had now bestowed upon Crookes also this new title and dignity), and Sir William Crookes was now elected President of the British Association for the Advancement of Science, the most august scientific body in the world, and he concluded his President's Address, at the 68th annual meeting, at Bristol, 7th September 1898, with the following remarkable and prophetic words:—

"To stop short in any research that bids fair to widen the gates of knowledge—to recoil from fear of difficulty or adverse criticism—is to bring reproach on Science. There is nothing for the investigator to do but to keep straight on, 'to explore up and down, inch by inch, with the taper of his reason'; to follow the light wherever it may lead, even should it at times resemble a will-o'-the-wisp. I have nothing to retract. I adhere to my already published statements. Indeed, I might add much thereto. I regret only a certain crudity in those early expositions which, no doubt justly, militated against their acceptance by the scientific world. My own knowledge at the time scarcely extended beyond the fact

that certain phenomena new to science had assuredly occurred, and were attested by my own sober senses, and, better still, by automatic record. . . . I think I see a little farther now. I have glimpses of something like coherence among the strange elusive phenomena; of something like continuity between those unexplained forces and laws already known.

"This advance is largely due to the labours of another association of which I have also this year the honour to be the president—the Society for Psychical Research—and were I now introducing for the first time these inquiries to the world of science I should choose a starting point different from that of old. It would be well to begin with telepathy, with the fundamental law, as I believe it to be, that thoughts and images may be transferred from one mind to another without the agency of the recognised organs of sense—that knowledge may enter the human mind without being communicated in any hitherto known or recognised ways. . . . A formidable range of phenomena must be scientifically lifted before we effectually grasp a faculty so strange, so bewildering, and for ages so inscrutable as the direct action of mind on mind. This delicate task needs a rigorous employment of the method of exclusion—a constant setting aside of irrelevant phenomena that could be explained by known causes, including those far too familiar causes, conscious and unconscious fraud. An eminent professor in this chair declared that 'by an intellectual necessity he crossed the boundary of experimental evidence, and discerned in that matter, which we in our ignorance of its latent powers, and notwithstanding our professed reverence for its Creator, have hitherto covered with opprobrium, the potency and promise of all terrestrial life.' I should prefer to reverse the apothegm, and to say that in life I see the promise and potency of all forms of matter.

"In old Egyptian days a well-known inscription was carved over the portal of the temple of Isis: 'I am whatever hath been, is, or ever will be; and my veil no man hath yet lifted.' Not thus do modern

SPIRITUALISM PURSUES SCIENCE

seekers after truth confront Nature—the word that stands for the baffling mysteries of the universe—steadily, unflinchingly, we strive to pierce the inmost heart of Nature, from what she is to reconstruct what she has been, and to prophesy what she yet shall be. Veil after veil we have lifted, and her face grows more beautiful, august and wonderful with every barrier that is withdrawn."

CHAPTER XXXI

THE ONLY SCIENTIFIC BASIS OF EVOLUTION IS VOLITION

I HAVE spoken of spiritualism, in this book, in a broad sense. I have made it, in its larger scope, coincident with a universe controlled by a psychism; to a universe in which the only force we know or can know is volition; to a universe in which law and order, development and harmony, are the results of a law-maker and an orderer, a developer and a harmoniser; and in which we human beings, as even Herbert Spencer concedes, are endowed with the same kindred of spiritual powers in individualised and specialised form as the great psychism from which we are derived. And our individualities are here under probation for a future beyond the grave. What are called spiritualistic phenomena may be true, probably are true, if religion is true; for these two are kindred. But if spiritualistic phenomena are not true, only because it is impossible that they should be true, then of a surety religion itself of every cult and kind, manhood, womanhood, honour, honesty, decency, virtue, chastity, purity, love, justice, truth, fidelity, morality, fatherhood, motherhood and brotherhood, are none of them true.

Romanes has told us in pregnant sentences, in his "Candid Examination of Religion," how religion itself, or theology rather, had thrown away its Godgiven charter, which is that God is not only the source, but the life and movement of all things, and that it had allied itself with materialism, in granting natural physical causation—that is, a non-intelligent causation, and yet resulting in intelligent order. "No one," he says, "even the most orthodox, has as yet learnt this lesson of religion to anything like

fulness. God is still grudged His own universe, so to speak, as far and as often as He possibly can be. . . . It is still assumed on both sides (that is, by this theology and this materialism), that there must be something inexplicable or miraculous about a

phenomenon in order to its being divine.

"What else," he says, "have science and religion ever had to fight about, save on the basis of this common hypothesis, and hence as to whether the causation of such or such a phenomenon has been 'natural' or 'supernatural'? For even the disputes as to science contradicting scripture ultimately turn on the assumption of inspiration (supposing it genuine) being 'supernatural' as to its causation. Once grant that it is 'natural' and all possible ground of dispute is removed.

"Only because we are so familiar with the great phenomenon of causality do we take it for granted, and think that we reach an ultimate explanation of anything when we have succeeded in finding the 'cause' thereof: when, in point of fact," he says, "we have only succeeded in merging it into the

mystery of mysteries."

Both Romanes and Sir John Herschel, and most other great scientific authorities, agree that the only known force and known cause of anything is volition, continuous, ever-acting, intelligent, directive, purposive and impelling volition.

There is no other which we can see, know, under-

stand, or of which we can conceive.

With this divine volition conceded, we can have, and we do have, as all can see, an intelligent plan, and progression, from the relatively lower to the relatively higher—an intelligent and intelligible evolution; without it there is, there can be, no evolution at all, for "evolution" is the evolving, the out-turning, of the scheme, or plan, or process, which we recognise as the *order* of nature. Without such there is no order. But only disorder, accidental jumblings and breakings-up, as well go backward as forward; that things proceed in an orderly and comprehensible manner is proof absolute that they pro-

ceed by means of an orderer, and that this orderer was, and is, the prior comprehender; in other words there is, as Lamarck held, an intelligent power which transcends nature, which was before nature, and is independent of nature, and controls nature to do its will—and this is what we call God; he may pass by many names, but, if he have these qualifications, then he is God; if, on the contrary, he have not these qualifications, then, though he be called God in a hundred languages, he is not God. And with such a real God all that we see going on around us, and much of which we can comprehend, is precisely what we ought to expect. Through all the world-process is orderliness and advancement; and we, the microcosm, can follow with comprehending eyes the macrocosm which carries all things along with it. Outside this, who can comprehend or feel with Longfellow's aspiring youth, with his flag on the mountain peak, "Excelsior," and the dead body which has won by its losing; or Olive Schreiner's dream-hero, who, climbing unending mountains for truth, at last saw, at his highest ascent, fluttering down to him, a single feather from her glorious plumage, and there died content?

Be sure Professor William James is right when he says, "We and God have business with each other." Here is a little Persian Poem from Jalalu'd-Din, a Sufi poet, who wrote seven centuries ago:

"I died from rock and sand, and rose a plant,
I died from plant, and grew a living breath,
I died from lower flesh, and rose a man,
Why should I fear? What have I lost by death?
When next I die, 'twill be to die from man,
And rise on angel wings to higher place,
And from the angel still shall rise, and rise,
'For all shall perish, save alone His face.'
And I shall wing my way to higher spheres,
And transcend all I here can know, or learn,
Then let me now be naught, for the harp-string
Crieth, 'To Him indeed we shall return.'"

PART IV



CHAPTER XXXII

REVIEW OF PARTS I., II., AND III.

In the first and second parts of this book I endeavoured to show that religion has been so uniformly found in all peoples, of all times and places, that it has been substantially universal from the origin of man, so that it conforms to the criterion of Leibnitz, which would establish it as a universal, eternal and immutable truth.

Either it was born into man with the birth of man, or was at once implanted by spiritual revelation, which has never ceased for a moment anywhere, from that time to the present; and never will until time shall have completed its span and been merged into

a spiritualised eternity.

This cognition of the co-ordinated presence of the individual body, the individual spirit, the spirit of nature, the Spirit of the Universe, as Romanes named it, is so intimate and inseparable that a man altogether devoid of religion, if there be such a man, is not a whole man, but is either deformed, atrophied,

blind or paralytic.

I have shown, by the highest scientific testimony, that men who proclaim their atheism or materialism, and believe that they are atheists or materialists, are universally miserable at heart, that they are feeding on husks, are cramming their stomachs with highly-spiced confectionery instead of food, while in their souls they crave natural food, and are miserable without it.

I have endeavoured to show that the basis of all religions is spiritualism, and that spiritualism is not only the basis but the test of religion, and that religion can only exist so long as spiritualism coexists with it. I have cited all the principal religions of history, and those prehistoric ones which have cast their beams of light through the stone age, the ages of bronze, iron, steel, and, alas! gold, up to our highest and latest civilisations, and shown that they could all unite with their fundamental beliefs in the same words, and used in the same sense.

Turning from the religions of other peoples to our own, I have shown how ancient paganisms had gradually forced art into their service, so that art itself became sacerdotal, and intertwined with mythology, and its beautiful arms were so entwined, by centuries of pressure, with older and falser accretions, that when Christianity arose in its strength, like a young giant, it was forced to crush out art in crushing paganism.

But I endeavoured to show, also, that when the full triumph of the new faith had come, art again was welcomed, as God's most beautiful gift to man, and

religion and art again went hand in hand.

So too, I endeavoured to show that Christianity with all its power, and in the day of its world-conquering dominion, had forced spiritualism into a like sacerdotal bondage to the church, and when the great revolt of the sixteenth century came, Protestantism, in attacking the old and corrupt accretions of ecclesiastical organisation, was compelled to crush spiritualism in order to secure its own position.

Driven perforce from the divine control of the church, and the divine preservation of the Bible, driven from miracles, from the supernormal as revealed in the promises of its Founder, it was compelled to posit an ever-present and operative Nature, to take the place of an ever-present and inworking God.

Natural science, new-born as it was, found its vogue, and a new and popular ally, in this theology without *Theos*, and these two forces clasped hands; and against them, for centuries, all the strength of a spiritual religion and a scientific psychology was spent in vain.

"Natural Causation" became the god of both creeds, and the only difference between them was that

faith (and such faith) taught one wing that later on (how, or when, or where, or why, or to what purpose, no one could say, for the occasion then must have long passed by) some monstrous form would come out of the clouds, whether above or below, or from one side, with the blare of trumpets, and shout of the archangel, and separate the goats from the sheep, and, to quote Burns' prayer,

"Send ane to heaven and ten to hell,
A' for thy glory."

I do not mean to say that that whole branch of the church was in this lamentable state; far from it. On the contrary I believe that the vast preponderance of all that has worked for man's advancement, and indeed for his spiritual enfranchisement and potentiality, has been due to just this and like popular movements.

I am speaking of the forbidding rockbound creeds and "confessions" which, while ever present and aggressive, the bulk of the people never did accept, and never could accept, but which, by their very presence and authority, paralysed the power of the church in dealing with the forms and forces of materialism.

I said, upon one occasion, to a sweet-faced Presbyterian lady: "Could you sit here quietly and listen to this music, and enjoy it, if you knew that your mother was now being burned alive by wicked people next door?" "Heavens, no! Why do you say that?" "I understand that you had a brother whom you dearly loved, and who died unconverted." After a pause, "I will trust him, and all mine, to God," was her beautiful reply.

With this perverted theology and baseless empiricism so bound up together, when what Romanes called the "nearly fatal mistake" had been made, the real truth and significance of all things had no chance whatever; a vague and shadowy faith was left, but it was a baseless, superstitious, credulous faith, against the code, and which could not be boldly defended in public, but could only be wept and prayed

over in private; and for demonstration of the eternal there was but one thing left to do—to wait.

"The mills of God grind slowly, But they grind exceeding small."

Time was needed for the seed to be sown, and to ripen into the gleaming harvest; time for new machines to be discovered, and perfected; for new lines of investigation to be carried out; for whole new sciences to be created; for, by the power of mind over matter, God proposed to destroy the power of matter over mind.

The time has come at last, and empiricism and materialism are retreating, and divine volition and spiritualism are advancing, with giant sweeps. And this time they come to stay; everything else has been tried and failed, even during this weary time of waiting, and a reawakened psychology, with new weapons and new facts is now coming, with

"Banners yellow, glorious, golden,"

full-armed and full-panoplied, and the sky is all alight with their approach.

CHAPTER XXXIII

TESTIMONY OF ABLE AUTHORITIES, IN LETTERS TO THE DIALECTICAL SOCIETY, IN FAVOUR OF THE TRUTH AND IMPORTANCE OF SPIRITUAL PHENOMENA

I HAVE spoken much of spiritualism in the preceding chapters; I have spoken of the broad spiritualism of the universe; of the cosmical spiritualism of telepathy. thought-transference, prevision and clairvoyance; of the individual spiritualism of the working mind and instinct; of the primordial, earthly spiritualism of the lowest forms of life; of the spiritualism of the subconscious department of the mind, especially of the human mind, and of genius, invention, inspiration and other forms of what the ancient Chinese named "ling"; and also of the phenomena of mediumship. Broadly speaking, we are all mediums, just as we are all poets, or farmers, or soldiers, but partially undeveloped ones; for the specialists in these lines are both born with the power and developed by its use. This latter form of spiritualism, mediumship, is that which can be best and most easily investigated, which most certainly leads us to the knowledge of higher planes of the supernormal, and it is the co-worker and supporter of religion, by giving certainty to our survival after death, which is the basis of all religions; and, with some reluctance, I feel that I ought to say something of my own personal studies in this field.

Referring again to the London Dialectical Society, there were many eminent men who wrote letters to the Dialectical Society, from which I will make very brief extracts, prefatory to my own observations.

George H. Lewes wrote: "When any man says that phenomena are produced by no known physical

laws, he declares he knows the laws by which they

are produced."

The converse, of course, is equally applicable: "When any man says that certain phenomena are not produced by any laws, he declares that he knows

all the laws by which phenomena are produced."
Dr J. G. Davey, M.D., of Bristol, wrote, regarding his investigations, that they "have not only removed whatever doubts did once belong to me, but have convinced me of many great and solemn truths in regard to the future of man which, anterior to 1862, were altogether ignored by me, and deemed scarcely worthy of the nursery."

Dr J. J. Garth Wilkinson wrote: "I have been a believer in the spiritual world, and its nearness to the natural world, nearly all my life. And the rareness of communication between the two is to me one of the greatest of miracles; a proof of the economic wisdom, the supreme management, the extraordinary states-manship, of the Almighty."

Mr Newton Crossland, of Lynton Lodge, Vanburgh Park Road, Blackheath, wrote: "The facts of spiritualism are to me as certain and indisputable

as those of the multiplication table."

Edwin Arnold (afterwards Sir Edwin Arnold), M.A., wrote: "The statement to which I am prepared to attach my name is this: that conjoined with the rubbish of much ignorance and some deplorable folly and fraud, there is a body of well-established facts beyond denial and outside any existing philosophical explanation, which facts promise to open a new world of human inquiry and experience, are in the highest degree interesting, and tend to elevate ideas of the continuity of life, and to reconcile, perhaps, the materialist and metaphysician."

Mr J. Hawkins Simpson, who experimented with Mr Home, mentions a case of crystal vision which illustrates what I shall say later on regarding the simultaneous appearance in the crystal apparently, of the same apparently objective view, by a number of persons looking at the same time into the crystal. He says: "When I tell you that a large landscape

view, as carried in my brain, was made perfectly visible in the spherical crystal to everyone in a dark room, although the individuals composing the party occupied opposite places to each other, and no one, except Mr Home, who held the crystal, was within three feet of the crystal; you will admit that a field of inquiry is here opened up which would yield results increasing our knowledge of mental action, etc., etc."

Miss A. Goodrich-Freer of the S.P.R., in her excellent "Essays in Psychical Research," cites a case in which she and a friend went to the new gallery to see the "shew-stone" which Kelley, the Scryer, used, hundreds of years ago, and which was kept in a glass case. They both gazed into it simultaneously, as, says the author, "We were particularly anxious to achieve a collective vision." At her home was an old hand-organ, which would not play. After the ladies had left home for this visit, a friend dropped in accidentally, and, with a brother then there, fixed it up and set it going, a most unexpected and totally unknown circumstance. Says Miss Freer: "In the crystal we both saw the following scene:-we saw them sitting at opposite sides of the fireplace in the room where it was kept, but while I, in my picture, so to speak, faced the right, my friend faced the left "

This, and many other instances, seem to show that the vision is not merely a replica of a visualised idea in the clairvoyant's mind. It is as though the object was under inspection, and subject to the usual laws of position and perspective, for each separate "gazer."

Mr Hockley, a witness who gave his testimony concerning crystal gazing to the Dialectical Society (see Report pp.184-187), furnishes a number of unusual cases, having collected, he says, more than twelve thousand answers to questions, and his testimony is corroborated by like facts from other sources. Mr Hockley says that, "on one occasion, a man appeared in the small crystal with a book before him, and she saw it was splendidly done but too small to read. I gave her a powerful reading-glass, and she could then read

it, for the glass increased the size." At the Earl of Stanhope's request he obtained for Lieutenant (Captain) Burton, a crystal and a black mirror, which Burton afterwards used in the East. This witness never could see anything in a crystal himself, but relied on what the visualiser told him, but he appeared to have used very scientific tests, as his examination by the committee shows.

John Tyndall wrote the Dialectical Society very courteously, but stated that Mr Cromwell Varley, a well-known spiritualist, paid him a visit, and told him, says Mr Tyndall, "that my presence at a séance resembled that of a great magnet among a number of

smaller ones. I throw all into confusion."

Such personalities, outside of mere conscious antagonism, are not uncommonly met with. They are usually those "too much immersed in merely physical research," or those others, to whom Romanes refers, as made consciously miserable by feeding on the husks of materialism, until they have been bound down thereby, and have lost what Professor James calls "the will to believe."

Belief is something to be earned; as Romanes says, unbelief is usually due to indolence, often to prejudice, and never a thing to be proud of; doubt may be scientific, pending investigation, but denial

on an a priori never.

Dr William B. Carpenter wrote: "There are certain phenomena which are quite genuine, and must be considered as fair subjects of scientific study. My inquiries have led me to the conclusion, however, that the source of these phenomena does not lie in any communication ab extra, but that they depend upon the subjective condition of the individual which operates according to certain recognised physiological laws."

To this letter he appended an abstract in support of his "recognition" of these "physiological laws," covering more than ten printed pages, in which not one experiment is reported bearing on these subjects but in which philosophical speculation takes the part of practical study, which latter, and not the former,

was the sole object of the existence of the Dialectical Society. His explanation was his well-known "Unconscious Cerebration," which, as a complete explanation, as all men of science now know, stops short where psychology commences, simply because it runs, like all materialistic conceptions, into an imbasse in both directions.

Mr T. Adolphus Trollope wrote a very interesting letter from Florence, where he then resided. He says: "In short, the result of my experience thus far is this, that the physical phenomena frequently produced are, in many cases, not the result of any sleight of hand, and that those who have witnessed them with due attention must be convinced that there is no analogy between them and the tricks of professed 'conjurors.' I may also mention that Bosco, one of the greatest professors of legerdemain ever known, in a conversation with me upon the subject, utterly scouted the idea of the possibility of such phenomena as I saw produced by Mr Home being performed by any of the resources of his art."

Bosco's testimony is that of all the great "magicians," Houdin, and those of like eminence, and I have personal knowledge of a very apropos case in which one of the greatest of our living "magicians" was interested. A personal friend of mine, a physician of high standing, a member of the Seybert Commission of the University of Pennsylvania (which was so badly mismanaged, by the way, but which got Mr Seybert's sixty thousand dollar legacy nevertheless), had this eminent magician, some years ago, as a patient.

The gentleman consulted my friend about certain inexplicable phenomena which had manifested themselves to him almost nightly, while in bed. A ticking, or very light tapping, at intervals, and in defined groups, on the head, the footboard, or elsewhere on the bed. In response to questions, he received intelligent answers in all cases. I do not know that the replies were of any special significance or importance, but they were beyond the magician's power to account for, and they annoyed or disturbed him in consequence. I presume that he could have repeated them

on the stage before an audience, but I do not think that they would have seemed the same to him as they did in the silence of the night, and under the circumstances encountered by himself. In fact, he told the doctor that "they were inexplicable," which seems

to prove this fact.

Mr Trollope was not a spiritualist. Long afterwards, in his book of reminiscences, "What I Remember," he says: "I have spoken at length in my former volume of the various 'spiritualistic' or tablemoving experiences, which I have met with at various times: I gave, I think, upon the whole, a rather unfavourable impression of the genuineness of the phenomena I recorded. I think it honest therefore to mention here a record taken from my diary at a much later date, which seems to afford evidence in the other direction."

In this experiment he confined himself to numbers, asked for mentally. "Numbers of questions were asked, with the result that some rather startling replies were elicited. But as all this was liable to more or less of doubt, to the possibility of trickery, and the probability of misunderstanding, I asked if the 'spirit' would name a number I should think of, which was accordingly promised. I thought of five, and that number was at once, and without any tentative guesses, correctly given. I tried again, but carelessly removed my hands from the table, and was answered wrong. I then replaced my hands on the table, thought of another number, which was at once correctly given. Some others of the party then tried the same experiment, and stated that the number they had thought of had been correctly named. On a subsequent occasion, the result (barring one mistake) was exactly similar."

From personal experience I can say that the removing of the hands after a question has been asked, and before it has been answered, seems to produce a feeling of disgust on the part of the manipulating agency, just as if one should ask someone in company a question, and then turn away before listening for the reply. Only a few days ago, I asked one of the sitters

at the table to reach for a pencil, and wrote down the answer to what I had just asked, which was the orthography of an unknown name then being given. The result was that it took about ten minutes to woo back the offended mechanician, although he had been working the table, before the interruption, like a sawmill, bump, bump, bump (yes), bump (no), bump, bump, bump; bump-bump-bump; bump-bump-bump

It is just as common an experience for a table to answer mental questions as spoken ones; in fact, they are only spoken, in general, to keep up the inter-

est of the others present.

Mrs Lætitia Lewis wrote the Dialectical Society: "I must inform you that I am not a medium and had no belief in spirits till I became convinced almost against my will. Whilst residing at my home in South Wales during the spring of the present year (1870), most wonderful spiritual manifestations occurred spontaneously to myself and daughter." She appends a private letter to a near relative, a clergyman in the Church of England, describing these phenomena. These were in the nature of rappings, poltergeist phenomena, and automatic writing, largely relating to a lost will, and which nearly scared the daughter to death.

I need hardly refer the reader to the published records of the well-known experiments of Sir William Crookes, and especially to his most fascinating narratives of his materialising experiments, in his own house, with Katie King, and particularly to his last interview and final parting with this materialised visitant from the past, while the medium lay silent and unconscious by her side, or distant from her, but

visible in another room.

Surely, in view of the experiences narrated by others, it is not only a right but a duty, in the cause of science, to dispassionately describe examples of such phenomena as have manifested themselves to us, of an apparently supernormal character, and thus advance our knowledge of the "character, faculties, extent, sources and departments, and the connections of the human mind, by thoroughly practical and scientific methods."

In the cases which I have cited in this volume I have endeavoured to use them only for illustration, and to avoid the startling; and I should hesitate to present this narrative of Sir William Crookes, entitled, "The Last of Katie King," to an inexperienced public, were it not that the distinguished author was himself the experimenter; that every scientific precaution was taken with the fifteen-year-old medium, domiciled in his own house, and with his family, where the experiments took place; that he wrote down the narrative with his own hand; and that so recently as September 1898 he declared, to the most eminent scientific audience possible to be assembled, that, referring to his own work, along these lines and to his own records of the same—

"I have nothing to retract. I adhere to my already published statements. Indeed I might add

much thereto."

And in this Presidential Address, before the British Association for the Advancement of Science, he clearly set forth the only possible way in which science can be advanced. The scientific world has been the beneficiary of his teaching, for during the few intervening years its whole status has been changed.

The narrative of Sir William Crookes of the last appearance of the materialised form of "Katie King" is contained in his book entitled, "Researches in the Phenomena of Spiritualism," reprinted from *The Quarterly Journal of Science*, and it is most pathetic as well as instructive, as it is told. The following is

the narrative:-

"During the week before Katie took her departure she gave séances at my house almost nightly, to enable me to photograph her by artificial light. Five complete sets of photographic apparatus were accordingly fitted up for the purpose, consisting of five cameras, one of the whole-plate size, one half-plate, one quarter-plate, and two binocular stereoscopic cameras, which were all brought to bear upon Katie at the same time on each occasion on which she

stood for her portrait. Five sensitising and fixing baths were used, and plenty of plates were cleaned ready for use in advance, so that there might be no hitch or delay during the photographing operations, which were performed by myself, aided by one assistant.

"My library was used as a dark cabinet. It has folding doors opening into the laboratory; one of these doors was taken off its hinges, and a curtain suspended in its place to enable Katie to pass in and out easily. Those of our friends who were present were seated in the laboratory facing the curtain, and the cameras were placed a little behind them, ready to photograph Katie when she came outside, and to photograph anything also inside the cabinet, whenever the curtain was withdrawn for the purpose. Each evening there were three or four exposures of plates in the five cameras, giving at least fifteen separate pictures at each séance; some of these were spoilt in the developing, and some in regulating the amount of light. Altogether I have forty-four negatives, some inferior, some indifferent, and some excellent.

"Katie instructed all the sitters but myself to keep their seats and to keep conditions, but for some time past she has given me permission to do what I liked—to touch her, and to enter and leave the cabinet almost whenever I pleased. I have frequently followed her into the cabinet, and have sometimes seen her and the medium together, but most generally I have found nobody but the entranced medium lying on the floor, Katie and her white robes having

instantaneously disappeared."

"During the last six months Miss Cook has been a frequent visitor at my house, remaining sometimes a week at a time. She brings nothing with her but a little hand-bag, not locked; during the day she is constantly in the presence of Mrs Crookes, myself, or some member of my family, and, not sleeping by herself, there is absolutely no opportunity for any preparation, even of a less elaborate character than would be required for enacting Katie King. I

prepare and arrange my library myself as the dark cabinet, and usually, after Miss Cook has been dining and conversing with us and scarcely out of our sight for a minute, she walks direct into the cabinet, and I, at her request, lock its second door, and keep possession of the key all through the séance; the gas is then turned out, and Miss Cook is left in darkness.

"On entering the cabinet Miss Cook lies down upon the floor, with her head on a pillow, and is soon entranced. During the photographic séances, Katie muffled her medium's head up in a shawl to prevent the light falling upon her face. I frequently drew the curtain on one side when Katie was standing near, and it was a common thing for the seven or eight of us in the laboratory to see Miss Cook and Katie at the same time, under the full blaze of the electric light. We did not on these occasions actually see the face of the medium because of the shawl, but we saw her hands and feet; we saw her move uneasily under the influence of the intense light, and we heard her moan occasionally. I have one photograph of the two together, but Katie is seated in front of Miss Cook's head.

"During the time I have taken an active part in these séances Katie's confidence in me gradually grew, until she refused to give a séance unless I took charge of the arrangements. She said she always wanted me to keep close to her, and near the cabinet, and I found that after this confidence was established, and she was satisfied that I would not break any promise I might make to her, the phenomena increased greatly in power; and tests were freely given that would have been unobtainable had I approached the subject in another manner. She often consulted me about persons present at the séances, and where they should be placed, for of late she had become very nervous, in consequence of certain ill-advised suggestions that force should be employed as an adjunct to more scientific modes of research."

"One of the most interesting of the pictures is one in which I am standing by the side of Katie; she has her bare feet upon a particular part of the

floor. Afterwards I dressed Miss Cook like Katie, placed her and myself in exactly the same position, and we were photographed by the same cameras. placed exactly as in the other experiment, and illuminated by the same light. When these two pictures are placed over each other, the two photographs of myself coincide exactly as regards stature, etc., but Katie is half a head taller than Miss Cook, and looks a big woman in comparison with her. In the breadth of her face, in many of the pictures, she differs essentially in size from her medium, and the photographs show several other points of difference.

"Having seen so much of Katie lately, when she has been illuminated by the electric light, I am enabled to add to the points of difference between her and her medium which I mentioned in a former article. I have the most absolute certainty that Miss Cook and Katie are two separate individuals so far as their bodies are concerned. Several little marks on Miss Cook's face are absent on Katie's; Miss Cook's hair is so dark a brown as almost to appear black; a lock of Katie's which is now before me, and which she allowed me to cut from her luxuriant tresses, having first traced it up to the scalp and satisfied myself that it actually grew there, is a rich golden auburn.

"On one evening I timed Katie's pulse. It beat steadily at 75, while Miss Cook's pulse a little time after was going at its usual rate of 90. On applying my ear to Katie's chest I could hear a heart beating rhythmically inside; and pulsating even more steadily than did Miss Cook's heart when she allowed me to try a similar experiment after the séance. Tested in the same way Katie's lungs were found to be sounder than her medium's, for at the time I tried my experiment Miss Cook was under medical treatment for a severe

cough.

When the time came for Katie to take her farewell I asked that she would let me see the last of her. Accordingly when she had called each of the company up to her and had spoken to them a few words in private, she gave some general directions for the future guidance and protection of Miss Cook. From these,

which were taken down in shorthand, I quote the following:—'Mr Crookes has done very well, throughout, and I leave Florrie with the greatest confidence in his hands, feeling perfectly sure he will not abuse the trust I place in him. He can act in any emergency better than I can myself, for he has more strength.' Having concluded her directions, Katie invited me into the cabinet with her, and allowed me to remain there to the end.

"After closing the curtain she conversed with me for some time, and then walked across the room to where Miss Cook was lying senseless on the floor. Stooping over her, Katie touched her, and said, 'Wake up, Florrie, wake up! I must leave you now.' Miss Cook then woke and tearfully entreated Katie to stay a little time longer. 'My dear, I can't; my work is done. God bless you,' Katie replied, and then continued speaking to Miss Cook. For several minutes the two were conversing with each other, till at last Miss Cook's tears prevented her speaking. Following Katie's instructions, I then came forward to support Miss Cook, who was falling to the floor, sobbing hysterically. I looked round, but the whiterobed Katie had gone. As soon as Miss Cook was sufficiently calmed, a light was procured and I led her out of the cabinet."

With reference to the photographs described in the above narrative (of which I am the possessor of one), it should be noted that these are photographs of a visible and tangible form. But there are other spirit-photographs, of which I feel that I should say something, because popular ignorance has here left an open door for scepticism and denial, instead of for research and evidence. In regard to these phenomena, as with reference to "miracles," in a previous chapter, I am not called upon to assert the actuality of such photographs which reveal upon the plate, and the prints therefrom, forms and faces which were invisible and intangible, and which in many cases are identifiable as portraits of loved ones now dead. If I can show the scientific status of these phenomena, and that they are scientifically possible, then my

work here will have been accomplished, for after that it will only be a matter for evidence, and not for a priori denial.

I have many such alleged spirit-photographs, and many of these are subject to suspicion, and some to rejection. I know all about double-exposures, defective developments and professional trickery; but we find these everywhere, and still we have courts and juries and judges, and all that faith and trust which mark civilisation, and even barbaric peoples, and lower animals. Utter and universal scepticism is practical nihilism and intellectual suicide. I have one of these photographs, however, which has a history precluding any falsehood except the judgment of an observer as to what the picture itself shows. A close friend of mine and his wife, both members of the Society for Psychical Research, about ten years ago purchased a residence near by, and moved inhusband, wife, daughter and young lady cousin, comprising the family. The ladies were amateur photographers, and a few days afterwards they took a picture, among many others, of the new parlour, in which the former mantel and mirrors still remained.

On developing the negative, in addition to the forms and furniture normally photographed, near one corner was apparently a standing figure of a young woman, semi-transparent in parts to a picture frame behind. It was a puzzle to these people, and was blamed on the developing fluid, but this has been denied by skilled photographers who have examined

the print.

To me, when I saw it first, a few days afterwards, I marked but did not mention what I observed, for "spook houses" are not desirable properties as a rule.

This figure was costumed in the garb prevalent here from about 1859 to 1865—that is, during the period of the War of the Rebellion, when things were much less rigid than in later and more peaceful times. She had the netted "waterfall" for the hair, the white-fur-bordered close sacque, and, in fact, as she stood in a half-back view, she was the very picture of the girls which I knew at that period, but which my friends knew nothing of, as they had not then been born.

I had moved into the neighbourhood in 1868, and during the latter part of the war, which closed in 1865, this fine old residence had been used for quite other purposes, and there was a tradition of the tragical death of a young girl in this house about 1863 or 1865. The circumstances I did not know, and it was not then well to inquire about, but such were the facts. I do not say that this picture represents that girl, or anybody; I do not say that it was not a bad flaw of the developing fluid; I only say that something came on that plate which was not seen beforehand, and was never seen, nor anything like it, in that room afterwards, and the character was such as was recognisable by me.

But I am interested in showing that invisible and intangible objects can be and often are photographed, and quite as clearly and conspicuously as "crude matter." In fact, if we depended on the visible and

tangible we could not photograph at all.

Who does not know of the mirage, in which beautiful scenes, lakes, and the like, appear in the distance real enough to carry conviction to anyone? I have seen these both in northern and tropical regions, and they can be photographed, and often have been, yet here we look upon a plate or print itself composed of physical matter, chemical compounds, and yet these portray merely ethereal light playing upon invisible strata of an invisible atmosphere.

Marmery, in his "Progress of Science" (London, 1895), says: "The one result which surpasses all others in importance, and adds immensely to our knowledge of the elementary forces which govern the universe, is the ascertaining that atomic energy as shown by Crookes, Thomson (Lord Kelvin), and Tesla, is millions of times greater and more powerful than any with which we are acquainted." So Professor Knott, of Edinburgh University, in his "Physics" (1897), says of sound:

"The ear is sensitive to impulses only when these come faster than 20 or 30 times a second, and more

slowly than about 70,000 times a second. The limits vary a good deal with different ears, some are sensitive to high shrill sounds, when others hear nothing." I have italicised the part which dogmatism denies. It is well known that many lower forms of life, certain insects and lower, hear sounds which are to us altogether inaudible; and we know how the microphone will so translate and emphasise inaudible sounds that the step of a housefly's foot will sound like the crack of a bat against a baseball.

We know too that, in the phenomena of light, when we set a bar of iron into low red incandescence, it will send only red rays by oscillations of the adjacent ether, and, as it glows to full incandescence, it will send the whole solar spectrum. But we cannot see it all. There is an invisible spectrum far beyond the visible, and far more extensive, and this will impress a photographic plate as strongly as the visible part. If one paints on a sheet of white paper a portrait or scene with a solution of a salt of quinine, when it dries, the sheet of paper will be as white as it was before. But if placed before a camera it will photograph this invisible portrait or scene with all the force and vigour of a man or a landscape if these were as physical as all brute creation.

Nor does light stop at this. If we paint a picture on a sheet of paper with an anhydrous paint of many of the sulphides, say calcium sulphide, and expose it to sunlight, the ethereal waves of light will set up such a commotion in the chemical coating that all night long the picture will glow with all the force and

fire of the original, but in total darkness.

Further along, in Chapter XLIII., I have dealt with the ether as a motive force, and an intelligently controlled medium; but it may be here said that, if normally invisible and intangible spirits exist (and surely all religious people so believe, and most of those also who do not claim to be religious, all those in fact who believe in a future life, which, as I have elsewhere shown, comprise substantially all people of all races and in every age), then if these spirits are

anything at all they must be something, and if they are ethereal then they occupy and are part of that which is immeasurably the most dynamic and the most capable of doing photographic work in all the realm of nature.

CHAPTER XXXIV

CARLYLE ON MIRACLES—EVIDENCE BY CHRISTIAN CON-VERTS OF THE REALITY OF SUPERNORMAL MANI-FESTATIONS OF ESKIMO AND OTHER PSYCHICS

I have frequently been asked to give examples of such apparently spiritualistic, and certainly supernormal, phenomena, as I have spoken of in these chapters. There seems to be a general, but quite unnecessary, ignorance or misunderstanding concerning these very common experiments. I have usually quoted from recent scientific authorities in support of my views, but I will make a brief extract here from one who has influenced mankind as largely, perhaps, from the supernormal side, as any during recent years—I refer to Thomas Carlyle. In his "Sartor Resartus" he says:

"Deep has been, and is, the significance of Miracles, far deeper perhaps than we imagine. Meanwhile, the question of questions were: What specially is a miracle? To that Dutch King of Siam, an icicle had been a miracle; whoso had carried with him an airpump, and vial of vitriolic ether, might have worked a miracle. To my Horse, again, who unhappily is still more unscientific, do not I work a miracle, and magical 'Open Sesame!' every time I please to pay twopence, and open for him an impassable or shut

turnpike?

""But is not a real miracle simply a violation of the Laws of Nature?" ask several. Whom I answer by this new question: "What are the Laws of Nature?" To me perhaps the raising of one from the dead were no violation of these laws, but a confirmation; were some far deeper law, now first penetrated into, and by Spiritual Force, even as the rest

have all been brought to bear on us with its Material Force.

"Here too may some inquire, not without astonishment: 'On what ground shall one, that can make Iron swim, come and declare that thenceforth he can teach Religion'? To us, truly, of the Nineteenth Century, such declaration were inept enough; which, nevertheless, to our fathers, of the First Century, was

full of meaning.

"But 'is it not the deepest Law of Nature that she be constant?' cries an illuminated class: 'Is not the Machine of the Universe fixed to move by unalterable rules?' Probable enough, good friends: Nay, I, too, must believe that the God whom ancient inspired men assert to be 'without variableness or shadow of turning' does indeed never change; that Nature, that the Universe, which no one whom it so pleases can be prevented from calling a machine, does move by the most unalterable rules. And now of you, too, I make the old inquiry: What those same unalterable rules, forming the complete Statute-Book of Nature, may possibly be.

"They stand written in our Works of Science, say you; in the accumulated records of Man's Experience. Was man with his experience present at the Creation, then, to see how it all went on? Have any deepest scientific individuals yet dived down to the foundations of the Universe, and gauged everything there? Did the Maker take them into His counsel; that they read His ground-plan of the incomprehensible All; and can say 'This stands marked therein, and no more than this'? Alas, not in anywise! These scientific individuals have been nowhere but where we also are; have seen some hand-breadths deeper than we see into the Deep that is infinite, without

"Custom doth make dotards of us all! What is Philosophy throughout but a continual battle against Custom; an ever-renewed effort to transcend the sphere of blind Custom, and so become Transcendental."

bottom as without shore.

In narrating any events of more or less interest,

as I shall do, all these will be found to be of types well known to psychological investigators, and to those who deal with the phenomena of comparative religion. While there always will be, to the sceptic, and probably ought to be, a doubt of the accuracy of reported phenomena, it may be in place to say that such manifestations among heathen people, occurring in their own experience, have in general been maintained to have been genuine after these mediums or psychics have been converted and baptised as Christians, and were, for the rest of their lives, leading Christian lives. In Nevius' "Demon Possession," (a clerical misnomer), his Chinese records are full of these cases, and Sahagun and other early writers on the Mexican and Central American religions confirm such statements almost universally. The same is true of the Red Indians, and, in fact, the rule is that converts maintain the genuineness of the phenomena. In the missionary accounts given by Captain J. F. Dennett, R.N., cited elsewhere, an apparition of a boy's mother, while the boy was playing near her grave, not only appeared, and physically held him, but spoke and prophesied that he would come to strange people, who would instruct him in the knowledge of Him who created heaven and earth, etc., and was related by the boy himself to a missionary after his baptism, and confirmed by many others.

The missionary account states of these phenomena that while coarse imposture was made apparent in many instances, and though the majority of their Angekoks are doubtlessly mere jugglers, "the class includes a few people of real talent and penetration, and perhaps a greater number of phantasts, whose understanding has been subverted by the influence of some impression strongly working on their fervid

imagination."

Again: "So much is certain that Angekoks who have laid aside their profession in the waters of baptism, while they acknowledge that the main part is a tissue of fraud and imposture, are steadfast in asserting that there is an interference of some super-

natural agency; something which they now abhor, but are unable to describe."

One of their mystical practices, one form of crystal vision, which is now universally acknowledged even in the Bible, to be a means of working through the subconscious, cannot be attributed to imposture. In case an Eskimo out in his kayak is missing, which is not uncommon, a tub of water is procured, and shaded by the person inquiring. The Angekok then looks into the water, "and there they behold the absentee either overturned in his kayak, or rowing in his erect posture," thus indicating the fate of the absent one.

The narratives which follow are not startling, nor are they intended to be. They are mostly unpublished, and principally the result of investigations by members of the Society for Psychical Research. My object is to commence with the simpler phenomena of mere telepathy or thought-transference, and then lead up to more complicated phenomena, in which apparently the normal explanations possible in the simpler cases successively fall away, and must be replaced by new experiences, necessarily more and more difficult of explanation on what, at present, would be considered a normal basis. For I do not by any means grant that any of these phenomena, in fact any phenomena of nature, are really supernormal, and I use the term merely in the sense that most of us use the words "extraordinary," "surprising," "astonishing," wonderful," "remarkable," and the like—such phrases shading off, as we rise in the intellectual scale, to "beautiful," "illuminating," "satisfying," "revealing," etc., and as we sink in the intellectual scale, to "miraculous," "incredible," "nonsense," "gross superstition," "fraud," "lies," "bosh," "chatter," and the like.

