

The Project Gutenberg eBook of Theism; being the Baird Lecture of 1876, by Robert Flint

This ebook is for the use of anyone anywhere in the United States and most other parts of the world at no cost and with almost no restrictions whatsoever. You may copy it, give it away or re-use it under the terms of the Project Gutenberg License included with this ebook or online at www.gutenberg.org. If you are not located in the United States, you'll have to check the laws of the country where you are located before using this eBook.

Title: Theism; being the Baird Lecture of 1876

Author: Robert Flint

Release date: May 31, 2014 [EBook #45850]

Language: English

Credits: Produced by David Garcia, Les Galloway, Marilynda Fraser-Cunliffe and the Online Distributed Proofreading Team at <http://www.pgdp.net> (This book was produced from scanned images of public domain material from the Google Print project.)

*** START OF THE PROJECT GUTENBERG EBOOK THEISM; BEING THE BAIRD LECTURE OF 1876 ***

THEISM

BEING

The Baird Lecture for 1876

BY

ROBERT FLINT, D.D., LL.D.

PROFESSOR OF DIVINITY IN THE UNIVERSITY OF EDINBURGH

AUTHOR OF 'THE PHILOSOPHY OF HISTORY
IN EUROPE,' ETC.

WILLIAM BLACKWOOD AND SONS
EDINBURGH AND LONDON
MDCCCLXXVII

PREFATORY NOTE.

The Lectures in this volume have been delivered in Glasgow, St Andrews, and Edinburgh, in connection with the Lectureship founded by the late Mr James Baird of Auchmedden and Cambusdoon. They will be followed by a volume on Antitheistic Theories, containing the Baird Lectures for 1877.

The author has to thank the Baird Trustees for having twice appointed him Lecturer, and for much indulgence extended to him during his tenure of office. His special thanks are due to James A. Campbell, Esq., LL.D., of Stracathro, for kindly revising the sheets of this volume, and for suggesting many corrections and improvements.

JOHNSTONE LODGE, CRAIGMILLAR PARK,
EDINBURGH, *22d August 1877.*

CONTENTS.

LECT.

PAGE

I. ISSUES INVOLVED IN THE QUESTION TO BE DISCUSSED—WHENCE AND HOW WE GET THE IDEA OF

GOD,	1
II. GENERAL IDEA OF RELIGION—COMPARISON OF POLYTHEISM AND PANTHEISM WITH THEISM—THE THREE GREAT THEISTIC RELIGIONS COMPARED—NO RELIGIOUS PROGRESS BEYOND THEISM,	30
III. THE NATURE, CONDITIONS, AND LIMITS OF THEISTIC PROOF,	59
IV. NATURE IS BUT THE NAME FOR AN EFFECT WHOSE CAUSE IS GOD	96
V. THE ARGUMENT FROM ORDER,	131
VI. OBJECTIONS TO THE ARGUMENT FROM ORDER EXAMINED,	169
VII. MORAL ARGUMENT—TESTIMONY OF CONSCIENCE AND HISTORY,	210
VIII. CONSIDERATION OF OBJECTIONS TO THE DIVINE WISDOM, BENEVOLENCE, AND JUSTICE	233
IX. <i>A PRIORI</i> THEISTIC PROOF,	264
X. MERE THEISM INSUFFICIENT,	302

APPENDIX.