And when all other explanation fails, as it has so often failed, there still remains the long-derided, but lately accepted telepathy, and hypnotism, or its congeners, suggestion and magnetism. Quoting from a late book dealing with the Cornwall fisheries, "Magnetism, my dear," said the vicar, "if there's

anything you don't understand in human actions, call it magnetism. It takes you a long way, and compromises nobody and nothing."

But in science there is no "compromise," and psychology is now taking both science and ourselves "a long way."

CHAPTER XXXV

PRACTICAL CASES CONTINUED—CRYSTAL VISION— CLAIRVOYANCE-TRANSFERRED MENTAL POWER

ALLIED to the phenomena of thought transference. though often comprehending far more than mere thought transference, is crystal vision. This is first mentioned in the Bible in connection with the story of Joseph in Egypt, in which it is said of the cup, "Is not this it in which my lord drinketh, and whereby he indeed divineth?" The verb has the sense of "accustomed to divine," and the word translated "divine" has elsewhere the sense of divining or fore-telling by supernatural means. This divining by water in vessels is common all over the world, as one of the methods of crystal vision; I have elsewhere referred to its use among the Eskimo. I will cite two examples, published, it is true, but in books not popularly known, and having high authority behind them.

Among the early Pennsylvanian pioneers was one who afterwards became "Colonel James Smith," and who spent several years of his early life a captive among the Indians in Eastern Ohio, by whom he was adopted. He afterwards wrote the narrative of his life and travels among the Indians. Of this writer President Roosevelt says, in his "Winning of the West," "Smith is our best contemporary authority on Indian warfare; he lived with them for several years, and fought them in many campaigns."

His memoir was published at Lexington, Ky., in 1799, afterwards by J. Pritts, and published in his "Border Life," at Abington, Va., in 1849, and at Chambersburg, Pa.

A party of sugar-makers went up to the head-

waters of Big Beaver Creek, to make maple sugar. There were a number of squaws along. It was not a war party. The snow still lay lightly on the ground. Across the creek was a country occupied at times by the Mohawks, who were hostile.

One night a squaw, outside her tent for some purpose, raised an alarm; "she said she saw two men with guns in their hands, upon the bank on the other side of the creek, spying our tents, they were

supposed to be Johnson's Mohawks."

Great alarm prevailed, and the squaws were ordered to slip quietly out some distance into the bushes and hide themselves, and all the men with guns or bows were to squat in the bushes near the tents, and, "as the enemy rushed up we were to give them the first fire, and let the squaws have an opportunity of escaping."

There was a very old conjurer, of another tribe, with the party, so old that he was bedridden, and had to be carried on a litter. "He was a professed

worshipper of the devil," says the author.

The men carried Manetohcoa, the conjurer, at his request, to the now vacant fire, in a tent, and gave him his conjuring tools, among which was the shoulder-blade bone of a wild cat, and Manetohcoa, says the author, "was in a tent at the fire, conjuring away to the utmost of his ability."

The situation was dramatic enough, in those dark

woods.

The narrative proceeds: "At length he called aloud for us to come in, which was quickly obeyed. When we came in, he told us that after he had gone through the whole of his ceremony, and expected to see a number of Mohawks on the flat bone when it was warmed at the fire, the pictures of two wolves only appeared. He said, though there were no Mohawks about we must not be angry with the squaw for giving a false alarm; as she had occasion to go out, and happened to see the wolves; though it was moonlight, yet she got afraid, and she conceived it was Indians with guns in their hands; so he said we might all go to sleep, for there was no danger, and accordingly

we did. The next morning we went to the place, and found wolf tracks, and where they had scratched with their feet like dogs; but there was no sign of mocassin tracks."

The shoulder-blade of an animal is a well-known

device for crystal gazing.

The significant part of this narrative is the immediate result of the old conjurer's experiment—all hands returned, and went quietly to sleep. This implies a large experience of the validity of these practices among them. The author says, "this appeared to me the most like witchcraft of anything I beheld while among them."

Of course, standing by itself, it would not have so much validity, but it is directly in line with the wellknown phenomena of crystal vision, which is well known, and has been practised in all parts of the world from times immemorial, and which is found in vogue in prehistoric America from Terra del Fuego to the

Arctic Ocean.

The next citation I shall make is from the nine-teenth volume of the United States Government report of the Bureau of Ethnology, in which one large volume is devoted to the myths of the Cherokees, in south-western North Carolina. The work, one of several, is by James Mooney, one of the best and most reliable authors who has ever written on these subjects and who worked from his own original studies on the ground, assisted by a large corps of other authorities.

In his "Notes and Parallels" to the body of the work, he comments on crystal vision among these peoples as described in earlier portions of the volume. My purpose in introducing this incident is that it illustrates the fact that the visions seen in the crystal are not merely subjective on the part of the operator, but are visible, in certain cases, to observers, standing by. The crystal employed was of quartz, with a red streak of the mineral rutile down its centre.

The incident, devoid of context, is as follows: "Many of the East Cherokees who enlisted in the Confederate service, during the late war, consulted

the Ulunsuti (Crystal) before starting, and survivors declare that their experiences verified the prediction. One of these had gone with two others to consult the fates. The conjurer, placing the three men facing him, took the talisman upon the end of his outstretched finger, and bade them look intently into it. After some moments they saw their own images at the bottom of the crystal. The images gradually ascended along the red line. Those of the other two men rose to the middle, and then again descended, but the presentment of the one who tells the story continued to ascend until it reached the top before going down again. The conjurer then said that the other two would die in the second year of the war; but the third would survive through hardships and narrow escapes, and live to return home. prophecy, so the event."

Crystal vision was one of the bases of the Aztec faith, and Tescatlipoca, their chief divinity, was pre-

eminently the god of crystal vision.

Among the Mayas the art was not only practised from the earliest ages, but is still in universal use

throughout Yucatan to this day.

Daniel G. Brinton, the anthropologist, in his "Essays of an Americanist," fully describes the practice, saying: "There is scarcely a village in Yucatan without one of these wonderful stones."

Vice-Admiral Brine, in his "American Indians" (1894), quotes the official report, at the beginning of the last century, to the Spanish Government of Mexico, regarding this practice. A medical friend now here attending one of our colleges, from Merida, tells me that the zaztun (clear stone) is continually consulted all through Yucatan, not only by the natives, but by others.

The same practice prevailed in prehistoric Peru, even among the Incas, and by the savages also of Southern Chile; the Apaches of New Mexico and

Arizona also used it.

It is not a difficult or unusual art to acquire. A. Goodrich-Freer, of the Society for Psychical Research, in her "Essays in Psychical Research," relates that,

in one of the eastern counties of England, she came across a little colony of half-a-dozen or more who had made themselves adepts in this art, having started it almost accidentally. She says: "These people had no outside knowledge, or encouragement, or help whatever, yet they have developed the art of scrying in all its branches—the externalisation of conscious ideas or images, or revivals of memory, and of information unconsciously acquired by thought transference, possibly by clairvoyance. So much for the

reward of taking pains."

I will now refer to a more personal incident, which is unpublished. A brother physician in this city, a member of the Society for Psychical Research, had a brother killed at the battle of Antietam, in September 1862. After his death the bullet was secured, and the doctor had a little morocco case made, and sometimes carried it as a sort of relic. Two or three years ago, as most of us psychical researchers do, he dropped in upon a well-known medium, who was in Philadelphia for a few days. They were entire strangers to each other. After giving the doctor such information as she chanced to have, in which the doctor's dead brother purported to appear and identify himself, just as he was leaving, in reply to a question of the doctor's, she said, "You have something about you in your pocket in a leather case; it is round; it is hard; Eph. says it's his bullet." The dead brother's name was Ephraim. Possibly this was telepathic, but it was dramatically put, at all events, and the doctor had forgotten all about the circumstance, when the medium turned it up. In fact, if properly understood, telepathy, which science is now conceding, concedes the entire foundations of spiritualism as against any possible form of materialism. If two consciousnesses at a distance from the human forms which they animate can hold intelligent and intelligible thought, converse with each other, it is a mere matter of extension (as is gravitation), and this is a question for observation and experiment and not for dogmatism. If telepathy can reach across a continent it may just as well reach the surviving

spirits of the dead, and prove their existence. The phenomena of crystal vision and planchette writing are known from the earliest ages, and among all peoples. In China their system of writing by composite characters in groups precludes the easy use of such instruments as a pencil moving in contact with paper, for it can only operate well for written languages; the planchette employed in China is described by Tcheng-Ki-Tong, of the Imperial Chinese Legation in England, in his book "Chin-Chin" (London, 1895), as follows:—

"We have no want of literary gods. A large dish is taken filled with sand, and then the two ends of a curved stick of wood are moved over it. The god guides the points, and a number of acrostic sentences and poems are the result, written in the sand. The spirits of well-known literary men of bygone ages are called for, and they are begged to attend the meeting, and to give some specimens of their poetic talents.

Let me describe one of these scenes.

"The brush, after having moved about for some time, announces that a literary god is approaching. At once it begins to trace out the following quatrain:—

"'Twilight covers half the mountains,
The tired birds return to their nests.
The stork, driven by the azure zephyr,
Comes down from heaven through the clouds.'"

(Of course in Chinese the lines are rhymed.)
A long conversation is given by the author, with a number of poems, concluding as follows:—

"Is it true that besides heaven, there is hell?"
"Hell and heaven are in the minds of men—one re-

presents what is good, the other what is bad."

President W. A. P. Martin, D.D., LL.D., of the Chinese Imperial University, in his great work, "The Lore of Cathay," describes a modification of the above instrument as follows:—

"Another medium is the *fu lun*, an instrument which we may describe as a magic pen. It consists of a vertical stick suspended like a pendulum from a cross-bar. The bar is supported at each end by a

votary of the genii, care being taken that it shall rest on the hand as freely as an oscillating engine does on its bearings. A table is sprinkled with meal; and, after being properly invoked, the spirit manifests his presence by slight irregular motions of the pen or pendulum, which leaves its trace in the meal. These marks are deciphered by competent authorities, who make known the response from the spirit world. This will be recognised as an early form of planchette. In the Far East, it has been in vogue for more than a thousand years; and there is as yet no sign that it 'has had its days.' Not merely Taoists by profession, but scholars, who call themselves Confucian, believe in it with a more or less confiding faith. When they resort to it with a serious purpose, they usually get an answer which they accept as bona fide, whether it meet their wishes or oppose them. Often, however, they call in the magic pen to supply diversion for the late hours of a convivial party; and in such cases, they tell me, they are sometimes surprised by the result—an invisible person evidently joining in the festive circle, and solving or creating mysteries. Sceptical as are the Chinese literati, no one that I have seen doubts the genuineness of some of the communications so obtained."

The above extracts are prefatory to what I desire to say about another series of phenomena, seemingly connected (as are nearly all psychical phenomena) with each other at various points and divergent at others. I think few persons familiar with the ideographic characters used in Chinese literature, and carefully considering the appliances and modus operandi above described, would be willing to assert that fraud or deception could be used and not recognised by those sitting around the table, or that people so keen-witted and sceptical as the Chinese cultured class would, for thousands of years, waste their time in childish juggling like this, if it had no serious basis. And I claim that the same is true of the phenomena of "Dowsing" so-called, or "Waterfinding," or, as the French sometimes have called it, the use of the hydroscope, the latter being a misleading word as used in this sense. "Dowser" or "Dowsing" is an obsolete word, in its original sense, borrowed from the Swedish, and meaning "to strike on the face." The instrument strikes on the "face of the earth," or seems to endeavour to do so, and this may have given the word its meaning. "Dowse" was used long ago by Bailey and Smart, the latter as a noun, "a blow on the face," but is marked

(vulgar).

At all events, this art has long been known and practised in all civilised countries. Not much is said about it publicly, but it would astonish sceptical minds to know how extensively water-finders are employed in England and America by railway, mining, agricultural, water-supply, or other corporations, before undertaking deep or expensive wells. I know of one instance in one of the south-western of the United States, in which a city of 25,000 inhabitants, desiring a municipal water-supply, employed one of these water-finders, who drove his pegs at several points on very high ground, far above the city level, and a mile or two distant. He could locate none on the wide flat valley in which the city lay. His results were rejected, and \$60,000 were expended along the flat, affording only a lot of muddy surface soakage, when, finally, they went up on the mountain plateau, and secured a permanent city supply of most excellent water, at comparatively small expense.

I have a number of books relating to this subject, but Professor W. F. Barrett, F.R.S., of the chair of Experimental Physics in the Royal College of Science, Dublin, and one of the founders, and a late president, and now Vice-President of the Society for Psychical Research, has dealt so profoundly and extensively with the whole subject in his two reports entitled "On the So-called Divining Rod," in volumes xiii. and xv. of the Proceedings of the Society for Psychical Research (July 1897 and October 1900), that nothing more of importance can be desired or, so far as I know, obtained. This work has the high character of all the work of this distinguished man of science, teacher and writer, and neither time,

labour nor expense has been spared in the collection of all previous authorities, and in the prosecution of all original investigations requisite for determining the facts, and studying and weighing the evidence to account for the phenomena. The two reports together cover more than 530 of the closely printed pages of the proceedings, and constitute a mine of information on this really important subject. I shall use only the second and later report of Professor Barrett, and I can quote only in the briefest possible manner what may show to some extent the scope, means, and methods employed.

Professor Barrett gives a list of the professional dowsers, known to him, in England and Wales. There are thirty-five in the list, who are employed professionally, and work for pay as professionals. "No doubt," says the author, "there are several others of whom I have not heard, and there are, of course, in addition, numbers of amateur dowsers, some of whom have

been remarkably successful."

Anyone reading this work of Professor Barrett's will discover that the amateur dowsers must far outnumber the professionals, these being those who do not advertise and work for pay. I know that this is so in America, and some of the best water-finders are only known privately and in their own neighbourhoods. I think the proportion of those capable of acquiring this art is at least as great as in the case of

those who can learn crystal vision.

One of the principal inhibitions in acquiring the art of dowsing, I think, is in a sort of "stage-fright" when undertaking experiments. If they see another practising the art, and then have this dowser hold or touch the amateur's wrists while the latter holds the forked or curved stick (of which Professor Barrett mentions numerous instances), the instrument will work at second-hand, as it were, and the confidence and method thus acquired will shortly lead to successful practice, in the amateur's hands alone. The first success is surprising enough to startle any amateur, as is also the case with automatic writing.

While success does not attend every experiment of the water-finders, yet the proponderance of successes over failures, beyond what chance could possibly account for, determines the authenticity of

the phenomena.

And these failures themselves may not really be failures in many cases, for, as we do not fully understand the factors employed to produce the visible results, nor the conditions and possible prohibitions encountered, we cannot determine what inhibitory factors may not interfere with what otherwise would prove successful. A single ray of invisible light from the ultra-visible end of the spectrum will make the taking or development of a photographic negative a failure, and, as I have mentioned elsewhere, of the mirage, invisible reflections from invisible planes of irregularly heated air will present a scene which has often misled travellers, or armies indeed, from successful "water-finding," in plain view, to failures, often involving loss of life. It is a strong corroboration of the genuineness of the dowser's art that, as is well known, one dowser following another later on will nearly always mark the same exact spots. The eminent French anthropologist, Professor Gabriel De Mortillet, confirms this fact; as quoted by Professor Barrett, he says:

"This much, however, is certain, which I can affirm as the result of experience, that the point chosen by one diviner will also be chosen by others brought from a distance, and completely ignorant of the preceding experiments. A real phenomenon to

study does therefore exist."

As an example of the methods and results of these water-finders, I quote the following from a letter in Barrett's report of Montgomerie & Company

(Limited), Haddington.

"Previous to our communicating with Mr Gataker we had decided to put down an artesian bore at a different part of our ground. On arrival Mr Gataker started over the ground at a fair speed with the palms of his hands towards the earth. After proceeding some distance he was able to locate a spring at the

end of our new maltings. He then proceeded over a strawberry field belonging to us, and at about 70 yards from where he located the first spring he located another. He guaranteed that from either of those springs we would get a supply of about 20,000 gallons per day at a depth of from 100 ft. to 150 ft. We put down a 4-inch bore at the first spring, and are pleased to say that at a depth of 102 ft. we are getting a supply of about 100,000 gallons per day, and the

water is coming up with great force."

This boring passed through the following strata: —20 ft. sand and gravel; 6 ft. boulder clay; 19 ft. fireclay; 45 ft. sandstone and what are called "faikes" in alternate layers; then 8 ft. marl; and finally sandstone to depth of bore, at 103 ft. The bore hole is about 100 ft. above sea level. A firm near by, which bored without the aid of a "water-finder" sunk to a depth of 660 ft. and "failing to find water have had to abandon the bore." From a report of the Cheltenham Steam Laundry, in 1896, embraced in Professor Barrett's second report, I quote the following, with reference to the technique of the

process :-

"Taking one of his small, slender twigs, he held it in front of him with his arms lowered and one end of itineach hand, so that the angle of the fork pointed very slightly downwards, about three feet from the ground. Thus he commenced to walk slowly in a straight line across the field. Suddenly the twig gave a turn in the operator's hands, began to revolve, and continued to do so while he remained within the area in which he experienced the 'shock' of water. The two directors attempted to stay the revolving motion of the twig while the operator carried it over the affected area, but though each seized one end of it, they could not do so, the ends of the twig, in fact, slightly lacerating their fingers as it turned in resistance to all the pressure they could employ. Similar results were obtained with the wire. Then Dr Cardew walked across the affected spot with the twig in his hands, but the simple apparatus remained quite stationary until Mr Chesterman (the operator) placed his

hands on the doctor's wrists, when it began to revolve."

Following the above is a report of Lieutenant-Colonel Taylor. A dowser, Mr Tompkins, had marked some points for borings, and later on Mr Chesterman, who was in the neighbourhood, was asked by Colonel Taylor if he would go into his garden and try to locate a stream found by Mr Tompkins. He kindly consented, but it was quite a dark night when they went out, "but it made no difference." He then crossed the ground already gone over by his predecessor, and "found the rod turn at the point g when he said he was crossing a stream. I put down my hand to mark the place with a peg when it came into contact with the end of the peg I had previously put in to mark the spot Tompkins had selected. It was much too dark for either of us to see the pegs even if we had searched for them."

The Reverend Father Roe, of County Kilkenny, seeking a water-supply for the convent at Thomastown, employed Mr Wills, the partner of Mr Gataker, to come over to Ireland. Looking at the site already selected, and trying his rod, he advised its abandonment, as there was only a very small ripple, and at great depth. "He then went over the whole field with his rod and marked out two or three places where an abundant supply of water could be obtained, but selected a rather elevated spot in preference to the others. He said we would most certainly get water

at about 80 ft. and so many gallons per hour."

By a singular coincidence Mr Jones, another dowser, came, accompanied by a mutual friend, an inquirer, and Jones was invited to have a try also, with his rod. As a result, Father Roe says, "he pointed out the exact spot, and traced out the water in the same line as Mr Wills had done. They were quite independent of one another, and Mr Jones knew nothing about the coming of the English dowser, or what he had already done. Mr Jones could not tell the depth, nor the quantity, etc., but he was certain there was a strong current of water. I noticed in the operations when they came over the places where

water could be found, Mr Wills' rod jumped up and

Mr Jones' down."

This last fact has a certain significance in the consideration of the subject. At 75 ft., boring through rock, water was struck in sufficient quantity, and the boring was discontinued, largely on account of interference by water coming in. Father Roe concludes his letter as follows:—"I may add that I am now convinced that the divining rod is no sham, but genuine, and I cannot explain its influence on some susceptible people when they come over or near water."

In the Pontyberim experiments, next narrated, two amateurs fixed upon the same spot. In this case one was the contractor, while the other was locally known as a dowser. After Mr Young got through with his experiments he asked the contractor himself, Mr Williams, to take a try with the rod. "This he did and to his surprise Mr Williams found the rod moved vigorously, and apparently spontaneously at the same place found by Mr Young." Further test experiments were carried out by these parties and the facts were corroborated.

Mr F. Napier Denison reports experiments conducted in 1898 with a number of persons. He says, "Out of the twelve persons who tried the above experiments, two had the power well developed, two slightly, while the remaining eight almost nil. When the weaker members used a rod over four feet long, then slight muscular action was clearly shown by the far end of the rod turning down. . . . At the end of the experiments Mr Harris' hands were considerably blistered."

In the Isle of Wight experiments near Shanklin, Mr Mullins, the dowser, was employed subsequent to large expenditures by engineers on geological and topographical data. Within 100 yds. of one of Mullins' marks a well was dug and bored by the Local Board to a depth of nearly 500 ft. with no water.

Two amateur dowsers also located two wells within 50 yds. of this spot where the Local Board

had failed. All these three wells, when sunk to very moderate depths, gave ample supplies. Several examples are given in Professor Barrett's reports of dowsers' pegs put down almost contiguous to deep dry wells, and water was found in great quantities beneath these pegs, and alongside or often directly between these useless holes, and at one-third or onehalf their depth. That it is not merely water which affects the dowser with that peculiar "shock" and induces the rod or forked branch to turn, or to be turned, is shown by the fact that many persons are similarly affected by certain oils, metals, etc., and in some cases by other influences, one being the celebrated case of Jacques Aymar, who pursued a murderer, by its means, for hundreds of miles, and secured his arrest; also by the Bleton phenomena, and, in fact, by authentic narratives, if anything either inside or outside of science is authentic, within the knowledge of many persons of high repute.

Andrew Lang, in his "Making of Religion" (London, 1898), in discussing Professor Barrett's first report on the divining rod, says, "Professor Barrett gives about one hundred and fifty cases, in which he was only able to discover, on good authority,

twelve failures."

A. Goodrich-Freer, in her "Essays in Psychical Research" (London, 1899), in discussing this sub-

ject, says:

"Certainly, to judge from the extent of the claims of the various professional 'dowsers' and, still more important, the testimonials as to their success from well-known landed proprietors who have employed them, we may gather that, whatever be the explanation of the fact, the waterfinder has justified his existence."

I have given considerable space to this subject, because it seems to me likely that this art, or faculty, or practice is connected at many points with whole ranges of other faculties in such wise that it will afford a point d'appui by which these may be studied far more advantageously than from any other now at

hand. The question which, hence, arises is-what

is the explanation of this art or faculty?

It is only recently, of course, that any intelligible explanation has been possible, only, in fact, since the establishment of the entity of the subconscious department of the mind, and its control over the surfaceconsciousness, and its connections, beyond our ap-

parent physical limits.

Professor Barrett, after enumerating several attempted explanations—(I) various hints which have been unconsciously absorbed by the operator; (2) hyperæsthetic discernment of surface signs; and (3) some kind of transcendent discernment possessed by his subconscious self, of this latter, savs:

"For my own part, I am disposed to think that this last cause, though less acceptable to science, will ultimately be found the true explanation of the more

striking successes of a good dowser."

He adds, later, in conclusion: "This subconscious perceptive power, commonly called 'clairvoyance.' may provisionally be taken as the explanation of those successes of the dowser which are inexplicable on

any grounds at present known to science."

The undoubted fact that in many, if not most, of these cases the dowsers were not only able to locate the water, but very closely to approximate its depth, quantity, and, in many cases, its quality, takes it out of the category, in my opinion, of simple subconscious perception or feeling. These factors can only be explained in analogy with such cases of crystal vision, numerous and familiar enough, in which one sees definite numbers, colours, actions, etc., in distant countries, as observations among soldiers in India, or a sick officer amid his surroundings lying on the deck of a vessel in the Suez Canal, as in some of Miss Freer's cases. Such cases are not unusual in advanced hypnosis (so-called, but very badly called), as in some of Charcot's experiments, where the hypnotised patient diagnosticated and located an internal organic disease in an unknown subject hundreds of miles distant. Such were the narrated

experiments of St Paul, when he could not tell if he was inside or outside the spirit, of Mohammed's night visit to the spirit world, or some of those of

Swedenborg.

I am not arguing for the veridicity of the above results, but only for the veridicity of the phenomena. Some water-finders have claimed to see the underground waters clairvoyantly as a panorama, but these cases may be attributable to unverifiable self-suggestion. Somewhere, I cannot now place my hand on it, I have read a careful and authentic narrative of a boy in France (a modern case) who, in hypnosis, or trance, was directed to look up a captain in the city of Algiers. He proceeded, narrating his trip as he went along, crossing the Mediterranean, then, finding that the captain had been ordered far up into the interior, following him there, describing the strange scenes and animals as he went, then finding the captain amid his wild surroundings, and finally returning. His narrative was exactly in accordance with the facts, then largely unknown, of course, to all present. This is in accordance with some of the experiments of Professor

Krafft-Ebing of the University of Gratz, Austria.
In "Phantasms of the Living," one of the publications resulting from experiments and investigations of the Society for Psychical Research, are given a number of like cases by W. Stainton Moses, and

others.

In Loren Albert Sherman's book, "The Science of the Soul" (1895), are given a number of capital experiments of this sort, conducted by Mr Frank R. Alderman. In one case a boy under hypnosis was sent to a neighbour's house to describe the interior, which he correctly did. If any of those present were acquainted with this interior this might have been accounted for by telepathy, but not necessarily so. We count such, however, as nonevidential. In another case his subject was requested by someone to visit a house of a certain street and number, and did so, describing the exterior accurately, and, on going inside, at first said, "I see nothing," but finally, when pushed for a description, described

furniture, pictures, etc. The gentleman then announced that the boy was entirely wrong, as the house had been vacant for some time. At this a gentleman at the other side of the room stated, for Mr Alderman's benefit, that he lived next door, and that the boy's description was correct as it was last furnished. This, if telepathic, must have been of a very complex type of telepathy. Another case, which seems to exclude telepathy, was when he sent the boy to get the number of the room at a certain hotel at which a friend was stopping. He brought it back correctly, and said he went to the room, and he then described its contents, but found no one there. Again, sent back to learn where the friend then was, he returned, stating that the clerk had said, "He went out about half past seven," which was afterwards found to be correct.

Mr Alderman stated that his subjects claimed to see the objects just as though in a normal way; they could not see the future, but saw past objects and events; one said he "saw it as it came around," or apparently, as Mr Alderman thought, as in a revolving panorama. On one occasion the experimenter was desired by a gentleman present to send the boy's projection to Marine City, where were a number of salt-wells. He did so, described the pump and tubes, and then was directed to follow the latter down into the earth to the end. At the first attempt he got switched off, after going a short distance into the ground. The second time he went down, saying he guessed he was down 800 ft.," and "that there was a channel broader and higher than the parlour he was in (30 ft. by 12 ft.) that ran to the end of the tube, the strainer of which was more or less covered with particles. The surroundings appeared to him as being blue, light blue. The length of the channel he could not determine, as there was a turn in it. Directed to go to the turn and report' further, he replied that he had done so, and found another turn, in fact, that the channel was a long one and crooked, resembling a river."

The statement follows that on awakening the boy

began to expectorate, as though he had something disagreeable in his mouth. The sympathy of one of the ladies present was soon aroused, however, and in answer to their queries as to what troubled him, he said with some feeling, "You have been putting salt in my mouth."

Mr Sherman's conclusion, which seems to be in accordance with the facts (unless it be desired to substitute the *subconscious with power to act*, for the word "soul" which is used in so many and such

various senses) is :--

"The soul can leave the body as an individual intelligence, and while thus projected it has all the perceptive faculties of the physical organism and mind including sight, hearing, tasting, smelling and

feeling."

There is also, I may add, a connecting link in such cases connecting this projected intelligence with the normal self and its normal consciousness, just as is the case in crystal vision, which I have described as a sort of trick of the normal consciousness by which it con-

nects up with the subconscious.

This clairvoyance of the absent is very common in crystal vision, even extending to far-distant countries. It also sometimes extends to the vision of those already dead. In a delightful book, not generally known, "Memorials of a Southern Planter" (1888), being a biography of Thomas S. G. Dabney, who resided on a large plantation south of Vicksburg and Jackson, Miss., the earnest and loving writer, his daughter, mentions a pathetic incident of this sort of clairvoyance. Speaking of her two young brothers she says; "James died first, and Sophia (her sister and their mother), dreading the effect on Thomas, allowed no one to tell him that his playfellow was gone. In dying, Thomas called out, 'Oh, I see Jimmy. Oh, gold all around! So beautiful!"

Of course these perceptions are related to those of fascination, which has often been denied by closet naturalists. I have myself seen many such instances among animals, but I reproduce a graphic account from Mrs McHatton-Ripley's little book of her ex-

periences in the same war entitled "From Flag to Flag" (1889). The incident occurred during her flight from the dying Confederacy, with her husband, an officer, on the southern bank of the Rio Grande, in Mexico.

"On the first day," she says, "as we drove slowly along this monotonous country road, my husband's watchful eye perceived, in a small opening by the side of the ambulance, a huge rattlesnake coiled, with head erect, forked tongue, and glistening eyes, following in an almost imperceptible motion the fitful efforts of a large frog vainly trying to get out of his way. The snake had fastened his eyes on the eyes of the frog; the poor creature could not even wink, he could not escape the fascinating gaze. Turning his body, though not his head, he would make a pitiful little squeak and a desperate effort to jump; but the wretched frog could not jump backward. Every motion he made was accompanied by a corresponding motion of the wily serpent. So intent were they that we alighted from the vehicle, and Mr Dodds stood near with pistol in hand; neither the snake nor the frog seemed to have consciousness of the presence of any other object than the one upon which its eyes were fixed. At last the head of the serpent slowly approached nearer and nearer its victim, the poor creature made one despairing croak that sounded almost human in its agony, and leaped into the full distended jaws of the rattlesnake! At the same instant the watchful Mr Dodds fired his pistol with such accurate aim that the vertebrae was struck close to the head, the jaws suddenly relaxed and fell open, and out sprang Mr Frog! If ever a frog made haste to get away that frog was the one. He was out of his enchantment, out of the jaws of death, and out of our sight in an instant. The thirteen rattles that tipped the tail of that enterprising snake remained in my possession for many years, a memento of the incident."

Lord Wolseley, himself a great commander, says of this sort of faculty. "This is the influence which men, with what I may term great electrical power in their nature, have exercised in war. Cæsar, Marl-

borough, Napoleon, Sir Charles Napier, and many others I could name, possessed it largely. The current passed from them into all around, creating great enthusiasm in all ranks far and near and often making heroes of men whose mothers and fathers even had never regarded them in that light. This feeling is an addition of at least 50 per cent. of strength and energy to the army where it exists."

Of course electrical power is here only used as a rough analogy, like "animal magnetism." Emerson characterised it more accurately, saying, "A river of command runs down from the eyes of some men, and the reason why we feel one man's presence and not another's is as simple as gravity; and this natural force is no more to be withstood than any other

natural force."

Allied with phenomena of the order above described are those of so-called "spirit rappings." With these again are connected whole series of physical manifestations involving telepathic messages or communications clearly supernormal, and the origin of which has formed the subject-matter of much of this book. In order to establish the evidential value of these experiments, so as to form a sound basis for investigation and judgment, it is necessary that the description should be in the words of those who are capable, honest and scientific. Many of the phenomena contained in this Fourth Part of the present book are my own personally, or verified by myself, and it is obviously so because they are conclusive evidence to me, as I am accustomed, from my practice as chemist and physician, and expert in patent litigation in the courts for the past thirty years, to sift and weigh evidence, and to conduct investigations and experiments in a strictly scientific manner. But this evidence, to others, can only have the weight which the book itself has, so that it is well, in a corroborative way, to secure the evidence of men of science whose statements upon other like scientific subjects are received with respect, and whose scientific judgments stand unimpeached.

In citing such statements as in the case of Sir

William Crookes, Sir Oliver Lodge, Professor Barrett, and others, I have given such brief information of these men of science as will recall to the reader their special qualifications along these lines, in addition to their general repute in the scientific world.

In such wise I have already referred to Professor Augustus De Morgan, but in citing the case which follows, from his own pen, I desire to say something further of this remarkable mathematician, author,

man of science and of sound judgment.

In Marmery's "Progress of Science" (London, 1895) De Morgan's name appears with that of Newton, among six, as England's contribution in mathematics to the list of world-famous names in science; and, in the text, says, "De Morgan effected a great generalisation, for his double algebra is true, not only of space relations, but of forces," etc. etc.

In Jevons' "Principles of Science," from which I have already quoted several times, De Morgan is indexed as authority under many headings, as Negative Terms, Aristotle's Logic, Relatives, Logical Universe, Complex Propositions, Contraposition, Numerically Definite Reasoning, Probability, Experiments in Probability, Probability of Inference, Mathematical Tables, Personal Error. His works on Probability, Apparent Sequence, Sub-equality, Rule of Approximation, Negative Areas, Generalisation, Double Algebra, Extensions of Algebra, etc. etc. Taking a single extract from the text, Jevons says, "The best popular, and at the same time profound English work on the subject (Theory of Probabilities) is De Morgan's 'Essay on Probabilities and on their Application to Life Contingencies and Insurance Offices."

Such a man will be, least of all men, deluded by fancy, and most of all be guided by strong commonsense. If to this be added sterling honesty and fearlessness, such a man's statements, made after full investigation, should be accorded the same respect and acceptance as his other writings have received, throughout the whole scientific world.

His own attitude is shown by the following extract:—

"What I reprobate is, not the wariness which widens and lengthens inquiry, but the assumption which prevents or narrows it; the imposture theory, which frequently infers imposture from the assumed impossibility of the phenomena asserted, and then alleges imposture against the examination of the evidence."

In the preface to his wife's book, "From Matter to Spirit," from which I shall quote later on, he refers to many experiments of his own along these lines of psychology, and among others narrates the following experiment the latter part of which, it appears to me, is beyond refutation on any normal basis. The fact that the medium's feet were watched by those present, and that the significant conclusion occurred while she was standing and talking at another table and "taking refreshment," shows, of course, that the experiment was conducted in a lighted room, as such experiments always are, so far as I know or have learned.

The narrative, from the hand of Professor De

Morgan, follows.

"Ten years ago, Mrs Hayden, the well-known American medium, came to my house alone. The sitting began immediately after her arrival. Eight or nine persons were present, of all ages, and of all degrees of belief and unbelief in the whole thing being imposture. The raps began in the usual way. They were to my ear clean, clear, faint sounds, such as would be said to ring, had they lasted. I likened them at the time to the noise which the ends of knitting-needles would make, if dropped from a small distance upon a marble slab and instantly checked by a damper of some kind; and subsequent trial showed that my description was tolerably accurate. I never had the good luck to hear those exploits of Latin muscles, and small kicking done on the leg of a table by machinery, which have been proposed as the causes of these raps; but the noises I did hear were such as I feel quite unable to impute to either source, even on the supposition of imposture. Mrs Hayden was seated at some distance from the table, and her feet were watched by their believers until faith in pedalism slowly evaporated. At a late period in the evening, after nearly three hours of experiment, Mrs Hayden having risen, and talking at another table while taking refreshment, a child suddenly called out, 'will all the spirits who have been here this evening rap together?' The words were no sooner uttered than a hailstorm of knittingneedles was heard, crowded into certainly less than two seconds; the big needle sounds of the men, and the little ones of the women and children, being clearly distinguishable, but perfectly disorderly in their arrival."

Then appears a full description of the phenomena which had occurred, many of the questions being asked mentally, and answered audibly to all (a common occurrence, by the way); he afterwards narrated the occurrence to a sceptical friend, "a man of ologies and ometers both," who believed the whole to be a clever imposture, but concluded it to be very singular, and decided to go alone to Mrs Hayden, which he did. He took his alphabet behind a large folding screen, "asking his questions by the alphabet and a pencil, as well as receiving the answers. No person except himself and Mrs Hayden were in the room. The 'spirit' who came to him was one whose unfortunate death was fully detailed, in the usual way. My friend told me that he was 'awestruck,' and had nearly forgotten all his precautions."

CHAPTER XXXVI

EXPERIMENTS CONTINUED—TELEPATHY—CRITICISMS CONSIDERED — WIRELESS TELEGRAPHY — POLTER-GEISTS

TELEPATHY, so long derided by so-called "Natural Science," as nearly everything which now forms the body of the sciences has been in the past, has been reluctantly, and perhaps tentatively, now accepted, as has that wonderful subconsciousness which was first systematised and elaborated by Myers, less than twenty years ago.

Physical science has been largely compelled to accept telepathy by the revolutionary advances, in defiance of the science of that day, in more modern views of matter, in the X-rays, in the phenomena of

radium, but most of all in wireless telegraphy.

This latter appears so analogous to telepathy, that when messages were being transmitted all over the world, at a shilling a word, or even gratuitously, through open space, for thousands of miles, the old phantasm of dogmatism, as in the case of the phonograph, was simply overwhelmed by common-sense and commercial success.

But wireless telegraphy itself, to save science, is now called ærography, meaning that it is by the atmosphere, while it is nothing of the sort. The atmosphere has a vibrating or undulating rate of transmission, as in sound, of about 1100 ft. per second while the Hertzian Waves, according to Maxwell, have a rate, but not by means of the atmosphere, of from 100,000,000 to 300,000,000 yds. per second. If the air were driven at one ten-thousandth of this

If the air were driven at one ten-thousandth of this rate, the whole atmosphere would be made incandescent in ten seconds, as is illustrated by the pneumatic

piston firelighter, in which a piston struck down by the hand, in a closed cylinder, ignites a bunch of tinder at the bottom with which the operator lights

his pipe, or kindles a fire.

It is the ether of space which carries the message, but the ether itself does not move along. If one lays a row of billiard balls against each other, and strikes the first, the last one flies off and the intervening ones remain still.

But wireless telegraphy demands a conscious message to start with, and this it will deliver. The line is not self-conscious, or else a message started with "Peace has been declared" might end up with an original poem on the evening star.

And so it is of telepathy; this requires a conscious

starter, and is received as an intelligible message.

And this difficulty in interpreting so-called spirit messages was not understood prior to the knowledge of the transmission of conscious telepathy, and, what is still more important, the vast scope and dramatic power of the subconscious sender. This has made unevidential much of the communications long ago received as evidence of spirit return, but by no means all.

We are now so cautious, that if there is any possibility that the message may have been subconsciously and telepathically received by the medium from any terrestrial source, or from the sitter who sits with the medium to receive the message, we now reject this as non-evidential; but this does not demand that the message itself may not have been genuinely received from the conscious spirit which purports to send it; it merely requires us to render the Scotch verdict, "not proven."

But even among the old records we find plenty of

But even among the old records we find plenty of cases, and particularly isolated remarks and the chance snatches thrust in by "interjectors," and other bits totally unknown to all persons living, in which telepathy from the living can by no means suffice, in which, in fact, it has no possible place, and this evi-

dence is as good to-day as it ever was.

Not regarding the fact that long before Hodgson's

death all this was well known, not only to Dr Hodgson but to his sitter, and carefully guarded against, I will instance two cases which I have described later on; those of Professor Bayley through Mrs Piper, in which his sister and Professor Newbold figured. I have examined these manuscript records. and am acquainted with all the parties. In the first case Dr Bayley's sitting was interrupted by what purported to be the spirit of his sister, an interjector, who suddenly asked, "How is Rial?" But Mrs Piper unconsciously hearing the question, made an anagram of the name, in writing it, as is common with typists taking down from dictation, and asked, "How is Lari?" In the manuscript the last letters are run together at first sight, and Dr Bayley, reading it, said, meaning the word, "Is it lame?" The sister suddenly cried, "Is she lame?" thinking that Bayley referred to her still living daughter, named Rial.

Now here Dr Bayley could not have telepathically influenced Mrs Piper, nor could any other living person or thing; it was a simple duplex blunder, and the question which followed Dr Bayley's could only have come from someone who was no longer living—presumably the one who signed the first question "sister."

The next instance is in the communication, through Mrs Piper, also to Dr Bayley, from Hodgson, in which he narrated a conversation which he had had, prior to his death, with Professor Newbold of the Society for Psychical Research (as is Professor Bayley) and which Hodgson asked Bayley to have Newbold verify. Hodgson, communicating, said that it occurred on the beach at Nantasket, while, in Newbold's reply to Bayley's letter of inquiry the facts were all stated as correct, excepting that the conversation, while it commenced during the time when they were sitting on the beach, was for the most part continued on the steam vessel bringing them back to Boston. Newbold communicated this telepathically to Mrs Piper, he would have stated this fact, and no other living person knew it. But if it was Hodgson himself who influenced the automatist, Mrs Piper, after his death, then the circumstances fall into place naturally, for Nantasket was old to Hodgson, and his attention would be given to the conversation, while it was new to Newbold, who would naturally pay more attention to the surroundings, as it is a beautiful

and novel watering-place.

The Society for Psychical Research has made every effort to exclude telepathy from the living, and many hundreds of pages of its recent Proceedings have been devoted to elaborate reports of its work along these lines, and in comments upon them at its various meetings, and the work is still being continued.

I can do no better to illustrate this new work than to quote the following from the article entitled "Some New Facts of our Survival of Death," by John W. Graham, M.A., Principal of Dalton Hall, University of Manchester, and published in *The Hibbert Journal* (Editor, Oxford, and Sub-editor Cambridge, England).

I make as brief extracts as the circumstances will

justify.

"It is generally known that thirty years ago Frederic W. H. Myers, one of the greatest men of our generation, combining as he did extraordinary faculty as a man of letters and a man of science with high academic standing and strong spiritual intuition, determined to devote the rest of his life to the investigation of a group of phenomena of which no scientific explanation had yet been found. He found in Edmund Gurney a colleague of singular likemindedness, extensive leisure, and good literary and scientific powers, and on the initiative of Professor Barrett of Dublin, the Society for Psychical Research was launched in 1881. Dr Richard Hodgson, an acute and sceptical thinker, who was at that time an expert in Herbert Spencer's philosophy and a man of much practical wit, shortly joined the band, and it has worked on under the constant play of showers of sceptical criticism from Mrs Sidgwick and Mr F. Podmore. It has issued twenty-two volumes of Proceedings and thirteen volumes of Journal, and there have been produced the great work 'Phantasms

of the Living' and the still greater work of F. W. H. Myers, published after his death under the title of 'Human Personality.' Other subsidiary literature has flowed from other pens. Then in succession came the deaths of Gurney, Sidgwick, Myers, and Hodgson. But this is a work which, if there is anything in it, may perhaps be carried on from both sides of the chasm of death; and for the past five years, amid many bogus imitations, there appears to have come a stream of communications from the departed leaders, which I venture to claim has now reached evidential force and volume.

"Communications have to pass through a medium's hand or voice; she has to write or to speak; how are we to know that the communication does not come from some subliminal part of herself, or by thought transference from someone else on earth? If it be accepted, as it is accepted, that the subliminal self of each of us may carry on communication with the subliminal self of another without our knowledge or the other's knowledge, and that anything that is in anyone else's mind may conceivably, by stretching improbabilities, be thus transferred to the medium's mind, it will be seen how difficult it is to choose material which will be evidence of a communication

from the departed.

"Myers and his friends recommended when they were here that we should all write in a sealed envelope some word, or fact, or allusion, which we should leave behind us in the hands of a trusted friend, hoping that if we were able to tell the contents of the envelope from the other side before the envelope itself was opened, that would constitute a proof of our survival. But it appears as though accidental, merely superficial knowledge of that kind rarely survives into the memory of the next life, and no such experiment has yet been successful except a remote one in America many years ago. Myers, therefore, the initiator as ever of new work, conceived the idea about two years after his death—that is at least what purports to have happened—that he would try to give through two or more different mediums communica-

tions which make no sense in isolation, but which dovetail into one another, and show an independent mind behind them both; the communications to the two or more mediums being so different that it would be plain that telepathy had not taken place between them. The mediums used have been Mrs Piper, the experienced lady who has worked so long with Dr Hodgson at Boston, and whose communications have already given such strong evidence of survival as to convince most of those who have studied them; Mrs Verrall, the wife of Dr Verrall of Cambridge, her daughter Miss Verrall, Mrs Thompson, and the Anglo-Indian lady who goes under the name of Mrs Holland. Three parts of the Proceedings, dealing chiefly with the script of Mrs Verrall, Mrs Holland, and Mrs Piper respectively, have been published (Parts liii., lv. and lvii.). It is almost impossible to give in a brief form an intelligible account of experiments which are so complicated and which depend upon detail for their value, but I will here attempt a summary of one from Part lvii., edited by Mr Piddington which I will call Calm in Tennyson and Plotinus." (The summary which follows is too long to quote here. The conclusion of Principal Graham's article is as follows.)

"If the curious reader wants to know what news of our life hereafter is vouchsafed by this revelation, the best answer is to exhort to patience and to be cautious in statement. 'Myers' and 'Hodgson' declare that they are very much more alive than they were on earth, that they are not really dreaming, that they would not desire to come back again, and that they are still, nevertheless, in possession of much at any rate of the memories and attachments of earth; they say that they are still almost as far as we are from the innermost Presence and Counsel of God, but they confirm the claims and sanctions of the religious life. They state that a period of unconsciousness, varying in length, supervenes upon death—a period unusually prolonged in Myers' case; and that after a few years—say halfa-dozen—the spirit moves in its development too far from earth life to have any further communication with it. Doubtless there are numerous exceptions to this; and we gather that Myers himself is voluntarily staying near us for the sake of the service of our faith."

In The Journal of the Society for Psychical Research for December 1908 is published an address by Sir Oliver Lodge to the Dublin Section S.P.R., in connection with the visit of the British Association for the Advancement of Science, which the speaker was then attending. From this address I select the few closing paragraphs, referring to the cross-correspon-

dences described above by Principal Graham.

"These are among the best evidence for a separate and peculiarly 'Myers'-like intelligence which we have yet obtained. It is not of course complete, but it is singularly good. We hope yet to reach a scientific demonstration of a future life. It is true, as we are often assured, that such a demonstration is not required in religion, since faith is independent of it. But faith can be strengthened, even in the religious mind; while, in the mind which is more purely intellectual some such demonstration is increasingly called for. It is enough to know that we are progressing at a sufficiently rapid rate. We need not be in haste; we may possess our souls in patience.

"We need not be in a hurry either. Our boat is coming in. I believe that a new area of intelligent and critical acceptance is pending for the work we have in

hand."

Sceptics, and in many cases those who are not sceptics, in endeavouring to explain away evidence for the supernormal, after conscious fraud has been eliminated, place great reliance on what they call "malobservation," and "lapse of memory." These are elements to be carefully considered, but their importance has been greatly overestimated.

As a matter of fact, if malobservation and lapse of memory had the scope and importance thus attributed to them, the whole system of jurisprudence would fall to the ground, and all witnesses would be discredited a priori. But every judge, and every

lawyer, and every intelligent juryman knows that this

is by no means the case.

In certain technical matters involving lack of attention, malobservation is often fatal to the truth. For example, prestidigitators deceive in their mechanical manipulations in nearly all cases by substitution, and that alone.

They attract the attention for an instant to something apparently capable of deception, but not so in reality, at the time, and under the cover of this withdrawal of attention substitute one object for another

without the cognisance of the observer.

So in ventriloquism, the operator attracts the attention to a certain box or figure, and then the voice

is imputed to that box or figure.

But malobservation could not apply, in the former case, to what was carefully observed, nor, in the latter case, to what the voice said, or whether there was a voice at all.

It is on the fact that whilememory, when defective, may drop out essential features, but will never introduce new features, unless tampered with, that our whole system of jurisprudence is based. The old method of torture to wring the truth from reluctant witnesses was based on the fact that the witnesses had the truth; that it failed in so many cases was simply due to the fact that the torture was a tampering, and the testimony then given was mixed up with deliberate lies to bridge lacuna, or to protect those in peril.

If the charge of malobservation (as made against the validity of testimony, where properly put, as it must be to be valid) is to the effect that malobservation is deliberate falsification, the true force of the objection would be seen, and it would be repudiated at once. Human testimony is good, and the truth can be wrung, by judicious cross-examination, even out of reluctant witnesses. If this is not true, then the whole fabric of human life is not worth a farthing, and the only reliable people are the deaf and dumb,

even if these are so.

So of Miss Freer's coming across the little East

County colony of crystal gazers. She might have forgotten the place, but she never could have forgotten the circumstances. Such facts explain why anthropologists set so much store by common traditions; they are living and enduring things, and, traced back, they give the springs, brooklets and streams, before history can even find the great river-floods with which it deals.

Take, for example, the strange case of poltergeists culled out by John L. Stephens, the famous explorer and anthropologist, in the second volume of his

"Incidents of Travel in Yucatan."

At Valladolid, in Eastern Yucatan, there suddenly appeared a "demonio," about the year 1570, "a demonio of the worst kind," says the legend, "called a demonio Parlero, loquacious or talking devil, who held discourse with all that wished at night, speaking like a parrot, answering all questions put to him, touching a guitar, playing the castanets, dancing and laughing, but without suffering himself to be seen."

This "speaking like a parrot" is a curious fact, if it was a fact. Among the northern Red Indians, these mysterious communicators usually spoke in a squeaky voice, sometimes like a kitten or an infant, sometimes like a bird, and the same was true in like cases in the eastern hemisphere. If there is any validity in the vast amount of testimony at hand, it is likewise that this peculiarity of voice was not in conscious imitation of lower animals, but simply because the vocal apparatus rigged up for temporary use was not of a first-class character, and the manifestors did the best they could with these imperfect instruments.

To return now to the poltergeist case, narrated by John L. Stephens. This was carefully investigated by the ecclesiastical authorities at Merida, and was fully reported by Don Sanchez de Aguilar, who was cura of Valladolid in 1596, and afterwards dean of the chapter of the cathedral in Merida, and an author of repute, as Daniel G. Brinton tells us in his "Essays of

an Americanist."

I would not cite the case merely on those old authorities, but in an article on Valladolid in the issue

of Modern Mexico for March 1906, the following occurs, showing the powerful hold which this old

tradition still has on a whole population:—

"According to tradition, Valladolid has been the theatre of remarkable events. It is asserted that the place was long haunted by a demon of the worst character, which even now is spoken of with bated breath, as *El Demonio Parlero*, because he held nightly discourse with any who chose to question him, answering in the voice of a parrot."

"He took to throwing stones," says Stephens, "in garrets, and eggs at the women and girls." Then he played the cura a trick, and afterwards told about it; he began slandering people, and got the whole town at swords' points; the church forbade the people to talk to him, when the demonio took to weeping and complaining; then he made more noise than ever.

and took to burning houses, when the cura finally

drove him out of town."

But he carried on his incendiary operations through the surrounding country, flames scattered lightnings which set other places a-fire, two or three houses at once, until finally the church authorities drove him away, when he returned to Valladolid, and resumed his old practices, until by putting crosses on all the

hills he was made to disappear.

As this narrative stands alone among the records of these particular people, and whole towns and neighbourhoods were concerned, and the case was investigated by experts, and embodied in the church records, and as it is still told of with bated breath more than three hundred years afterwards, and, especially as it conforms to poltergeist narratives elsewhere throughout the world, I am satisfied the narrative had a substantial basis of fact, and I am convinced that while fraud might have produced many of the effects, coincidence cannot explain the identity of the case with like phenomena occurring among many other and unknown peoples. Anthropology and folklore are dealing with such cases in quite a different manner from what was once the custom, and comparative religion is using such material with constantly increasing respect.

CHAPTER XXXVII

ACCURATE PREVISION OF DEATH BY A SOLDIER MONTHS
BEFORE, WITH ABSTRACT OF EVIDENCE

ONE of the most difficult problems in psychology is that of prevision. Such cases are indubitably numerous, and valid, and they cannot be accounted for by simple spirits of the dead, singly or combined, or indeed, so far as I can see, by a subconscious intelligence of any sort. For example, in the case described by Dr Layman below, the amount of cooperating agencies dealing with mental changes producing military counter-orders on the spur of the moment, the varying resistance or non-resistance of a body of a thousand individual human units, the direction or force of the wind at any special moment, and the mentally depicted view of an unknown spot in an unknown and unoccupied wilderness, far away and months beforehand, I confess staggers me. It is such considerations that make me look for that "new integration," which will have a broader basis than any now at hand; and I cannot help thinking that this new integration must involve new conceptions of time and space relations, perhaps of time and space themselves. I have already mentioned some cases of prevision. I could fill a volume with similar cases with which I am more or less familiar.

The Confederate General, John B. Gordon, a most capable man, both in military and civic life, in his "Reminiscences of the Civil War" (issued but a few months ago, and just previous to his death), devotes a whole chapter to various premonitions of death among soldiers, one of which was that of his own brother, who foretold the circumstance of his

death at the battle of Chancellorsville, and which occurred as foreseen.

One of the most graphic and incontestable cases of the sort which has come under my notice, a typical case, indeed, in all its aspects, as subsequently worked out from the army records, by myself, for a context, is that of Private William W. Shuler, of Company "I." II8th Regiment, Penna. Volunteers, who was killed at the battle of the Wilderness, Va., 5th May 1864.

The case was originally reported by Dr Alfred Layman, of the Society for Psychical Research, and one of our best-known Philadelphia physicians, who was at the time a sergeant in Shuler's company, and

was intimately acquainted with all the facts.

I prepared the record myself for the S.P.R., at the suggestion of Dr Hodgson, taking down Dr Layman's statement verbatim, which I had afterwards supported by his own affidavit, and the fact that his story was substantially the same as was narrated by him on his return from the army in 1865, supported by the affidavit of his sister, together with copies of the original records of the United States Government, bearing on the facts and statements of army movements, battles, losses, etc., etc., the whole supported by my own certificate attached. The record was read at one of the meetings of the Philadelphia Section of the S.P.R., and will be published in full later on.

The brief published statement of Dr Layman will be found on pages 672 and 673 of the "History of the 118th Pennsylvania Volunteers" (the Corn Exchange Regiment, so-called because organised by the Philadelphia Corn Exchange). The book was published by J. L. Smith, Philadelphia, Pa., in 1888, but was completed, as shown by the prefatory letter of General Chamberlain, prior to 22nd November 1887. In this first edition of the regimental history, the statement was not signed by Dr Layman, but in the later edition, of 1905, his name follows as the authority.

Learning that my friend, General J. B. Gordon, was

giving space to narratives of similar presentiments, among soldiers, I gave him a syllabus of the case reported by Dr Layman, but it reached the general too late. He wrote me as follows, from his home at Kirkwood, Ga.,

under date 25th July 1903:-

"On my return after an absence, I find your letter of July 6th, in which you give me a most interesting account of a remarkable fulfilment of a premonition of death, which came to a private soldier of the 118th Pennsylvania. It is certainly a very remarkable experience, and if your account had reached me a few days earlier I should gladly have incorporated it in my chapter on presentiments. That chapter, however, has been revised and returned to the publishers, and has doubtless by this time been transferred to the permanent plates. Again thanking you, I am, with best wishes, very truly yours, "I. B. GORDON."

The narrative of Dr Layman, in the history of the

118th, is as follows:-

"There came to the regiment while it lay encamped near Beverly Ford, Va., as a substitute, a man of fine physique. He was assigned to Company 'I.' as W. Shuler. It was seen that he possessed more than ordinary intelligence. He was a fluent talker, and affable in his manner, so that he soon won the good-will of most of his company. He was by profession a lawyer, and entered the service in the South-West as a captain.

"After the battle of Shiloh, he resigned his commission, and went to Philadelphia, and while there reentered the service. He told some of his comrades that he had been in many hard-fought battles in the South-West, but that the very next battle he should go into he would be killed, and that early in the fight. He was often laughed at for his forebodings, but he only answered, 'Yes, you may laugh, but nevertheless it is true; for I see it just as plainly as if pictured on paper. But I do not care, for I shall go to my death just as I would to a ball.' When the Wilderness campaign opened, under General Grant, and orders were given to move forward, he repeated his story, adding that he had but five days more to live, and that he would face the music. On the

morning of May 6th [see correction from the official records, should be May 5th], when our division was drawn up in line of battle to make the first assault on the enemy's position, plainly in sight across the clearing, he said to Sergeant Layman, of his Company: 'You see those works; well, just the other side of them I will fall. That is the spot, I know it! I know it!' The sergeant said, 'Captain,' for that was the title he was known by, 'do you honestly feel that such is your fate. If so, fall out, and do not go into this fight; I shall never mention it.' The look that he gave the sergeant was one not to be forgotten, as he said: 'Sergeant, I thank you; don't tempt me: I have always done my duty, and shall do it now.' Just at this moment the command was given, 'Forward!' and forward the lines moved—moved into the very jaws of death. The sergeant, now fully realising the situation, and the earnest manner of his friend's reprimand, concluded to stand by him. The lines rushed upon the enemy's works. They were carried about fifty yards inside these works. The fatal missile came; the ball entered the captain's left breast with a thud. Reeling, he fell into the arms of the sergeant, who now laid him down. Loosening the knapsack from his back, and laying his head upon it, he asked, 'Captain, is there anything else I can do for you?' 'Yes, give me a drink of water.' But before the water reached his mouth the blood came gushing forth. The sergeant called to his comrades for help to carry him from the field; but the captain, in a dying whisper, said, 'No, sergeant, leave me where I am; it is no use; it is all up with me. Go on and take care of yourself.' Bidding him good-bye the sergeant left him, never to see him again, as his remains fell into the hands of the enemy."

Signed in the edition of 1905, with portrait of Dr

Layman.—" Dr A. Layman."

Not signed in the original edition of 1887-1888.

The above narrative has been much strengthened, both historically and evidentially, by the Official War Records, vol. xxxiii., which were not published until 1891, and by the muster-out roster of the 118th, which was first published in the history of the regiment, to

which Dr Layman had previously contributed his narrative.

I have come across another, a similar case, also of a United States soldier, who fell in the Mexican War. This case has been published, but not so as to be accessible, and I have added the official record to confirm the statement. The case is narrated by Dr S. Compton Smith, who was acting surgeon with General Taylor's army in Mexico, in 1846, in his book "Chile Con Carne," and who was personally acquainted with the facts.

It was during the operations which resulted in the capture of Monterey, and he quotes from Dr E. R. Chamberlain, one of our best-known army surgeons in that war, as to the general plan of operations and their results. In a letter to S. C. West, of Milwaukee, written 28th September 1846, a week after the events narrated, he describes the position of Taylor's army confronting the works at Monterey. General Worth marched his division secretly away off to the right, and into the rear of the defenders, to attack their works there. This was on the night of 20th September. Taylor meanwhile made a demonstration on his front. "At length," he says, "a distant gun on the right, followed by others in equal succession, told us that Worth had gained his position in the night, and had now commenced the attack." This was on the morning of 21st September. "On the morning of the 22nd," says Dr Chamberlain, "a messenger came from General Worth, stating that he had met the enemy, on the plain beyond the fortifications, the day before [the 21st], and had defeated them, without any serious loss of his own force; -and that he had stormed, and taken at the point of the bayonet the highest fortifications, and would have the Bishop's Castle—a strong fortress—before night."

In this he was successful, as promised.

Returning now to Dr Smith's own narrative of events, of which he was an eyewitness, he narrates, as "A presentiment," the case of Captain McKavett, a regular army officer, as follows:—

"Captain McKavett, of the 8th Infantry, a brave, amiable, and much-esteemed gentleman, was the first officer who fell at this point." The point referred to

is stated, in Chamberlain's narrative, as that where "Worth had gained his position in the night, and had now commenced the attack." This was while Taylor, with his main army, was demonstrating against the

enemy in his front.

Dr Smith continues, writing of Captain McKavett, "For a number of days he had had a presentiment of his death. While at Cerralvo, being too sick to be on duty, I found him confined to a couch in his tent. He was suffering with a severe attack of camp dysentery. I endeavoured to dissuade him from attempting to join the advance of his column on the morrow, and to put himself under medical treatment. I have no doubt he would have done so, if the prospect of a battle had not been so imminent. But, with a melancholy smile, said he, 'I must proceed to Monterey; I feel an irresistible impulse urging me onward,—an impulse which I would not overcome. I know I shall be the first officer to fall before the town, and I would not shrink from my destiny. I thank you for your friendly interest,' continued he, 'but I cannot remain.'

"I accounted for his melancholy foreboding as the effect of his disease, and so explained to him. 'No!' said he, 'I have long had the impression, and nothing can change my mind.'

"On leaving him, he bade me farewell, with the assurance that it was for the last time in this world.

"Poor fellow! his presentiments were but too true. A nine pound shot struck him in the breast while he was

leading on his company, killing him instantly."

There are certain significant resemblances in this case to the Shuler case. For example, "I have long had the impression"; "I know I shall be the first officer to fall"; "I must proceed to Monterey; I feel an irre-

sistible impulse urging me onward."

Then again, the loss is reported as small in this engagement; and there are others. This irresistible impulse, however, is specially remarkable, and is not uncommon in these cases. He was irresistibly urged to his death, and he knew it at the time. It seems almost that, the conditions having been prepared, he was forced by some like irresistible or inevitable power (un-

doubtedly psychical and subconscious) to fulfil his part of the arrangement, and be on hand, at the proper place and at the appointed time. But what an enormous concurrence of diverse factors was required to ensure

the success of the prevision.

A remarkable example of the above type of previsions was narrated in Boswell's "Life of Johnson," which occurred, it is true, two hundred years ago, and was published nearly a century and a half ago, but the authority upon which the narrative rests is so high, the participants and auditors so eminent. and the published work so widely read, and so cele brated, that any falsification of names, dates or facts, must have been detected. That, nearly a century later, Washington Irving, in his "Life of Oliver Goldsmith," has repeated the narrative, is sufficient evidence to me that, during that long period, it had never been repudiated or its authenticity questioned; while the fact that Irving re-narrated it in his life of one of those present gives testimony to its importance.

The narrative came from General James Oglethorpe, narrated personally by him to an assemblage including Sir Joshua Reynolds, Samuel Johnson, Oliver Goldsmith, Boswell himself, and a number of others

celebrated in English history and literature.

The standing of General Oglethorpe, a hero of three continents, the founder of the State of Georgia, in America, and whose fame and name command respect and belief throughout the world, gives his narrative an authenticity which time cannot dim, nor criticism of that supercilious sort (with which we are so familiar) discount. I cite the narrative from

Irving's "Life of Goldsmith."

"The conversation turned upon Ghosts. General Oglethorpe told the story of a Colonel Prendergast, an officer in the Duke of Marlborough's army, who predicted among his comrades that he should die on a certain day. The battle of Malplaquet took place on that day (1709). The colonel was in the midst of it, but came out unhurt. The firing had ceased, and his brother officers jested with him about the fallacy

of his prediction. 'The day is not yet over,' replied he gravely; 'I shall die, notwithstanding what you see.' His words proved true. The order for a cessation of firing had not reached one of the French batteries, and a random shot from it killed the colonel on the spot. Among his effects was found a pocket-book, in which he had made a solemn entry, that Sir John Friend, who had been executed for high treason, had appeared to him either in a dream or vision, and predicted that he would meet him on a certain day (the very day of the battle). Colonel Cecil, who took possession of the effects of Colonel Prendergast, and read the entry in the pocket-book, told this story to Pope, the poet, in the presence of General Oglethorpe."

The conversation then extended to the others, and Goldsmith related that his brother, the clergyman, in whom he had such implicit confidence, had assured him of his having seen an apparition. Johnson also had a friend, old Mr Cave, the printer, at St John's Gate, "an honest man, and a sensible man," who told him he had seen a ghost; he did not, however, like to talk of it, and seemed to be in great horror whenever it was mentioned. "And pray, sir," asked Boswell,

"what did he say was the appearance?"

"Why, sir, something of a shadowy being."

A case of previsional dream, thoroughly established and connected with the assassination of the well-known actor, William Terriss, is related at length in the Proceedings of the Society for Psychical Research for July 1899.

It is therefore a case so recent as to be remembered by many persons in England, the murder

having occurred on 16th December 1897.

The case was fully examined and reported by Miss Alice Johnson, Associate of Newnham College, Cambridge, and Editor and Research Officer of the S.P.R.

The following is the narrative of Mr Frederick Lane, the subject of the previsional dream, which was obtained by Mr Frank Podmore, the well-known author, and member of the Council of the Society for Psychical Research.

"ADELPHI THEATRE, "December 20th, 1897.

"In the early morning of the 16th December, 1897, I dreamt that I saw the late Mr Terriss lying in a state of delirium or unconsciousness on the stairs leading to the dressing-rooms in the Adelphi Theatre. He was surrounded by people engaged at the theatre, amongst whom were Miss Millward and one of the footmen who attend the curtain, both of whom I actually saw a few hours later at the death scene. His chest was bare and clothes torn aside. Everybody who was around him was trying to do something for his good. The dream was in the shape of a picture. I saw it like a tableau on which the curtain would rise and fall. I immediately after dreamt that we did not open at the Adelphi Theatre that evening. in my dressing-room in the dream, but this latter part was somewhat incoherent. The next morning on going down to the theatre for rehearsal, the first member of the company I met was Miss Olive Haygate, to whom I mentioned the dream. On arriving at the theatre I also mentioned it to several other members of the company, including Messrs Creagh Henry, Buxton, Carter Bligh, etc. This dream, though it made such an impression upon me as to cause me to relate it to my fellow-artists, did not give me the idea of any coming disaster. I may state that I have dreamt formerly of deaths of relatives, and other matters which have impressed me, but the dreams have never impressed me sufficiently to make me repeat them the following morning, and have never been verified. My dream of the present occasion was the most vivid I have ever experienced; in fact, lifelike, and exactly represented the scene as I saw it at night.

"FREDERICK LANE."

To establish the fact that this dream was previsional, the narrative of the murder was published in The London Times of Friday, 17th December (from which I will quote later), and states that the event occurred "last evening," which, hence, was Thursday

evening, 16th December.

The following statement will show that the dream was related on Thursday morning about twelve o'clock.

"ADELPHI THEATRE, "December 18th, 1897.

"On Thursday morning about twelve o'clock I went into Rule's, Maiden Lane; and there found Mr Lane with Mr Wade. In the course of conversation, after Mr Wade had left, Mr Lane said that he had had a curious dream the night before, the effects of which he still felt. It was to this effect: he had seen Terriss on the stairs, inside the Maiden Lane door [the spot where Terriss died], and that he was surrounded by a crowd of people, and that he was raving, but he [Mr Lane] couldn't exactly tell what was the matter. I remember laughing about this, and then we went to rehearsal.

OLIVE HAYGATE."

The following corroborative letters are embraced in the report of the case:—

"ADELPHI THEATRE, "January 4th, 1898.

"I have much pleasure in being able to state that Mr Fred Lane, on the morning of the 16th ult., at rehearsal at the Adelphi Theatre, told me among others in a jocular and chaffing way (not believing it for an instant), how he probably would be called upon to play Captain Thomas, that night, as he had dreamt that something serious had happened to Terriss. I forget now, and therefore do not attempt to repeat, the exact words Mr Lane used as the reason (in the dream) why Mr Terriss would not appear that night, but I have a distinct recollection of him saying that he [Terriss] could not do so, because of his having dreamt that something had happened. It was all passed over very lightly in the same spirit in which it was given, i.e. in the spirit of unbelieving banter. "H. Carter Bligh."

ACCURATE PREVISION OF DEATH 31,

The following letter to Mr Podmore is also included in the record:—

"5 MILBORNE GROVE, THE BOLTONS, S.W., "January 20th.

"DEAR SIR,—With reference to your letter concerning Mr Lane's dream, he mentioned it to me at rehearsal during the morning of the day which proved fatal to poor Terriss. The description he gave me was that he saw Mr Terriss on the staircase (upon the landing where he died) surrounded by several people who were supporting him in what appeared to be a fit. Something serious seemed to have happened, and no performance took place that evening—another fact which was verified. As far as I recollect this was all Mr Lane mentioned. I remain, yours faithfully, "S. CREAGH HENRY."

It is, I think, evident that no telepathic communica-tion from the murderer, Richard Archer Prince, to Mr Lane the night before could possibly have furnished the material for this dream, because the murderer himself could not possibly know that the events would occur in the precise order and relationship of place and circumstance, as these depended more on Mr Terriss than on the one who afterwards slew him. Nor could the latter have known that the crowd would gather around on the stairs, and that Terriss' chest would there be bare and the clothes torn aside, because, as stated in *The Times* report, the morning after the murder, "On reaching the private entrance" the stabbing occurred, while one of the witnesses at the inquest testified (Mr Graves) that he "drove Terriss to the corner of Maiden Lane, Strand, where they both alighted and walked to the private entrance a few yards up the lane. . . . As he was putting his key into the lock, the prisoner rushed forward from across the lane and stabbed him," and that Mr Graves then seized the prisoner and gave him in charge to a constable, and then went back to the theatre, "and found Mr Terriss lying at the foot of the stairs a few

paces from the door, attended by a doctor and several others. He died a few minutes later." See also evidence of the stage-doorkeeper and of W. Alger, dresser to Mr Terriss, who "saw the prisoner at about 8-30 [on the night of 15th December] watching the people coming out of the stage door but did not speak to him."

The verdict was "that the prisoner was guilty of wilful murder—that he knew what he was doing and to whom he was doing it, but, on the medical evidence,

that he was not responsible for his actions."

The narrative in *The Times* of Friday, 17th December 1897, so far as it relates to the homicide, is as follows:—

"Last evening Mr William Terriss, one of the most popular actors on the London stage, was assassinated at the private entrance to the Adelphi Theatre in Maiden Lane, Covent Garden. He had spent the afternoon with some friends, and had gone home to dinner at about five o'clock. Subsequently he proceeded as usual to the theatre, where he was taking the chief part in Secret Service, and on reaching the private entrance he was suddenly attacked by a man between thirty and forty years of age, who stabbed him in the region of the heart and again in the back. The weapon employed is described as a long, thin-bladed knife. Mr Terriss at once fell to the ground, exclaiming: 'He has stabbed me, arrest him.' The assassin, after a struggle, was captured, and straightway conveyed to Bow Street Policestation. Mr Terriss, meanwhile, was carried inside the theatre and medical aid was at once summoned from Charing Cross Hospital and obtained. It was not possible, however, to convey him further than the foot of the stairs leading to his dressing-room, and here, after lying in a state of semi-consciousness for about a quarter of an hour or twenty minutes, he died."

The part taken by Mr Frederick Lane is also

described in The Times article.

"Mr Frederick Lane, who 'understudies' Mr Terriss in the part of Captain Thorne (Thomas?), had a peculiar story to tell. He said:

ACCURATE PREVISION OF DEATH 315

"'I dreamt about this very thing last night, and when I came to the theatre this morning for the rehearsal, I told all the "boys" about it. I dreamt I saw Mr Terriss lying in the landing, surrounded by a crowd, and that he was raving. I seemed to see it all and then it all seemed to fade away. It was a horrible dream, and I could not tell what it meant. I tried to forget it during the day, but to-night again, when I came to the theatre, I was going down Bedford Street, when something seemed to say, "Do not go there." I then went round to Maiden Lane, and there I saw this villain. I had heard of him as being an old super, and I knew he was asking for Mr Terriss last night. His appearance struck me as peculiar. He wore a big cloak and a slouch hat. I, however, do not know him, and he said nothing to me. I walked on, and then a few minutes afterwards I heard a great noise, and found that he had stabbed Mr Terriss. I rushed back and saw Mr Terriss taken indoors. If it had not been for the police I believe the man would have been lynched. He was a fellow of average height, had a dark moustache and a somewhat foreign appearance. I can suggest no motive whatever for the crime."

CHAPTER XXXVIII

UNPUBLISHED EXPERIMENTS CONTINUED — CHANGING WEIGHTS—SLATE WRITINGS—AUTOMATIC WRITINGS PURPORTING TO BE FROM SPIRITS OF THE DEAD

Among my oldest and best friends was a very eminent patent lawyer and practitioner before the United States Courts, of precisely my own age to the day, I may add,

and who died a few weeks ago, full of honours.

Many years ago, between 1874 and 1878 approximately, he looked into the phenomena of mediumship, led in that direction by certain experiences which I shall briefly narrate later on. He was a man of inventive ability and of mechanical skill, and though a Quaker by birth and training, was a gallant soldier in the War of the Rebellion, where he was almost fatally wounded, through the neck and head, at the battle of Fredericksburg in 1862.

There was a young man from New York here temporarily, who had the use of the parlour when he had callers, at a house on 12th Street above Arch, and who had mediumistic powers, and was ready to stand any sort of scientific experimentation. He was only about fifteen or sixteen years old, and was of dull, sluggish and nearly half-witted temperament. His name was Hough, and he still lives in New York, I understand.

My friend had been interested in some of Sir William Crookes' experiments in England, in changing the weights of bodies, and conceived the idea that he would get a spring-scale, so-called, a spiral spring in a case with a sliding pointer, like a barometer, and see what he could do with Hough. I would not cite the case from Mr P.'s memory, although he detailed it to me as early as 1880, but the gentleman kept a diary in which he jotted down his experiences, and he wrote this one down at once,

and I have read this several times, and once quite

recently.

He bought a small spring-scale, and put it into his coat pocket, and then sallied up to try it on Hough. He asked Hough if he had any objection to trying something new, without describing it, and Hough told him

to go ahead.

Mr P. then went back through the house, and by consent of the occupants, hunted up an empty soap-box, in the cellar, which he carried up to the parlour. It was daylight, and, of course, the parlour was fully lighted by the sun. He then got out a little light table which Hough used, and, set it so that it had a good light, and put a chair alongside so as to support his soap-box with its open side facing the table. He then set Hough alongside the soap-box, facing the same way, and so that he could not see into the soap-box. Preparations complete, Mr P., sitting opposite, reached over the table, with the ring of the spring-scale over his thumb, and his hand over the top of the box for a support, the scale hanging down within the box. Hough then laid his left hand on top of the box in the rear of Mr P.'s hand, the scale being only visible to Mr P., and nothing happened. At last Hough ventured a suggestion, that if he expected anyone to pull at that hook, they couldn't do it as long as the sitter could see the hook, which looked to Mr P. reasonable, and he secured a stool, or a lower chair, so that, when he placed his hand as before, the hook of the scale would be below the level of the table. When things were thus arranged, the scalepointer manifested considerable vivacity, and as soon as Mr P. called a number of pounds, or fractions, the pointer went there with the same certainty as the pointer on a Ouija-board will sometimes fish out the letters. Mr P. tried all sorts of numbers. I recollect, 9, 14, 8, 7, and the like, with some fractions, on the record in his diary, and Hough, Mr P. said, was evidently as much interested in the matter as the sitter was. During this performance, Hough's left hand was on top of the soapbox, his right hand on top of the table, and no one need tell me that a man of Mr P.'s knowledge, experience, sagacity and profession, would take the time and trouble to carry out such an experiment if it were open to such charges as, "that's easily explained"; "anybody can see the fraud"; "his work was unscientific"; "such

stuff is nonsense," and the like.

As soon as Mr P. had withdrawn his scale, he felt, under the table, a great patting on his two knees, a regular "pat-juba" pat, and in putting his hand under it was seized by some other apparent hand, his fore-finger extended, and this was rapidly touched to the extremities of the digits of still another hand, repeatedly from start to finish. At last Mr P. caught on, to use a colloquialism, and exclaimed, "why, one of your fingers is missing." Then there was a great clapping of the knees again, and Mr P. recollecting that a guide, or spirit, or effervescence, or something, was appearing, at the Holmes séances (which were not all genuine by any means), which had only three fingers on one hand, Mr P. asked, "Are you three-fingered Aleck?" or whatever the name was, to which a triumphant assent was given.

As I shall not have time to discuss so-called slate writing, I will mention a single example, for which the evidence itself was put into my hands some years ago by Mr P., and which I still have in my possession. Many will recollect that after the Katie King phenomena, with which Sir William Crookes was so closely connected, and which he so fully and beautifully described, like phenomena appeared here in Philadelphia at some of the Holmes séances, and John King, or in reality the old buccaneer, Morgan, the alleged father, also appeared. There was apparently a good deal of fraud in some of these experiments, certainly there was a good deal of controversy about them, with which I am not at all

concerned.

Mr P. conceived the idea that he would try a test case with the old pirate, as he had already experimented somewhat with Slade, who had been here, in slate writing. For this purpose my friend again made use of the boy Hough. This was in 1875 or 1876. He went from his office one morning and bought two children's slates, which I find, by measurement, were 7 in. long and 5½ in. wide; they had thick, strong, hardwood frames,

 $\frac{3}{8}$ in. thick, and $1\frac{1}{16}$ in. wide. He took these to his office, and bored a hole through the middle of each side of the two, countersunk those on one of the slates, and then screwed the two together, at opposite sides, by a 3 in. brass wood-screw, sinking the conical head beneath the level. Having placed three very small bits of coloured slate-crayon inside, one white, one red, and one blue, each about as large as a grain of rye, he screwed the two slates firmly together. He then melted over a gas flame alternately three sticks of sealing-wax, each of a different colour, dropping them on to the screw heads, so as to make a raised, glossy, and irregularly coloured boss. When these were cold, he took a fine needle, and, with a magnifying glass, set minute punctures in sets of three, and quite invisible to the naked eye, all over these surfaces. He now felt pretty sure that whatever turned up inside would not be due to any crude sort of fraud, if he kept hold of the slates.

He then put the slates into his overcoat pocket, and

went up, a few blocks, to see Hough.

Sitting there in the parlour, without any intervening apparatus, he asked Hough if he thought he could get anything written inside, and Hough didn't know, but

thought it worth while to try.

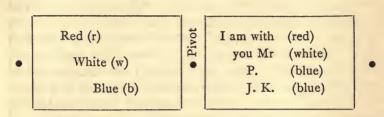
So Mr P. went over to the table, and took hold of one end of the two united slates, and Hough put his hands on the other, and Mr P. audibly asked John King if he would communicate, and were present, to take those bits of crayon and make a mark with each, on one of the slates, inside, in the following order:—red, white and blue.

But a few seconds passed until a tap was heard, and

Hough said he guessed they were through.

Mr P. then pocketed the slates again, and, to get rid of any notion of hypnotic suggestion making him see what wasn't, he applied his glass to the sealing-wax bosses, and found that the various colours were the same and that the microscopic dents were as they had been before.

He then removed the sealing-wax, unscrewed one screw, and swung the top slate around so as to uncover the under one. Bear in mind that the slates had not been out of Mr P.'s hands, that it was in broad daylight, in the middle of a public parlour, and that the slates were brought there and taken away by Mr P., that they were his own, had never been "magnetised," and that I now have them before me, with the writing precisely as it was seen by Mr P. on just opening the slates. He had asked for a single mark by each crayon in the order, red, white and blue. What Mr P. found, and what I now read, is the following:—



This is the shape, set thus beside each other, as in text.

It will be seen that the writing, when the slates were rotated together on the pivot, was from top to bottom on one slate, and from bottom to top on the other. It was a bold, rough handwriting, perfectly legible

throughout.

Now, I do not claim to know whether the old buccaneer was present or not, or what power, or *modus operandi*, or mechanism, produced this writing; but I do know that a case like this is a legitimate case for investigation, and that the lines of investigation, and their methods, pertain to psychology.

But Mr P. did a far greater service to psychology than by the isolated experiments he made, a few only out of

a large number of which I have above narrated.

For he placed in my hands (to be used at my discretion, by the Society for Psychical Research, and with authority, if necessary, to use his own name, and the names of those others present, and of the alleged communicators), the original and intact record of a series of automatic writings, covering in all more than sixty pages of manuscript, and extending from 25th January to 18th March 1875, with notes of other experiments with tables before and afterwards. I will not use the permission to give the actual names at present, as my

friend has very recently died, and his surviving children may not be satisfied to have me do so; but I hope to do this later on, and reproduce the manuscript for the S.P.R. entire, and precisely as written automatically in

his family.

These records were written, nearly all, in a small quarto blank book, and in many cases are almost microscopic, requiring a glass to read easily. There are no erasures, interlineations or halts and dashes, and the record of each sitting reads as easily as a conversation between a number of friends in a sitting-room, as it really was. This is to be accounted for by the fact that all the sitters and communicators were relatives, or close personal friends who had long known each other, and that no interpreting mechanism was employed—each communicator, apparently, using the agent's arm at will, and just as persons would use a telephone under like circumstances.

In order to understand the circumstances more clearly, I would say that the young wife of Mr P., a most devout Christian woman, died during the following year (the messages having been discontinued, Mr P. told me, as stated by the communicators, on account of danger to her vitality), and immediately after her death, Mr P. wrote an explanatory preface, and private explanatory letter, in which form the completed manuscript now appears. But, finding that the Society for Psychical Research was directly in line of such investigation (his family not being especially interested in psychology), he consented to turn the whole over to me, feeling impressed with the importance to the world of the work of that society, and to myself in especial. Mr P. and I had been bosom friends since 1879, and we have often talked over this record, and his other experiments, long before I saw the records themselves or his diaries.

Almost immediately after the death of his wife, he

prepared his prefatory note, as follows:-

"In Explanation of the Writings which Appear in This

Book."

"On the evening of the 15th of December 1874, there were present at my then residence, No. 728 Buttonwood Street, Philadelphia, my wife and myself, and our niece

and her husband (H. G.), who were living with us at the time. None of us, I believe, had at that time ever witnessed any so-called spiritual manifestations, except that I had on two or three occasions been present at the notorious 'Katie King' séances; nor were any of us

particularly interested in the subject.

"After our four children had gone to bed, I suggested that we should sit at a table and see whether we could cause it to tip, or move about: the others fell in with my suggestion and we took seats around a small rectangular table. We sat, perhaps, twenty minutes, with the gas turned down very low, when we finally became amused and merry at the thought of four, sober, sensible persons expecting such a ridiculous thing as to see a table move about by simple contact of the hands without the known exertion of force on their part; and were about to abandon further prosecution of the experiment.

"I, however, importuned for five minutes' grace to the 'spirits,' which was accorded by the other sitters; but before the time was out, the table manifested signs of life and a will of its own. Each, of course, accused the other of clandestinely producing the movements, but the affair began to wear a more serious aspect when, after turning up the gas a little, we observed that only the tips of our fingers touched the top of the table.