NOTE	PAGE
I. NATURAL AND REVEALED RELIGION,	323
II. INFLUENCE OF RELIGION ON MORALITY,	329
III. ETHICS OF RELIGIOUS INQUIRY,	335
IV. TRADITIVE THEORY OF RELIGION,	338
V. NORMAL DEVELOPMENT OF SOCIETY,	340
VI. DEFINITION AND CLASSIFICATION BY THE HIGHEST TYPE,	342
VII. PSYCHOLOGICAL NATURE OF RELIGION,	343
VIII. ARGUMENT <i>E CONSENSU GENTIUM</i> ,	348
IX. THE THEISTIC EVIDENCE COMPLEX AND COMPREHENSIVE,	350
X. INTUITION, FEELING, BELIEF, AND KNOWLEDGE IN RELIGION,	355
XI. THE THEOLOGICAL INFERENCE FROM THE THEORY OF ENERGY,	359
XII. THE HISTORY OF THE ÆTIOLOGICAL ARGUMENT,	364
XIII. MATHEMATICS AND THE DESIGN ARGUMENT,	367
XIV. ASTRONOMY AND THE DESIGN ARGUMENT,	369
XV. CHEMISTRY AND THE DESIGN ARGUMENT,	373
XVI. GEOLOGY, GEOGRAPHY, ETC., AND THE DESIGN ARGUMENT,	375
XVII. THE ORGANIC KINGDOM AND DESIGN,	378
XVIII. EVIDENCES OF DESIGN IN ORGANISMS,	380
XIX. PSYCHOLOGY AND DESIGN,	383
XX. HISTORY AND DESIGN,	386
XXI. HISTORY OF THE TELEOLOGICAL ARGUMENT,	387
XXII. CREATION AND EVOLUTION,	390
XXIII. THEOLOGICAL INFERENCES FROM THE DOCTRINE OF SPONTANEOUS GENERATION,	394
XXIV. DARWIN AND PALEY,	396
XXV. KANT'S MORAL ARGUMENT,	397
XXVI. DR SCHENKEL'S VIEW OF CONSCIENCE AS THE ORGAN OF RELIGION	400
XXVII. CHALMERS AND ERSKINE ON THE ARGUMENT FROM CONSCIENCE,	401
XXVIII. ASSOCIATIONIST THEORY OF THE ORIGIN OF CONSCIENCE,	403
XXIX. CHALMERS AND BAIN ON THE PLEASURE OF MALEVOLENCE,	403
XXX. HISTORY OF THE MORAL PROOF,	406
XXXI. DEFECTS IN THE PHYSICAL WORLD,	413
XXXII. NO BEST POSSIBLE CREATED SYSTEM,	417
XXXIII. DEFECTS IN THE ORGANIC WORLD,	418
XXXIV. EPICUREAN DILEMMA,	420
XXXV. GOD AND DUTY,	422
XXXVI. HISTORIES OF THE THEISTIC PROOFS,	423
XXXVII. <i>A PRIORI</i> PROOF NOT PROOF FROM A CAUSE,	424
XXXVIII. SOME <i>A PRIORI</i> ARGUMENTS,	425

THEISM.

LECTURE I.

ISSUES INVOLVED IN THE QUESTION TO BE DISCUSSED—WHENCE AND HOW WE GET THE IDEA OF GOD.

I.

Is belief in God a reasonable belief, or is it not? Have we sufficient evidence for thinking that there is a self-existent, eternal Being, infinite in power and wisdom, and perfect in holiness and goodness, the Maker of heaven and earth, or have we not? Is theism true, or is some antagonistic, some anti-theistic theory true? This is the question which we have to discuss and to answer, and it seems desirable to state briefly at the outset what issues are involved in answering

it. Obviously, the statement of these issues must not be so framed as to create prejudice for or against any particular answer. Its only legitimate purpose is to help us to realise aright our true relation to the question. We can never in any investigation see too early or too clearly the true and full significance, the general and special bearings, of the question we intend to study; but the more important and serious the question is, the more incumbent on us is it not to prejudge what must be the answer.

It is obvious, then, in the first place, that the inquiry before us is one as to whether or not religion has any reasonable ground, any basis, in truth; and if so, what that ground or basis is. Religion, in order to be reasonable, must rest on knowledge of its object. This is not to say that it is exclusively knowledge, or that knowledge is its one essential element. It is not to say that feeling and will are not as important constituents in the religious life as intellectual apprehension. Mere knowledge, however clear, profound, and comprehensive it may be, can never be religion. There can be no religion where feeling and affection are not added to knowledge. There can be no religion in any mind devoid of reverence or love, hope or fear, gratitude or desire—in any mind whose thinking is untouched, uncoloured, uninspired by some pious emotion. And religion includes more even than an apprehension of God supplemented by feeling—than the love or fear of God based on knowledge. It is unrealised and incomplete so long as there is no self-surrender of the soul to the object of its knowledge and affection—so long as the will is unmoved, the character and conduct unmodified. The importance of feeling and will in religion is thus in no respect questioned or denied when it is maintained that religion cannot be a reasonable process, a healthy condition of mind, if constituted by either feeling or volition separate from knowledge. Some have represented it as consisting essentially in the feeling of dependence, others in that of love, and others in fear; but these are all feelings which must be elicited by knowledge, and which must be proportional to knowledge in every undisturbed mind. We can neither love nor fear what we know nothing about. We cannot love what we do not think worthy of love, nor fear unless we think there is reason for fear. We cannot feel our dependence upon what we do not know to exist. We cannot feel trustful and confiding dependence on what we do not suppose to have a character which merits trust and confidence. Then, however true it may be that short of the action of the will in the form of the self-surrender of the soul to the object of its worship the religious process is essentially imperfect, this self-surrender cannot be independent of reason and yet reasonable. In order to be a legitimate act it must spring out of good affections,—and these affections must be enlightened; they must rest on the knowledge of an object worthy of them, and worthy of the self-sacrifice to which they prompt. Unless there be such an object, and unless it can be known, all the feeling and willing involved in religion must be delusive—must be of a kind which reason and duty command us to resist and suppress.