"It occurred to me that perhaps I could learn from the table itself who was the 'medium' in the quartette, and, upon asking the question, the former tipped and

rocked forcibly towards and against my wife.

"Then at my suggestion, we all except my wife withdrew entirely from contact with the table; thereupon and afterwards, whenever (and *only* when) my wife sat at the table, we received numerous very distinct and characteristic communications, purporting to come from various (deceased) relatives and friends, and acquaintances, a record of many of which I made at the time in my diary.

"The modus operandi of receiving these messages was as follows:—Three (3) tips of the table, or knocks against the floor, it was agreed should signify an affirmative—one a negative. Upon calling, either mentally or aloud,

over the alphabet, three tips or raps would be made as

the letter wanted was reached.

"On the evening of the 24th of January 1875, as we sat around the table, it suddenly occurred to me to ask the intelligence that controlled the movements of the table (purporting to be my father), whether my wife's hand could be controlled to write the communications: three most emphatic knocks by the table against the floor, was the immediate answer. I then procured pencil and paper, and within a few minutes thereafter, my wife's arm was controlled to write, and, a few evenings after, I procured this book. The following pencil writings are just as they were written by my wife.

"She explained to me that, when the writing was being done, she was in entirely normal condition, except that her arm, or the greater portion of it, seemed numb, as if 'asleep'; and that she had not the faintest idea of what she was being controlled to write, or, in fact, that she was writing at all, unless she looked at her moving

hand and arm.

"Many of the communications were written as we (wife and I) sat before the round table in our parlour, conversing about various matters, under the bright light of an Argand gas burner, and the children sometimes playing about the room. I observed, however, that for some reason I could not understand, the control could do better in a very subdued light than in a bright one.

"The full meaning and appropriateness of many of the communications in this book can of course, without explanations, be understood only by myself and my wife. What was written was frequently of an unexpected character, and beyond a shadow of doubt they came from a power or intelligence wholly outside of us.

"My wife's left hand was occasionally, at my request, controlled instead of the right (she was right-handed, and could not write with her left hand of her own volition); but the control was more perfect with the right hand, which seems to teach that the control is modified and limited by, and is in a measure subject to, the physical (and doubtless sometimes mental) characteristics and peculiarities of the instrument (the medium)

through and by which it manifests itself; as, although the master strike the keys, or draw the bow, the quality, character and effect of his music, depends largely upon his instrument. Is it not highly probable that the instrument which is controlled by a spiritual intelligence is a more delicate one, and more difficult to direct and control?

"On the evening of the 18th day of March, 1875, the power of controlling to write suddenly was lost and without apparent cause, and never afterwards returned in that form. And although on at least one evening a week afterwards we made trial, earnestly desirous of a return of the power (the matter having become very interesting to us), we did not receive a single communication, or any indication of the presence of the intelligence of any kind, until, on the first day of October, 1875 (after we had been installed in our new home near Germantown for about ten days), the power of moving the table only, returned as suddenly as it had departed in March before.

"It remained until the evening of November 9th, 1875, and never came back, although we sat frequently until my wife's death, which occurred December 6th, 1876. I made a record of the communications in the time from October 1st to November 9th in my Diary for 1877.

"Dated Philadelphia, Pa., January 14, 1877."

CHAPTER XXXIX

AUTOMATIC WRITING EXPERIMENTS CONTINUED—INTER-JECTORS SUDDENLY APPEARING

THERE is not very much of a so-called "test" character in these communications, though there is some. Yet even this is merely incidental to something else. For example, the father wrote that Mr P.'s sister, living at a distance, had just had a severe fall, but this was told with the addition that she would get along all right, merely so that the family should not be unnecessarily alarmed when the news was received in a normal way, which occurred afterwards. There are other evidential circumstances, but nothing striking or startling. A sister's sick child, about whom all were anxious, it was stated, would soon recover, etc., but that might have been guesswork. Then Mr P. was warned by his father against a certain man's business propositions, which Mr P. did not suspect, but which he afterwards discovered to be fallacious, and which knowledge saved him from serious loss.

While, to those who have ever known the parties, any suggestion of conscious fraud would be preposterous; and while, to those who have never known them, it would appear a monstrous thing for any wife to do, in the bosom of her own family, to deal profanely and wickedly with the holiest associations of soul and kindred, and indeed, under the circumstances, incredible, yet I may be permitted to cite the testimony of the husband, in leaving this record of his dead wife to their children. "That it was through the communications herein written that both their father and their mother first clearly saw that light which afterwards became to them a source of quiet strength, comfort and happiness—which enabled their mother to afterwards look upon her approaching

death calmly, without fear and without doubt, and with a certain conviction that the parting from her husband and little ones would only be for a comparatively brief time—and which had enabled their father to bear the parting from their mother with a reasonable fortitude."

I know that Mr P. lived and died in this full faith, in which he never for a moment faltered, from the

time I first came to know him.

There are many of these communications which I

would like to present; but space forbids.

But I cannot forbear quoting the following from Mr P.'s advice to his children, in the preface to the record.

"I would emphatically discourage my children from seeking knowledge through public 'mediums' or those who exhibit or use their wonderful gifts directly or indirectly for pecuniary gain or even for support. It is my experience, with very few exceptions, that the class of invisibles who are the familiars of such mediums, are of a low, silly and unprogressed, and occasionally even a malicious order, and, whatever their intentions, may be actually more apt to cloud belief than to induce or confirm it, except in those investigators who understand the subject well. If you cannot, spiritually speaking, drink from a pure fountain, then you had best not drink at all."

This is the correct attitude of psychology to-day; and while all these sources are fully and fearlessly investigated, it is to establish facts, and not to acquire supernormal "knowledge." Supernormal knowledge of genuine value feeds into our minds by inspiration, and through its many other entrances, and it is tested and worked over in the great intellectual workshop of the subconscious, as Tennyson says:

"To shape and use."

But the knowledge to be derived from earth-bound spirits, granting such, is of a different type, and may be or may not be "a game worth the candle." Intelligent spiritualists all understand this; it is not necessary to give this warning to them; it is the

ignorant and the neophytes who are in danger, and especially those who "come on a run" from the

materialistic camps.

An amusing and interesting example of what we call "interjectors" occurred, as I copy from the original record of a sitting with Mrs Piper, by Dr Hodgson, on 22nd June 1903. A member of the S.P.R., the head of an institution for mentally retarded children, was to have a sitting on this day, but was unavoidably kept away, and she sent in the questions relating to some important school changes in contemplation, as her friend and co-worker had recently died, and was communicating with her through Mrs Piper.

So, Dr Hodgson sat there alone, asking Miss B.'s questions, Mrs Piper, while entranced, writing her

replies automatically.

Thyrsa, the deceased school friend, was communicating, and was called away for a moment, leaving

this last writing:

Thyrsa. I must go out, I think. I will be back in a moment, excuse me. (Now here was a chance for any anxious bystanders, which was thus utilised.)

Interjector. While that lady is out, I presume to introduce myself to you. I am Hud-s-o-n (so it was

written).

Dr Hodgson. I am delighted to make your personal acquaintance. Tell us anything you have or wish to say, kindly.

Interjector. I was a d—d idiot. Dr Hodgson. D—d idiot?

Interjector. Are you Hodgson of Boston?

Dr Hodgson. Yes. I know who you are, of course, well.

Interjector. My head is dizzy, but I am glad to

find my way here.

Dr Hodgson. I am glad, and I shall be pleased to greet you, and welcome all the help you can give whenever there is opportunity.

Interjector. Thank you, you are very kind.

I shall endeavour to help you often.

Dr Hodgson. Amen. Interjector. You are on the right path; go on. Yours fraternally

I. (T. or J.) HUDSON. (Scrawl.)

The communicator, Thyrsa, then reappeared, and asked of Dr Hodgson: "Did you meet a gentleman?" Dr Hodgson. Yes. Mr Hudson.

Thyrsa. I don't know him at all, but I saw him

pushing his way through the crowd.

Thyrsa's communication then continued; as it is not relevant to the interjection, I do not reproduce it.

There is a curious circumstance in the latter part above, suggested by "pushing his way through the crowd," quite familiar to those acquainted with these phenomena, but rather startling to, and in fact

usually disbelieved by, most others.

It is the dramatic situation at the other end of the line. Where was this mysterious invisible crowd? The general impression is that it is hanging up in the air overhead; but apparitions, which are like presences made visible, do not usually appear floating about in the air, but moving on terra firma. I shall discuss this phase later on, in connection with the "bound" and "free" ether, but at present I wish to cite a sentence or two from the record of a Piper sitting with a lady, which I have just had the opportunity to examine. It occurred 18th May 1904, and the original automatic writing was made at the time. The sitter says, I was in the midst of asking a question, when Dr Hodgson picked up something which had fallen down in front of the table. At once the hand wrote, "I do wish you would not push me away." The dramatis personæ would seem to be arranged as follows:-Imperator and Rectorwere standing alongside and supplying matter and controlling the arm and hand to write, while the communicator was standing in front of the table and giving impressions of her answers to the control. Dr Hodgson stooped down precisely where the communicator was, and "pushed" her away.

In the P. record of my friends, already referred to,

often a half dozen or more were gathered around the instrument (the medium), and each spoke as occasion offered. As these were all friends and relatives no violent interjections appeared until the final climax, when "dead dog" and his friends turned up.

I wish to call attention also to Mr Hudson's post

I wish to call attention also to Mr Hudson's post mortem opinion of his own published theories, and his endorsement of the categorically opposite work of Dr Hodgson, "You are on the right path; go on."

CHAPTER XL

PLANCHETTE CASE OF AUTOMATIC WRITING, IN WHICH
AN INTERJECTOR APPEARED TO NARRATE AN
IRRELEVANT TRAGEDY

A MUCH more tragical interjection occurred in a planchette experience of Mr Charles Morris, Vice-president of the Philadelphia Section S.P.R., a life member and officer of the Pennsylvania Academy of the Natural Sciences, a co-worker with Cope and Leidy, and who is also the author of many standard works on historical and scientific subjects. These planchette experiments extended over many months, and dealt with the phenomena of the beyond, or, at least, purported to do so.

The events occurred in 1873, but the narrative is from the records written at that time, and without subsequent alteration. The whole record was read

by Mr Morris at one of our regular meetings.

As my purpose at present is merely to illustrate these interjections, I have asked Mr Morris to send me the extracts which follow, and which he has just made from the originals, prefacing it with the following letter to me.

"PHILADELPHIA, "June 7th, 1906.

"DEAR DR HEYSINGER,—The enclosed communication is copied verbatim from a transcript of the original planchette writings, made immediately after receiving them, and still in the possession of Mr John Ford, the recorder.

"The comments are also part of the original record. The other persons present at the writing (besides myself) were Mr John Ford, Miss Annie McDowell,

who was the psychic, and my sister, Mrs C., who

prefers not to give her name.

"As respects the Misses Thompson, as they have long been dead, and as their share in the matter was simply to confirm the statements, I can see no objection to the use of their names. Sincerely yours, "CHARLES MORRIS."

The following is Mr Morris' copy:-

(Extract from a Record of Planchette Communications now in the Archives of the Philadelphia Branch of the Society for Psychical Research

These communications, it may be stated, were not received through a professional medium, but came to a party of personal friends and investigators. The following case is of interest from its strongly evidential character.)

Jany. 22, 1873. On this evening Mrs C., Mr M., Miss McD. and myself (Mr F. the recorder) had been engaged in conversation, when someone suggested that we try planchette. This we did, receiving communications from alleged friends in the spirit world, as also from some whom we did not know. At length the name of "Mary Frost" was plainly written, a name that was absolutely unknown to anyone present. This fact was announced to the writer, when there came immediately the following:—

"Miss Thompson knows the poor girl who was done to death by the slanderous tongue of Julia M.

(the full name given).

"Q. Do you mean Miss Adelaide or Miss Annie

Thompson?

"A. I mean both Miss Adelaide and Miss Annie. They were my best earthly friends. Tell them that Adeline (pronounced Adeleen) is with me, and sends her best love to them and Bud.

"Q. How were you slandered?

"A. By the charge of being a free-lover and other false and malicious stories.

"Q. Why do you come to us?

"A. To get you to bear my message of love and

gratitude to my dear friends."

We asked further questions. Neither the name nor a single incident connected with the life of "Mary Frost" was known to any of the persons present, all of whom were mutual friends, nor could any circumstances be recollected that would give us any light, the name and subject-matter alike being entirely unknown to us. Miss McD. was requested to send a copy of the communication to the Misses Thompson (whom she knew personally). This copy was sent on the following day, Jany. 23, and on being read by Miss Annie Thompson, she declared that every statement was literally true; that Mary Frost had died in the manner described; that she had doubtless been "done to death" by malicious slanderers, chief among whom was the "Julia" mentioned; that she was young and exceedingly beautiful; and further, that the Adeline-pronounced Adeleenwas a dead niece of Miss Annie's and that "Bud" was Adeline's brother. This message was carried back to Miss McD. by the bearer of the note to Miss Annie.

To make the statement of Miss Annie more circumstantial I (Mr F.) accidentally met Miss Adelaide on Third Street at or about the same hour her sister received the note from Miss McD. I informed her of the purport of the communication we had received on the previous evening, stating the name and the incidents given. Her response was: "It is true in every particular," and she described, as did Miss Annie, the relations which the parties held towards each other, adding that it was one of the most remarkable tests she had ever known, etc.

After the above described interjection, the ordinary communications went on, dealing with quite different subjects.

I may add that the Misses Thompson referred to

PLANCHETTE AUTOMATIC WRITING

were sisters of the President of the Pennsylvania Railroad Company, and that Miss McDowell was a wellknown writer at the time on subjects relating to women, etc. She was not known as a psychic. Mr Ford still survives.

CHAPTER XLI

EXPERIMENTS CONTINUED — TRUMPET MEDIUMS— FURTHER EXPERIMENTS IN PREVISION—VERIDI-CAL DREAMS

I WOULD like to say something about so-called trumpet mediums, which so many theoretically ingenious sceptics explain by concealed telephones, connecting wires under the floor, confederates concealed in various places, and the like, but of which sort of explanations Professor De Morgan said, "I am perfectly convinced that I have been seen and heard in a manner which should make unbelief impossible, things called spiritual which cannot be taken by a rational being to be capable of explanation by imposture, coincidence or mistake. So far I feel the ground firm under me." Again, "The physical explanations I have seen are easy, but miserably insufficient; the spiritual hypothesis is sufficient, but ponderously difficult. Time and thought will decide, the second asking the first for more results of trial."

It is doubtful whether the spiritual hypothesis is more ponderously difficult than the theory of the ether, or that of eternity, or of infinite space, or of infinitely diminishing oscillating systems down to infinity, for there is no place, on a physical basis, to stop, and all the difficulties and "absurd drafts" which science makes on our beliefs, as Jevons and Sir John Herschel tell us, are surely more ponderously difficult than the mere survival of the consciousness from one stage of existence to another, especially with the phenomena of sleep and coma before us.

The first practical experience with trumpet mediums I am giving at second-hand, but I am perfectly convinced of the truth of the narrative, which

was told to me, and to others of the S.P.R., some years ago, and shortly after the events occurred, by the Rev. Thomas W. Illman, then of Grand Rapids, Mich., but who is now the pastor of a church near Boston. Mr Illman is a man of the most direct and truthful character, a scientific clergyman, for a wonder, and a very able man. Mr Illman was not and is not a "spiritualist," and I believe that this was his

solitary psychical experience.

One of his acquaintances in Grand Rapids spoke to him of a "trumpet medium" who produced some singular results, and who was then in Grand Rapids for a short time. On the strength of this he called to see her, and was received in the parlour. It was broad daylight, and the medium (of some of whose later performances in Philadelphia I shall have something to say) gave him a trumpet, and told him to put the small end to his ear and listen. The whole séance, if it may be called such, was quite informal, as he told her he merely came to try to learn something about it, and not for revelations. No result followed, and she suggested that they go into the adjoining entry, or hall, where the place was quieter. The medium was, I believe, knitting, or fanning herself, or something, at a distance, and Mr Illman had charge of the trumpet entirely. He laid the big end across a chairback, pointing to the front of the house, and applied the nozzle to his ear, and waited. The medium sat back in the hall behind him six feet or more. It was a warm summer day.

He listened with the utmost intentness, and the medium finally asked, "Don't you hear anything?"

"Not a thing," replied Mr Illman.

"Don't you hear any sound at all?" the medium asked.

"Only a faint clicking or ticking in the metal, at times."

"Well, that's it," replied the medium, "why don't you ask who it is?"

Mr Illman then made the desired inquiry, and a clear silvery voice replied in his ear, as if coming from the larger end of the trumpet, and gave a name, which was unknown to Mr Illman. He then asked the unknown woman what he had to do with her or with the matter, and considerable conversation en-

sued, which I will briefly condense.

This woman was the recently deceased wife of a man who was of intemperate habits, and had been going, more and more rapidly, since his wife's death, on the road to ruin. Her object was to have Mr Illman save him if possible. Mr Illman got his name. as well as that of the wife, through the trumpet, but asked how was he to know him. She then asked if he did not recollect that, some time before, he had seen a man in a suburban trolley-car under the influence of liquor, and had gone up and spoken to him, and tried to dissuade him from such habits. The clergyman remembered. Then she told him where to find him, and wanted him to look him up and try to get him to come to church, and begged that he would do all he could to save him, which the clergyman promised. Mr Illman afterwards hunted up and got hold of this man, got him to church, made a Christian of him, reformed him from his bad habits, and he was, when Mr Illman left Grand Rapids, an honoured and upright Christian man.

Some years later on, this trumpet medium came, for a few days, to Philadelphia, and took a room with a patient of Dr Alfred Layman, who, at that time, knew nothing of this clergyman's experience, or of the medium. But being interested in such matters, and a member of the S.P.R., when he heard of the matter he undertook to look into it. He found the medium a very pleasant woman, and since then we have found that she is considered generally a very modest and

worthy person in all respects.

A mutual medical friend of myself and Dr Layman, Dr Holcomb (a member, until his death, of the Oxford Medical Club), had died a short time, a year or two, previously, Dr Layman having been one of his attending physicians, as well as his bosom friend for years. Of course time had intervened, and only a memory remained.

But taking up the trumpet, and asking how to use

it, in full daylight, the medium told him to put the small end to his ear, and perhaps, although it was in the light, he might get something. He had hardly done so, when he heard, "Well! Well! Well!" "Who is this?" asked Dr Layman. "Don't you know me? I am-" then came a name which could hardly be made out, it was so confused. Then the doctor turned the trumpet over to the medium and she couldn't make out the word. It was then suggested to darken the room, Dr Layman still holding the trumpet, which was done; and at once a string of sentences came, with all the accents and peculiarities of Dr Holcomb, telling about his post mortem experiences. I recollect one characteristic remark. Layman, how did you come to get on to this?" "On to what?" asked Dr Layman. "Why, this trumpet business; if I had known of this, I would have hunted it up long ago," or words to that effect.

One more incident out of the many trumpet experiences which I have looked into, and I am done with trumpet phenomena, as in my own personal experience they were inconsiderable, though I had such. A gentleman from the interior of Vermont, an old family friend of Mrs Layman, spent a day or two with the doctor, and, conversation turning on the trumpet matter, the visitor said he would like to try the medium, and her street address was given him, and he departed. On his return he detailed his experiences, which were voluminous, but among others gave this sentence of an interjector: "Say, Jim, I'll be going up with you on the train to-morrow, but I won't take up your tickets this trip." This was ostensibly from a conductor on a local railroad in Vermont, which he was accustomed to travel over, the name given being that of a conductor then deceased, and whom he had known long and well, as both were from the same country district in Vermont.

I will now narrate a veridical dream, which I have had from two independent participants, both of the

S.P.R.

A young woman in this city was expecting to be confined with her first child. Her mother and a lady friend

were both resident at the time in the house. It was decided that if the baby were a boy it should be called Leonard, and if a girl Esther. The mother had long been

a widow, and the lady friend was unmarried.

A week before the anticipated event, the expectant matron rose early in the morning and came to her mother, saying, "Mother, I have had a very strange dream; I dreamed that I was at a funeral, and that I passed through the crowd and recognised everybody there, they were all our friends, around a coffin, but I didn't see myself there at all."

The mother, to cheer her, said, "Oh, dreams are nonsense; I had a dream last night too, and I dreamed that I had got a baby, and that's ridiculous." Just then the lady friend called down, "I dreamed that you got through and had your baby all right; so don't worry, but that it wasn't named either Leonard or Esther."

These various dreams were mentioned to the doctor, who, to safeguard everything, and allay anxiety, provided means at hand for every possible contingency. The confinement was concluded with every favourable indication; the doctor was a most careful and skilful obstetrician; all were happy; it was a splendid girl baby; when suddenly, without warning, a most terrific internal hæmorrhage occurred, which all means employed were powerless to arrest, and almost in a flash the patient was exsanguinated, and with her dying throes called to her own mother, whispering, "Mother, take your baby!" She took it, raised it, and has it still; she is a lovely girl, now approaching womanhood, and she was named, not Leonard, and not Esther, but by the sacred name of her dead mother, Bertha. The facts are as narrated; they have been carefully investigated by several members of the S.P.R.

CHAPTER XLII

Now, regarding materialisations by professional and other mediums, the question is a broad one, and perhaps I would not now speak of them at all, were it not for the facts already presented by Sir William Crookes, so long ago as 1874, and published in his works, of which he said, in his Presidential Address in 1899, before the British Association for the Advancement of Science, already cited by me, that he had nothing to retract, and would now make his statements even stronger, if possible.

And what I shall say will not be to present phenomena at all, but merely to consider certain matters which came

properly before the medical profession.

It is a common opinion that medical men are atheistic, or materialistic, and, to judge from their opinions as publicly expressed, in cold blood as it were, one would think so. But an amusing incident occurred, some years ago, which gave me quite a different opinion, and which I will narrate:

A medical society of this city, composed, at the time, of more than two hundred practising physicians, at one of its monthly meetings, held at Mosebach's, had Dr Bayley, whom I have so often mentioned, and who is an old member of the S.P.R., down for a paper. The paper and discussion in this society are always followed by a banquet.

Dr Bayley's paper was on a psychological subject as connected with practical medicine, something along the lines of Dr Schofield's Force of Mind, which had not yet

then been published.

The paper was coldly received, which was a rare thing

with the papers of Dr Bayley, and those members who did speak, besides myself and one or two others of the S.P.R., spoke with sarcasm or ridicule. The mass of the doctors present was as stolid as though they were about to be executed, and had given up all hope. The paucity of discussion left an aching void before the banquet was ready, and during the interval one of the professors, at the time the dean of the faculty in one of our medical colleges, who was a member, turned to me, and said, "I don't know about Dr Bayley's paper; there is a good deal which I have never seen explained, and I would like to." He then narrated the case of his grandmother, whose husband was the captain of a merchant vessel trading to the East Indies. Of course these events occurred many years ago, but he had heard it from first hands, and the whole family had long accepted its truth.

One night one of the children was very ill with croup, and the mother (the professor's grandmother) had been working with it, until at last the child fell asleep, and she lay down, noting the time, which was five minutes before one o'clock A.M. She was awakened by something, and saw her husband, in his sea uniform, standing at the foot of the bed, gravely looking at her. "Why, have you returned?" she cried, springing up, "I must get you something to eat." The presence said: "Margaret!" and then slowly faded away. She noted the time, and wrote it down at once. Six weeks later news arrived that precisely at this hour and minute, by the ship's log, a terrific wave had washed the captain overboard at sea.

off Rio Janeiro, on the Brazilian coast.

I said to my friend, "Will you tell that again before these doctors?" He studied for a moment, and then said, "I have told it to you, and, as I am an honest man, I don't see why I shouldn't tell it to others." "Then tell it," I said, and he did.

He was the last man to lend himself to superstition. He was a noted man, and President of the State Board of Health. Many of those present had sat under his

teachings, and his name was on their diplomas.

The supper was half-forgotten; man after man arose to relate supernormal incidents personal to himself, or those which he had seen among his patients, or which had occurred in his own family, and before one narrative was concluded, a number were on their feet, and more than two hours after the usual hour for adjournment, between three and four o'clock in the morning, the meeting broke up, with still a dozen of doctors vainly clamouring that their experiences should be heard.

What Dr Bayley, now himself Professor of Neurology in the same institution, and the dean did, was merely to take the lid off, and assure a square deal and a fair and respectful hearing. I have seen this tried in other cases, though not on so considerable a scale, and I have

never yet seen it fail.

Scepticism cannot withstand conscience, face to face at the bar of truth. And so I feel that I may say something about materialisations, without seeking to analyse the bases of matter, which are still under examination by the greatest intellects of the age, and with results already achieved so new, and so startling, as to make any possible "spirit materialisations" the mere a, b, c of the series.

Two members of the S.P.R., friends of mine, attended, some years ago, a materialising séance, to endeavour to fathom the principles involved, or to detect any manifest

imposture.

They sat at opposite ends of the circle, with the cabinet midway between, and perhaps a dozen feet in front of them. The sitters formed a semicircle, with a dim red light behind as usual, but with all objects visible when the eyes had become accustomed to the light.

Midway in the semicircle sat a German doctor, whom both knew. A white figure advanced from the cabinet straight forward towards the doctor, who rose saying,

"Do you want me?"

"Yes," came the sibilant whisper, and he stepped forward to interview the visitant. This brought the line of sight of my two friends diagonally across the space between the figure and the cabinet. The form in white was perhaps ten feet from the cabinet. All the sitters were looking at the softly conversing figures when suddenly a "swish" was heard, and the white figure seemed to flow down to the floor, making a sort of white puddle, and disappeared. The doctor,

with a startled cry, said, "Mein Gott, did you see dat?"

My two friends of the S.P.R. are sure that the figure did not return to the cabinet across their line of vision.

For myself, I did once see and feel a materialised white form dissolve and disappear from the strongest grasp I could hold it by, with the same "swish," and slide down over the floor, or else into the distant cabinet, in a manner most unaccountable to me, and to the other observers.

This occurred with another medium, of whom I shall

have something to say later on.

The prevalent opinion regarding the atheism or materialism of the medical profession, I know from my own investigations and conversations with hundreds of physicians, is not correct; and in corroboration of this statement I cite the fact that Ridgway's Magazine for 9th February 1907 published an abstract of the answers to a like inquiry which had been sent out to one thousand physicians. The question was, "Do you believe in immortality?" Six hundred replies were received from as many physicians all over the country, and only twelve per cent. of these replies were in the negative.

I am satisfied that if the question had been more properly put, as involving survival after death, instead of "immortality," which is a matter for the future, if at all, while survival after death is a matter of demonstration in this life, the affirmative replies would have

been nearly unanimous.

In The Journal of the Society for Psychical Research, for the month of May 1908, is an apparitional case communicated by Professor Barrett, which is especially interesting in view of the comments of this eminent man of science. The case is entitled, "Apparition seen soon after death," and occurred during the summer of 1907. Citing only the significant facts, the gentleman whose apparition appeared to a young girl in a convent school on the Continent shot himself in London on 29th May 1907. The young girl, named Minnie, who was not a Catholic, was his godchild, to whom he bequeathed an annuity. Her mother resided in London and did not write to her daughter until nearly a week after the

death of the gentleman, whom Minnie had always called "uncle," and to whom she was much attached. In the letter, moreover, the mother merely stated that her uncle had died suddenly on the preceding Wednesday,

and had been buried on Saturday.

Ouoting now from the mother's narrative, "On the Saturday morning she was in the church with Mère Columba. She was up a short ladder dusting a statue when she looked round and saw one of her school friends, whom she knew to be away at the time, coming towards her. She felt great surprise and almost shock at seeing her friend in nun's dress. The young nun came up to her, beckoned to her to come down. . . . The nun then took her by the arm and led her away through a side door of the church, where she had never been before, and through the nuns' refectory, where no one is allowed, and thence into their private chapel, and brought her to one of the pews. She can describe everything, even one of the pictures on the walls of the refectory, which appeared to have several pieces of red tape hanging from a figure in the picture, and which she had not seen before, but subsequently was found to have correctly described. She knelt and felt someone near her: she looked up and, she says, there was Uncle Oldham standing by her. Her first thoughts were, mother never told me he was coming over to Belgium. But she felt something was wrong, his face bore such terrible suffering. He came up and placed his hand in hers and said: 'Minnie! I have done a terrible thing. I have taken my own life because a woman would not love me, and I am suffering much. I never believed what I ought to have on earth. Pray for me.' He told her he was in need of earthly prayers; they helped him. She then prayed, and after that the same nun came and led her out of church and she found herself on the ladder dazed. She managed to get down. when Mère Columba noticed she looked very white and ill, took her away, and she lay down for some hours. Since then the figure has appeared to her every morning, about four or five, but only momentarily. He has never spoken again, but each time his expression changed and a happier look came in his face. Her words were: 'Oh, mother, I have prayed so, I want to forget the

awful look on his face when I first saw him. That look is going now.' He came to her as usual the day she left, but nothing has been seen here in London. The child seems to take it very calmly. What worried her so terribly was not knowing the truth. She dared not write to ask me about it, as all their letters are read, and so she had to wait until she came home. The phantom told her everything: all I had intended she should never know. There is no one over there who knows anything about either him or ourselves. Each morning between the two bells he stands by her bedside and makes her understand he is happier, but he never speaks now."

To this was appended a further paper from the mother's hand, and also a description written by Minnie herself. Professor Barrett comments on this case as follows:—

"The following case is in my opinion one of the most interesting and impressive of the many cases of phantasms of the dead that have ever come under my notice. Knowing as I do the young percipient, and her absolute truthfulness, transparent sincerity and bright intelligence, I am convinced of the substantial accuracy of the story she has told. Moreover, the fact of her being secluded in a convent school when the apparition occurred—a place in which no news of the outside world is allowed to percolate, except through letters from relatives which are previously opened and read—this in itself renders the case almost an ideal one, and it would have been wholly so had Mère Columba lived a little longer, so that her confirmation of the story and date of the apparition had been obtained. Nor do I see how any explanation of the case can be based on telepathy from the living, except by making assumptions which are more difficult to accept than the hypothesis of the conscious survival of the personality for (at any rate) a certain period after the death of the body."

In Chapter xxxiii. of this book, I quoted a letter of T. Adolphus Trollope to the Dialectical Society, stating the opinion of "Bosco, one of the greatest professors of legerdemain ever known," who scouted the possibility of such phenomena as Trollope had seen and described,

as being performed by such means.

He has since published a series of autobiographical

sketches in two volumes entitled: "What I Remember," by Thomas Adolphus Trollope, 1890, which describes many interesting psychical experiments and phenomena in the author's experience. He narrates one of these as follows:—

"I will place on record a singular story of a so-called supernatural occurrence which happened within her experience. I premise that she was, in my opinion, as accurately truthful a person as ever spoke; also that she was markedly calm by nature, and especially little liable to be made the fool of purposed deception, or of

any tricks of her own imagination.

"Although I remember the story very well, I have thought, when I set about to write it, that it would be well to make sure of my accuracy. And with this view I have written to the lady in question, and have received so accurate and lucid a statement of the facts that I think I cannot do better than give them in her own words.

"'I enclose an account of the circumstance of my childhood about which you have inquired, such as I have heard it frequently stated by my mother. I was between five and six years old, and was sitting one winter evening at dinner, with my father and mother. Suddenly looking up, my mother perceived that I was deadly pale and shivering. Much alarmed, she asked what was the matter, "Nothing," I answered, "only the lady who passed behind me just now smiled and blew upon me, and made me cold all over." To the various questions put to me by my father and mother I replied, without any signs of fear or wonder, that the lady had come in at the door behind my back on the left and had gone out at the window opposite (which opened on to a balcony); how I could not tell, for neither had been opened; that, though she crossed the room behind me, I saw her quite distinctly. I described her as tall and slender, with dark hair, dressed in a gray silk dress, and carrying a lighted candle. The pallor and fits of shivering lasted a day or two, and then no more was said or thought about the matter.

"'Some months later, a young gentleman called to see my parents. He had been a great favourite

and a frequent visitor; but had not, to their surprise. made his appearance latterly. On his entering the drawing-room, my mother noticed his sad and altered features, and his mourning garments; and inquired at once what had happened, and why he had stayed

away so long?
"'" Have you not heard," he said, "that my beloved mother died suddenly some months back? I was so broken-hearted that I left Paris after the funeral, and have been travelling in Italy to try to get over my trouble. But I felt my earliest visit on returning home must be to you, as I wished to tell you that my dear mother's last thought and words were about your little girl."
"" How so, since she had never seen her?"

asked my mother.

""No, but you are aware how fond I am of your child. And I had often and often spoken about her to my mother, and had promised I would bring the

little girl to see her.

""On that day we had just been summoned to our dinner, when my mother walked into the diningroom from her own room where she had been dressing. and on seeing me said, 'When are you going to bring little Clara to see me, Henri?' Before I had time to answer her, she suddenly dropped the light she was carrying and fell back in what seemed a swoon, but was in reality death from aneurism."

"'My mother with some agitation asked the date and hour of the catastrophe, and also inquired what were the appearance and costume of the deceased lady. All these points absolutely coincided with the

extraordinary vision I had had."

Mr Trollope also narrates a case frequently repeated to his wife by an aged man, the perfect veracity and accuracy of whose statements she always felt to be absolutely unimpeachable. When he was a child about eight or nine years old, he was living with his parents in Dublin, and his grandmother, Mrs Lawless, was living a few miles distant from Dublin. The boy returning from school ran upstairs to the drawing-room and asked, "Where is grandmamma?"

His mother replied that she was at her own home, but the boy replied, "No! she is not at home, but here." His mother said, "How could she be here?" But the boy answered, "She is here, mamma, for I have just seen her on the stairs." He insisted that his statement was correct. The old lady's figure and clothing were both of a remarkable character, the latter a rich old brocaded flowered-silk gown, and old-fashioned high-heeled shoes. The boy was always a great favourite of his grandmother. The corroboration was found when it was later discovered that "old Mrs Lawless had died exactly at the moment when her grandson saw, or supposed himself to have seen, her."

I shall cite one more case, a brief one, which is used as a part of the veridical evidence in a paper written by Frederic W. H. Myers, the distinguished author of "Human Personality," and published in the Proceedings of the Society for Psychical Research for July 1892, under the title, "Of Indications of Continued Terrene Knowledge on the Part of Phantasms of the Dead." At this period the author had just been President of the S.P.R., following Professor William James, Professor of Philosophy in Harvard University, and Sir William Crookes, F.R.S., and immediately preceding Sir Oliver Lodge, F.R.S., and

The narrative is a simple one, which is the sort which I prefer, for the lack of complexity cuts out much extraneous matter which is eagerly seized upon by many to complicate the problems and disturb the judgment. In this narrative, which is abundantly corroborated, as will be seen, the events described are either true, or they are falsifications or mistakes. If they are falsifications, then who were the conspirators, and what was the motive? If they are mistakes, and if human evidence is ever of any use anywhere, then what were the mistakes possible to be made in so broadly-drawn and categorical a narrative? While,

Professor W. F. Barrett, F.R.S. of Dublin.

established.

There are perhaps a dozen apparitional cases em-

if the facts as narrated are true, then the case is

braced in this paper, but the one I have chosen to

copy out is the following:-

Says Mr Myers, "We owe this case to the kindness of Lady Gore Booth, from whom I first heard the account by word of mouth. Her son (then a schoolboy aged ten) was the percipent, and her youngest daughter, then aged fifteen, also gives a firsthand account of the incident as follows:—

"'LISSADELL, SLIGO, "'February 1891.

"'On the 10th of April, 1889, at about half-pastnine o'clock, my youngest brother and I were going down a short flight of stairs leading to the kitchen, to fetch food for my chickens, as usual. We were about half way down, my brother a few steps in advance of me, when he suddenly said-"Why, there's John Blaney, I didn't know he was in the house!" John Blaney was a boy who lived not far from us, and he had been employed in the house as hall-boy not long before. I said that I was sure it was not he (for I knew he had left some months previously on account of ill-health), and looked down the passage, but saw no one. The passage was a long one, with a rather sharp turn in it, so we ran quickly down the last few steps, and looked round the corner, but nobody was there, and the only door he could have gone through was shut. As we went upstairs my brother said, "How pale and ill John looked, and why did he stare so?" I asked what he was doing. My brother answered that he had his sleeves tucked up, and was wearing a large green apron, such as the footmen always wear at their work. An hour or two afterwards I asked my maid how long John Blaney had been back in the house? She seemed much surprised and said "Didn't you hear, miss, that he died this morning?" On inquiry we found that he had died about two hours before my brother saw him. My mother did not wish that my brother should be told this, but he heard of it somehow, and at once declared that he must have seen his ghost. "' MABEL OLIVE GORE BOOTH."

"'The actual percipient's independent account is as follows :-

" March 1901.

"'We were going downstairs to get food for Mabel's fowl, when I saw John Blaney walking round the corner. I said to Mabel, "That's John Blaney!" but she could not see him. When we came up afterwards we found he was dead. He seemed to me to look rather ill. He looked yellow; his eyes looked hollow, and he had a green apron on. "'MORDAUNT GORE BOOTH."

"'We have received the following Confirmation

of the date of death.

"" I certify from the parish register of deaths that John Blaney (Dunfore) was interred on the 12th day of April 1889, having died on the 10th day of April, 1889. P. J. SHEMAGHS, C.C.

"'The Presbytery, Ballingal, Sligo, "' 10th February 1891."

"'Lady Gore writes:

" 'May 31st, 1890.

"'When my little boy came upstairs and told us he had seen John Blaney, we thought nothing of it till some hours after, when we heard that he was dead. Then for fear of frightening the children, I avoided any allusion to what he had told us, and asked everyone else to do the same. Probably by now he has forgotten all about it, but it certainly was very remarkable, especially as only one child saw him, and they were standing together. The place where he seems to have appeared was in the passage outside the pantry door, where John Blaney's work always took him. My boy is a very matter-of-fact sort of boy, and I never heard of his having any other hallucination. "'G. Gore Booth."

CHAPTER XLIII

SOME POSSIBLE EXPLANATION OF MATERIALISING PHENOMENA

REGARDING these materialisations, the last word has by no means been spoken. It has been asked, and by scientific sceptics most of all, where could these discarnate spirits get the material, either out of the atmosphere, or out of void space, wherewith to materialise? and the question has been deemed to be without a scientific answer. We know the presence and hence the density of the atmosphere, and we know that it would deplete the contents of a public hall to build up even a small-sized ghost into a corresponding bodily weight. Some of this material is said to come from the medium, some from the aura of those persons present, and some from the atmosphere; but, in fact, it is by no means certain that all of these together could furnish the entire material required for an actual materialisation.

But our popular conceptions of "void space" are perhaps the furthest from the truth of all the erroneous popular conceptions held concerning any physical

substance whatever.

And even scientific specialists do not seem to form any better conception of the practical contents of so-called void space than do ordinary laymen. Yet they profess to learnedly discuss and deal with these contents, whenever they deal with the phenomena of light, radiant heat, electricity and magnetism, which require for their transmission and manifestation, and for their generation as well, a density for the universal content of this so-called void space almost transcending imagination.

The transmission of light alone, for example, re-

quires a substance so dense or rigid that, in the mass, face to face, as it were, it will quiver from a state of absolute quiescence into a velocity or rapidity up to at least 1,000,000,000,000 oscillations in each second of time. It requires that rapidity to produce the sensation of violet light on the retina, and, in case of the sun, that this oscillation shall be continuous along a line nearly a hundred million miles long; for us to see the planet Neptune requires that the line from the sun to that planet as a relay station must be three thousand million miles long, and as long again for the wave of reflected light to travel back to our telescopes again.

To travel one hundred million miles requires about eight minutes, yet there are visible, nay, very conspicuous, stars whose light, we know, has taken many thousands of years to travel across space to reach us,

as it does.

Now, what is the significance of all this? Who ever thinks of it at all, while he thinks of void space all the time?

The significance lies in the fact that to vibrate at such a rate the void space must have something in it to vibrate, and the faster the quiver the stiffer the substance that quivers. That the quivering is always the same demonstrates that the mass of that which fills void space, and does the quivering, must be of a corresponding resistance, and hence of equal density and rigidity.

In other words, it acts under impulses like a tuning fork. Now as you shorten the legs of the tuning fork you raise the pitch, which means that you increase the

rapidity of oscillation.

The ether is a tuning fork, excepting that it deals with the ethereal light, etc., instead of with atmospheric sound, and the incandescence of the sun's photosphere starts the oscillation at the solar end, and we feel and see it as heat and light, at our end of the line; if we did not catch and stop it, it would go on through space indefinitely, as does all this radiant energy which misses the planets, which, in fact, catch only about one two hundred and thirty millionths of what the sun sends out.

We know the vibrating rate of the ether for light, hence we can know its density or stiffness, or rigidity, which must be very great.

Why then do we not feel it? Why, when we swing our arm around, do we only feel the weak resistance of the atmosphere instead of the vast

resistance of the ether of all space?

Simply, because the ether, while the substance of all substances in actual density and resistance, lacks one, and, so far as we know, only one, property of matter, and that is gravity. The attraction of gravitation does not immediately affect the ether to any considerable extent at all. The fact that light requires time for its transmission shows some action of agglutination perhaps, but to our own physical tests it is without gravity. Hence a physical body moves through it without resistance, simply because the free ether passes through all physical bodies somewhat as a fish net passes through water, and we note no resistance, and hence we say, "void space."

Sir John Herschel, in his paper on Light, has given us a table of the density of this ether, which results, of course, can be found in any scientific work dealing with these subjects. He shows that a cubic inch of this ether, if confined, and relieved from outside pressure, would have a bursting pressure of more than seventeen

billions of pounds to the square inch.

As we know that the density is proportionate to the bursting strain, and that a cubic inch of atmospheric air, under the same conditions, would have a bursting strain of only fifteen pounds to the square inch, we can form some idea of what this ether is. We cannot, of course, shut up this ether into a cubic inch, for it passes through all physical restraints, nor can we relieve the outside pressure of the ether which balances our cubic inch, so that we know that this universal ether fills all space with an equal density, and that the physical universe owes its existence, and all living forms owe theirs as well, to the solitary fact, that the omnipresent ether practically lacks the attraction of gravitation.

And Sir John Herschel adds, "Do what we will—adopt what hypothesis we please—there is no escape,

in dealing with the phenomena of light, from these gigantic numbers; or from the conception of enormous physical force in perpetual exertion at every point through all the immensity of space."

See also Lord Kelvin on "Ether and Gravitational Matter through Infinite Space" (Smithsonian Report,

1901), pp. 215-230.

It is this ether under strain which gives us the phenomena of electricity and magnetism. It interpenetrates all matter, and when enclosed in matter it becomes "bound ether." Sir Oliver Lodge, in his "Modern Views of Electricity," devotes much space to bound ether; and matter, our own crude matter, acts on the ether as soon as its vibrating particles reach the period of ethereal oscillation. This is the origin of our light and heat; that is why waves of ether give your skin the sensation of heat, when held opposite a red-hot iron rod. That is how the sun gives us light and heat. Says Sir Oliver Lodge, "an atom imbedded in ether is vibrating and sending out waves in all directions."

"Now, through free ether," he says, "all kinds of waves appear to travel at the same rate; not so through bound ether." On account of this fact we get our phenomena of refraction, aberration and dispersion.

So we learn, to again quote Sir Oliver Lodge, and I know of no higher authority, "the fact is certain that ether is somehow affected by the immediate neighbourhood of gross matter, and it appears to be concentrated inside it to an extent depending on the density of the matter. Fresnel's hypothesis is that the ether is really denser inside gross matter, and that there is a sort of attraction between ether and the molecules of matter which results in an agglomeration or binding of some ether round each atom, and that this additional or bound ether belongs to the matter, and travels about with it."

It is true, as I have stated, that free ether does not possess attraction of gravitation, and hence possesses no "weight," but we do not know what gravitation is, or why some things have it and others do not, or whether what does not have it at one time may not have it at another. We know that the gravitational and non-gravitational substances, as I have just cited, tend to

agglomerate with and mutually affect each other, and that if even the most minute portion of such ether should suddenly be associated in such a way as to acquire the energy of gravitation, or anything akin to it, we would have a solidity, a ponderosity, and a physical momentum sufficient to move the heaviest bodies about like playthings, and penetrate, it might be, solid matter, like

cannon-balls, without leaving a trace behind.

Nikola Tesla, so long ago as 1891, foresaw that this prodigious mass and power of the ether (see his Lectures before the American Institute of Electrical Engineers) will soon be utilised, in a strictly normal way, as a source of ordinary motive power. We are, indeed, doing this now, excepting that we start the process at second hand and, by the use of coal or water-power as an intermediary (for these are both the direct products, through solar light and heat, of the energy of the ether), from eddies along the shore, as it were, instead of a direct appeal to the great universal source, the eternally acting ethereal motive power of space. Said Tesla, "There is a possibility of obtaining energy not only in the form of light, but of motive power, and energy of any other form, in some more direct way from the medium. The time will be when it will be accomplished, and the time has come when one may utter such words before an enlightened audience without being considered a visionary. We are whirling through endless space with inconceivable speed, all around us everything is spinning, everything is moving, everywhere is energy. There must be some way of availing ourselves of this energy more directly."

If invention, as I have endeavoured to show in a previous chapter, comes from the supernormal, which is the discovering and creating realm, then it may well be that in these supernormal regions this very discovery has long been made which we have, as yet, been vainly

seeking here.

Franklin, whose place at the very head of electrical discoverers is now secure, by such an inspiration, drew down from the sky this very electrical energy at first-hand—true, 'twas in a small way, but when he was asked, "Of what use is all this kite-flying?" he could

respond with his immortal reply, "Of what use is a

baby?"

In the light of our recent discoveries in the fields of radio-activity, of the X-rays, of wireless telegraphy, and of the electron theory of matter, it can hardly be considered bold, to-day, to ask for a suspension of judgment against a priori attacks on possible explanations of such occult phenomena as once were relegated to the devil, then to discredited history, and finally to superstition, but which, notwithstanding, have lived on, and grown and strengthened, for, as Sir William Crookes has said, the Vision of Nature grows more august with every veil that is lifted.

Science is clearly moving in the direction of the spiritual; nothing can be more certain. In every thunderstorm one may see the almost resistless power of ether under strain, bound up with, and binding in, the nebulous vapours, dissipated, diaphanous, intangible, scarcely the skeletons of form, gathered from stream and sea, empty and idle, till "materialised" by the ether.

Granting a discarnate spirit, let us say such "a specialised and individualised form of that Infinite and Eternal Energy," which Herbert Spencer, in his last paper conceded the "Consciousness" to be, and of which Spencer "inferred," without telling us why, "that at death its elements lapse into the infinite and Eternal Energy whence they were derived" (and which seems to me as much of a non seguitur as that a baby, when it died, lapsed into its surviving grandfather), but granting, instead, that since it had been specialised and individualised, and trained and developed, it remained a discarnate individualised spirit, and was attracted, by sympathy perhaps, to a special medium, and desirous of communicating with surviving mortals, and granting, too, that an efflorescence, let us say, from the medium, another from the bodies of those present, and a third from the atmosphere, perhaps, might be tangibly available as a framework, it is not at all incredible that bound ether, under strain, might be attracted to, and agglomerate with, and, acting under intelligent power, might possibly produce all the phenomena of materialisation, and those of poltergeists, and other like manifestations.

Such an interpretation might also serve to account for the almost universal employment of such terms as "magnetism," "electricity," "animal magnetism," "etherealisation," "materialisation," and the like, applied in spiritualistic nomenclature, simply because they seem appropriate, while no other terms are; but, as the most careful tests show, which phenomena do not respond to electroscopes, magnetoscopes, galvanoscopes or other similar instruments.

CHAPTER XLIV

SOME PERSONAL EXPERIMENTS IN MATERIALISATION

I am not, however, broaching a theory; I am merely endeavouring to present a scientific suggestion which may serve to excuse, on the part of scientific students, any investigation of these remarkable phenomena, which

they may be persuaded to undertake.

At all events, phenomena of this character have been too common everywhere, in all parts of the world and during all past times, as well as at present, for us, as scientific students, to ignore them. It may not be possible, at present, to explain these phenomena, at least to fully explain them, but their substantial identity is so remarkable in all the narratives, that they must have some valid basis, and must be in accord with the great law of continuity, and almost certainly with the continuity of life.

They involve telepathy and thought transference, and very often prevision; almost always clairvoyance; and the physical manifestations clearly extend far beyond

phenomena of these types alone.

In fact, the physical and the non-physical seem to blend in these cases in such a manner as to suggest a revision of all our conceptions of crude matter as formerly held, and this is what science to-day, in the light of its recent advances, stands ready to accept, on proof.

Many reported cases of materialisation are disputed because the records have been made long subsequent to the occurrences, and theories of malobservation and defective memory have served, often most unjustly, to

discredit the narratives.

A case occurred in my own experience, however, in the spring of 1902, to which these objections will, perhaps, not be pertinent, as the narrative was written down at once after the experience, was commenced, in fact, within twenty minutes afterwards, and finished immediately.

I have also secured valid data, I think, excluding hallucination and hypnotism as elements. As for the personal good faith of the narrative, that will have to take its chances, excepting that another of our members went with me a week afterwards to the same medium, and the case was continued with added information, with no materialised form of this personage of whom I speak, but with plenty of others, not matters of scientific interest to me, and of which I made no written record.

I have read this manuscript before the Philadelphia Section S.P.R. in June 1905, and I will very briefly

abstract it here.

About thirty sitters were present, arranged in an elongated horseshoe, with the cabinet at the open end. A dim light was burning behind the curve of the horseshoe, throwing its red light on to the cabinet, as usual.

The medium's son sat beside the entrance of the cabinet, outside, showing a vast expanse of white shirt-bosom, which certainly remained there during all the proceedings. Opposite him was a well-known florist, who brought a bunch of long-stemmed roses, which he laid on the floor by his side.

The cabinet was closed in its rear, being an alcove from the parlour. It had one window opening on the

yard, but the shutters were closed, and locked.

In other words, ordinary precautions were taken to eliminate confederates. I know of my own knowledge, however, as some of us had sittings in private houses with the same medium, with a powerful electric street light outside, where the medium had, and could have had, no confederates there, and the audience consisted of four members of the S.P.R. only. In fact, I tested the confederate hypothesis with this medium so often and so conclusively that I know that whatever other fraud might have been charged, it could not be of this character. That she fraudulently impersonated the materialised forms herself is another question.

Regarding this latter, with other mediums, I can only cite such cases as the well-known experiences of Sir William Crookes, who felt and handled at the same time,

at arms' length from each other, the materialised Katie King and the medium Florence Cook, in his own library. as described in his published works. Or those of my friend, Dr Bayley, a very capable neurologist and expert in mental cases, and a most cold and critical observer, of excellent training, who was, on one occasion, called into a cabinet of this character with another medium, and from handling the forms inside declared unequivocally that there were there two living human organisms. Also a case of my own with the medium I am now describing, in which I was called into the cabinet. The medium was stout, clad in black, with a closely-buttoned and braided "body," fastened up with multitudinous black-glass buttons, and the cloth as closely stretched as the skin, it seemed to me. I only found one tangible form in the cabinet, but when I had "communicated sufficient strength," I turned to go, and, as I stepped out into the room, I heard a cry of surprise from the audience, and instantly turned to find myself followed by a thin, tall, female figure, clothed in white. The time required for this transformation could have been not more than three seconds, and, like Sidney Smith, the medium would have had to strip to the bones, pretty nearly, to effect this change of contour and costume.

I do not fully understand these things, but that is no reason why I should allow others who understand them very much less, or not at all, to do the understanding

for me. I agree with Professor De Morgan that,

"The physical explanations I have seen are easy, but

miserably insufficient."

I will now recur to the case of which I made the record at once, and from this record I make the following brief notes.

A patient of mine, aged more than eighty, an old and dear friend, had suffered for about nine years with a traumatic rotary curvature of the spine, gradually progressive in character, and finally, by a passive pneumonia, terminating in death, at which I was present. When all had left the room, I laid my hand on my dead friend's forehead, and said, "Dear friend, I will see you later," meaning in the great beyond.

He was buried the succeeding Saturday, and next day,

Sunday evening, as it was raining violently, and my offices promised to be empty, I concluded to go down a few blocks, and see what my other old acquaintance, the medium, whom I had not seen for more than two years, had to say. I found her packed up for her summer visit to Onset, in Massachusetts. She had been ill, and had just returned from a short visit to the country, those present told me.

The sitting proceeded, as I have already described, many forms coming out to their alleged friends and relatives, in which I took, as it was an old story, a very languid interest. "Patie," her spiritual child-assistant, and I, however, had something to say to each other, as she was one of my fast friends. I will now quote from

my manuscript.

"About a half-hour after the sitting commenced, and after numerous other manifestations to others, there appeared a tallish (for a woman) figure, much bowed over, and walking with an uneven motion, and an apparently conspicuous limp, more especially on its right side. As it advanced between the lines of sitters, which were about 6 ft. apart, it carried its arms, in front, bowed towards each other at nearly the height of the mouth, and at every step swaved them simultaneously up and down, as though either to assist in walking, or as a sort of movement of recognition, or both. As it stepped along, several said, 'The poor lady is lame.' None seemed to know her, nor did the appearance speak or make any sound from first to last. When nearly opposite me (and up to this time I had taken no especial notice), it turned suddenly, and came directly in front of me, still waving its arms up and down, and then stopped within a foot of me perhaps, and waved its arms, while standing, still the same. I saw at once that it was not the face of a female, but was the living image of my old friend, as though taken some year or more, up to five years and more, ago. It had the same strong face, short gray side and chin whiskers, bare lip, short, white hair, and a sort of bandage about the upper part of the head, while the breadth of chest was extreme, as it was in the case of my deceased friend, and which was one of the prime factors of his holding out so long, for a number

of years after the accidents which finally caused his

death.

"I expected him to speak, and I waited breathless, but almost before I saw what was happening, the form receded, still waving the arms, and was gone into the cabinet apparently. I supposed that it had, perhaps, gone back for more strength, and would reappear, but it did not do so.

"After waiting a good while, and after a number of other appearances had come out, I appealed to my little friend 'Patie,' who is always ready, behind the curtain, to explain things. But first, in an interval, I asked the company if it was a male or female. All said it was a female; one said, 'It was a lady, and she came to you, doctor.'

"As for the garb, the figure was clothed in apparently pure white, and the sleeves were full, and closed

at the wristbands like a clergyman's sleeves.

"In fact, the whole garment was much like a surplice, or a white shroud. The arms obstructed the view somewhat, as the bent elbows were in front, I presume.

"When I spoke to Patie, I said, 'Patie, can you tell me the name of that person that came out, the lame one?"

"'I didn't get any name,' she replied. Then suddenly, 'Doctor, she was a he.'

"'Are you sure?' I asked.

"'Oh, yes,' she replied, 'it was a gentleman, and he

came to you.'

"Then, after a long pause, 'Doctor, wasn't there something wrong with that lame gentleman's top-knot?'

"'What do you mean, Patie?'

"'I mean,' she said, 'wasn't he 'ranged in his head?'

"'Yes, rather, towards the last,' I said.

"'Yes, I thought so.' Then

"'Doctor, didn't that gentleman pass over from an accident?"

"'Well, partially so, but it would take a long

time to tell you about it.'

"'Yes, but it was a pesculiar case, wasn't it?'

"'Yes, it was, Patie.'

"'I thought so, it was a very pesculiar case.'

"After the sitting had been going on perhaps ten minutes longer, I having asked Patie to see if she could find out anything more about him, she said,

"'Say, Doctor, didn't that lame gentleman have

something to do with grain and feed?'

"'What makes you think so, Patie?'

"'I get a 'pression of grain and feed; it is only

a 'pression I get.' "

A half-hour later another figure appeared, which spoke the single word (let us say) "Rachel." She then walked directly up to me, leaned over, and repeated the word "Rachel," and retired.

I then asked if this Rachel was connected with the lame person, and a series of rapid knocks came from the cabinet. Patie said that she had passed out

first.

A little while afterwards the name "Carberry" was spoken, and Patie said, "I think that's for you, Doctor, too; don't you recognise it." The name "Saylor" was also called out. Patie suggested that Rachel and these others "all belong together."

The corroborative facts are that Rachel was the name of the long-deceased wife of my friend, whom I knew and attended till her death, that her maiden name, while not Carberry, was all that excepting the latter part, and that Saylor was the name of her

married sister.

As regards my friend himself, he had much to do, in a large way, with grain and feed; his death was secondarily due to accident; and he was deranged in his mind for a considerable time before his death. Owing to the progressive injury to the spinal column, he walked precisely as he appeared, bent over, limping on the right side, tottering so that he had to be aided on both sides, but occasionally took a header of his own, with disastrous consequences.

He wore a long, nearly white bath-robe habitually, for he mostly sat in a large adjustable chair, precisely as he appeared before us, with a cord around the waist,

but not always tied.

The most remarkable coincidence to me, however,

was that up-and-down motion of his bowed arms to his mouth and back again, and so on, repeated over and over.

It was due to a hallucination, not uncommon in these spinal cases, that his teeth (he had excellent teeth for his age) were wired together at the roots.

I employed dentist after dentist, for some refused to extract sound teeth. I consulted with the wife, and at his persistent demands tooth after tooth was extracted, to give him evidence of the unsoundness of his theory; which nothing would accomplish, and up to his death that mute appeal of his vibrating, bowed arms, from mouth to waist was the one conspicuous feature of his sufferings. If he had sought the world over, he could have found nothing so evidential as this, of his surviving personality.

Of course this was a professional and sacred secret, known only to his wife and nurse and to myself—that

is, fully known only to us.

It was not a thing to be talked about, and if it had been, the motion itself was most unlikely to have been imitated.

The medium, I am sure, knew no one of this family, nor of their connections; there was not a spiritualist among them, and they were members of the Episcopal Church, from which church he was buried.

In endeavouring to account for these phenomena, while the experiment was in progress, I took account of the often-used hypothesis of collective hallucination, for which, however, I have never seen sufficient evidence in physical cases.

But the opportunity presented itself, by which I satisfied myself that this was no part of the explanation required. Among these materialised forms were

two whom I had met there long before.

One of them was good old Mother Wheat, a resident, while in the flesh, of Wheeling, W. Va., whose old inhabitants she had at her fingers' ends, and who was very loquacious in her quaint way, and always urging me to continue my scientific work along these lines; the other was Namouna, an alleged

resident of Mars, here temporarily in pursuit of her anthropological studies, a very beautiful and attractive young girl, fond of talking with me on her life in Mars, but who made me think far more of

Venus than of that other planet.

But, on the "collective hallucination" basis, these two hallucinatory visions, during the evening, each brought me a beautiful hallucinatory, long-stemmed rose, from those lying on the floor, beside the florist, and put it in my hallucinatory hand with very complimentary but hallucinatory thanks and

good wishes.

I grasped these hallucinatory roses fast by their stems, or thought I did, for I made up my mind not to let them escape for an instant, and, at the close of the sitting, I carried them home, still grasped in my hand, and then gave them to my daughter, who, at once, in admiration of their beauty, placed them in water in a deep vessel, and they remained and kept in bloom on the dining table for days and days afterwards.

I merely cite the facts, however, leaving to other skilled psychologists the interpretation of the

phenomena.

CHAPTER XLV

SOME FURTHER EXPERIMENTS WITH PSYCHICAL PHENOMENA

I DESIRE now to make brief reference to another materialising medium, who is usually in Philadelphia for a few weeks during the winter, and who is known to many of the members and associates of the S.P.R. here.

She is very much of a lady, refined and intelligent, and when I first knew her, a few years ago, had a lovely and devoted young daughter just budding into womanhood.

I have never known this lady, or her daughter, intimately, but I have been acquainted with them for probably nine years. I have been present at perhaps a dozen of her séances. My interest in these phenomena has been purely in the way of investigation; nothing would be more repellent to me than personal communications involving the present or future, if of any important or specially significant character.

I may describe, somewhat, the meeting of this lady with her sitters. Her young daughter was always present, and looked after the safety and welfare of her mother, sat in the audience outside the cabinet, and manipulated the cord which regulated the light. This medium, like the previous one, sat indifferently in her own room, or in the private houses of friends or acquaintances who might like to have her with them at their own homes.

She had a beautiful home of her own in Southern California, and was herself a native of South-western Tennessee. I have heard from another mediumistic friend, that, when a young girl, she used to have all

her present manifestations take place anywhere out in the orchard, in any room or shed, or, in fact, anywhere. In her séances which I have attended the cabinet was a rather curious affair. For convenience sake she had made a slight knock-down construction which she carried with her. It consisted of four uprights hinged in the middle, with their tops and bottoms joined by cross-pieces; the whole was a skeleton put together something like a jointed fishing-rod. Over the top and down three sides were buttoned grey blankets, to buttons fixed on the sticks. and together, something like the curtains used in sleeping-cars. Another blanket, overlapping the others, at the edges, hung loosely down in front, and could be flung up, over the covered top, or pulled down by the hand, to cover the opening in front.

The loose materials for this cabinet, which, when completed, was about four feet square, and six and a half high, usually lay on the floor, and we were accustomed to put the construction up ourselves, without interference from anybody, and placed it in any convenient part of the room. I do not recollect any occasion on which it stood against a wall, and people could pass freely around it, and did so, at pleasure. The whole affair was about as simple and unconventional as possible, and I have attended séances there, with other members of the S.P.R., in which we knew personally everybody present in

the room.

The medium usually came into the parlour after everything had been prepared, and made, or suggested, any little changes of chairs or lamp, or of other fixtures desired, although the daughter was very careful and competent, by herself.

This medium's performance usually opened with some experiments similar to those described by Zöllner in his "Transcendental Physics," or some of those described by Sir William Crookes, with the

medium Home.

These phenomena occurred in full gaslight, and I will only mention them to give an opportunity to describe a little interpolation of my own.

She stood in the open cabinet, with a wooden chair beside her, with cross-rounds beneath, and cross-bars in the back. Any chair commonly used in the house served; I got her one of my own from outside the parlour on one occasion.

Her hands were then bound together by any of those present; I and my S.P.R. friends sometimes assisted in this, and I will merely say that we did the best we could. The medium was entirely passive, and agreed to any sort of tying, or any sort of cord

produced by any of those present.

Perhaps she could slip her hands out; she had very beautifully formed hands and wrists, but it was not the ability to slip the hands out that puzzled me, but how she could get them out, do her juggling, and then put them back again in the short time occupied. I am very familiar with mechanics and mechanical operations—have, in fact, taken out a hundred or more mechanical patents, have been long identified with mechanics, and have frequently been called to testify, as an expert witness, before United States Courts in patent litigation, so that I do not approach

this difficulty precisely like an amateur.

The modus operandi was as follows: -Someone, anyone, would catch and pull down the front curtain, thus putting her in darkness in the cabinet. In a moment she would call "light," and the curtain would be flung up by anyone present, and she would be seen to have the chair strung within the rungs, upon her bound-together arms. Curtain down again, "light," and the chair would be strung by other of its rungs, and so on. Or a coat flung in would be turned wrongside out and found put on by the medium, either put on correctly, or else with one sleeve turned wrongside out and put on, or else, if a large coat, with its back twisted two or three times across the back and the sleeves on the arms correctly. Looking at the back, the coat sometimes looked like a twisted rope across the body. Or she would take handkerchiefs, and make them up into the most comical little effigies of babies, Indians, or the like.

The time element was the significant factor to

me, and to all of us. From fall of curtain to cry of "light," and flinging it up, the time was never longer than nine seconds, varying from that down to three or less. Of course, the exhibition, with the open curtain, was as long as anyone desired. I have seen, as we all have, a chair dropping, midway in the air, as the curtain was flung up, and falling with a crash on the floor.

On one occasion I asked her if she had any objection to my snapping a rubber band on her wrists, over the other bindings (and that is why I am narrating these trivial incidents). "Certainly not," she said, and I took out of my pocket a thin rubber band, such as they put round small packages—about an inch or two across when unstretched. She held out her bound wrists, and I snapped it on the wrists so as to make contact with the skin directly.

The experiments went on just the same, but after a few minutes the daughter interposed, and said she would not have her mother tortured, and I removed the rubber band. I was sorry to see that it had left quite a deep imprint, as such rings will, in the flesh.

Of course this rubber band could have been removed and reapplied readily, but I could not see how any movement of the hands which would enable them to be slipped out of the cords, and then again slipped in, could, at the same time, remove the hands, or hand, from the rubber ring, and again reapply it.

I will not narrate any materialising experiments with this medium, except to say that it was with this lady that Dr Bayley's experience occurred in the cabinet, in which he believed that he distinctly handled two apparently solid human forms, at the same time.

I will, however, mention that it was usual with this medium to have the curtain flung up at the end of the séance, and draw the medium out into the room seated on her chair; and any of those present were then invited to go up and examine her. The room was fully lighted at these times. On one of these occasions, within five minutes, certainly within ten, after I had tested the pulse, and, approximately,

the skin and temperature, of one of these materialised forms outside the cabinet, I did the same for the medium.

I found her pupils rigid, her eyeballs insensitive to passing the fingers over them, the skin cold and clammy, and shrunken and wrinkled, the pulse 90 and very thready and contracted.

The arms were cataleptic, although this might have

been simulated by the subject.

The whole physical objectivity, however, was abnormal, and pathological, so that, if I had been called to see a case presenting those phenomena, I should have considered it a serious professional case.

The form I had seen before outside the cabinet was rosy, warm, plump, with skin moist, lips red, and as quick and active as any young girl would be in a state of perfect health. In fact, very much like what the form purported to be, and which claimed to have passed over thirty-two years ago, to the very month, as she correctly informed me, but which fact I did not know till I looked the data up afterwards, and computed the time by other evidence.

So much for the phenomena. Now there is another difficulty with this medium, on any basis of alleged fraud or deception, which I am totally unable to explain, taking human nature to be of any worth

or character whatever.

For many years my brother was engaged in the jewellery business in Carlisle, a small city in the interior of Pennsylvania.

He usually purchased his stock in Philadelphia and New York, and among those from whom he bought in Philadelphia was a wholesale house which I

will call that of Mr Hooper.

I was practising medicine in Philadelphia at the time, and my brother often called upon my family, or I met him down town, and sometimes went with him to some of the houses from which he bought his goods. As I sometimes wanted a watch, or other articles in his line, he took me with him and introduced me, among others, to Mr Hooper, and asked him to sell me anything I might want just as he sold such

goods to him, which Mr Hooper consented to do, and of which opportunity I availed myself. All this was

perhaps twenty-five years ago.

My brother recommended Mr Hooper to me as a thoroughly reliable man. I know he had an excellent reputation, and did a good business. He was a member of the Episcopal Church, as he still is; and, in due time, having acquired such a competence as would satisfy him, he retired from business, in which he has not since actively engaged. He certainly was and is a very fine man, against whom I have never heard a word of disparagement, and many of my friends know him personally, and I have, for my own reasons, inquired about him, from others.

When I first visited this medium in question I found that Mr Hooper, with others whom I knew, was present, sitting back and examining the phenomena much as I did. I was told that he was a

believer in the truth of the phenomena.

So it continued, and when the medium was, at intervals, in Philadelphia, he attended the séances at various times, and meanwhile the young daughter grew up to be a beautiful and intelligent young lady. Some years afterwards they were married, and the family has since consisted of the mother, daughter and son-in-law.

As the daughter is devoted to her mother, and accompanies her in her journeys, so the husband now does likewise, and they thus live and travel together. It was at first contemplated by her to retire, and they went to their home in Southern California, for that purpose, but "the call of the wild" was upon her, and she was unwillingly taken from her rest, and again forced into her laborious life of psychical work. Mr Hooper, later, bought a beautiful place by one of the lakes in Central New York, where they spend part of their vacations.

One of my friends, of the Philadelphia Section S.P.R., an old friend of theirs, visited them at their home last year, and could not speak too highly of the home life of his friends.

Now the problem which I am unable to solve is this:

Mr Hooper is a man of independent means; he retired from business to have opportunity for rest and study. He is an orthodox Christian, a member of the Church, and a man universally respected. He is withal, as are his wife and her mother, modest, quiet, and altogether unaffected, and with no craving at all

for notoriety.

For years past he has travelled with his wife and her mother wherever they have gone; he is always present at, and takes an active part in, the séances now; attends to much of the detail work; apparently he loves, honours and respects his family; and yet, if there is any collusion, or impersonators, confederates, trickery, fraud, or anything of the sort, it is an absolute certainty that he must not only long since have known it, but must spend his life in aiding and abetting it.

And for what? The money profit of those séances to Mr Hooper must be a mere nothing; to anyone, indeed, the profits would be considered very moderate; for these three people, together, the profits could not exceed, on an average, the weekly salary of a good ordinary mechanic, and the labour is hard and exhausting. They have two beautiful homes to fall back to, and ample means to carry them

on.

But if this medium has an appointed work to do, and feels it, and is controlled by influences beyond her own personality, and if her son-in-law and daughter feel this also, and bow to it, then I can understand the whole situation.

CHAPTER XLVI

INCONSEQUENTIAL CHARACTER OF MUCH OF THE PHENOMENA, WHICH MAY YET BE OF EXTREME VALUE FOR SCIENTIFIC PURPOSES

To show the utterly inconsequential character of the stuff which often comes along the invisible lines, and yet that it has a value of its own in quite other directions, I will refer to a case of table tipping, to which I have already referred as one in which the table worked like a sawmill, and in which I was a principal

party, quite unexpectedly to myself.

I was asked to call at the house of an acquaintance on Sixth Street, where three or four mutual friends occasionally conducted table-tipping experiments among themselves. I dropped in about ten o'clock one evening, and the time up to half after one was occupied with a single message to myself. Nothing else turned up all the evening, and I fear that my three partners were a good deal disgusted with the paucity of the outcome. Nevertheless, I found considerable side interest in following out and

endeavouring to account for the clues.

The table was a light, oblong, folding table, such as are used by ladies for cutting out children's dresses, etc. Two of us sat one one side, and the two others on the opposite. The sensitive sat diagonally across from me. We sat there and talked upon various subjects for about fifteen minutes, when the table took a slide diagonally across to the sensitive (who was not a professional medium at all, of course, but the lady of the house), and so manifested that some communicator was at hand. Questions, with constant calling over the alphabet, then ensued, and the following was elicited:—

"Iohnsteefasavif-"

Two of the sitters believed that we were "away off," and so we went over the letters again and again, but the table pronounced them correct every time. It was then suggested (notwithstanding my notion that I had turned up some antique Hindu disciple, for the communicator insisted that he was dealing with myself only), that perhaps the gibberish might be split up, and the "presence" separated it out as suggested, and then continued the sentence as follows, announcing that it was then complete.

"John Steefa say if you do more of this good

results will come."

The substance of this was obviously very thin, but it might be interesting to discover who John Steefa was, and what he had to do with me.

The facts gleaned out were the following, although I had no recollection of John Steefa, nor do I now

believe that I ever heard his name.

He saw me in Philadelphia; it was in 1862; in September; the 28th of September; I did him a favour; he was from the west; from Arkansas; he was not a Confederate soldier; he was in the Confederate army; he was at Antietam; I first saw him in Maryland; he was coloured; he was light coloured; he was not a cook; he was a teamster; he was in Longstreet's corps; he drove an ammunition waggon in the train; he was captured; then deserted from the Confederates; he was captured by Union cavalry; he was taken up to Greencastle, Pennsylvania; he came to Philadelphia from Greencastle by way of Harrisburg; never heard of Chambersburg; he went to Providence, R.I., with the cavalry; was left there; afterwards returned to Arkansas; it was to Southern Arkansas; he died there in 1878; he was never married; he first learned about table tipping after his death.

Now this story hung together very well, and much of it was so unlikely that I hardly see how my subconsciousness could have held the clues, or connected

them up.

For example, in 1862, I had not yet become a

resident of Philadelphia, but as a soldier I passed around it once, with troops, in June 1862, but was only a part of one day in Philadelphia in that year, which was on some one of the following days, 25th,

26th, 27th, 28th or 29th September.

The "catch" as to his belonging to the Confederate army, and yet not being a Confederate soldier puzzled me greatly, and was only solved by the fact that he was discovered to have been a teamster servant and not an enlisted man. That he knew Greencastle and Harrisburg, yet not Chambersburg lying between, is accounted for by the fact that we went north at night in box cars from Greencastle, and he, no more than the rest of us, waked up so as to see Chambersburg, although I was born there, which we passed at night. I was with the cavalry which (two thousand of us) broke out from Harper's Ferry, through the Confederate cordon (the place surrendered early next morning), passed through McLaws' and Longstreet's troops, and intercepted, attacked and captured the latter's ammunition train of more than eighty-six mule waggons, with coloured drivers and a heavy infantry guard, bringing the waggons and hundreds of prisoners into Greencastle at nine A.M., 15th September, whence we returned to the Antietam battlefield, on Tuesday, 16th September, and which is a matter of history. The coloured drivers, of whom there were perhaps a hundred, were left stranded in Pennsylvania, and some of them, one or two I believe, "sneaked their way" along with the troops to which I was attached, when they returned to Rhode Island at the end of September.

But the personality of John Steefa, if I ever encountered it, was at all times so vague and disconnected from me, that I cannot recall him, or his name, or his doings at all. Perhaps I helped him to "sneak into the cars" when they left Philadelphia; perhaps I got him some "grub" here; perhaps I did something else for him; and perhaps there was no John Steefa at all, and the whole scheme may have been a dramatisation from some other source entirely; which,

of itself, is of psychological value.

Another case, of which I have just seen the manu-

script, two thick volumes filled with automatic writings, which appear to be genuine. But of what do they consist? Of a series of formal sermons by some practised clergyman, with text, outline, headings, and all the paraphernalia, directed to this Christian girl who indited them, doubtless effects of that "ruling passion strong in death" of some ambitious clergyman cut off in his prime.

CHAPTER XLVII

VISIONS OF THE SANE—APPARENTLY AKIN TO CRYSTAL VISION

In connection with the phenomena of crystal vision, I may refer to what are known as "Visions of the Francis Galton and others have written of these visions, but their explanations, such as unconscious action of the usually idle cerebral hemisphere, etc., are lamentably weak, as I know from my own experience. These visions are dramatic in the extreme, but differ entirely from the hallucinations of insanity in that they are visualised externally, do not possess the visualiser, and, while not controllable by the visualiser, may be cut off at will. I have a patient, a most intelligent elderly lady, who has what she calls her "circus," at various times. Many persons, by an act of memory, can recall past scenes, even photographically, as it were, and recollect actions, conversations, etc., in quite a dramatic manner. But this lady tells me, and I have confirmed it experimentally, these revived memories are not only different in degree, but different in kind. The visions I refer to are of the same vividness as crystal visions, are, in fact, as vivid as if enacted in broad daylight before you, and are full of life, light and colour.

No scene in a theatre, no battlefield, can exceed these scenes and actions in vividness, and they are always new, strange, and unexpected, and, as far as I know, are in no sense revivals of faded, conscious

memories.

One of the visions of this lady, which visions usually came while wide awake, but mostly while lying in bed, was of a tall, spare woman, who paraded up and down, a few yards away, in front of a grove of

trees. She wore a very rare Indian shawl, of magnificent pattern, which appeared in all its rich patterns and textures, and her object was to display it at its best to this observer. She told me that the actions of this vain shawl-wearer were the most dramatic and amusing possible, and continued for a long time.

Another was of a very nice-looking man, who had two heads. These heads rose straight up from the shoulders. When she first saw him he was endeavouring to conceal himself behind one of a group of trees. But the tree-trunk, while large enough to conceal the body, could not conceal more than one of the heads and faces.

In consequence, the visible head dodged behind the tree-trunk to conceal itself; this brought the opposite one into view, and the evident mortification alternately experienced by these heads was so graphic that it became pathetic. In her experience, she told me, nearly all these phenomena occurred in front of or just within the margin of a grove, or row of trees, which is not at all the case with my own experiences.

One of the cases of this lady may have indicated a dramatisation of a lapsed memory. She saw a rather young lady, whose dress had caught fire, and blazed up suddenly above her head. As the flames rose all around her, she turned her gaze to the observer, and she told me that the look on her face was so vivid that she would never forget it. I suggested a look of horror; but she said, no, that there was no horror, nor fright, nor pain, but a startled look of extreme surprise or astonishment. Some years before this the mother of this lady's daughter's husband, an elderly woman, had been burned to death, in her own house, and she heroically warned away the frightened housemaids who rushed to her assistance. But the lady of whom I am speaking was not there, did not see it, and had nothing to do with the events which occurred.

She told me also that she had a dressmaker, who told her (from some hint, I suppose) that she had frequently had these same experiences, of a remarkable

character, and that they often gave her much annoy-

ance by their persistence.

These phenomena will often continue daily or nightly for months; then they will cease, and afterwards reappear, but I can testify that, in those cases which I have investigated, neither health, habits, associations or modes of life have anything to do with them.

They are not visions of drowsiness; though best seen with closed eyes; sleepiness and stupidity are fatal to their production, and cause their disappearance if one begins to become sleepy. Ordinary aches and pains do not affect them, nor does music, noise, movement or conversation. They do not disappear with the withdrawal of attention; they keep moving along and persisting in their own way, and when the attention comes back to them they are found to have progressed in the meanwhile just as actual external occurrences would have done.

I will give some brief description of my own experiences in this class of phenomena, which clearly lies along the dividing line between matter and mind, and belongs directly to psychology, some of the princi-

ples of which they may serve to elucidate.

In the first place these "Visions of the Sane," in my own experience and in that of others I refer to, have a remarkable peculiarity—they move directly along their own way, and cannot be directed or controlled in the least degree by the volition or consciousness of the visualiser. Hundreds of times I have consciously felt that certain visions, then undergoing change, would merge into certain others; but on the contrary they passed on quite differently, not in the way of a defiance, but simply ignoring or taking no cognisance whatever of what I had been imagining. I could violently stop the whole series, by a considerable mental effort, but so long as they continued, they were as independent of my conscious ego as if they had been presented to me by a showman displaying his unknown patterns, or the unrolling of an unknown panorama.

Nor could I start them at will; and still less could

I determine what they should start with. Here came in the vital difference between these visions and revived memories or conscious imaginings. I could make such pictures at will, and used to "bait" my visions, as it were, but the real ones either never came, at the time, or else my "vain imaginings" disappeared like a dream, and the solid realities, as it were, of a totally different character, instantly filled the scene, and proceeded without my knowledge of control.

The next peculiarity is that I have never, among these thousands of forms or faces, seen one which I could recognise as ever having seen before. No relatives, no friends, none of those whose portraits I have been familiar with, ever appeared; and the same is true, as I ascertained by careful examination, of

those others who have had this same faculty.

They were all strangers to me, and, not only that,

the scenes were all strange to my recollection.

To discredit Galton's hypothesis that these were the unconscious working of an idle half of the brain, one half creating or reviving, and tossing the images over to the recording half, I have usually seen a halfdozen or more separate actions going on at the same time all over the field, not one accessory to or associated with the others, but totally different creations or presentations, acting totally different parts, and I could study one set closely, while I saw the other going on dimly elsewhere, and then turn to another, and carefully examine that, and so on at will, precisely as if the objects and actions were external. There never, also, was a repetition, so far as I know, of the same scene or circumstance, and I have heard many conversations going on at the same time, any one of which I could give my attention to and follow, if desired.

Galton, and other writers, describing these phenomena, make no note of spoken words, heard audibly, so far as consciousness is concerned. But in my own case I have heard conversations going on in a number of places at the same time, and I could drop one, merely hearing its hum, and turn to another to listen, and so on, as I pleased. I have often, while

thinking over other matters, of business, of invention, or normal experiences, heard conversations going on, patter-patter-patter, without knowing what the conversations were; but on stopping my own line of thought and listening, I immediately heard this conversation, just as I would in a room full of people; finding it uninteresting, as I usually did, and relating to other and unknown folks, and their commonplace experiences, I usually reverted to my own work, and let the matter run on. I never heard gibberish; the conversations were all intelligible. Nor did I ever hear anything purporting to be revelational, or spiritualistic, or of a divine or mystical nature.

But sometimes I was suddenly forced into a very sudden cognisance of these half-heard conversations. I always figured in the scenes as an observer, apparently either standing or sitting, in front or alongside. Once two women were sitting on the ground in front of me, but to the right, perhaps a yard or two distant. One had her back to me, the other faced her vis-a-vis, and they were engaged in earnest, and, it seemed, angry conversation. I paid no attention to them, when the one facing me suddenly rose to her feet, flung out her arm toward me, and, in an angry voice shouted.

"Did you hear that?"

"No!" I shouted in return, and I shouted it out aloud, so that I startled myself greatly, for my whole frame shook with my reply, and waked up my wife.

Then she sat down, shaking her head, and the

earnest conversation went on as before.

Another time two women occupied a somewhat similar position in front and to the left. They were conversing earnestly, with their heads together, and nearly in whispers. Suddenly the one facing me said to the other, "Hush! he will hear you!" The other rose up from the ground, deliberately turned around towards me, and swept her eyes over me in a contemptuous way from my head to my feet, and said, "Well, I don't think much of you." I started in to exculpate myself, but suddenly perceiving that it was but a vision, I forbore. Indeed, I felt a keen sense of

humiliation, although quite innocent of any eaves-

dropping.

I have said that nothing revelational everappeared. This might have been so, but I may mention one case which might have had such value, but which, at all events, will illustrate what these visions sometimes were like.