But religion is certainly a very large phenomenon. It is practically coextensive, indeed, with human life and history. It is doubtful if any people, any age, has been without some religion. And religion has not only in some form existed almost wherever man has existed, but its existence has to a great extent influenced his whole existence. The religion of a people colours its entire civilisation; its action may be traced on industry, art, literature, science, and philosophy, in all their stages. And the question whether there is a God or not, whether God can be known or not, is, otherwise put, whether or not religious history, and history so far as influenced by religion, have had any root in reason, any ground in fact. If there be no God, or if it be impossible to know whether there be a God or not, history, to the whole extent of its being religious and influenced by religion, must have been unreasonable. Perhaps religion might still be conceived of, although it is difficult to see how it could be so conceived of on consistent grounds, as having done some good: and one religion might be regarded as better than another, in the sense of doing more good or less evil than another; but no religion could be conceived of as true, nor could one religion be conceived of as truer than another. If there be no God to know, or if God cannot be known, religion is merely a delusion or mental disease—its history is merely the history of a delusion or disease, and any science of it possible is merely a part of mental pathology.

Further, whether Christianity be a reasonable creed or not obviously depends on whether or not certain beliefs regarding God are reasonable. If there be no God, if there be more Gods than one, if God be not the Creator and Upholder of the world and the Father of our spirits, if God be not infinite in being and perfection, in power, wisdom, and holiness, Christianity cannot possibly be a thing to be believed. It professes to be a revelation from God, and consequently assumes that there is a God. It demands our fullest confidence, on the ground of being His word; and consequently assumes that He is "not a man that He should lie," but One whose word may be trusted to the uttermost. It professes to be a law of life, and therefore assumes the holiness of its author; to be a plan of salvation, and therefore presupposes His love; to be certain of final triumph, and so presupposes His power. It presents itself to us as the completion of a progressive process of positive revelation, and therefore presupposes a heavenly Father, Judge, and King. The books in which we have the record of this process—the books of the Old and New Testaments—therefore assume, and could not but assume, that God is, and that He is all-powerful, perfectly wise, and perfectly holy. They do not prove it, but refer us to the world and our own hearts for the means and materials of proof. They may draw away from nature, and from before the eyes of men, a veil which covers and conceals the proof; they may be a record of facts which powerfully confirm and largely supplement what proof there is in the universe without and the mind within: but they must necessarily imply, and do everywhere imply, that a real proof exists there. If what they in this respect imply be untrue, all that they profess to tell us of God,

and as from God, must be rejected by us, if we are to judge and act as reasonable beings.^[1]

For all men, then, who have religious beliefs, and especially for all men who have Christian beliefs, these questions, What evidence is there for God's existence? and, What is known of His nature? are of primary importance. The answers given to them must determine whether religion and Christianity ought to be received or rejected. There can be no use in discussing other religious questions so long as these fundamental questions have not been thoughtfully studied and distinctly answered. It is only through their investigation that we can establish a right to entertain any religious belief, to cherish any religious feeling, to perform any religious act. And the result to which the investigation leads us must largely decide what sort of a religious theory we shall hold, and what sort of a religious life we shall lead. Almost all religious differences of really serious import may be traced back to differences in men's thoughts about God. The idea of God is the generative and regulative idea in every great religious system and every great religious movement. It is a true feeling which has led to the inclusion of all religious doctrines whatever in a science which bears the name of theology (discourse about God, λογος περι του Θεου), for what is believed about God determines what will be believed about everything else which is included either under natural or revealed religion.

In the second place, the moral issues depending on the inquiry before us are momentous. An erroneous result must, from the very nature of the case, be of the most serious character. If there be no God, the creeds and rites and precepts which have been imposed on humanity in His name must all be regarded as a cruel and intolerable burden. The indignation which atheists have so often expressed at the contemplation of religious history is quite intelligible—quite natural; for to them it can only appear as a long course of perversion of the conscience and affections of mankind. If religion be in its essence, and in all its forms and phases, false, the evils which have been associated with it have been as much its legitimate effects as any good which can be ascribed to it; and there can be no warrant for speaking of benefits as its proper effects, or uses and mischiefs as merely occasioned by it, or as its abuses. If in itself false, it must be credited with the evil as well as with the good which has followed it; and all the unprofitable sufferings and useless privations—all the undefined terrors and degrading rites—all the corruptions of moral sentiment, factitious antipathies, intolerance, and persecution—all the spiritual despotism of the few, and the spiritual abjectness of the many—all the aversion to improvement and opposition to science, &c., which are usually referred to false religion and to superstition,—must be attributed to religion in itself, if there be no distinction between true and false in religion—between religion and superstition. In that case, belief in God must be regarded as really the root of all these evils. It is only if we can separate between religious truth and religious error—only if we can distinguish religion itself from the perversions of religion—that we can possibly maintain that the evils which have flowed from religious error, from the perversions of religion, are not to be traced to the religious principle itself.^[2]

On the other hand, if there be a God, he who denies His existence, and, in consequence, discards all religious motives, represses all religious sentiments, and despises all religious practices, assuredly goes morally far astray. If there be a God—all-mighty, all-wise, and all-holy—the want of belief in Him must be in all circumstances a great moral misfortune, and, wherever it arises from a want of desire to know Him, a serious moral fault, necessarily involving, as it does, indifference to one who deserves the highest love and deepest reverence, ingratitude to a benefactor whose bounties have been unspeakable, and the neglect of those habits of trust and prayer by which men realise the presence of infinite sympathy and implore the help of infinite strength. If there be a God, the virtue which takes no account of Him, even if it were otherwise faultless, must be most defective. The performance of personal and social duty can in that case no more compensate for the want of piety than justice can excuse intemperance or benevolence licentiousness.

Besides, if God exist—if piety, therefore, ought also to exist—it can scarcely be supposed that personal and social morality will not suffer when the claims of religion are unheeded. It has seemed to some that morality rests on religion, and cannot exist apart from it. And almost all who believe that there are religious truths which men, as reasonable beings, are bound to accept, will be found maintaining that, although morality may be independent of religion for its mere existence, a morality unsupported by religion would be insufficient to satisfy the wants of the personal and social life. Without religion, they maintain, man would not be able to resist the temptations and support the trials of his lot, and would be cut off from the source of his loftiest thoughts, his richest and purest enjoyments, and his most heroic deeds. Without it nations, they further maintain, would be unprogressive, selfish, diseased, corrupt, unworthy of life, incapable of long life. They argue that they find in human nature and in human history the most powerful reasons for thinking thus; and so much depends upon whether they are right or wrong, that they are obviously entitled to expect that these reasons, and also the grounds of religious belief, will be impartially and carefully examined and weighed.

It will be denied, indeed, by no one, that religious belief influences moral practice. Both reason and history make doubt on this point impossible. The convictions of a man's heart as to the supreme object of his reverence, and as to the ways in which he ought to show his reverence thereof, necessarily affect for good or ill his entire mind and conduct. The whole moral life takes a different colour according to the religious light which falls upon it. As the valley of the Rhone

presents a different aspect when seen from a summit of the Jura and from a peak of the Alps, so the course of human existence appears very different when looked at from different spiritual points of view. Atheism, polytheism, pantheism, theism, cannot regard life and death in the same way, and cannot solve in the same way the problems which they present to the intellect and the heart. These different theories naturally—yea, necessarily—yield different moral results. Now, doubt may be entertained as to whether or not we can legitimately employ the maxim, "By their fruits ye shall know them," in attempting to ascertain the truth or falsity of a theory. The endeavour to support religion by appealing to its utility has been denounced as "moral bribery and subornation of the understanding."^[3] But no man, I think, however scrupulous or exacting, can doubt that when one theory bears different moral and social fruits than another, that fact is a valid and weighty reason for inquiring very carefully which of them is true and which false. He who believes, for example, that there is a God, and he who believes that there is no being in the universe higher than himself—he who believes that material force is the source of all things, and he who believes that nature originated in an intelligent, holy, and loving Will,—must look upon the world, upon history, and upon themselves so very differently—must think, feel, and act so very differently—that for every man it must be of supreme importance to know which of these beliefs he is bound in reason to accept and which to reject.

Then, in the third place, the primary question in religion is immediately and inseparably connected with the ultimate question of science. Does the world explain itself, or does it lead the mind above and beyond itself? Science cannot but suggest this question; religion is an answer to it. When the phenomena of the world have been classified, the connections between them traced, their laws ascertained, science may, probably enough, have accomplished all that it undertakes—all that it can perform; but is it certain that the mind can ascend no further? Must it rest in the recognition of order, for example, and reject the thought of an intelligence in which that order has its source? Or, is this not to represent every science as leading us into a darkness far greater than any from which it has delivered us? Granting that no religious theory of the world can be accepted which contradicts the results established by the sciences, are we not free to ask, and even bound to ask—Do these results not, both separately and collectively, imply a religious theory of the world, and the particular religious theory, it may be, which is called theism? Are these results not the expressions of a unity and order in the world which can only be explained on the supposition that material nature, organic existences, the mind and heart of man, society and its history, have originated in a power, wisdom, and goodness not their own, which still upholds them, and works in and through them? The question is one which may be answered in various ways, and to which the answer may be that it cannot be answered; but be the answer that or another—be the answer what it may—obviously the question itself is a great one,—a greater than any science has ever answered—one which all science raises, and in the answering of which all science is deeply interested.