I saw three men, side by side, coming across a field directly towards me, but I kept no particular account of them. The middle one was tall and wildlooking, slouch-hatted, leather-belted, a sort of a cowboy, in fact, and they halted immediately in front of The tall one had his right hand closed on some object. With his left he reached out and suddenly seized the tip of the first finger of my right hand, and pulled my arm out to its full length. I then saw that what he had in his right hand was a pocket knife. With this he cut the terminal joint off my finger, and I heard and felt the knife grating through the cartilage. Startled, I looked down at my finger, and clearly saw the white and glistening joint and cartilage, and the blood oozing up from the flesh around. Looking at him, I saw him holding the end of my finger, with its bloody ring, between his thumb and fingers, and with a look of malicious glee he opened his right hand, and I saw lying there an old-fashioned Barlow knife, with a blood-streaked blade. They whirled around and moved off diagonally to the opposite side and away from me. The vision was so vivid that I carefully felt, with each opposite hand, the ends of every one of my fingers, before I could convince myself that some physical change had not occurred.

I spoke of this incident at the time to a medical

friend or two, members of the S.P.R.

One of them advised me to take note of anything which should occur in the near future, which might be related to this circumstance.

A month or two afterwards my younger son, now a captain in the United States Army, was successfully operated on for appendicitis, and some time afterwards the same trio appeared, but now walking along rapidly at a distance, along the side of a rock path, in single

file, and the tall one in the middle was swinging his arms about to attract my attention, which he finally did. As soon as he saw this, he raised his right arm to its full height, obviously holding something between his thumb and fingers, and oscillated it to and fro violently, with the same malicious grin, until they disappeared in the distance.

In all probability the event was a mere coincidence. I never observed anything else of an analogous nature.

CHAPTER XLVIII

THE PSYCHOLOGY OF RELIGIOUS CONVERSION

KINDRED to much of the phenomena which I have been describing, are those of so-called religious conversion. I have been quite familiar with these from boyhood, as I grew up in a region of revivals and camp meetings, and my profound interest was early awakened by what I had occasion to observe during

many years.

Professor William James, in his work on "The Varieties of Religious Belief," deals with this subject in its psychological aspects extensively. He says, in his chapter on this subject, "I cannot but think that the most important step forward that has occurred in psychology since I have been a student of that science is the discovery, first made in 1886, that in certain subjects at least, there is not only the consciousness of the ordinary field, with its usual centre and margin, but an addition thereto in the shape of a set of memories, thoughts and feelings, which are extra-marginal and outside of the primary consciousness altogether, but yet must be classed as conscious facts of some sort, able to reveal their presence by unmistakable signs. I call this the most important step forward because, unlike the other advances which psychology has made, this discovery has revealed to us an entirely unsuspected peculiarity in the constitution of human nature."

This subconscious department of the human mind is the storehouse and workshop, the creative manufactory, the adapter, the controller and director of all the unconscious functions and processes of the living body, the source, or at least the channel, of genuine invention, inspiration, spiritual power, and

religious and moral life.

Many persons seem to overlook this rich treasure, ignoring its presence, knowing nothing of its value, denying even its existence; but they are, though stifled to the extent it can be stifled, under its control nevertheless.

In crystal vision we indubitably have a mechanism by which we can consciously tap this treasury of subconsciousness, which normally only appears in vague and mystifying dreams; for when sleep comes, the surface consciousness rests, and the subconsciousness takes entire control, and what passes then we only know as flitting gleams.

But crystal vision, by employing a trick, as it were, connects these two departments of the mind, the conscious and the subconscious, so that the latter can be openly read out, to some considerable extent,

by the former.

Gazing steadily into the depths of the mysterious crystal (it need not be a crystal, but it must be something that can fix and hold the consciousness, and yet not dismiss it entirely), the surface consciousness becomes quiescent, as the enveloping mist rises.

Then, this disturber having been removed, the subconsciousness reveals its hidden strata, and the watching consciousness, like an eavesdropper, ex-

poses the secrets revealed before its gaze.

Some such phenomena are connected with the "Visions of the Sane," and with the phenomena of conversion as well. Many of the subjects of this latter, which I have had opportunity to study, were friends and acquaintances, other whom I knew were from the lowest and most ignorant strata of society, others were able and intelligent men, women and children, and persons whose previous life had been of the coldest and most critical, or blasted by passion or degraded by vice. And I have been able to follow the lives of many of those for years afterwards.

I do not desire to enter into a discussion of these

I do not desire to enter into a discussion of these phenomena, but only to point out certain marked features bearing directly on questions of psychology. A remarkable circumstance which I have often observed, and cases of which I have personally examined, is that one of these "mourners" becomes suddenly rigid, cataleptic and unconscious, while still unconverted, but while "convicted of sin" in all its horror and intensity.

I know that many of these spells of unconsciousness were complete and general. These subjects often lay in this state for one, two or even more hours, when they instantaneously "came to," and some process had been evidently going on within, for they awoke

"saved" and triumphant.

Some organising power must have been intelligently directing these changes while the consciousness, as a controlling intellectual factor, was withdrawn.

Now, some of these people, whom I saw and knew, had been born and brought up in absolute illiteracy, and among the worst possible surroundings; yet this sudden change was permanent. The whole trend of their lives was at once changed, and they never relapsed under temptations to return to the old life. In the case of others the effects were temporary, and the old associations were powerful enough to subvert, or the spiritual power was not strong enough to resist, and they became "backsliders." Many of these became subjects of conversion afterwards, at other revivals, and some over and over.

In other cases the everyday consciousness seemed for a time to control the subconscious, by what is called force of habit. But in many cases the force of habit was immediately lost, and new forces took its place—the forces of spiritual control, which broke up these habits at once, as hypnotic suggestion will often do permanently, in such cases as the drinking habit,

for example.

I have personally investigated many cases of each

sort, and have read of others.

Among the Red Indians converted to Christianity, for instance, the Wyandots, a mixed tribe, and the Eskimo, there evidently was no physical structure of habit, or heredity, to produce any change to Christian

practice as a reversion, and yet, among these peoples, the action of this spiritual force acting, in a state of unconsciousness in some cases, instantaneously, was able at once to displace centuries of habit and heredity, and substitute an entirely new mode of living, new principles and new practice, and this not upon human suggestion, but purely by something working to the surface from within.

The scientific study of these phenomena, and of the great psychical and kindred movements described by Dr Hecker in his "Epidemics of the Middle Ages," show that the phenomena of pscyhology are the dominating factors, wherever we choose to probe.

There are some to whom spiritualism is foolishness, and others to whom it is a stumbling block, who seek to explain these phenomena by auto-suggestion. this is mere juggling with words, unless we first explain auto-suggestion. It is certain that these phenomena do not pertain to auto-suggestion in any sense in which auto-suggestion has ever had definite meaning. Most of these cases of conversion, as I personally know, were not only against belief, but against even the will to believe. These converts have fought against conviction by every factor of shame, credulity, feeling, knowledge, association and desire; they have struggled with all their power and in horror even, against this degrading blow (as it seemed to them), which often has fallen upon them like a bombshell following a fleeing coward from battle.

Certainly there was no auto-suggestion in the subconsciousness from the consciousness itself. If it be held that it was an auto-suggestion from one stratum of the subconscious to another, that is the same as to explain a gastritis as caused by one membrane inflaming the other. No, there are great psychical and dynamic agencies like that which swept Saul of Tarsus instantaneously into a new spiritual life, and in which, prior to the deed, there were not even the elements inside Paul's personality out of which to manufacture an auto-suggestion, except as one may prove the

presence of light by its absence.

These phenomena are clearly of that great psychical

class which has produced so many, if not all, of the great ethnological and anthropological changes which have modified and elevated mankind, and which are exemplified wherever the study of comparative religions carries us.

CHAPTER XLIX

BIBLICAL EVIDENCE

To show how far so-called "Rational Theology" has diverged from the divine revelations on which it purports to be based, I will quote the following from Chapter xv., entitled "The Word of God," of Mrs Professor De Morgan's "From Matter to Spirit." This is the work for which her husband, the celebrated professor of mathematics at Cambridge University, wrote the wellknown preface of forty-five pages, composed largely from his own experiences, from which I have already quoted several times in previous chapters. The following is the quotation from Mrs De Morgan's book :--

"What is the meaning of the phrase, the WORD OF God? Within the churches and without the churches, applied vaguely by honest religionists, and falsely by dishonest ones, the simple phrase, which in old times conveyed the idea of the Messenger of Peace, has become

the watchword of strife.

"The words have lost their first import as the knowledge of internal spiritual things has died away. It is an instance of what has been already said, that with the growth of time, expressions and symbols, losing their essential meaning, are ill used by the theologian and rejected by the philosopher.

"We must look to the Bible, its acknowledged record, for the meaning of the Word, and we may find, as in other cases, that when its specific sense becomes clear all the learned rubbish which has accumulated round the phrase will fall away, taking with it the confusion and discord inseparable from argument unenlightened by spirit.

"The Hebrew debar, translated Word, bears in its

root the idea of driving, or throwing off, that is, emanation or efflux.

"Like all spiritual influx it takes different forms of manifestation. It comes sometimes as an audible voice, sometimes as an impelling influence, sometimes by writing, and sometimes, indeed most often, by vision. Whenever a prophet utters his inspiration (and the different forms of utterance show that by the same law which I have traced the phrases and symbols are those of the recipient), the expression is, 'The Word of the Lord' came to that prophet. The burthen of a prophet is the influx which presses him, that which he must utter before he can speak from himself.

"In I Samuel iii. 6, 'The Word of the Lord was rare in those days: visions were not frequent.'" (De Wette's

translation.)

"This clearly expresses the fact that the influence from God was at that time not often received. The history goes on to tell of the voice heard by the child Samuel, evidently not an alarming sound, for he supposed that Eli had called him. In Genesis xv. I, we find that 'the word of the Lord came to Abraham in a vision.'

"In I Kings xiii. I, 'And behold! there came a man of God out of Judah by the Word of the Lord' (by the impelling influence). Here the two words used to express the divine power in Man of God and Word of the Lord are different; the prophet is a man of the spiritual powers, Elohim; the Word is from Jehovah, the highest name.

"When Jehoram and Jehosaphat went together against the King of Moab, and became uneasy as to the success of their enterprise, Jehosaphat asks, 2 Kings iii. verse II, 'Is there not here a prophet of the Lord, that we may enquire of the Lord by him?'"

One of the King of Israel's servants tells him that

Elisha is there. The King replied,

"The Word of the Lord is with him." When Elisha appeared, the influence failed to come; then he said,

"" But now bring me a minstrel.' And it came to pass when the minstrel played, the hand of the Lord came upon him."

In Isaiah ix. 8 it is said, "The Lord sent a word

unto Jacob, and it lighted upon Israel."

"We will now turn to the New Testament. . . . We must remember, that the Hebrew *debar* and its Greek synonym *lagos* comprehend every degree of efflux from the source of life, whether it results in the formation of a world, in a prophetic dream, or in a healing miracle.

"The Apostle John's description of The Word is immeasurably more perfect and more sublime than any attempt at explanation ever made by scholars or theo-

logians.

"' I. In the beginning was the Word, and the Word was with God, and the Word was God.

"' 2. The same was in the beginning with God.

"'3. All things were made by Him, and without Him was not anything made that was made.

"'4. In Him [or in it] was life; and the life was the

light of men.

"5. And the light shineth in darkness; and the darkness comprehended it not.

"'9. The true Light was that which, coming into the

world, lighteth every man.'

"The Word of God, then, is the phrase used in Scripture to express the outpouring efflux from our heavenly Father in its creating, life-giving, and inspiring energy, and in its redeeming and sanctifying power; and the Bible is the history of the Word in all its degrees of action and modes of manifestation, from the simple processes of magnetic healing and clairvoyance to its full and perfect manifestation in the person of the Saviour, the Word made flesh.

"If this is true we may expect to find allusions to various magnetic and spiritual processes in the Bible. And we shall not be disappointed. I will first bring together a few instances of spiritual action in its lowest

forms.

"In 2 Kings v. 10 we find a reference to mesmerism made in such words as to lead to the belief that it was commonly practised by the prophets, who were also in early times called *healers*. Naaman the Syrian having been sent to the King of Israel in order to be cured of his leprosy, Elisha shows him how much more powerful is the healing which he practises than the mesmerism

which was expected. The prophet desires Naaman to

wash seven times in Jordan.

"Verse II, 'But Naaman was wroth, and said, Behold I thought, he will surely come out to me, and stand, and call on the name of the Lord his God, and move up and down his hand [marginal reading] over the part, and recover the leper.'

"We find another instance in the history of the prophet Elisha, of whom Jehosaphat says, 'The Word of God is with him.' Hearing of the death of the widow's son, Elisha first sends his staff to Gehazi, desiring him to lay it on the face of the child. (All mesmerisers have seen similar processes.) But this is ineffectual, and

Gehazi returns, telling his master of the failure.

"2 Kings iv. 33. 'He (Elisha) went in therefore, and shut the door upon them twain, and prayed unto the Lord. And he went up, and lay upon the child, and put his mouth upon his mouth, and his eyes upon his eyes, and his hands upon his hands: and he stretched himself upon the child; and the flesh of the child waxed warm. Then he returned, and walked in the house to and fro; and went up, and stretched himself upon him: and the child sneezed seven

times, and the child opened his eyes.'

"I need hardly refer to the direct healing of our Lord and His Apostles. But a few words are necessary to show that even these effects of the vitalising power of the Word were processes of which the immediate cause and agency can be traced. If by miracle we understand an act not coming under this definition, then assuredly the cures, and even the raising of the dead by the living Word, were not more miracles than the birth of a child or the growth of a tree. But their cause, though real and apparent, lay far beyond the reach of educated or uneducated humanity, unassisted by spiritual power. When the Saviour was among believers, the very effort of His will, uttered in 'Damsel, I say unto thee, Arise!' poured life into the lifeless girl; and in like manner His Word raised the widow's son and the entombed Lazarus. When He restored the man blind from birth, a process was used, and the clay which contained the vital influence was to remain on the eyes till washed off at the Pool of Siloam. But we learn in Mark vi. 5 that

'He could then do no mighty work, save that He laid His hands on a few sick folk and healed them.' The corresponding verse in Matthew says, 'He did not many

mighty works there, because of their unbelief.'

"We see, then, that even the Word itself needs something in the recipient to make it effective, that something is faith, without which we can do nothing, but with which we may by God's help move mountains.

"I have traced the Word of God from its lowest to its highest degree of healing. We find it also in earthly clairvoyance and in heavenly vision. For the first, when Saul had lost his asses, he went to the prophet to find 'where they were.' And this was called *enquiring* of God equally with the most important consultations.

"Every part of the Bible is full of spiritual vision in every degree, so that the enumeration of instances would only cease when the greater part of Scripture had been copied out. After earthly clairvoyance, which we find in Samuel and Baalam, we may mention divining in a cup or crystal, for the process is the same" (see Genesis xliv. 5, etc.).

"Simple imagery, such as has often been met with in dreams and visions in these days, is found in the vision of Peter, by which he was directed to instruct the family of the Gentile Cornelius, who was himself also spiritually told where to find the welcome teacher, Acts x.-xi."

"A very simple suggestive vision was given to the Apostle Paul, Acts xvi.: 'There stood a man of Macedonia: and prayed him, saying, Come over into Macedonia:

donia, and help us.'

"The sudden conversion of the Apostle Paul was brought about in a manner which is intelligible to those who have witnessed many spiritual manifestations in

various forms and degrees.

"The outpouring on the day of Pentecost was attended with the usual concomitant phenomena—a rushing mighty wind, an appearance of flame or fire in the form of cloven tongues, and then the influx of the spirit.

"The spiritual writing (Exodus xxxii.; 2 Chronicles xxi.; 1 Chronicles xxviii.; Daniel v.) is mentioned in

Scripture in every degree, from that by the hand of a

prophet to the direct impress of the finger of God.

"In Exodus xxviii. we find long directions for the construction of an ephod, or priest's dress, but there is, I believe, only one passage, verses 7 and 8 in I Samuel xxx., of the manner in which it was used. "I pray thee bring me hither the ephod. And Abiathar brought the ephod to David. And David enquired at the Lord."

"It appears by this that the ephod was not a ceremonial robe, but a real instrument, and David could use it as well as the high priest, for he enquired at the Lord, or induced in himself a spiritual state, as we have seen can be done, though in a lower degree, by gazing at a

crystal."

(So also, authorities declare, were used the two stones, the *Urim* and *Thummim*, which the high priest bore upon his shoulders, and which were called *essen*, the

oracle.)

"The laying on of hands should not be unnoticed in an enumeration of the various forms in which we have seen a resemblance between the incidents of Scripture history and the modern phenomena. I have said that the power is always strengthened, I should have said that it is apparently communicated, by the hand of a medium laid on the wrist of another to produce writing, or on the shoulder to produce vision. A finger of a powerful medium will convey the current to another person. How often this fact is mentioned, or how important a part it bears in the history of the Word, I need not say. In Deut. xxxiv. 9, 'And Joshua the son of Nun was full of the Spirit of Wisdom; for Moses had laid his hands upon him.'"

See also, 2 Timothy i. and the very numerous other instances in the New Testament referred to in the author's

text. The author continues:

"We look down with supreme contempt on the heathen, who attributed to their deities actions which at this time bring men to the gallows; but for those who have seen the glory of God in the face of Christ, we are no better than the heathen. We malign and misrepresent the God whom we worship. I had lately an instance of this blasphemy of the Holy Ghost in a letter from a

friend, who writes of the little children in a fishing village far from London,—'They are well taught as to conduct, and are good, kind-hearted little creatures, who sit round and sing hymns about blood and wrath and damnation with the utmost good humour.'"

The author then asks this momentous question, which applies not only to the Jewish and the Christian bibles, but to those of all ages and peoples, and to the religious beliefs and practices of all peoples throughout all time. and to all the results produced by such bibles, such religious beliefs, and such religious practices, of which the French rationalist, Le Bon, in his "Psychology of Peoples" says: "Religious beliefs have always constituted the most important element of the life of peoples, and in consequence of their history. . . . At all the ages of humanity, in ancient times as in modern times, the fundamental questions have always been religious questions. If humanity could allow all its gods to die, it might be said of such an event, as regards its consequences, it would be the most important event that had taken place on the surface of our planet since the birth of the first civilisation.

"The gift of the gods to man, and it is a gift which they alone have been able to endow him with up to now, is a state of mind which allows of happiness. No philosophy has ever been able as yet to realise such an

achievement.

"History shows us that people do not long survive the disappearance of their gods. The civilisations that are born with them die with them. There is nothing so destructive as the dust of dead gods."

The following is the momentous question which Mrs De Morgan asks in closing her remarkable book,

"From Matter to Spirit":-

"Is all that I have described as spiritual development, with all its accompanying processes and trials, due to 'unconscious cerebration,' or self-delusion, or irregular nervous action, or imposture?

"Then the Bible is a history on a large scale, and of great antiquity, of unconscious cerebration, irregular nervous action, self-delusion, and imposture. It is hard to say in what way those who pronounce the judgment

can escape the conclusion.

"The thought may occur—If it be true that the Bible is only a history of these mesmeric and psychological phenomena, it loses at once all its authority, and its sacred character. These mesmeric and psychological phenomena are parts of a great whole, and are found to be a connecting link between what has been called the world of matter and the world of spirit. And the ascent from matter to spirit is not difficult, neither are their respective boundaries undefined, if we remember that matter is the deposit of the life force, and that it becomes dead, and falls back into other forms, only to be acted on by new forces in the constant outpouring of spirit from the Fountain of life. We need not apprehend a diminished reverence for Scripture. The Bible will be found full of instruction, comfort, and hope for every soul in need, and in every degree of spiritual opening, and all the more when the obscure and mysterious passages, whose meaning has been lost, are restored to life by a better knowledge of the states they describe, and when the things of the Spirit are recognised in the world as they are treated of in the history of the Word of God."

In direct line with the momentous question asked by Mrs De Morgan, I quote the following from the pen of Sir Oliver Lodge, in the "Proceedings of the Society for Psychical Research," part lviii., June 1909. "Good and earnest though moderately intelligent

"Good and earnest though moderately intelligent religious people sometimes seek to pour scorn upon the reality of any of these apparent communications—not for any scientific reason, but for reasons born of prejudice. They think that it is not a worthy occupation for 'just men made perfect' 'who have entered into felicity' to be remembering trivial and minute details, under circumstances of exceptional difficulty, for the purpose of proving to those left behind the fact of survival and the continuance of personal identity. It is taken for granted that saints ought to be otherwise occupied in their new and lofty and favoured conditions.

"But seriously, is it not legitimate to ask these

good people whether, if an opportunity of service to brethren arises, an effort to seize it may not be made even by a saint? Whether this notion of perennial service is not in accordance with their own doctrines and beliefs? And whether they are not impressed by that clause in the creed of most Christians which roundly asserts that their Master descended into Hades? for purposes which in another place are suggested. Whereby they may learn that, even after such a Life and Death as that. Felicity was not entered into save after an era of further personal service of an efficient kind. Those who interpret the parables in such a way as to imagine that dignified idleness is the occupation of eternity—that there will be nothing to do hereafter but idly to enjoy the beatific contemplation and other rewards appropriate to a well-spent life or to well-held creeds, free from remorse of every kind, and without any call for future work and self-sacrifice—such people will probably some day find themselves mistaken, and will realise that as yet they have formed a very inadequate conception of what is meant by that pregnant phrase, 'the Joy of the Lord.'"

Who is there whose heart has not thrilled in the reading of Leigh Hunt's divinely beautiful "Abou Ben Adhem," who awakened to find, within his room, an angel writing, in a book of gold, the names of those

who love the Lord?

[&]quot;'And is mine one?' said Abou. 'Nay, not so,' Replied the angel. Abou spoke more low, But cheerly still; and said, 'I pray thee, then, Write me as one that loves his fellow-men.' The angel wrote, and vanished. The next night It came again, with a great wakening light, And showed the names whom love of God had blest; And lo! Ben Adhem's name led all the rest!"

CHAPTER L

GENERAL CONSIDERATION OF THE SUBJECT—THE PHENOMENA PRACTICALLY CONCEDED BY THE VERY AUTHORITIES POPULARLY SUPPOSED TO DENY THEM—ANTAGONISTIC THEORIES HAVE ALL BROKEN DOWN IN THE LIGHT OF RECENT SCIENCE—THE CRITERIA OF TRUTH—CONCLUSION

I could, of course, fill a volume with narratives of supernormal phenomena—that is to say, with phenomena necessarily classed at present as supernormal, but which, later on, will be recognised as normal whenever genius, invention, inspiration and clairvoyance and the like, are both understood and recognised as normal, as they will be; that is, as normal but as exceptional, for they will never become common, and they ought not to become so.

In the language of Garth Wilkinson, "The rareness of communication between the two worlds is to me one of the greatest of miracles; a proof of the economic wisdom, the supreme management, the extraordinary statesmanship of the Almighty. My whole soul, perfectly convincible by the other side, knows this for me; and

floods me with the power of it every hour."

I have in previous chapters of this book cited Thomas H. Huxley, who says, "If I were obliged to choose between absolute materialism and absolute idealism, I should feel compelled to accept the latter alternative." I have cited John Stuart Mill, to show that his whole theory of constructive and automatic idealism, by his own confession, broke down utterly in view of the inexplicable phenomena of that which is past and that which is present being together conceived of as present—that is, the inexplicability of continuity in the absence of a continuing psychical agent.

I have cited Herbert Spencer, in his final message, in dealing with ultimate questions for the first time, that our consciousness is a specialised and individualised form of that Infinite and Eternal Energy, and that the lesser was derived from the greater, and that, if eternal is predicated of the one, it must be predicated of the other.

And I have cited also from Dr W. B. Carpenter, much to his prejudice as an unbiassed scientific man. It affords me now, as with the others named, pleasure to measure Carpenter himself against his more formal writings, and give him credit for what most readers will interpret as a like concession, when the crisis of disbelief

had been squarely encountered.

It is well known that, in dealing with these phenomena, he laid all or nearly all his stress on what he called "unconscious cerebration"—that is to say, the action of the physical brain, or, at all events, the brain as a physical producer of supernormal phenomena, precisely as it appears to be the producer of normal phenomena. In his letter to the Dialectical Society, dated 24th December 1869, he, however, narrows his claims, concluding his abstract with the following significant language, which I am sure no psychologist can read to-day without perceiving that this distinguished, but often unfair, author, in the crisis confronting him, made almost the same concessions as were made by the other opponents named. This is his language:

"And every course of self-discipline thus steadily and honestly pursued, tends not merely to clear the mental vision of the *individual*, but to ennoble the *race*; by developing that power of *immediate insight*, which, in man's highest phase of existence, will not only supersede the laborious operations of his intellect, but will reveal to him truths and glories of the unseen, which the intellect alone can see but 'as through a glass darkly."

It seems then that after all theories and hypotheses of automatism, self-constructive idealism, materialism, empiricism, self-causation, nature, chance, accident and agnosticism have been run out and failed, there is left but one single residuum, identical in every case, and that this is transcendentalism, divinity and spiritualism. We will thus come, after the most elaborate research, and the testing into absurdity of all alternatives, back to that primal truth recognised in all ages among all peoples, and appealing directly to what Dr Carpenter called "that power of immediate insight, which, in man's highest phase of existence, will not only supersede the laborious operations of his intellect, but will reveal to him truths and glories of the unseen, which the intellect alone can see but 'as through a glass darkly."

These truths and glories thus revealed by immediate insight, and which the intellect alone can never see, or see but darkly, are the bases of every religion which exists or ever has existed; which truths have made religion universal in all places and ages; and, after all the labours of science, scepticism, atheism, materialism and agnosticism have been exhausted, we find, still revealed, to-day, unassailed and unassailable, the same fundamental truths as those primal ones of the past.

The criteria of truth? Are there such? and if so, in what do they consist, and what is their value?

Asked Pilate, "What is truth?" Is there no answer? If we are of God, then there is an answer; if we are not of God, then the answer does not matter. But if we are of God let us not ignore Him and His revelation; let us not forget the old Scotch farmer: "All these years God has been looking at us, and all these years we have been shaming Him." For that is the possible price and penalty of free-will. God does not want puppets.

Not alone the future of each one of us depends upon these truths, but the future of every people and nation, and, finally, of the race, and, if man is the culmination of the universe, then of the universe, itself; for we are all bound up, willy-nilly, together; the solidarity of the universe is the great dominating principle of science,

philosophy, ethics and religion, nay, of humanity.

Says Walt Whitman in his "Memoranda of the War":
"As only that individual becomes truly great who understands well that, while complete in himself in a certain sense, he is but part of the divine, eternal scheme, and whose special life and laws are adjusted to move in

harmonious relation with the general laws of nature, and especially with the moral law, the deepest and highest of all, and the last vitality of man or State—so those nations may only become the greatest and most continuous, by understanding well their harmonious relations with entire humanity and history, and all their laws and progress, and sublimed with the creative thought of Deity, through all time, past, present and future. Thus will they expand to the amplitude of their destiny, and become splendid illustrations and culminat-

ing parts of the cosmos, and of civilisation."

There are criteria of truth, but not in mere speculations from passing phenomena, ignoring their source and destiny, not in hypotheses shifting with every swing of the scientific pendulum, not from what Lord Salisbury described as vague and flickering lights in an ocean of impenetrable darkness, nor in Hume's showers of disconnected sensations, nor in Berkeley's idealism "shifting with the shifting present," nor in Locke's tabula rasa sketched upon by our own weak, fragmentary and most often worthless experiences, but the vast, moving panorama of the ages, a work worthy of the supreme divine, and only possible in source, movement, operation, purpose and destiny to the supreme divine, and with every human being linked therewith as working parts and co-partners of "One Stupendous Whole." Here we can rest.

Of the criteria of truth, Professor Bowen says, in his "Modern Philosophy," "To Leibnitz belongs the credit of being the first to point out and establish these two criteria, or tests and proofs of Innate Ideas, to wit, universality and necessity. Whatever is universally true, true not merely so far as my experience, or as the experience of the whole human race, has gone, but true everywhere, and at all times, true under all circumstances and conditions, and without any exceptions of limitations whatever—that is an innate truth, or one which had its origin in the soul itself, and was not impressed upon us through the senses, or from the world without. Again, whatever is necessarily and absolutely true—that is, so true that neither you nor I can even imagine it to be false under any circumstances whatever—that also is

innate, or had its origin in the very constitution of the mind. Now these two criteria are always found to go together, each involving the other, so that, in fact, they coincide and form but a single test. Whatever cognition is, must for that very reason be universal; and in like manner it could not be absolutely universal, if it were not also necessary. And the number of truths is not small which possess these two decisive characteristics; whole Sciences are made up of them alone."

Yet many of these truths, he says, are not learned until in later life; often not until these sciences are studied. But he adds: "What of that? When you learned them, did you accept them as true merely because the book or your teacher said so, or did the instruction so received merely direct your attention towards, and bring out into distinct consciousness, what was already implicitly in your mind, and what was then first recognised, or known over again, as resting on its own evidence, shining by its own light, far down in the recesses of your intellect?"

Leibnitz founded his whole system on the validity of these criteria, as establishing an immutable knowledge of God as the originator, sustainer and preserver, and of our own soul as the receiver of God's knowledge.

And Carlyle expressed the same truth in saying that

"No lie can endure for ever."

The late President McCosh, in his "Criteria of Different Kinds of Truth," lays down three tests, which, taken together, will establish any truth absolutely, of that kind of truth which we are entitled to assume

without mediate proof—that is, directly.

The first criterion is self-evidence—that is to say, one in which we perceive an object to exist by merely looking at it, as that of our own consciousness, or existence of self. We are convinced that we need no further proof of such truths, nor would outside evidence add to the strength of our conviction. This is so obvious and self-evident, even at second-hand, that if a man persists in believing that he is dead, when we know that he is alive, we either put that man into an insane hospital, or cut off his alcohol. The thing is simply incredible.

Now it has been often asserted, and is a truth of this

nature, that every man, taken at some point, or under some circumstances, and irrespective of his belief in externally presented faiths, is to some extent superstitious. This perception includes many forms, and manifests itself in the most unexpected ways, but there are very few, if any, who will assert that they are totally unaffected by such influences, and in these exceptional cases they only claim that they are exempt by having reasoned themselves out of these notions; the thinness of this veneer, and its deceptive character, are brought out at once by a swift change in life, an overwhelming disaster, or the sudden development of radically new and startling conditions, as a shipwreck, an earthquake, an incomprehensible darkness, or the roar and rush of an angry and threatening sea. As Shakespeare says, "Conscience makes cowards of us all," and conscience is but that inner voice which the surface consciousness only knows as a superstition. But it is also an immutable and universal truth.

What would mankind be without sentiment? And yet, is sentiment but a superstition? A recent writer, Joel Chandler Harris, beautifully says: "It is a rule that everything beautiful and precious in this world should have mystery attached to it. There is the enduring mystery of art, the mystery that endows plain flesh and blood with genius. A little child draws you by its beauty; there is a mystery unfathomable in its eyes. You enter a home, no matter how fine, no matter how humble; it may be built of logs, and its furnishings may be of the poorest; but if it is a home, a real home, you will know it unmistakably the moment you step across the threshold. Some subtle essence, as mysterious as thought itself, will find its way to your mind and enlighten your instinct. You will know, however fine the dwelling, whether the spirit of home dwells there."

All this is in one sense, but a very high sense, superstition—that is to say, it cannot be worked out by logic, or demonstrated by reason. It exists alone, it stands above, like our knowledge of self, directly, and by its own self-evidence. So mother-love, our abhorrence of cannibalism, our patriotism, civilisation, religion, honour, honesty, self-respect, decency, manhood and womanhood, all these have only the self-same basis, superstition; they are all superstitions; they "stand above" the brute man, for that is what the word signifies, but they make him the divine man. To the materialist these notions are dyspepsia-born ghosts; to the spiritualist they are the most real, most original and divine of all

created or implanted things. The second criterion of truth is necessity. That is to say, physical science takes cognisance of all it can bring within its grasp and analyse; but it concedes, and must concede, that behind its phenomena lie whole realms of causes and effects, of forces and energies, of space and time, which, in order to make our knowledge complete, demand to be explained, and physics simply ignores them, and yet they constitute all the fundamentals of nature, while science still acknowledges their necessity and overwhelming importance. If these are non-physical, then they are truths incontestably transcendental. If agnosticism is simply know-nothing-ism, then this great universe of the physically unseen and unknown, which lies behind and all around, and even within, the visible phenomena of nature, is not the less real, but in fact the more real, and, viewed with relation to an eternal time and an illimitable space, the only real. And this great truth is demanded and posited by necessity, and cannot be questioned or denied. The "stone wall" of the agnostics is only a stone wall in the self-limited view of those who have merely, from a false perspective, imagined the wall. How many false views disappear as we approach them! Those who can see beyond this imaginary wall, and use their insight, see truths and glories which science, by its claimed "agnosticism," fails to see, and these are they, and always have been, who are the kings and rulers of men, and not those galley-slaves who sit self-chained in darkness, and pull the unintelligent oar.

The third criterion is universality; that the truth in question is and ever has been believed by all men. It is the universal consensus of humanity to which spiritualists appeal, and it has been well said that nothing universally believed by all men, and through all human ages, has ever been based on anything but truth. From

this consensus the appeal meets with universal assent all through the past and present; and on these three criteria, in which all the facts agree, spiritualists have a right to hold that the truth has been established, irrespective even of the vast flood of universal demonstrative evidence, which equally supports its conclusions.

Everyone who believes in luck, as contradistinguished from chance, or in genius, or conscience, or self-sacrifice for the sake of others; everyone who feels remorse, or is influenced to higher things by aspiration; everyone who thinks a prayer in distress, or turns to something higher and better than man in calamity and sorrow, is at heart a spiritualist, be his avowed faith what it may.

The hypotheses of animism, or a world-soul, or a soul of nature, every theory of angels or demons, or of influx and efflux, every proposed hypothesis on which transcendental facts are sought to be explained, meet with as earnest consideration from spiritualists as from those who announce them. There is no antagonism here, and further research is gladly welcomed, wherever

the truth of these facts may lead.

But there are three great classes of underlying phenomena which are strongly in favour of belief, to that extent at least, in individual spirits. In the first place, these intelligences, when manifesting themselves, universally claim to be the departed surviving spirits of the dead, and seek to identify themselves and to establish their identity in every possible manner. It is difficult to believe, if these phenomena are merely results of extra-human but non-individualised forces, that such a persistent and overwhelming course of deception, simple lying in fact, should be universally carried on, to no possible purpose it would appear.

And, secondly, the facts of prophecy or prevision, among these phenomena, which relate to individual experiences yet to appear, can hardly be explained except on the ground of conscious individuality on the part of the unseen communicator, for clairvoyance is individual in the clairvoyant, who can but repeat whatever the agencies with which he may be in contact, limited or universal, influence him to say, of the unknown future. And thirdly, in the well-known pheno-

mena of the *Phantasms of the Living*, in which we know, in many cases, that discarnate individualities of the living, far away from their bodily selves, do thus visibly and sensually manifest themselves. It is a mere extension of these phenomena that the same should be true, in authenticated cases, of those who bring evidence that they come as discarnate individualities, as spirits of the dead, whose bodily selves are dissolving or are dissolved, far away, into the dust from which they were built up into human, living and sentient beings. The

cases are surely analogous.

Be all this as it may, be the hypotheses what they may, whether one or the other be finally established to-day, or left, as the immeasurably vaster body of science is still left, to future demonstration, the phenomena themselves are real and true. Not all may be real and true, not all of anything may be real and true, but so much has been immutably established, so much may be demonstrated by a little time and labour with one's own friends, with one's wife and children, or with one's parents, so much can be established in individual cases, anywhere, and by actual scientific proof, that it is no longer possible to doubt or dispute the facts. And the facts are obviously supernormal and superhuman, unless every human being himself is omnipresent, omniscient, and outside all the laws of physics. And so the onus is on those who deny, and will not look, and no longer on those who look, see, observe and demonstrate. The correct spirit is that of St John: "Try the spirits." There is no vein on this earth which will pan out for all mankind richer gold and gems, nor with so little time and labour; and no mine the product of which will so enrich, not only for time, but for eternity, the earnest and honest seeker.

To quote from Lord Tennyson, the most scientific,

the most Christian, of all the great poets:

[&]quot;The Ghost in Man, the Ghost that once was Man, But cannot wholly free itself from Man, Are calling to each other thro' a dawn Stranger than earth has ever seen; the veil Is rending, and the Voices of the day Are heard across the Voices of the dark."



GENERAL INDEX OF SUBJECTS AND AUTHORITIES

On ABERCROMBIE, unlimited scepticism, 126

Is the part of a contracted mind, 126 Agnosticism, Results in the Church, 38

Multiplication of sects, 38

- Loss of faith, 38

-- The stone wall an imaginary one, 403 Aguilar, Don Sanchez de, His qualifica-

tions, 301 - Investigation of Yucatan polter-

geist case, 301

Alderman, Frank R., Experiments in externalising the consciousness under hypnosis, 285-287

Animism, The hypothesis of Worldsoul considered, 404

Anthropology, Study of, 9

- Deals with human testimony in the past, 302

Apparitions, Apparitional case by Dean of Medical College, 340

- Case reported by Professor Barrett, F.R.S., 342-344

- Two apparitional cases by T. A.