No scientific man can be credited with much insight who does not perceive that religious theory has an intimate and influential bearing on science. There are religious theories with which science cannot consistently coexist at all. Where fetichism or polytheism prevails, you cannot have science with its pursuit of general laws. A dualistic religion must, with all the strength it possesses, oppose science in the accomplishment of its task—the proof of unity and universal order. Even when the conception of One Creative Being is reached, there are ways of thinking of His character and agency which science must challenge, since they imperil its life and retard its progress. The medieval belief in miracles and the modern belief in law cannot be held by the same mind, and still less by the same society.

We have no reason, however, to complain at present that our scientific men are, as a class, wanting in the insight referred to, or that the truth just indicated is imperfectly realised by them. Perhaps such complaint was never less applicable. It is not long since it was the fashion among men of science to avoid all reference to religion—to treat religious theory and scientific theory as entirely separate and unconnected. They either cared not or dared not to indicate how their scientific findings were rationally related to current religious beliefs. But within the last few years there has been a remarkable change in this respect. The attitude of indifference formerly assumed by so many of the representatives of science towards religion has been very generally exchanged for one of aggression or defence. The number of them who seem to think themselves bound to publish to the world confessions of their faith, declarations of the religious conclusions to which their scientific researches have led them, is great, perhaps, beyond example in any age. They are manifesting unmistakably the most serious interest in the inquiry into the foundation of religion, and into the relationship of religion to science. The change is certainly one for the better. It is not wholly good only because scientific men in their excursions into the domain of religion are too frequently chargeable with a one-sidedness of view and statement which their scientific education might have been hoped to make impossible—only because they too seldom give to religious truths the patient and impartial consideration to which these are entitled. But most deserving of welcome is every evidence on their part of the conviction that when science goes deep enough it cannot but raise the questions to which religion professes to be an answer; so that the mind, instead of getting free from religious reflection by advancing in scientific inquiry, finds such reflection only the more incumbent on it the farther it advances—a conviction which falls short of, indeed, but is closely allied to, the belief so aptly expressed by Lord Bacon, "that while a slight taste of philosophy may dispose the mind to indifference to religion, deeper draughts must bring it back to it; that while on the threshold of philosophy, where second causes

appear to absorb the attention, some oblivion of the highest cause may ensue, when the mind penetrates deeper, and sees the dependence of causes and the works of Providence, it will easily perceive, according to the mythology of the poets, that the upper link of nature's chain is fastened to Jupiter's throne." Men of science are simply exercising a right to which they are fully entitled when they judge of religion by what they find to be ascertained in science; and no class of men is more likely than they are to open up the way to points of view whence religious truth will be seen with a clearness and comprehensiveness greater than any to which professional theologians could hope of themselves to attain. He can be no wise theologian who does not perceive that to a large extent he is dependent on the researches of men of science for his data, and who, firm in the faith that God will never be disgraced by His works, is not ready to accept all that is truly discovered about these works, in order to understand thereby God's character.

The greatest issues, then, are involved in the investigation on which we enter. Can we think what these are, or reflect on their greatness, without drawing this inference, that we ought, in conducting it, to have no other end before us than that of seeking, accepting, and communicating the truth? This is here so important that everything beside it must be insignificant and unworthy. Any polemical triumphs which could be gained either by logical or rhetorical artifices would be unspeakably paltry. Nothing can be appropriate in so serious a discussion but to state as accurately as we can the reasons for our own belief in theism, and to examine as carefully and impartially as we can the objections of those who reject that belief, and their reasons for holding an opposite belief. It can only do us harm to overrate the worth of our own convictions and arguments, or to underrate the worth of those of others. We must not dare to carry into the discussion the spirit of men who feel that they have a case to advocate at all hazards. We must not try to conceal a weakness in our argumentation by saying hard things of those who endeavour to point it out. There is no doubt that character has an influence on creed—that the state of a man's feelings determines to a considerable extent the nature of his beliefs—that badness of heart is often the cause of perversity of judgment; but we have no right to begin any argument by assuming that this truth has its bright side—its side of promise—turned towards us, and its dark and threatening side turned towards those who differ from us. If we can begin by assuming our opponents to be wicked, why should we not assume them at once to be wrong, and so spare ourselves the trouble of arguing with them? It will be better to begin by assuming only what no one will question—namely, that it is a duty to do to others as we would have others do to us. When a man errs, it is a kindness to show him his error—and the greater the error, the greater the kindness; but error is so much its own punishment to every ingenuous nature, that to convince a person of it is all that one fallible person ought to do to another. The scoff and the sneer are out of place in all serious discussion; especially are they out of place when our minds are occupied with thoughts of Him who, if He exist, is the Father and Judge of us all, who alone possesses the full truth, and who has made us that we might love one another.^[4]

II.

Theism is the doctrine that the universe owes its existence, and continuance in existence, to the reason and will of a self-existent Being, who is infinitely powerful, wise, and good. It is the doctrine that nature has a Creator and Preserver, the nations a Governor, men a heavenly Father and Judge. It is a doctrine which has a long history behind it, and it is desirable that we should understand how we are related to that history.

Theism is very far from coextensive with religion. Religion is spread over the whole earth; theism only over a comparatively small portion of it. There are but three theistic religions—the Mosaic, the Christian, and the Mohammedan. They are connected historically in the closest manner—the idea of God having been transmitted to the two latter, and not independently originated by them. All other religions are polytheistic or pantheistic, or both together. Among those who have been educated in any of these heathen religions, only a few minds of rare penetration and power have been able to rise by their own exertions to a consistent theistic belief. The God of all those among us who believe in God, even of those who reject Christianity, who reject all revelation, is the God of Abraham, Isaac, and Jacob. From these ancient Jewish fathers the knowledge of Him has historically descended through an unbroken succession of generations to us. We have inherited it from them. If it had not thus come down to us, if we had not been born into a society pervaded by it, there is no reason to suppose that we should have found it out for ourselves, and still less that we should merely have required to open our eyes in order to see it. Rousseau only showed how imperfectly he realised the dependence of man on man, and the extent to which tradition enters into all our thinking, when he pretended that a human being born on a desert island, and who had grown up without any acquaintance with other beings, would naturally, and without assistance, rise to the apprehension of this great thought. The Koran well expresses a view which has been widely held when it says, "Every child is born into the religion of nature; its parents make it a Jew, a Christian, or a Magian." The view is, however, not a true one. A child is born, not into the religion of nature, but into blank ignorance; and, left entirely to itself, it would probably never find out as much religious truth as the most ignorant of parents can teach it. It is doubtless better to be born into the most barbarous pagan society than it would be to be born on a desert island and abandoned to find out a religion for one's self.

The individual man left to himself is very weak. He is strong only when he can avail himself of the strength of many others, of the stores of power accumulated by generations of his predecessors,

or of the combined forces of a multitude of his contemporaries. The greatest men have achieved what they have done only because they have had the faculty and skill to utilise resources vastly greater than their own. Nothing reaches far forward into the future which does not stretch far back into the past. Before a tragedy like 'Hamlet,' for example, could be written, it was requisite that humanity should have passed through ages of moral discipline, and should be in possession of vast and subtle conceptions such as could only be the growth of centuries, of the appropriate language at the appropriate epoch of its development, and of a noble style of literary workmanship. "We allow ourselves," says Mr Froude, "to think of Shakespeare, or of Raphael, or of Phidias as having accomplished their work by the power of their individual genius; but greatness like theirs is never more than the highest degree of perfection which prevails widely around it, and forms the environment in which it grows. No such single mind in single contact with the facts of nature could have created a Pallas, a Madonna, or a Lear." What the historian has thus said as to art is equally true of all other forms of thinking and doing. It is certainly true of religious thought, which has never risen without much help to the sublime conception of one God. It is, in fact, an indisputable historical truth that we owe our theism in great part to our Christianity,—that natural religion has had no real existence prior to or apart from what has claimed to be revealed religion—and that the independence which it now assumes is that of one who has grown ashamed of his origin.

It does not in the least follow that we are to regard theism as merely or even mainly a tradition—as a doctrine received simply on authority, and transmitted from age to age, from generation to generation, without investigation, without reflection. It does not follow that it is not a truth the evidence of which has been seen in some measure by every generation which has accepted it, and into the depth and comprehensiveness and reasonableness of which humanity has obtained a constantly-growing insight. There have, it is true, been a considerable number of theologians who have traced all religious beliefs to revelation, and who have assigned to reason merely the function of passively accepting, retaining, and transmitting them. They have conceived of the first man as receiving the knowledge of God by sensible converse with Him, and of the knowledge thus received as transmitted, with the confirmation of successive manifestations, to the early ancestors of all nations. The various notions of God and a future state to be found in heathen countries are, according to them, broken and scattered rays of these revelations; and all the religious rites of prayer, purification, and sacrifice which prevail among savage peoples, are faint and feeble relics of a primitive worship due to divine institution. This view was natural enough in the early ages of the Christian Church and in medieval times, when the New World was undiscovered and a very small part of either Asia or Africa was known. It was consonant also to the general estimate of tradition as a means of transmitting truth, entertained by the Roman Catholic Church; but it is not consistent with the Protestant rejection of tradition, and it is wholly untenable in the light of modern science, the geography, ethnology, comparative mythology, &c., of the present day. A man who should thus account for the phenomena of the religious history of heathen humanity must be now as far behind the scientific knowledge of his age regarding the subject on which he theorises, as a man who should still ascribe, despite all geological proofs to the contrary, the occurrence of fossils in the Silurian beds to the action of the Noachian deluge. [5]