Trollope, 344-347

— Case reported by F. W. H. Myers, 347-349

- Case reported by the Author, 357-364

- Experiences of the Author with another medium, 365-371

- Clinical examination of medium

after trance, 369 - Question of hallucinations con-

sidered, 364 - Means used by apparition

identification, 357

A priori, Acceptance without demonstration; fatal to science, 9

- The "thimble - rig" of pseudo-

science, 71 - The ban against scientific advance,

76

- Compared with "odium theologicum," 159

- Romanes on unbelief; due to indolence or prejudice, 252

- Doubt may be scientific; denial on a priori never, 252 Arago, On scientific doubt contrasted

with incredulity, 126 - Reserve, above all, a necessity in dealing with the animal organisation, 126

Arnold, Sir Edwin, A body of wellestablished facts, 250

Author, Answer to allegation, "Hard on Science," 177-178

Authorities cited-Abercrombie, 126

Aguilar, 301

Alderman, 285-287

Arnold, 250 Arago, 126

Archimedes, 147 Author, 177-178

Bacon, 152, 153, 155

Baer, 181

Balbiani, 181, 183 Balfour, 181

Barker, 150

Barnett, 39

181, 224, 225, Barrett, 277-283, 279-281

Bateson, 225-226

Bayley, 295, 339-342, 368

Berkeley, 209, 212

55, 105-106, Bible, 9, 22, 23, 25,

92-109, 180, 270, 388-393 Binet, 181, 182-183, 183

Bingham, 54 Bois-Reynard, 181

Booth, 348-349 Boris-Sidis, 181

Bosco, 253

Bowen, 146, 400 Bradley, 28, 29

Bramwell, 181 Brine, 273

Brinton, 56, 181, 273

Broca, 57 Brooks, 181

Browning, 216

Burton, 252 Büchner, 135

Bütchli, 181

Bunge, 181

Butler, 181 Calvin, 24

Cano, 273 Canons, Church of England, 5

Carlyle, 265, 266, 401 Carpenter, W. B., 252, 398 Carpenter, J. Estlin, 82-83

Chamberlain, 307-309 Charcot, 284

Christ, Jesus, 5, 7, 25, 26, 28, 96, 101, 102, 193, 201

Chopin, 49

Authorities cited-continued Church, 65, 66, 128 Churchill, 209 Chieron, 48
Comte, 83, 84, 103, 205, 209, 210
Conn, 52, 53, 181, 218, 225, 235
Cook, 257-260
Crockett, Davy, 172
Crockett, S. R., 187, 188 Crooke, 386 Crookes, 105, 181, 235, 236-237, 237-238, 239 Crossland, 250 Cuvier, 133 Dabney, 287 Darwin, 85, 150-151, 219, 223 Davey, 250 Davies, 5, 57-58 De Morgan, 125, 231, 232, 290, 291-292, 388-393, 395 Dennett, 195-196, 267 Descartes, 206 De Vries, 181 Dujardin, 181 Dudley, 340-341 Du Prel, 36, 181 Ehrenberg, 181 Ellinwood, 58 Emerson, 161, 289 Engelmann, 181 Erasmus, 23 Eskimo, 198, 267 Eve, 96, 97-101 Farrar, 23-24 Fechner, 148, 181 Flammarion, 175, 181 Flournoy, 181 Fol, 181 Foster, 94 Franklin, 76, 354-355 Franklin, Sir John, 31 French Royal Academy of Sciences, 233 Fresnel, 353 Geikie, 181 Gibier, 181 Gladden, 6-7 Gladstone, 73, 113 Goodrich-Freer, 181, 251, 274, 283 Gordon, 303-305 Gould, 96 Graham, 134, 181, 296-299 Gruber, 181, 183 Haeckel, 12, 104, 171, 217-218, 218-219, 220, 226-229 Hamilton, 210 Hammond, 11-12, 107, 213 Harris, 402 Harrison, 209 Hartmann, Von, 95, 147, 156-158, 222 Hayden, 291-292 Hecker, 386

Authorities cited-continued Herron, 38 Herschel, 45, 158, 175-176, 223, 352 Hilprecht, 181 Hindred 122 Hockley, 251-252 Hodgson, 181, 295-299, 327-329 Holmes, 149, 230 Hough, 316-320 Huggins, 236 Hume, 88-91, 205, 208 Hunt, 396 Huxley, 10, 11, 74-75, 90, 103, 113-114, 177, 212-213, 397 Hyslop, 181 Illman, 335-336 Ingersoll, 119 Irenæus, 29 Jalalu'd Din, 242 James, 4, 59, 181, 223, 224, 383 Janet, 176, 181 Jevons, 110-114, 124, 127, 290 Johnson, Samuel, 309-310 Johnson, Alice, 310 Jordan, 181 Kant, 158, 222 Kelvin, Lord, 94-95, 181, 200 Kepler, 69 Kidd, 103, 106, 181 King, President, 181 King, John, 318-320 King, Katie, 256-260 Kipling, 146 Klebs, 181 Knott, 262-263 Koelliker, 181 Künnstler, 181 Ladd, 147 Langley, 181 Lamarck, 46-47, 133 Lane, 311 Lang, 181, 279, 283 Lao Tsze, 155-156 Laplace, 125 Lardner, 23 Layman, 303-306, 336-337 Leaf, 181 Le Bon, 193, 394 Le Conte, 163, 181 Leibnitz, 400-401 Lewes, 103, 249-250 Lewis, 255 Lochman, 181 Locke, 11, 205-208 Lodge, Sir Oliver, 181, 224, 299, 353-354, 395-396 Longfellow, 242 Luther, 18, 21 Lyell, 57 Lyte, 49 McCosh, 401-404 McHatton-Ripley, 287-288 McKavett, Captain, 307-308 Mackintosh, 209 Mallock, 119-120, 181

Authorities cited-continued Manetohcoa, 271 Marmery, 262, 290 Marryat, Florence, 128 Masson, 135, 161-162 Matthew (Gospel), 101-102 Maya Codices, 195 Melancthon, 21 Mendel, 226 Merwin, 141-143 Mill, John Stuart, 210-211, 397 "Modern Mexico," 302 Moebius, 183 Mohammed, 285 Momerie, 85, 181 Montgomery, 148 Montucci (Father), 41 Moody, 29 Mooney, 272 Morgan (John King), 256, 318-320 Morris, 330-333 Murdock, 216 Myers, 181, 223-224, 297 Müller, 5, 188-190 Newbold, 295-296 Newman (Cardinal), 50, 145 New Testament, 29, 63 Newton (Sir Isaac), 47, 69, 147 Nevius, 68, 181, 269 Nus, 173 Nussbaum, 181 Orton, 229 Parry, 267 Paul (Saint), 100, 285 Pfeffer, 181 Piddington, 181 Pilate, Pontius, 399-404 Piper (Mrs), 295-299 Pliny (The Younger), 101 Prendergast, Colonel, 309-310 Pritts, 270 Poe, 49 Podmore, 181, 310-315 P. (Mr), 316-320, 321-324, 325-326 Quackenbos, 181 Rayleigh, Lord, 181 Récéjac, 181 Religious Tract Society, 26-27, 28 Ribot, 181 Richet, 17, 181 Ridgway's Magazine, 342 Roberts, 22-23 Romanes, 17, 34, 43, 47, 51, 52, 53, 84, 91, 103, 104, 119, 169, 172, 182-186, 203, 227-229, 240, 252
Roosevelt, President, 270
Salisbury, Lord, 112 Sandeman, 181, 221 Sanders, Rev. Dr. 107 Sargent, 57 Schiller, 181 Schofield, 128, 181, 339 Schreiner, Olive, 242

Shaler, 58, 121-123, 181, 222-223

Authorities cited-continued Sherman, 285-287 Shuler, 305-306 Sidgwick, 181 Simon, St, 209 Simpson, 250-251 Smedes, 287 Smith, Colonel, 270 Society for Psychical Research, 234-235, 296-297, 298-299, 358-375 Spencer, 4, 12, 76, 168, 176, 213-215, 355 Stainton-Moses, 285 Stallo, 181 Stanhope, Earl of, 252 Stein, 181 Steefa, John, 372-374 Stephen the Sabaite, 187 Stephens, John L., 301 Stewart, 181 Stewart and Tait, 103, 107-108, 109, 116, 117, 120 Stock, St John, 115 Strasburger, 181 Sully, 181 "Supernatural in Nature," 56 Swedenborg, 144 Swift, 73 Tacitus, 101 Tait, 181 Tcheng-Ki-Tong, 275 Tennyson, Lord, 77, 145, 215, 405 Terriss, William, 310-315 Tertullian, 29 Tesla, 225, 354 Thomas, 195 Thompson, Dr G., 149-150 Thompson, J. J., 181 Thomson, Prof. W. H., 94-96, 104, 181, 225 Trollope, 253, 254, 344-347 Tylor, 57, 81 Tyndall, 18, 73, 135, 212, 252 United States Supreme Court, 142-United States Circuit courts, 142 Van Norden, 181 Verrall, 181, 298 Verworm, 183 Vignoli, 181 Virchow, 181 Hartmann (see Hartman, Von Von) Waldstein, 149 Wallace, A. R., 76, 89-90, 127, 181 Ward, Dr, 150, 181 Warschauer, 134, 181 Webster, Noah, 13, 216 Weismann, 181, 220, 221 Westcott, 22 Whitman, 399-400 Wilkinson, 250, 397 Wolseley, Lord, 288-289 Wordsworth, 161, 220

Authorities cited-continued Wundt, 148, 181 Ximenes, Cardinal, 23 Zöllner, 366 Zopf, 181 Zwingli, 21

BACON, Lord, The eidolon of form, 152-155

- Familiarity with a name makes it an explanation, 152-153

Balbiani, On psychology of micro-organisms, 183

On the Barker, Professor,

consciousness, 150
Barrett, Professor W. F. (F.R.S.),
On telepathy, 224

On the spiritual ear, and open vision, 224

- On the larger life, 224

- On the solidarity of mind, 225

- On the divining rod (dowsing), 277-283

- Methods described; list of dowsers, 278-281

Barnett, Canon, On loss of the consciousness of God, 39

- Morality dependent on conscious-

ness of God, 39
Bateson, W. (F.R.S.), "Problems of Heredity," 225-226

- No glimmering as to what constitutes the process of transmission of parental likeness, 225

- We do not know whether material

or not, 225-226
Bayley, Professor W. D. (S.P.R.), Experiment with Mrs Piper, 295

- Interjection by deceased sister, excluding telepathy, 295

- Experience in medium's cabinet, two forms present, 368 Experience in a large medical

- Experience society, 339-342

Berkeley, His system contrasted with that of Locke, 209

— How Hume used both, 209

- Huxley on Berkeley's system, 212 Bible, False interpretations isolated texts, 9

- Same is true of all Bibles, 9

- Growth of dogma as a consequence,

- Consists of a residuum from many other documents, 22

- Those not now canonical thrown out

by Church councils, 22 - Dr Lardner; prior to 556 there was no canon, 23

- "Christian people were at liberty to judge for themselves," 23

- Canon Farrar's list of mistranslations in New Testament, 23 - Bible on enchantments, magicians,

Bible-continued

familiar spirits, diviners, divination, etc., etc., 25

- Higher criticism merely deals with the stucco and drapery of the Bible; its fabric stands, 55

- The first Creation - narrative in

Genesis, 105

So - called "spontaneous generation" considered, 105-106

- Miracles narrated in the Bible. 92-109

- Professor De Morgan on dogmatic theology and science, 180 - Crystal vision in the Bible, 270

Bingham, Rev. Dr, Italian girl: "Do you Protestants believe in any supernatural world at all?" 54

Binet, Alfred, "Psychic life of micro-organisms," 182-183

- Refers, as authorities, to Gruber, Verworm, Moebius, Balbiani, etc., 183 Biology, Professor Wm. H. Thomson on inference as a prime factor in biology, 94

- Summary of the final results and conclusions of Romanes,

biology, 227-229 *Birthmarks, Transmitted correct in place and form to unborn children from prenatal shock to the mother, 229-230

Professor O. W. Reference to

Holmes, 230

 Holmes cites mental impression (see Elsie Venner)

Booth, Lady Gore, Apparitional case, from herself and family, 348-349 Bosco (The Magician), Utterly scouted

the idea of the possibility of Home's phenomena being produced by any of the resources of his art, 253

Bowen, Professor Francis, On the unconscious department of the mind (the subconsciousness), 146

- On the two Criteria of Truth, of

Leibnitz, 400

Bradley, Bishop, On the spreading disregard of Christ's authority, to-day, 28

- Tertullian on the same, contrasted with above, 200 years after Christ, 29

- Irenæus on the same, 29

Brine, Vice-Admiral, On crystal vision among the Ancient Mayas, of Yucatan, 273 Brinton, Dr Daniel G., On religion

and superstition, 56

- No tribe devoid of religion; no animal manifests any sense of religion, 56

- All religions depend on revelation, 56

Brinton, Dr Daniel G .- continued

vision in Ancient - On crystal

Yucatan, 273 Broca, Paul, Earliest human remains

show talismans, 57 Browning, Mrs E. B., On God's greatness and our incompleteness, 216 - On His rest, and our restlessness, 216

Büchner, On spirit, 135 Burton, Captain, Used crystal and black mirror in the East, 252

CALVIN, John, Calvinistic errors, 24 Cano, Dr Bernardo, On universal practice of crystal vision in Yucatan, to-day, 273

- Not confined to the natives, 273 Canons of the Church of England, On possession, obsession and casting out of devils, 5

Carpenter, Dr Wm. B., Alleged spiritual phenomena quite genuine and fair subjects for scientific study, 252

 His remarkable paper on mediate insight " which supersede the laborious operations of the intellect, and reveal truths and glories of the Unseen, 398

Carpenter, Professor J. Estlin, On the universality of religion, 82-83 Carlyle, Thomas, On miracles; "What are the laws of Nature?" 265

- Who has been present at the Creation and learned the laws of Nature? 265

- "Alas, not in anywise ! They have been nowhere but where we also are," 266

- "No lie can endure for ever," 401

Causality, Romanes on "causality," 43 - Romanes on; only because we are so familiar with its appearance do fail to recognise its possible origin and progress, 43
Sir John Herschel on "causality,"

- Only interpretable by volition, 44

- Lamarck on "causality," 46

Sir Isaac Newton on "causality," 47
Cicero (Nature of the Gods), On "causality," 48

- "Physical causation cannot made to supply its own explana-tion" (Romanes), 84

- Romanes, on volition as the only known cause, 228

- Sir John Herschel on volition as only known cause, 44-46
— Lamarck on "Will," divine free will,

as only known cause, 47

- Sir Isaac Newton on Divine Will as the only cause, 47

trosomes, The psychical com-manders in the psychology of Centrosomes, micro-organisms, 218

Charcot, Professor, Experiments in

clairvoyance under hypnosis, 284 Chamberlain, Dr E. R., Case of pre-vision by Captain McKavett of latter's own death. the 309

Chopin, Frederick, The inspiration of his "Marche Funebre," 49

- Comparison of Chopin with Edgar

Allan Poe, 49 Christ, Jesus, Max Müller on going back to His words and life, 5

- Romanes on fallacies of orthodoxy and recent simplification of doctrine, 6

- God's character revealed in Christ's life and words, 7

- His promises of spiritualistic powers, 25

- Not restricted to those of his own church or faith, 25

His commission, 26Statement of Rev. Dwight L. Moody, as to Christ's unpopularity to-day, 28

- The virgin conception, 96

- Examples of virgin conceptions from established science, 96

- Parthenogenesis; examples, 96 - His execution attested by Tacitus,

- His worship "as God," attested by Pliny the Younger, 101 (Both the above were heathen writers)

- Fallacies of a clerical critic's

arguments, 101

- His reasons for attributing greatness to Christ, would have left Him no greatness, 102

- On the kingdom of heaven within ourselves, 193

Universe God's workshop, - The creation by design going on all the time, 193

- "Suffer little children," 201

Christianity, Founded on spiritualism of the modern types, 18

- Its continued spiritualism denied until the Protestant Reformation, 18

- For fifteen centuries it was universal,

- List of phenomena of modern type of spiritualism narrated in the New Testament, 19

- The old Church recognised spiritualism in revelations, among the common people, 19

- Its old triumphant career lost in

eddies, 39 - Canon Barnett on the cessation of

the consciousness of God. The words of Jesus, 39

Christianity-continued

- Its new awakening and present broadening, 39

— Abandonment of erroneous theo-

logical systems, 39-40

- Attack and triumph over heathenism, 40

- Sacrifice of pagan art (all art was pagan), 40

— Revival as Christian art, centuries

later, 40

- Many of its beliefs and practices antedate Christ, 41

- Biblical Christianity a dead record without a spiritualism ever present and acting, 41

- "Higher Criticism" merely applicable to historical and incidental

errors, 55

- Necessity for Protestant revolt not denied; the Reformation struck back at abuses of and also reformed the older Church, 168

- Theological fallacies forced upon the Reformation by the necessity of repudiating the spiritual authority of the old Church, in order to have a status for the new, 168-169

- Result was to leave an anonymous Bible and a despiritualised

Church, 160

- The exclusion of present divine activity manifested by spiritual powers openly acting, for which was substituted an impersonal Nature as the operator, 169

science — Materialistic seized opportunity, and an alliance was formed, 169

- A short step from a dead Bible to a dead God, 38

- Its conquering power during its earlier ages the spiritualistic, 246

Church, Mrs Ross (Florence Marryat),

- On credulity which "accepts anything," among spiritualists, 128

- Reference to her book, "There is no Death," 65

- Her experiments with Sir William Crookes, in the Katie King phenomena, 65-66

-Her statements regarding sceptics,

Churchill, Winston, On the flash from crossing wires of consciousness (see Hume), 209

Cicero, M. T., On causation; immediate, of the gods directing and governing the whole world; otherwise, " of what avail is piety, sanctity, or religion?" 48

Clairvoyance, Case of "Eph's bullet";

Clairvovance-continued was it telepathy from the living or

the dead ? 274 - Experiment down a salt-well, 286

- Experiments in projected conscious-

ness, 285-287

Algerian case described, 285

- Alderman's cases, under hypnosis, 285-286

Comte, Auguste, His "religion of humanity," 83

- A composite god compared with a composite photograph, 84

- Huxley would as soon worship a wilderness of apes, 103

- Comte's teachings, 205

- His history and system, 209-210

- His fallacies, 210

Conn, Professor H. W., On protoplasm, 52

- Not a chemical product, but a machine, 52

 Machines always constructed under the guidance of intelligence, to construct and adapt the parts to each other for a definite purpose,

- On centrosomes in the psychology

of micro-organisms, 218

- His "Story of the Living Machine," 52 (see also his "Germ Life," and "Evolution")

All living protoplasm is living machinery, 225 - All

- The problem of explaining life is the problem of explaining a machine,

- We are apparently as far from a real explanation of life as before the discovery of protoplasm, 225

- We know of no such simple protoplasm capable of living activities apart from machinery, 225

Conscience, Shakespeare says, "Conscience makes cowards of us all," 402

- The inner voice from the subconsciousness, 402

- Unites us with all that is higher; the surface consciousness only knows it as a superstition, 402

Consciousness, The difficulty is not that it should survive after bodily death, but that it should survive through bodily life, or exist at all, 72

Tyndall on chasm between con-sciousness and physics of the

brain, 135

 Darwin on universe and consciousness inconceivable without existence of God, 85

- Professor Momerie on

letter, 85

Consciousness-continued

- Not a difficult problem if properly

approached, 161

- Consciousness must be used to even deny the existence of conscious-ness, 161

Conversion, The phenomena of religious conversion, 383-387

- Comes through the subconsciousness, 383

- Professor James on the psychology of conversion, 383

- Subconscious processes continue during trance and coma, 385

Cook, Florence, the medium through whom the Katie King phenomena were produced before Sir William Crookes, 257-260

Councils, The great Christian councils which established the Church and

Scripture canon, 22

Credulity, Professor Wm. H. Thomson on incredulity; based only on personal experience; will believe nothing else; cannot be reasoned with; relies on most fallacious testimony; a mental weakness; those incredulous about some things exhibit in others the most facile credulity, 104

- Belief is something to be earned; Romanes says that unbelief is usually due to indolence, often to prejudice, and is never a thing to

be proud of, 252

- Jevons on laws of thought; must encounter inexplicable and apparently contradictory results, 124

 Mrs Ross Church on credulity of many of those most devoted to spiritualism, and who are ready to accept everything without investigation, 128

- Romanes on credulity, 228

 No real difference between credulity and incredulity; both equally credulous, 128

Criteria of truth, Pilate's question,

"What is Truth?" 399

- If we are of God, there is an answer; if not, then the answer does not matter, 399
— Professor Bowen on the two criteria

of truth of Leibnitz, 400-401

- The three criteria of truth President McCosh, 401-404

- Author's illustrations of the latter, 401-404

- Professor Bowen's illustrations of the criteria of Leibnitz, 400-401

Crockett, S. R., Apostrophe to a donkey, in his "Adventurer in Spain," 187-188

- Comparison with the "two-legged";

Crockett, S. R.—continued

"Worlds and worlds of thistles without end! Amen!" 188 Crockett, Davy, "Be sure you are

right, then go ahead," 172
Crooke, Dr R. H., Translation of
Hecker's "Child Pilgrimages," 386

Crookes, Sir William, Reports seeing a detached hand come down upon a table before him, in full daylight, and strike on the table with a solid body, producing loud sounds, 105

- His work while known as Professor

Crookes, 235

- Rejected by Council of the Royal Society, 235

- His experiments continued, and his reports accepted by Quarterly Journal of Science,

- His further work and reports, 236-

- Made Sir William by the Queen, 236-237 - Elected President by the British

Association for the Advancement of Science, 1898, 237-238 - President, during the same year, of

the Society for Psychical Research, 238

- List of phenomena established by his experiments, up to 1874, 236-237

 Qualifications for his work, 235-236
 Extract from his Presidential address before the British Associa-

tion, 237-238
— "Nothing to retract; might add

much thereto," 237

— "In life I see the promise and potency of all forms of matter," 238

- His burning words, 18

 On Science, lifting veil after veil, and how her face grows more august, beautiful and wonderful,

Cross-correspondences, Methods sug-gested from the "other side," to ensure the elimination of telepathy from the living, 296-299

- Principal Graham on cross-corre-

spondences, 296-299

- Three previsional dreams of three persons, which were without significance separately, but which, when combined, made a veridical cross-correspondence; but only capable of being combined after the foretold death; the purpose evidently having been to establish the prevision without creating alarm, 337-338

Crossland, Newton, Spiritualism as certain as the multiplicationtable, 250

Crystal Vision, Captain Burton used a crystal and black mirror in the East, 252

- Experiments of J. Hawkins Simpson,

- Experiments of A. Goodrich-Freer, 250-252

- Narrative of Colonel James Smith, concerning a crystal vision among the Red Indians, 270

— Bible narrative; Joseph's divining

cup; used also for drinking, 270

- Use of shoulder-blade of wild-cat as crystal, 271-272 - Among the Cherokee Indians of

North Carolina, 272

- Among the ancient Aztecs, 273 - Among the ancient Mayas Yucatan, 273

- Dr Cano on present use in Yucatan,

- Crystal vision among the Eskimo, 268

- Among the natives of Chile: used by the Incas of Peru; among the Apaches, 273

Crystal vision and planchette writing in China, 275

DABNEY, Thomas S. G., Narrative of clairvoyance in his family, of dying boy, 287
Darwin, Charles, On existence of God,

- On psychology of plants, 150-151 - Plants perceive, and then act, 150-

151 - Consult together before acting;

division of labour, 151

— On the subconsciousness, 151

- On environment, 219

— His proposed pangenesis, 223 Davey, Dr J. G., His spiritualistic investigations removed doubt, 250 Davies, Rev. Dr. On spiritualism in

the Church, 5

- Spiritualists are broadest churchmen he finds anywhere, 57-58

De Morgan, Professor Augustus, On overbearing minister Nature; wears a priest's cast-off garb, dyed to escape detection, 125

- Sketch of his qualifications, 231, 290

- His conclusions from his own ex-

periments, 231-232 - Cannot be explained by imposture, coincidence or mistake, 231

- Some combination of will, intellect and physical power, 231

- Physical explanation casy, but miserably insufficient, 231-232

De Morgan, Professor-continued - Spiritual hypothesis sufficient, 232

- But ponderously difficult (1863), 232 - Spiritualists on track which has led to all advancement in physical science, 232

 Their opponents the representatives of those who have striven against

- The spiritualists appeal to evidence, 232 - All nations have assumed that there

is a world of spirits, 232 - Uniform vein of description among

rapping spirits, 232

progress, 232

 His qualifications epitomised, 290 - His narrative of experiment of his own in spirit-rapping, 291-292

- Anecdote of a sceptical friend's

experience, 292

De Morgan, Mrs (wife of Professor De Morgan), Her book, "From Matter to Spirit," 388

- Her citations of spiritual phenomena

in the Bible, 388-393

- Anecdote of children singing "of blood, wrath and damnation, with the utmost good humour," 394

— Her momentous question, 394-395 Dennett, Captain J. F. (R.N.), Narrative of Parry's Second Voyage to the Arctic, 195

- Narrative of early missionaries to

the Eskimo, 195-196

- Their primitive belief in God, 196 Descartes, Innate principles, 206 Dialectical Society of London.

- Huxley's reply, 74

- Answer by eminent psychologist, 75 - Investigation and report on phenomena, 233

- Extracts from letters to, 249-255

Dowsing (see Divining Rod)

Divining Rod, The methods used by so-called water-finders, 277

Largely in use in various countries,

277

- Professor Barrett's exhaustive reports on the divining rod, in Proceedings of the Society for Psychical Research, 277

- Cases cited by Professor Barrett,

278-283

 Andrew Lang on Professor Barrett's reports; not more than twelve failures out of 150 cases, 283

- A. Goodrich-Freer on the divining

rod, 283
- Case of Jacques Aymar (pursuit of murderer), 283

- Some possible explanations "dowsing," 284-285

Dreams (see veridical dreams), Under "Cross-correspondences,"337

Dudley, Professor Pemberton. Apparitional case, 340-341

Du Prel, On transcendentalism Somnambulism, 36

ELECTRICITY, Modern views of electricity and matter, 355-356

- The phenomena produced by strain in the ether, 353

- Franklin the forerunner in its utilisa-

tion, 354-355 — Tesla on electrical energy from

space, 354 Ellinwood, Rev. Dr., "Who shall say then that a disembodied spirit

may not do the same?" 58
Embryology, A leading factor in the
New Psychology, together with anthropology, modern biology, psychology of micro-organisms, comparative religions, folklore, and kindred sciences, 9

Emerson, R. W., On Brahma; on "river of command," 161, 289 Emotions Emotions the higher,

intellect the lower (Spencer), 4 Empiricism contrasted with trans-

cendentalism, 216

Environment, Fallacy regarding its power; it has no power; the power is in the one who overcomes it, 219

- Misunderstood by Haeckel; "the man " is everything, 219

Erasmus, Fourth edition of his Greek Testament, not earlier than 1514, the basis of all subsequent texts: the materials he used, 23

Eskimo, Their religious beliefs, before the advent of the missionaries, 108 Narratives of apparitions, angekoks,

and crystal vision among them, 267 Ether, The luminiferous ether considered, 293-294

- Wireless telegraphy a phenomenon

of the ether, 293

- Contrasted with telepathy, of the consciousness, 294

- Free and bound ether, 328 - Lord Kelvin on the ether, 353

- Sir Oliver Lodge on the ether, 353 - Sir John Herschel on the ether, 352

- Nikola Tesla on the ether, 354 - Sir Wm. Crookes on the vision of

nature, 355
— Fresnel on the ether, 353

 Consideration of the ether as a factor in the phenomena of materialisations, 350-356 Ethics, Without a religious basis ethics

impossible, 84

One of the "moral satisfactions"

which, Romanes says, always land us in misery, 84

Ethics-continued

- Ethics deal with questions of duty, not of choice; a consequence, not a cause, 84

- It is to learn what one ought to do. and there is no learning without a better informed teacher, 84

Ethnology, United States Bureau of, Psychical practices among the Indians, 292

— Crystal vision of Confederate

soldiers, 273
Eve, Dr, His "Collection of Remarkable Cases in Surgery," 96

- Many cases described of fœtal growth and development without male parentage; examples cited at length, 96-100

Evolution, Masson on Zero or Deity,

- Granted a Deity, John Stuart Mill concedes revelation, 162 - The parting of the ways; either

God is all, or Zero is all, 162-163 - By its definition Zero is nothing, and, however we may multiply it,

it remains nothing, 162 - Haeckel's errors regarding evolu-

tion, 217-227

- Professor Orton on evolution of the imago from formless matter,

- The only scientific basis of evolution is volition, 240

- Romanes, Sir John Herschel, Lamarck, on, 241

 Divine volition, acting in a vast sphere as our volition does in a small one, solves the problem of evolution: volition cannot be conceded in the one case and denied in the other, because the processes are identical, only differing in magnitude; as Sir Isaac Newton merely expanded the conception gravitation from the fall of an apple to the cosmical bodies of space, 241

FAITH, Romanes on difference between

faith and opinion, 91

-Huxley's confusion of these terms, or Farrar, Canon, His "Texts Explained,"

23 Citation of many errors, some of which are vital, in present trans-lations of the New Testament, 23, 24

Fascination, Psychical in character, 287 Allied to the inspiring power of great leaders, 288-289

- Case of fascination of frog by rattlesnake, 287-288

Flammarion, On mistakes of science,

Flammarion—continued

due to failure to pursue scientific methods, 173

- Relates incident in French Academy of Sciences, when the phonograph was first exhibited there, 175

Foster, Professor Michael, On difference between a living and a dead human body; to a large extent one of inference only, 94

Folklore, This new science presents old phenomena in a new aspect, 302

- Importance of consensus among widely separated peoples, 302

- Coincidence cannot account for such, 302

Franklin, Dr Benjamin, His "Kite-flying," 76

His noble reply, "Of what use is a baby?" 76
What "the baby" now ac-

- What complishes, 76

- His place in the phenomena and interpretation of electricity, 354

- Electrical energy from the ether,

354-355 Franklin, Sir John, On revival of

frozen fish in the Arctic, 31 French Royal Academy of Sciences, investigation and report of 1831, on so-called animal magnetism,

Fresnel, On the luminiferous ether, 353

GLADDEN, Rev. Washington (D.D., LL.D.), "The Outlook for Christianity," 6

- On liberalising movement in the Roman Catholic Church, 7

- On vast changes from the old to the new theology, 7

fatherhood and human - Divine brotherhood, 8

- God was formerly a sovereign; to-day is a Father, 7-8 Gladstone, Huxley on "Gladstone

and Genesis," 73, 113 God, God's science of Man versus Man's

science of God, 3

- His character revealed in the life and words of Jesus, 7

Our relation to, 7
No sovereignty higher than fatherhood; no law stronger than love, 8

- A celebrated evangelist: "It is the common cant to say that Christ is here, not in the flesh but in the spirit," 48

- He says that Christ went away from the world of His children; no one knows when He will return, 49

- Answer to the evangelist, "Abide with me," 49

- Charles Darwin on the impossibility

God-continued

of conceiving of the universe with our conscious selves, without the existence of God, 85

- Nothing spontaneous except in our own mind, and in God's will, 106

- Man's brotherhood and God's fatherhood; how this faith rises above human creeds and sectarian theology, 164

The great Overgod found intact in

all religions, 167

 Also with divine and spiritual revelation to man, 167-168

"God is a Spirit"; the context, 187
Faith in God's immanence; anecdote of two little girls, 192

— The universe His workshop; building, designing, with intelligence and volition, and creative power and wisdom constantly going on, 193

- Eskimo belief in God prior to missionaries, 196-197

- Le Bon's statement of man's creation of the gods, and then worshipping them, disproved, 197

intellectual and emotional conception of God preceded all attempts to embody them, 197-198 - Mrs Browning on His completeness,

and His rest, 216 - Professor James' definition of God,

— "We and God have business with

each other," 224 - Author's definition of God, 242 - Lamarck's definition of God, 242

- Walt Whitman on the individual as part of the divine; the same

of nations, 399-400

— Leibnitz on knowledge of God, as originator, sustainer and preserver; and of our own soul as the receiver of God's knowledge, 401

Goodrich-Freer, Miss A. (S.P.R.), On objectivity of things seen in crystal vision, 251

On acquirement of the art of crystal

vision, 273 - Example cited from a little colony

of crystal gazers, 274

- On the use of the divining rod, 283 Gordon, Lieutenant-General John B., Cases of prevision narrated in his recent book, "Reminiscences of the Civil War," 303-305 ld, Dr, His "Curiosities

Gould,

Medicine," 96

- Many cases of fœtal growth, with live fœtuses, often nearly fully developed, in cases where male parentage was impossible, 96 (see also Dr Eve's book)

Graham, Professor, On the alleged

atheism of science, 134

— His "Creed of Science"; a state of

chaos never existed, 134 Graham, Principal John W., On Crosscorrespondences, S.P.R., 296-299 Gruber, On psychology of microorganisms, 183

Hamilton, Sir William, On "in-explicability," on any empirical

basis, 210 Hammond, Dr William A., His "Sleep

and its Derangements," 11

Likens mind to bile, to candle-

light, to a coal-fire, 12 - Says that when brain is quiescent there is no mind, 12

— He wrote in 1869, 11

- His concessions, in cases of somnambulism, that his subjects saw without eyes, and while the ordinary senses were not awake to ordinary excitations, 107

Harris, Joel Chandler, Everything beautiful and precious in this world has a mystery attached to

Harrison.

Frederic, His belief in Comte's philosophy, 209 Hartmann, Edouard Von (see also

Von Hartmann) - On phenomena following the

severance of an annelid, 95 - On the subconsciousness (the

unconscious), 147

— On memory, 156-157

— On the action of the unconscious,

the unconscious (the sub-

consciousness), 222

Hayden, Mrs, The medium in whose presence were produced the phenomena described by Professor

De Morgan, 291-292 Haeckel, Ernest, His "Riddle of the

Universe," 12

- Describes the soul as a matter of the nervous system, 12

- He says it is the sum total of the physiological functions, 12

- Conceded his incompetency to deal

with the problems, 171

Thought he was able, however, to produce a sketch of a general

plan, 217-218 - Recommended "the profound work of Romanes" to his readers, 104

- Romanes repudiated Haeckel and his teachings, 103-104, 227

- Some of Haeckel's misstatements and fallacies, 218-219

- His whole scheme of heredity now discredited, 220

Haeckel, Ernest-continued

 His endorsement of Romanes. 226-227

- The conclusions of Romanes directly

opposite, 227-229

Hecker, Dr J. F. C., On epidemics of the Middle Ages, dancing mania, sweating sickness, child pilgrimages, etc., 386 Heredity, Physical heredity incom-

patible with memory, 158

- Otherwise progenitors must have been better informed instead of

less, 158 - Cannot account for inheritance of higher mind from lower, 220

- Lowest forms of life have little of use to us to transmit, 220

- No physical stream can rise higher than its source, 220

— Inventions could never be so transmitted, 220

- Discussion of heredity, from recent authorities, 220-230

- Citations from Bateson, 225-226

- Strange results from cross-breeding, - Sandeman on heredity:

differences in protoplasms indicating possibilities of form, 221

- Von Hartmann on

225-226

- Kant on instinct; the "Voice of God," 222

- Consideration of the "Vis Medicatrix Naturæ," 222

- Professor Shaler on heredity; changes in man psychical, not physical, 222

- Heredity, says Shaler, goes beyond our field of knowledge or the scientific imagination, 223

- Bateson on heredity; no glimmering of an idea; we do not even know whether it is material or not,

Professor Orton cites the fact that the larva disappears into form-less matter before the imago commences to form, 31, 229; I refer also to Orton's "Comparative Zoology," page 30:
"There are no parts set apart
for a particular purpose, but a fragment is as good as the whole to perform all the functions of life.' "The animal series, therefore, begins with forms that feel without nerves, move without muscles, and digest without a stomach: in other words, life is the cause of organisation, not the result of it. Animals do not live because they are organised, but are

Heredity-continued

organised because they are alive" (Note, not in text of present work)

- Lamarck on the organising principle as superior to Nature, and independent of matter, 229

- Birthmarks transmitted to unborn children, from prenatal shock to mother, and appear at birth correct in form and place, 229-230

- Example in professional experience

of the Author, 230

— Professor O. W. Holmes, M.D., on birthmarks (Professor Holmes cites the case of King James I. of England, in which a mental dread of naked weapons followed through his whole life, from maternal shock, from his mother practically beholding the murder of Rizzio, by such weapons)

Herron, Professor, On the degeneration of living faith; theology responsible; does God live now? 38 Herschel, Sir John, On causality; only

interpretable by volition, 45 On memory as controlling the atoms and molecules of space, 158

- On the phenomena of atoms in

motion, 175

- Their movements can only explained by mind and volition, 175-176. (He says, in his paper on Atoms, "Thou hast said it. The presence of MIND is what solves the whole difficulty"

On will without motive, power without design, thought opposed reason; would explain chaos, but not anything else, 176

- On mind as the key which unlocks the vis viva of unstably-balanced nature, 223

- On the ether, 352

Hockley, Mr, On crystal vision; collected more than 12,000 answers to questions. Examples, 251-252

Hodgson, Richard (LL.D., S.P.R.), Communications, through Mrs after his death. Professor Bayley and others, 295-

- Surviving personality of Hudsonturns up at one of Dr Hodgson's sittings, 327-329

Holmes, Professor O. W., On the sub-

consciousness, 149
On birthmarks (see Heredity), 230 (Says, "there is no end of cases of this kind"; see "Elsie Venner")

Hough, a boy medium; Experiments of Mr P. with, 316-320

Huggins, Dr. His association with Sir Wm. Crookes, 236

Hume, David, His argument against miracles, 88

- Fallacies of Hume's argument,

- A. R. Wallace on Hume's argument, 89-90 - T. H. Huxley on the same, 90

- G. J. Romanes on the same, 90-QI - His teachings, 205

- Little understood by those who lean upon him, 208 - His philosophy, 209

Morell ("Speculative Philosophy of Europe"), on Hume, 209
 Hunt, Leigh, His poem, Abou Ben

Adhem, 396

Huxley, Thomas H., On materialism; the idealistic position unassailable, IO-II

- He denies materialism, 11

- His definition of science; if nothing but what is exactly true be called science, there is very little science in the world, 74

- On Hume's argument

miracles, 90

- On Comte's "God of Humanity"; a wilderness of apes, 103

On mathematics as a perfect science,

- Answer by Professor Jevons, 110-

111, 113-115 - On solid and sure-enough science,

177 - On the brain as a mechanism by material universe which the becomes conscious of itself, 212

 The idealistic position unassailable, 213

- Compelled to accept idealism instead of materialism, 397

ILLMAN, Rev. Thomas W., His experiment with a trumpet-medium, 335-336

Inconsequential character of much of

the phenomena, 372

- But phenomena of this sort frequently of scientific importance, 372, 374

- Case of John Steefa (table-tipping

case), 372-374

— Difficult to explain on any normal

or telepathic basis, 374

— Case of young girl, who automatically reported two large volumes

of formal sermons, 375 Ingersoll, Col. Robert G., On passing

away of churches, 119 Inventions, Explanation of patentable inventions, 137-140

- They are essentially supernormal, 141-143

Inventions-continued

- Merwin on "Patentability of Inventions," 139-142

- Court decisions on inventions, 142-

-Like a "bolt from the blue," 138, 141 - The psychology of inventions, 144-

Irenæus, Sweep of Christianity in its earlier ages, 29

- The causes and the results, 29

- Due to faith, spiritualism and miracles, 29

JALALU'D Din, Persian poem, of 700 years ago, on the divine system of evolution, 242

James, Professor William (S.P.R.), On systematic theology, 4

phenomena of spiritualism among the most constant history, 59

the subconsciousness; now a well-accredited psychological

entity, 223-224

- More life in our soul than we are ever aware of, 223

- Definition of the term, God, 224 - "We and God have business with

each other," 224 - On Myers' great discovery and demonstration of the subconscious department of the mind, 383

Janet, Paul, Materialism due to an inclination to explain everything by unity; materialists do not go back far enough for the unity, 176

- Their blunders consequent on this

failure, 177 Jevons, Professor W. Stanley, On tendency of men of science to conceal incompatible facts, 110,

- On mathematics as an imperfect

science, 110-114
On Comte, Tyndall and Mill, 112-113 - Every explanation only serves to open new problems, 113

- There must, at one time, have been arbitrary determinations, 113

- On infinite series of diminishing

solar systems, 124

— "When fairly pursued science makes absurd drafts upon our powers of comprehension and belief," 124

- Result of harmonising a few facts is to raise up a host of other un-

explained facts, 127

- Statement of Professor De Morgan's

qualifications, 290

Joan of Arc, Type of humble recipients of divine and spiritual revelation and power, which the older Church Joan of Arc-continued

has always received with approval and often with high recognition and even beatification, 19

Johnson, Samuel, Apparitional case narrated in his biography, and by

Washington Irving, 309-310
Johnson, Miss Alice (S.P.R.), Report
of prevision in Terriss murder case, 310

KANT, Immanuel, On instinct; "Voice of God," 158, 222

Kelvin, Lord, On demonstrated daily miracle of our human free-will,

- On the infinite difference in plant and animal life and our consciousness, from any possible results of the fortuitous concourse of atoms, 95

— On perpetual miracle of life, 200 "Ether and Gravitational Matter through Infinite Space,"

Kepler, His researches pursued by the methods employed by spiritualists in their investigations, 69

 Aggressive scepticism fatal, 69 Kidd, Benjamin, A Rational religion a

scientific impossibility, being a contradiction in terms, 103 - Deep - seated instincts of society

have a truer scientific basis than our current science, 106

g, John (the Old Buccaneer, Morgan), Purports to write in King, John three colours, on closed slates, for Mr P., 318-320

King, Katie, Her last appearances to Sir Wm. Crookes, 256-260

- The Crookes, photographs of, 256-

Kipling, Rudyard, "A rag, and a bone, and a hank of hair," 146 Knott, Professor C. G., On sensitiveness of the ear to atmospheric vibrations, 262-263

LADD, Professor, On the subconscious, 147

Lamarck, Chevalier (Jean Baptiste Pierre Antoine de Monet), On causality, 46

- On nature, 47 - On free-will, 47

- On God, 46-47 investigations resulted — His

modern biology, 133

— Overwhelmed by the great influence of Cuvier, backed by the Church,

133 - Revived and re-established Charles Darwin, 133

Lamarck-continued

- Lamarck driven back by his researches to a designing, creating, and continuously executing God,

Lane, Frederick, His prevision of the murder of Terriss, the actor, 311

Lang, Andrew, On the divining rod, 283

- On proportion of failures, 283

- The failures may not be real failures,

Language, American languages all

polysynthetic, 198

 Anthropologists agree that this determines an independent de-velopment, if not origin, of the American races, 198

Lao Tsze, Ancient Chinese philosopher,

600-500 B.C., 155

- The commentaries of Kwang Tsze

on, 155-156

Laplace, On the denial of any phenomena in our present ignorance of the agents of nature, 125

- Scrupulous attention required, 125 Lardner, Dr Nathaniel, Canon was not settled until about 556; prior to that time, "Christian people were at liberty to judge for themselves concerning the genuineness of the writings," 23

Layman, Dr Alfred, Case of prevision by Private Shuler, of his own death in battle, months before his death; the scene pictured, 303-

medium, 336-337 Le Bon, Gustave, His "Psychology of

Peoples," 193

— Religious beliefs the most important

element in the life of peoples, 193 - The fundamental questions always

religious, 193

- On religious beliefs of peoples, "the most important element," 394
Le Conte, Professor Joseph, Man an immortal spirit, 163

- On the sole basis of morals, religion

and virtue, 163 - Belief intuitive and universal, unless

plagued by metaphysical subtle-

ties, 163 Leibnitz, His two criteria of truth, 400-40I

Lewes, G. H., Religious philosophy a contradiction in terms, 103

- On laws alleged to be known, 249

- Whoever says, "If phenomena are produced by no known physical laws, he declares he knows the laws by which they are produced,"

Lewis, Mrs Lætitia, Not a medium, 255 Spiritual manifestations, scared my daughter to death,

"Comparative (see Orton's Zoology," p. 30)

- Professor Conn on, 225

- As far now from a natural explanation as before discovery of protoplasm, 225

- Professor James Orton on immediate organisation of complex living animals from formless matter,

31, 229

- Von Hartmann on reproduction of two halves of a severed worm, the reproduced parts being totally unlike the remaining halves on which they are formed, 95

- Professor W. H. Thomson on de-

velopment of a whale, 95

 When a microscopic speck a greater living thing than when full-grown,

- Professor N. S. Shaler on physical organisation of man, 222

- The old bondage of the mind to the body swept away, 222

- The frame remains essentially un-

changed, 222

Orton says "animals are organised because they are alive " ("Comparative Zoology," p. 30)

- Sir William Crookes on, 238 - Sees in life the promise and potency

of all forms of matter, 238 The psychology of micro-organisms,

182-183, 220

" commanding — The centrosomes,

generals," 218

Locke, John, On God, spirits and revelation, 11, 205-208

Lodge, Sir Oliver, The whole of us not not the control of the contr

incarnated in our terrestrial bodies.