Theism has come to us mainly through Christianity. But Christianity itself rests on theism; it presupposes theism. It could only manifest, establish, and diffuse itself in so far as theism was apprehended. The belief that there is one God, infinite in power, wisdom, and goodness, has certainly not been wrought out by each one of us for himself, but has been passed on from man to man, from parent to child: tradition, education, common consent, the social medium, have exerted great influence in determining its acceptance and prevalence; but we have no right to conceive of them as excluding the exercise of reason and reflection. We know historically that reason and reflection have not been excluded from the development of theistic belief, but have been constantly present and active therein; that by the use of his reason man has in some countries gradually risen to a belief in one God; and that where this belief existed, he has, by the use of his reason, been continuously altering, and, it may be hoped, extending and improving his views of God's nature and operations. We know that in Greece, for example, the history of religion was not a merely passive and traditional process. We know as a historical fact that reason there undermined the polytheism which flourished when Homer sang; that it discovered the chief theistic proofs still employed, and attained in many minds nearly the same belief in God which now prevails. The experience of the ancient classical world is insufficient to prove that a purely rational philosophy can establish theism as the creed of a nation; but it is amply sufficient to prove that it can destroy polytheism, and find out all the principal arguments for theism. We know, further, that in no age of the history of the Christian Church has reason entirely neglected to occupy itself in seeking the grounds on which the belief of God can be rested. We know that reason is certainly not declining that labour in the present day. The theistic belief, although common to the whole Christian world, is one which every individual mind may study for itself, which no one is asked to accept without proof, and which multitudes have doubtless accepted only after careful consideration. It comes to us so far traditionally, but not nearly so much so as belief in the law of gravitation. For every one who has examined the evidences for belief in the law of gravitation, thousands on thousands have examined the evidences for the existence of God.

Tradition, then, does not necessarily exclude private judgment, and private judgment does not necessarily imply the rejection of tradition—that is, of transmitted belief. The one does not even necessarily confine or restrict the activity of the other. They are so far from being essentially antagonistic, that they may co-operate, may support and help each other; nay, they must do, if

religious development is to be natural, easy, peaceful, and regular. This is but saying in another form that religious development, when true and normal, must combine and harmonise conservatism and progress. All development must do that, or it will be of an imperfect and injurious kind. In nature the rule of development is neither *revolution* nor *reaction*, but *evolution*—a process which is at once conservative and progressive, which brings the new out of the old by the continuous growth and elaboration of the germs of life into organic completeness. All that is essential in the old is retained and perfected, while the form is altered to accord with new circumstances and to respond to new wants. It should not be otherwise in the moral and social worlds. The only true progress there, also, is that continuous and consistent development which can only be secured through true conservatism—through retaining, applying, and utilising whatever truth and goodness the past has brought down to the present; and the only true conservatism is that which secures against stagnation and death by continuous progress. Therefore it is that, alike in matters of civil polity, of scientific research, and of religious life, wisdom lies in combining the conservative with the progressive spirit, the principle of authority with the principle of liberty, due respect to the collective reason in history with due respect to the rights of the individual reason. The man who has not humility enough to feel that he is but one among the living millions of men, and that his whole generation is but a single link in the great chain of the human race—who is arrogant enough to fancy that wisdom on any great human interest has begun with himself, and that he may consequently begin history for himself,—the man who is not conservative to the extent of possessing this humility, and shrinking from this arrogance, is no truly free man, but the slave of his own vanity, and the inheritance which his fathers have left him will be little increased by him. The man, on the other hand, who always accepts what is as what ought to be; who identifies the actual with the reasonable; who would have to-morrow exactly like to-day; who would hold fast what Providence is most clearly showing ought to pass away, or to pass into something better,—the man, in a word, who would lay an arrest on the germs of life and truth, and prevent them from sprouting and ripening—is the very opposite of genuinely conservative—is the most dangerous of destructives. There is nothing so conservative against decay and dissolution as natural growth, orderly progress.