- Portions not ordinarily manifested may appear in men of genius, in mediums, etc., 224

- On demonstration of a future life, 299

- We are progressing sufficiently rapidly, 299

- On the ether, free and bound, 353-354

- On work of surviving personalities after death, 395-396

— Not a life of idleness; personal

service, 396

Longfellow, H. W., Lesson of his poem, "Excelsior," 242 Luther, Martin, Until his revolt the

whole Church was spiritualistic, 18

- The spiritualism of the type known as modern, 18

Luther, Martin-continued

- He himself a believer in this spirit-

ualism, 21

Lyell, Sir Charles, Far back in geological times human remains show that the dead were fitted out for journeying to the land of spirits, 57

Lyte, Rev. H. F., The grand hymn and prayer, "Abide with me," 49

McCosн, President James, His three criteria of truth, 401-404

- The author's illustrations of same,

402, 403, 404 McHatton-Ripley, Mrs, Case of fascination of frog by a rattlesnake, 287-288

McKavett, Captain (U.S.A.), Prevision

of his own death, 307-308 Mackintosh, Sir James, "There can be no belief that there can be no belief," 209

Magic, Practices narrated in the Bible which would apparently come under such designation, 25, 389-393 Mallock, His "New Republic

- On supplanting polytheism, 119

 On study of nature; they do not study it, 120 Malobservation, Consideration of, as

an explanation of psychical phenomena, 299-300

Man, "A religious as well as a political animal," 7 Manetohcoa, Old Red Indian conjurer;

crystal vision, 271

Marmery, J. V., On atomic energy, 262 - Millions of times greater and more powerful than any other with which we are acquainted, 262

- Statement of the qualifications of Professor De Morgan, 290

Marryat, Florence (see Mrs Ross Church), 128

Martin, President W. A. P., planchette in China, 275

Masson, David, On notions of phenomenal world, of man and animals,

- As though there is a basis of independent reality to which each sentiency can help itself, 135

- On philosophy pretending to regulate and supervise that of which it is ignorant, 161

- If Zero be reached, there can be no evolution; if Deity is at the back, then it is Deity and not Zero, 162

Materialism proven worthless, Preface v.

- Materialism and transcendentalism,

Preface v.

- Controversy with materialism practically ended, Preface v.

Materialism-continued

- Lines formerly followed erroneous,

Vast changes due to abandonment of, 3 - Professor Shaler on strong reaction

against, 58

- The great authorities formerly held to be in favour of materialism have been erroneously cited, 171

- Their teachings quite the reverse, 171 - Its basis a mistaken one, 171

- Definition of, synonymous with empiricism, 171, 215-216 - Its sole reward a blank, 203-204

- Absurdity of materialists as missionaries, 204

- Sir Wm. Crookes on life, with reference to matter, 238

- Romanes on misery of materialists; husks for starving belly; high confectionery for the starving, 185-186

Materialisations, Discussion on the question of, 339

- Cases of apparent dematerialisa-

tion, 341, 342
— Some possible explanation of, 350-356

- Bound ether as a factor, 350-354 Matthew, Gospel according to, espousal of Mary by Joseph, 101-

Maya Codices, Their symbolism; idols, 195

Medical profession, attitude of, toward psychological phenomena, 339

- The opinion that the profession tends toward atheism is erroneous, 339

— When the veneer is stripped off the reverse appears, 339

- Dr Bayley's paper, and the result, 339-341

- Census of 600 physicians, by Ridgway's Magazine, 342 Melancthon, Like the other com-

panions of Luther, a spiritualist, 21 Memory, The final battleground of materialism, 152

 Dialogue to illustrate that memory is non-physical, 153-154

- Professor Bowen on memory, 155-

- Example from library in British Museum, 156

- The subconscious "picker," 157

- Law of parsimony forbids multiplication of the pickers, or the construction of a physical museum of "impressions," when the picker must know it all beforehand without such physical museum, 157

- Familiarity with a name (such as

Memory-continued

"impressions") gradually makes the name the explanation, 152

"Association of ideas" inapplicable in whole fields of memory, 157

- Memory belongs to that psychical order of phenomena described by Sir John Herschel as of "atoms" in their movements and behaviour, and of causation as volitional. 158

- Lapse of, as an alleged explanation of psychical phenomena, 299

- If valid, would exclude all human testimony, and all community of social life, and civilisation, 300

- Lapse of memory may drop from, but cannot add to, 300

Merwin, H. C., On "Patentability of Inventions," 139 - Court decisions cited, 141-143

Micro-organisms, Psychology of, 182-

- Revelations of primordial psychic life, 182-183

-If obtained by physical evolution the evolution must have come by a

leap, 183 - Their psychical attributes; memory, friendship, love, likes and dislikes,

choice, sport, etc., etc., 183-184 - Haeckel on birth of the soul from sexual union; disproved by the psychology of the vast preponderance of asexual births, 218-219

Mill, John Stuart, His teachings, 205

— The "inexplicability" which overthrew his system; his final con-

cession, 210-211 Mind, From Zero or from Deity, 162

- Herbert Spencer on our consciousness as derived from the Infinite and Eternal Energy, that it is specialised and individualised here, and returns to its source at death,

- Romanes on psychism of man as kindred with the psychism of the "The Spirit of universe, "T Universe," 84 the

- Dr Hammond's statement mind is analogous to bile, candlelight, to coal-fire, 12

- Contradicted by his own experi-

ments, 107, 213
ments of independent - Masson on

reality, 135 — Huxley on consciousness as the medium of interpretation of the consciousness of the universe, 212, 213

- The existence of mind cannot be denied, for it must exist, even to deny that it exists, 161, 209

Mind-continued

- Professor Le Conte on matter and

spirit, 163
Professor Wm. H. Thomson on - Professor mind as a great reality; nothing inconceivable about its separate existence, 225

- Simply a matter of evidence, 225 Miracles, The miracles of one age the

science of the next, 91 - New Testament miracles, 92

- The miracles of plant and animal growth far more miraculous than those of Scripture, 92

- Only our familiarity blinds us, 92

- Lord Kelvin on such miracles, 94-- Lord Kelvin on plant-life, con-

sciousness, and free - will, miracles, 94

- Von Hartmann on miracle

severed annelid, 95

- Tennyson on miracle of flower in wall, 138

- Professor W. H. Thomson development of a whale, 95

Stewart and Tait on miracles in

accordance with the continuity of nature, and an intelligent agent, 95-96, 108

- The virgin conception of Jesus,

parthenogenesis, 96

— Not uncommon; the usual mode in lower organisms, 96

- Occurrences of same in human

beings, 97-100 - Hume's argument against miracles

long exploded, 88-92 - Recently revamped by a so-called

clergyman, 99-103 - Huxley on miracles; not impossible,

The miracles within our own bodies,

The "miracles" of the Rev. Dr

Sanders, 107 - Carlyle on miracles, 265-266

Modern Mexico, Late magazine, on Yucatan Poltergeists, 302

Moebius, On psychology of micr organisms, cited by Binet, 183 of micro-

Mohammed, Vision of night-visit to spirit-world, 285

Momerie, Professor, Accidental origin of the universe and consciousness only conceivable by an extravagant fanatic, 85

Montgomery, Professor, On the subconsciousness, 148

Montucci, Father, On pre-Christian revelations, 41

Moody, Rev. Dwight L., His statement of the abandonment of Christ's commission; hardly a name so Moody, Rev. Dwight, L .- continued unpopular as Jesus Christ's today, 29 Mooney, James, Crystal vision among

Cherokees, 272

Morgan, Old English Buccaneer, Said to be the original of John King,

256, 318-320 Morris, Charles, Extract from planchette writing; appearance of an interjector; her life and death described, 330-333 Myers, F. W. H., On the subconscious,

- Each of us an abiding psychical entity far more extensive than he knows, 224

- His "Human Personality," 297

Müller, Max, On revivals, 5
— Extract from his "Memories" (God and Eternity), 190

Murdock, Definition of transcendent-

alism, 216

NATURE, Its etymology, and signification; "born," 17

- Romanes on the psychism of the

universe, 17

- Problem of nature is the problem of mind, 17

- Lamarck on nature, 47, 133

- Sir John Herschel on nature, 44-

- Sir Isaac Newton on nature, 47 - Nikola Tesla on "stored up"

energy in nature, 225

 Herbert Spencer on Infinite and Eternal Energy, from which our consciousness is derived, and to which it returns at death, 214

Newbold, Professor, Referred to in communication of Dr Hodgson, after his death, to Dr Bayley, 295-296

Newman, Cardinal, His hymn, "Lead, Kindly Light," 50

On our union after death, 145

Testament, The writers firmed and expanded the spiritualism of the past and present, and directed it to the conversion of the world, 29

- Jesus unable to do great works where faith was wanting, 63

Newton, Sir Isaac, On causality; on instinct, 47

- His methods of research, 69 - On gravitation, 147

Nevius, Rev. Dr John L., On spiritual-

ism in China, 68 - His circular to missionaries, and

their replies, 69 Nus, Eugene, His sardonic dedication to "Savants," 173

ORTON, Professor James, His "Com-

parative Zoology," 31

— (His statement that life organises forms, p. 30 of his book)

— On larva and imago, 31 — On physical heredity; one form disappears in formless matter before its successor begins, 31, 229

PARRY, Captain, His second voyage to

the Arctic, 267

— His interviews with missionaries and Eskimo, 195-197, 267-268 the Apostle, "Without this, our

Paul the Apostle, "W hope is vain," 100

- Whether inside or outside the body.

Philosophy, Romanes says the philosophy of the cosmos becomes a philosophy of the unconscious only because it is a philosophy of the superconscious, 84

Photographs, Spirit-photographs con-

sidered, 256-257, 261-264 te, Pontius, Tacitus says that "Christus, in the reign of Tiberius, was put to death as a criminal, by the Procurator, Pontius Pilate,

- His question, "What is truth?"

399

The answer, the criteria of truth, 404 Piper, Mrs, The well-known S.P.R. medium, 295-299

Planchette, Its use in China for more than a thousand years, 276

- Belief in its revelations by the literati in China, 276

- No sign that the practice "has had

its day," 276
y the Younger, His testimony that Christians worshipped Christ as God (Christo quasi Deo), 101
Poltergeists, Yucatan case, as narrated

by Stephens, 301-302

- Valid reports of such cases innumer-

able, 302 Polysynthesis, All native American

languages polysynthetic, 198 Prendergast, Colonel, Prevision, with date, of his own death, 309-310

Pritts, J., publisher of "Border Life," which contains Smith's narrative of Red Indian crystal vision, 270

Podmore, Frank, Report of prevision in Terriss case, 310-315

Edgar Allan, Compared with Chopin, 49

Prevision, Shuler case reported by

Dr Layman, 303-306

Cases reported by General Gordon, 307-308

- Case of Captain McKavett, 307-308

Prevision—continued

- Case narrated by General Ogle-

thorpe, 309-310 - Case of William Terriss the actor, 310-315

- Previsional dream of three ladies, 337-338

Probation, The only rational explana-

tion of life, 228 Protestant Theology, Danger in any creed based solely on an ancient record, 25

- Multiplication of sects inevitable, 25 - In repudiating living spiritualism, compelled to accept a materialistic

nature, 26

- To successfully attack the older and more spiritualistic Church (but in which spiritualism had been made sacerdotal), compelled to repudiate spiritualism, 40

- Its basal false assumption, that nature is in control, and that, "if there be a personal God, He is not immediately concerned with natural causation," 51

Protoplasm a machine, not a chemical

substance, 225

 We do not know the essential differences of protoplasms, and what we do know appear to be wholly accidental and irrelevant, 221

- No difference in protoplasms in which possibilities of form can be

expressed, 221

- Protoplasm of the imago formless, and moulded by the life principle, 17, 31

Psychology, Present trend of, Preface v. - Formerly lacked means and appli-

ances, 8 - Basis of psychology is the trans-

cendental, 11

- Has advanced so far as to make retrogression impossible, 13

- Definition of, 13

 Is psychical or spiritualistic, 14 - Psychology among the Chinese, 68

- Testimony of missionaries, 69

- Rate of sensations no part of psychology, 160

- What is it that travels? the identity of a man who is mutilated, 160

- Professor Ladd on the missing word, "shot up from the hidden depth below," 160

— On the gift of consciousness, 16

- How do we know that present trend of psychology will continue?

- The problems become simpler as we advance, 179

Psychology—continued

- The conceded abandonment of brute matter, 179

- Modern views of matter essentially

psychological, 355

— List of names of prominent psychologists, 181

- Importance of the study of microorganisms, 183

"God opens wide all His doors down there," 183

- Popular error regarding teachers,

- The centrosomes in micro-organisms, 218

- Sir Oliver Lodge on parts of us not

incarnated here, 224 - May appear as genius, mediumship, etc., 224

- Professor James on the subconsciousness, 223

- W. H. F. Myers on "an abiding psychical entity far more extensive than he knows," 224

- Professor Barrett on the "larger life," 224

- Our union in the solidarity of mind, 225

- Professor Conn on life and protoplasm, 225 Professor Wm. H. Thomson on

- Professor mind as a great reality, 225

- Professor Orton on psychology in metamorphosis, 31

— His psychology in "Comparative

Zoology " (see p. 30 of his book); "animals do not live because they are organised, but are organised because they are alive."

- The vast scientific change regarding psychology in the past quarter of a century, 235

- Sir Wm. Crookes on the promise and potency of life, 238

science before - His address on British Association, 237-238

- Supernormal is only in the sense of extraordinary, 268

- Use of such terms as " magnetism," to disguise psychology, 269

- Cases of prevision, which, if true, must be psychological, 303-315

- Experiments in changing weights, 236, 316-326

 List of experimental demonstrations by Sir Wm. Crookes, 236-237

- The correct attitude of psychology to-day, 326

in passing matter - Experiments through matter, 367-368

— Planchette case narrated by Charles Morris, 330-333

- Table-tipping case narrated by the Author, 372-375

Psychology-continued

- Spirit-rapping case narrated by Professor De Morgan, 291-292

- Automatic reports of sermons by a young girl, 375

- The psychology of religious conversion, 383-387

 Consciousness and the bases of psychology, 397-398

- Carpenter's concessions of "im-

mediate insight," 398

No study which will bring richer returns, 405

Psychic Life, Micro-organisms, 225 (see also Conn's "Story of the Living Machine," pp. 96-100)

P. Mr, Personal friend of the Author, his experiments, 316-320

- His original records in possession of the Author, 320-324

- Advice to his children against seeking knowledge from public mediums, 326

RELIGION, An everlasting reality, 7 - Aspect of religion recently changed,

- The central truth now, God's fatherhood and Man's brotherhood, 8

 All religions of God, and all spiritualistic, 55

- Brinton on religion in general, 56 - Tylor on religion in the past, 56

- Sir Charles Lyell on primitive religion, 57

— Paul Broca on the same, 57 — Author of "Supernatural Nature" on the same, 57 - Epes Sargent on the same, 57

- Higher and lower religions fundamentally alike, 8, 167

- I. Estlin Carpenter on the universality and identity of religions, 83

— Kidd on a rational religion, "con-

tradiction in terms," 103 - G. H. Lewes on the same, 103

- Huxley on " Religion of Humanity,"

- Stewart and Tait on what Christ did

as a fulfilment of law, 103 - Lord Kelvin on free-will as a daily miracle, 103

- Romanes on agnosticism, 103

- Romanes on the Resurrection of Jesus, 104

Outcome of the great textual battle

(Higher Criticism), Romanes says "Signal Victory for Christianity,"

- Spiritual revelation the basis of all religion, 162

- John Stuart Mill; if a Deity exists, then revelation is ordinary and Religion-continued

normal, and to be expected,

- As old and universal as humanity,

- Basis always spiritualistic, 167

- The great Overgod intact in all religions, 167

- The old Spencerian idea that religion arose from ghosts, dreams and the like abandoned, 168

- Prior to sixteenth century the whole Christian Church avowedly spiritualistic, 168 Romanes on basis of conflict

- Romanes on between religion and science; due to acceptance of Nature for God,

- Results of divorcing religion from ever-acting God, 170

- Romanes' picture of soul-starving misery outside faith in God, 184-185

- Satisfactions which follow on faith in God, 186-187

- Le Bon on only gift which can endow men with happiness, 394

- S. R. Crockett's contrast; the twolegged and the donkey, 187-188

- Max Müller on religious basis in man, 188-190

- Spiritualism of the universe, 190

- On idols as mere physical representatives, 197 - Religious beliefs of the primitive

Eskimo, 196-197 - Summary of religious conclusions

of Romanes, 228-229 Basis of all religion is spiritualism,

- From Paganism to modern Christi-

anity, 246 - Sincere believers have always repudiated dogmatic theology, 247

- Perverted theology allied with empiricism, 247-248

— Mrs De Morgan; her citations from

the Bible, 388-393
— Sir Oliver Lodge on work of sur-

viving spirits, 395-396

— Leigh Hunt on love of fellow-man,

396

Religious Tract Society of London - On the assumed withdrawal of spiritual power from the Church; "no longer needed," 26-27

The consequences, 27
Rev. Dwight L. Moody; same condition now as He found it 1800 years ago, 28

Resurrection, Irenæus on resurrections in his day, 29

- "Suspended animation " considered, 30

Resurrection-continued

No scientific test of absolute death,

- Sir John Franklin on revival of frozen fish, 31

- Revival of drowned house-flies, 32 - Professor Michael Foster on dead

and living body, 94
— Professor Wm. H.

Thomson on living and dead protoplasm, 94

— Evidences of resurrection, 101 Revelation. Stewart and Tait

revelation, 107-109

– John Stuart Mill on revelation, 162 Revivals necessary in all religions, 5 Richet, Professor Charles, On coming integration, 17

Ridgway's Magazine, Census of 600 physicians on immortality, 342 Roberts, Dr Alexander, On original

Greek Testament, 22-23 Always Catholic Church,

spiritualistic, 19

- Grew to claim sacerdotal control, 19 - Revolt inevitable, 21, 168

Romanes, George John, On the "Spirit

of the Universe," 17 - Its psychism akin to our own, 17-

On Resurrection of Jesus, 34-35

— On causality, 43

- His experience at Cambridge, "all the most illustrious names were ranged on the side of Orthodoxy,'

- His statement of the great basal religious fallacy by which God is grudged His own universe, 51-52

- On moral satisfactions without faith in God, which always land us in misery, 84

- On nature and its psychology, 84 - Physical causation cannot furnish

its own explanation, 84

Hume's argument against miracles, 90

- Faith, as contradistinguished from opinion, 91

- On service rendered to Christianity by modern agnosticism, 103 - Battle of higher criticism a signal

victory for Christianity, 104 - Those who reject Christianity do

not care for any religion, 104 - Explanation of his earlier book, 119

— His primal errors at that time, 119 - On conflict of science and religion,

- Repudiated the facts and conclusions of Haeckel, 172

- Sketch of his life and pursuits, 182-186

- His last work, "Thoughts on Religion," 183-184

Romanes, George John-continued

- Evolution in analogy with God's other work, 184

- His picture of the misery of those who lack faith in God, 185-186

- Summary of his scientific position, 227-229

 His nearly fatal oversight in early life, 227

- Was "too much immersed in merely physical research," 227

His later work and results, 228

— On the integrating principle of the whole; a psychism, 229

fatal alliance between — On the theology and materialism, 240

- On unbelief, usually due to indolence, often to prejudice, and never a thing to be proud of, 252 sevelt, President Theodore,

Roosevelt, reliability of Col. James Smith, 270

SALISBURY, Lord, On dim and flickering island of light, 112

Sandeman, George, His "Problems of

Biology," 221 - We have no knowledge of the form-

determining properties of germs or protoplasms, 221
Sanders, Rev. Dr C. B., His psychical revelations entitled X+Y=Z; or

"The Sleeping Preacher," 10 Sargent, Epes, All tribes have had their

prophets, seers, sensitives, psy-

chics or mediums, 57 Schofield, Dr A. T., His remarkable series of works on the subconscious mind, 128

— His work "The Force of Mind," 339 Schreiner, Olive, The pursuit of truth; on the topmost height, a single feather fluttered down, 242

Science, Fallacies of physical science, 3 — Physical sciences incapable of dealing with psychology, Preface v.

 Narrowness of scientific specialists, 9 - Alliance of materialistic science with materialistic theology, 10

- Merely physical science fatal to breadth, 10, 227

- Had science turned its attention to investigations of spiritualistic phenomena, great results would have followed, 16

- The physical sciences deal merely with the temporary, 16

- The future of science when it has assumed its true attitude, 17

- In order to advance, it must be constantly shifting its ground, 71

 Physiological psychology not psychology at all, 72 - The "Scientific method" the only

correct method, 86

Science—continued

- The fatal ban of a priori, 87

- Kidd on the deep-seated instincts of society, 106

— Stewart and Tait on artificial

barrier erected by science, 109 - Limitations of physical science, 110

- Mathematical science limited and imperfect, 110, 113

writers ignore — Mathematical

problems, 110 - Failure to account for cosmical movements, III

- Infallible test of a genuine man of science, 112

- Penalty of faithlessness of scientific teachers, 112

- Warnings against false assumptions,

Scientific ignorance regarding force, 116

- Herschel, Crookes, Romanes, Lord Kelvin, Sir Oliver Lodge, on force, 116

-Force but a manifestation of change

of place, 116-117

- If all bodies were equally endowed with strain, there would be no force, 117

- Only known origin of force is

volition, 117

- The new sciences, modern biology, embryology, microscopic chology, anthropology, comparative religions, folklore, etc., have changed the whole aspect of science, 118

 Chemistry, matter, the ether, the bases of solids, electricity, etc., etc., have forced a new attitude so-called the physical

sciences, 118-119

- Professor Shaler on study of the mind by naturalists; specialties tend to create an idol of prejudice; the invisible becomes neglected,

 On immortality; says men of physical science least qualified, says men of they must enter wildernesses where they have no right to tread, 122-

123

- Professor Shaler says that denial of immortality and soul belongs to the days when naturalists had but begun their inquiries into the phenomenal world, 123

- Professor Shaler says that students of nature are now nearer to those who have trusted to the divining senses than ever before, 123

- Professor Jevons on infinite series of successive orders of infinitely small quantities; a million uniScience-continued

verses scientifically possible within the compass of a needle's point,

- Science, he says, when fairly pursued, makes absurd drafts upon our powers of comprehension and belief, 124

- Professor De Morgan on the overbearing minister of nature; he wears a priest's cast-off garb, dyed

to escape detection, 125

- Laplace says it would not be philosophical to deny any phenomena because, at present, inexplicable, 125

- Arago says doubt is scientific, but the opposite is true of incredulity, 126

- Reserve, he says, above all is necessary in dealing with the animal organisation, 126

- Abercrombie on unlimited scepticism; one's own knowledge not a

test of probability, 126

- The dogmatism of theology finds a counterpart in the dogmatism of science, 126

— Jevons: the result of harmonising a

few facts is to raise up a host of

others, 127

- A. R. Wallace; his arraignment of Dr W. B. Carpenter for deliberate suppression of evidence in his "Mental Physiology," 127

- Authorities suppressed by Carpen-

ter, 127-128

- The gains of science, enormous for life and civilisation, 131

- Science does not extend to its own

basic principles, 131

- The bases have simply been ignored or suppressed, 131

— The origin of modern biology:

Lamarck, 132-133

Difficulties encountered from "religion," and "science," 133
 Professor Graham on the alleged

atheism of science, 134

— A state of chaos never has been

possible, 134

- Dr Warschauer on the phenomena of science, 134

merely shows that certain — It phenomena are followed by others,

- All science rests on prior assumptions transcending science, 134

- Tyndall on physics of the brain and consciousness, 135

- Science works with weights and measurements, 159

- The presence of an a priori concedes scientific failure, 159

Science-continued

- The pursuit of science; its limitations, 173

 Jevons on mathematical problems; chances a million against one that a chance one can be solved, 175

 Sir John Herschel on the movements of atoms; utter failure of science to even reach them, 175

 Only explainable by mind and volition acting upon them, 176

 In accounting for the universe by a series of accidents, the accounting is one of these, 176

- Sir John Herschel on will without

design, 176

 The imitation, school-book science, as popularly taught, 177

- Huxley on residuum of solid science,

177

 Modesty only found among men of science of first rank, 177

— Problems which science cannot even

approach, 174-175

— Scientific teachers have spoken too much ex cathedra, 179

A universal consensus always covers

a great fact, 179

The new studies have greatly cleared up science, 180

Men of science of foremost rank all with us to-day, 180

The inertia of the past the only obstacle now, 180

- The awakening of science, 181

- Importance of study of micro-

organisms, 182-183

— Not possible to account for their psychism from heredity, 183 (for example, Binet cites certain sea-weeds the offspring of which are animals [Zoospores], and very lively and intelligent ones at that, see pp. 84-86 of his "Psychic Life of Micro-Organisms")

Popular error regarding the teachings of men of science, 205-219

 Spiritualism pursues the methods of science, 231-232

De Morgan on the phenomena, 231
 Sir Wm. Crookes on the advancement of science, 237-238

- Natural causation became the god

of science, 246-247

 Dr W. B. Carpenter on phenomena alleged to be spiritualistic, which are quite genuine and fair subjects of scientific study, 252

- Photography of the invisible, 262-

204

Sex, Sexual births not the ordinary rule in nature, 218

rule in nature, 218
Shaler, Professor N. S., On strong reaction against materialism, 58

Shaler, Professor N. S.—continued

 Old dogmatic beliefs now overthrown, 58

 Naturalists see mind at a great disadvantage, 121

 Professor Shaler on physical organisation of man, 222

 It cannot account for his advancement, 222

 Professor Shaler on heredity, and on man's psychical development, 222

On Darwin's proposed pangenesis,
 223

Naturalists incompetent in questions of immortality, 122

 On heredity; quite beyond our field of knowledge, 223

Sherman, Loren Albert, Experiments in "soul-projection," 285-287

Shuler, William, killed in the battle of the Wilderness, 305-306

Simon, Saint, Theistic French socialist, Comte his disciple, 209

Simpson, J. Hawkins, On objective appearances in crystal vision, 250-251

Slate Writing, Experimental case; slates in possession of the Author, 318-320

Smedes, Susan Dabney, Her book, "Memorials of a Southern Planter" (well known in England), 287

 Case of clairvoyance of a dying brother, 287

Smith, Colonel James, Case of crystal vision among the Red Indians in Ohio, 270

Society for Psychical Research, Founded 1882, constitution and membership, 234-235

The work it has accomplished, 296-299

 Deaths of Gurney, Sidgwick, Myers and Hodgson, 297

Their subsequent communications through mediums, 297-298

Cross-correspondences, 296-299
Some experiments before one of

the sections of, 358-375 Somnambulism, Trance, vision, inspira-

tion, 37 Spencer, Herbert, His statement of the emotions, 4

- His agnosticism, 12

— His latest statement; our consciousness, 12

- At one time met facts on a priori grounds, 76

 His hypotheses of ghosts and dreams now discredited, 168

 His teachings; his concession before his death, 213-215 Spencer, Herbert-continued

- On our consciousness as derived from the Infinite and Eternal Energy, specialised and individualised here on earth, and lapsing back into its source, at

our death, 355 Spirit, God the Father of spirits, 7

- Cognition of the co-ordinated individual body, the individual spirit, the spirit of nature, and the spirit of the universe, 245

Spirit of the universe, Romanes on this

infinite psychism, 84

- Akin to our own, 84, 229

- The integrating principle of the whole, 229 Spirit-rappings, Professor De Morgan's

experiment with, 291

Spiritual conflict within the Church, 37 - Du Prel on somnambulism, and development of the transcendental, 36

- Sacerdotal and free spiritualism, 37 Spiritualism, Rev. Dr Davies on, 5

- Argument for, and phenomena of, 15, 18

- Its manifestations universal in the older Church, 21

- The original Protestant reformers were spiritualists, 21

- Its practice not restricted by Jesus to His own people, 25

- Modern spiritualism a new John the Baptist, with its rough and often uncouth girdle of camel's hair, and its uncultured diet of locusts and wild honey, etc., 37-38,

- Universal in all ages, among all

people, 37
Professor James says, "The phenomena are among the most constant in history," 59

Christian churches older spiritualistic, 55

- Rev. Dr Ellinwood on possibility of spirit return, 58

- Its fundamental propositions ex-

perimentally obtained, 59

The modern type of spiritualism not a new thing; its denial is the new thing, 60

- When called to the bar of modern science it has a right to fair treatment and a full hearing, 61

- No reason to suppose that, at death, surviving spirits become "little gods," 63

- In China, 68

- Education in spiritualism must be acquired, 70

- Its connection with religion complete and universal, 81

Spiritualism-continued

- Sir Wm. Crookes; a detached hand, in full daylight, comes down upon a table, striking it with a solid body, producing loud sounds, 105

- Like all scientific demonstrations, spiritualism depends on accumulation and co-ordination of evidence,

- It can be easily demonstrated among even a few friends, 129

- Büchner says spirit can only be something immaterial, excluding matter, 135

- Inventions, genius, inspiration. mediumship, clairvoyance, belong to this domain, 144-145

- Lord Tennyson on guardian spiritmother, 145

- Like light of stars, obscured by cross-lights in the open; visible from deep wells, 145-146

- The sole alternatives, spiritualism or nihilism, 159

- Dangers of applying a priori, 159 - Professor Le Conte on spirit and spiritualism; without it religion, no virtue, no philosophy, no science, no significance in man or in nature, 163

- Using an a priori, science failed to

investigate, 170

- Broad statement of the subject, 170-171

- The substratum of religion but not identical with it, 200

- The basic proof of future life, 201 - Successive spheres of future life and growth, 201-202

- Lives of mutual helpfulness, not of

idleness, 202, 395-396

- Does not necessarily determine eternal life, but only survival, 201-202

- With survival, the rest can be left to God, 202

- Present life one of probation, 202

- Spirits start with their stock acquired here, 202

- May advance, stand still, or even retrograde, 202

- The path of duty, 203

- Definition of transcendentalism, 216 - The spiritualism of the universe cognisable by ourselves, 216

on false - Romanes attitude scientific men on spiritualism,

- Quite as dogmatic as theologians,

- Professor De Morgan on spiritualism, 231-232

- Persecution has helped spiritualism, 233

Spiritualism—continued

- Its advancement in institutions of

learning, 233-235

— The basis of all religion is spiritualism, 245

- Its various types, 249

- We are all mediums; developments vary, 249

Disturbing influence of a "strongly magnetic" sceptic, 252

— Inexplicable nexplicable phenomena en-countered by a "magician," who consulted a medical friend of the Author, 253-254

— Interruptions in communications

from removing hands from the

table, 254-255

 Mental questions as readily answered as spoken ones, 254as readily

255

Necessity of presenting only apparently genuine cases for in-- Necessity only vestigation; remarkable cases not necessary, 256-260
— Sir Wm. Crookes' narrative, "The

last of Katie King," 256-260

- Spirit-photographs of the invisible,

260-263

 Spiritualism in China; in Ancient Mexico; in Central America; among the Red Indians, and the northern Eskimo, 267-268

- How spiritualism has been shifted

off: "If there's anything you don't understand, call it magnetism," 268-269

- Smith's narrative of crystal vision

among the Indians, 270 Mooney's narrative of crystal vision among the Cherokees, 273

— Crystal vision in Yucatan, 273

- Crystal vision among the Eskimo,

 Crystal vision among other American Indians, 273

- Crystal vision dates back to the time of Joseph, at least, 270 Consciousness sent outside the body,

and reporting back, 284-287

- Methods now employed to exclude telepathy from the living, 294

The attempts to invalidate phenomena by "malobservation,"

__ "Lapse of memory" considered, 299-300

- Experiments with Hough, a boy medium, 316-320

- Narrative of the automatic writings of Mrs P., 320-326

Original records in possession of the

Author, 320

Apparent presence of a number of communicators, "in a crowd,"

Spiritualism-continued

sometimes in each other's way. 295, 323, 328, 362

Sudden appearance of jectors," 327-329, 295, 331
Experiments with

trumpet mediums, 335-337
— Combined veridical and previsional

dream, 337-338

— Apparitional case reported by Dean of a Medical College, 340

- Probable employment of boundether in materialisations, 350-356

- Apparitional cases, 340-349, 357-364, 369

The apparently inconsequential
"John Steefa" case, 372-374
The phenomena of spiritualism will

always be exceptional, 397

— Three great classes of facts which seem to establish intercommunication between the individual living

and the individual dead, 404-405

— All believers in "luck," "genius,"
"conscience," "self - sacrifice,"
"remorse," "aspiration," all who think a prayer in distress, are at heart spiritualists, 404

- In a vast number of cases the

narratives are true, 405

- Not in all, but not all of anything is true, 405 Importance to mankind of researches

in spiritualism, 405

Tennyson on the surviving "Ghost in Man," 405
 Spiritualists, The least dogmatic of all

people, 15-16
— Rev. Dr Davies says they are the broadest churchmen, 58

An unbiassed mind essential, 63

— They fear the coming onrush which will follow universal acceptance; the credulity will then be the other way. Caution always requisite, 130

- The test of a spiritualist, 404

They gladly welcome every investigation, 404
 Stainton-Moses, W., On phantasms of

the living, 285 Stanhope, The Earl of, At his request

Captain Burton obtained crystal and black mirror, 252

Steefa, John, Purported to be a coloured teamster in the Confederate Army; his communica-

tion, 372-374

Stephen the Sabaite, Saint (died 794),
His hymn from "Hymns of the
Eastern Church," "Is there
diadem, as monarch?" 187

Stephens, John L., Narrative of

poltergeist in Yucatan, 301

Stewart and Tait, Their "Unseen Universe," 103

- What Christ did was not in defiance but in fulfilment of law, 103

- Development of the universe by an intelligence resident in the unseen,

- On revelation, 107-108

- Science and religion cannot have two separate fields without intercommunication, 109

- Warnings against false assumptions of pseudo-science, 116

Ignorance of critics concerning "force," 116

- On horror of materialists when brought face to face with the inevitable results of their system, 117-118

- Only recently have scientific men perceived that there is something besides matter or stuff, 120

Stock, St John, On ungrammatical ghosts, 115

- Well-attested narratives must not be rejected because they sound grotesque, 115 Subconsciousness, The source of in-

ventions, 144

- Von Hartmann on, 146

- Ladd on, 147 Professor Montgomery on, 148

- Wundt on, 148

- Waldstein on, 149 - Professor O. W. Holmes on, 149

- Dr G. Thompson on, 149 - Professor Barker on, 150

- Dr Ward on, 150

— Charles Darwin on, 150-151

- Professor James on, 223 - W. H. F. Myers on, 224 - Professor Bowen on, 146

— Dr Schofield on, 128, 147, 339 Dr W. B. Carpenter on, 398

- The Author's experiments

- Description of, with its effects in

religious conversion, 383-387 pernatural in Nature," "Supernatural in prominent in the minds of primitive man; no tribe or people without religion, 56

Superstition, Joel Chandler Harris on

mystery, 402-403

- Former attitude of science; to fall back on an a priori. This was itself to fall back on a gross superstition, 9 Swift, Dean, His "Gulliver"; their

system of philosophy; much like what recently passed for science, 73

TABLE-TIPPING, Case of John Steefa, 372-374

tus, His testimony as to "Christus," executed as a criminal in the reign of Tiberius (closed A.D. 37) by the Procurator, Pontius Pilate, 101 Tcheng Ki Tong (Chinese author),

On planchette writing in China,

Telepathy, Reluctantly conceded by "Natural Science," 293
— Science has also been forced to

alter its whole former bases, by the X-rays, the new electron views of matter, the phenomena of radium, the phonograph and telephone, and wireless telegraphy all in a quarter of a century, 293

 By its discovery and demonstra-tion telepathy has compelled a new caution in psychological ex-

perimentation, 294

- Many of the past records in themselves exclude telepathy from the living, 294

- Interjectors at seances; how they often exclude telepathy, 295-296

 Cross-correspondences to exclude telepathy, 296-299

Tennyson, Lord Alfred, On life, 77 - On guardian spirits, 145

- Rejects fusion of self into a general soul, 215

- On intercommunion with spirits of the dead, 405

Terriss, William, the well-known actor, 310

- Frederick Lane's prevision of his murder, 310-315 cullian, On the vast sweep of Tertullian.

Christianity, 29 - Tertullian and Irenæus; causes

and results, 29 Tescatlipoca, The Aztec god of crystal

vision, 273 - The son of the never-represented

God supreme, 273

Tesla, Nikola, On the infinite energy "stored up," 225

- On the further guidance of the spirit, 225 On the ether, 354

Theology, Its artificial character, 5

 Professor James on, 4 - Rev. Dr Davies on, 5

- Max Müller on, 5 - Romanes on, 5

- Rev. Dr Gladden on, 6-8

— The old theology emphasised God's sovereignty; the new righteousness, 7

- Sectarian theology; an absentee God, 191

- Has swept countless millions into infidelity, 191

Theology-continued

- The religious faith of wo little girls, 192

alliance of theology with materialism, 43-49, 169

Thomas, Cyrus, On Maya Codices, 195 Thomson, Professor Wm. H., On living and dead protoplasm, 94

- On development of a whale, 95 - On sleep and awakening, 96

On credulity and incredulity, 104
Mind a great reality, 225

- There is nothing inconceivable in

its separate existence, 225 Thompson, Dr G., On th the subconsciousness, 149-150 ascendentalism, What the term Transcendentalism,

signifies, 216

Contrasted with empiricism, 216 Trollope, T. A., Testimony of Bosco, the great professor of legerdemain, on spiritual phenomena, 253

- Not a spiritualist; some of his

experiences, 254

- Narrates two apparitional cases, 344-347 Tylor, His "Primitive Culture," 56

On religion; dates it back, possibly, to origin of man, 57

All religions connected, 57

- Thoughts and principles of modern Christianity have clues extending back to origin of mankind, 81

Tyndall, John, On chasm between matter and consciousness, 135

- On presence of a strongly magnetic sceptic at a séance, 252

Unconscious, The, Dr Carpenter's concession Wm. of mediate insight, to supersede the operations of the intellect, 398 United States Supreme Court, Patent

cases, 142-143 Universe, Stewart and Tait on its

development, 107

— Nikola Tesla on its infinite energy,

- Romanes on its universal order, 84 — On the spirit of the universe, 84

On its psychism, 84

- On causality in the universe, 43-47

VARLEY, Mr Cromwell, On disturbing influence of a strongly magnetic person, 252

Verworm, On psychology of microorganisms, 183

Visions of the same, Francis Galton on, 376-379

- Other writers on, 376

- Experiences of a patient of the Author, 376-377

- Experiences of another lady, 377-378

Visions of the Sane-continued

- Experiences of the Author, 378-382 - Explanations considered, 376, 378, 379, 381 Medicatrix Naturæ, Allied to

psychical heredity, 222

Vitality, How it opposes chemical decomposition, 17

- Sir Wm. Crookes on life, 18

- Lord Kelvin on, 94-95 - Professor Orton on, 31

Volition, The only scientific basis of evolution, 240 Von Hartmann (see Hartmann, Von)

WALDSTEIN, On the subconscious, 149

Wallace, Alfred Russel, On a priori; has been given up, 76

- On Hume's argument, 89-90

— Criticism of Dr Carpenter suppression, 127

Ward, Dr, On psychology of plants, 150

On the subconsciousness, 150

Warschauer, Dr, All science rests on prior assumptions transcending scientific proof, 134

- The scope of the natural sciences,

Webster, Noah, Definition of the term psychological, 13

- Definition of transcendentalism, 216 Weismann, August, Plasm "theory, 220 His

- Tentatively suggested, 221

Westcott, On absence of care to preserve the books of the New Testament in early times, 22

 Disappearance of original copies; transcriptions not always accurate,

 God's miraculous spiritual care, 22 Whitman, Walt, On the divine in man,

— "The creative thought of Deity,"

Wilkinson, Dr J. J. Garth, On rareness of spiritual manifestations; "a proof of the economic wisdom of the Almighty," 250 Wireless Telegraphy, Consideration of

wireless telegraphy, 293-294

Contrasted with telepathy, 294

Not atmospheric; purely ethereal,

 Consciousness the psychical basis of telepathy; vibrations transmitted, the physical basis of wire-

less telegraphy, 294 Wolseley, Lord, On electrical power in

great commanders, 288 Examples cited, 289

Wordsworth, William, On pagan creed as preferable to materialism, 161

Wordsworth, William-continued - On heredity (as from God our home), 220

Wundt, On the subconsciousness, 148

XIMENES, Cardinal, Greek Testament owes its completed form to Ximenes (1514), 22-23

— Erasmus followed at nearly same

time, 22

Zoospores, Psychology of; heredity impossible, 220

- Gifts or endowments must have come with a leap; Binet on micro-organisms, 183 (Note.—Readers should not fail to study Binet's "Psychic Life of Micro - Organisms," as well as Conn, Sandeman, Orton and Shaler.)