The truth just stated is, as I have said, of universal application. But it is nowhere more applicable than in the inquiry on which we are engaged. The great idea of God—the sublimest and most important of all ideas—has come to us in a wondrous manner through the minds and hearts of countless generations which it has exercised and sustained, which it has guided in darkness, strengthened in danger, and consoled in affliction. It has come to us by a long, unbroken tradition; and had it not come to us, we should of a certainty not have found it out for ourselves. We should have had to supply its place, to fill "the aching void" within us caused by its absence, with some far lower idea, perhaps with some wild fiction, some foul idol. Probably we cannot estimate too humbly the amount or worth of the religious knowledge which we should have acquired, supposing we acquired any, if we had been left wholly to our own unaided exertions—if we had been cut off from the general reason of our race, and from the Divine Reason, which has never ceased to speak in and to our race.

While, however, the idea of God has been brought to us, and is not independently wrought out by us, no man is asked to accept it blindly or slavishly; no man is asked to forego in the slightest degree, even before this the most venerable and general of the beliefs of humanity, the rights of his own individual reason. He is free to examine the grounds of it, and to choose according to the result of his examination. His acceptance of the idea, his acquiescence in the belief, is of worth only if it be the free acceptance of, the loving acquiescence in, what his reason, heart, and conscience testify to be true and good. Therefore, neither in this idea or belief itself, nor in the way in which it has come to us, is there any restriction or repression of our mental liberty. And the mere rejection of it is no sign, as some seem to fancy, of intellectual freedom, of an independent judgment. It is no evidence of a man's being freer from incredulity than the most superstitious of his neighbours. "To disbelieve is to believe," says Whately. "If one man believes there is a God, and another that there is no God, whichever holds the less reasonable of these two opinions is chargeable with credulity. For the only way to avoid credulity and incredulity—the two necessarily going together—is to listen to, and yield to the best evidence, and to believe and disbelieve on good grounds." These are wise words of Dr Whately. Whenever reason has been awakened to serious reflection on the subject, the vast majority of men have felt themselves unable to believe that this mighty universe, so wondrous in its adjustments and adaptations, was the product of chance, or dead matter, or blind force—that the physical, mental, and moral order which they everywhere beheld implied no Supreme Intelligence and Will; and the few who can believe it, have assuredly no right, simply on the ground of such ability, to assume that they are less credulous, freer thinkers, than others. The disbelief of the atheist must ever seem to all men but himself to require more faith, more credulity, than the beliefs of all the legends of the Talmud.^[6]

LECTURE II.

GENERAL IDEA OF RELIGION—COMPARISON OF POLYTHEISM AND PANTHEISM WITH THEISM—THE THREE GREAT THEISTIC RELIGIONS COMPARED—NO RELIGIOUS PROGRESS BEYOND THEISM.

There are three great theistic religions. All of them can scarcely be supposed to be perfect. It is most unlikely that they should all be equal in rank and value. But to determine the position and worth of a religion, whether theistic or non-theistic, it is indispensable that we have some notion of what religion is in itself.

It is very difficult to give a correct definition or accurate description of religion. And the reason is that religion is so wide and diversified a thing. It has spread over the whole earth, and it has assumed an almost countless variety of forms. Some sense of an invisible power or powers ruling his destiny is manifested by man alike in the lowest stages of barbarism and in the highest stages of civilisation, but the rude savage and the cultured thinker conceive very differently of the powers which they adore. The aspects of religion are, in fact, numerous as the phases of human life and the steps of human progress. It extends its sway over all lands, ages, and peoples, and yet it is the same in no two countries, no two generations, no two men even. There is, accordingly, of necessity a great difficulty in finding an expression which will comprehend and suit the vast variety of forms assumed by the religious life. Instead of trying to find an expression of the kind, many, I might almost say most, theologians are content silently to substitute for religion the phases of it with which they are most familiar, and instead of a definition of religion, to give us, say, a definition of theism, or even of Christianity. It is the rule and not the exception to find the same theologians who define religion as the communion of man with God, or the self-surrender of the soul to God, arguing that religion is common to all races and peoples. Of course, this is self-contradictory. Their definitions identify religion with monotheism, and their arguments assume it to include pantheism, polytheism, fetichism, &c. Belief in the one God and the worship of Him are very far from being universal even at the present day. If there be no other religion—if nothing short of that be religion—there are still vast continents and populous nations where religion is unknown.

A definition of religion must completely circumscribe religion; it must not be applicable merely to one religion, or at the most to several out of the vast host of religions which are spread over the earth; it must draw a boundary line which includes all religions, the lowest as well as the highest, and which excludes all things else.^[7] A definition thus extensive cannot be, in logical language, very comprehensive; to include all religions, it must not tell us much about what any religion is; in significance it can be neither rich nor definite. Perhaps if we say that religion is man's belief in a being or beings, mightier than himself and inaccessible to his senses, but not indifferent to his sentiments and actions, with the feelings and practices which flow from such belief, we have a definition of the kind required. I fear at least that any definition less abstract and vague will be found to apply only to particular forms or special developments of religion. Religion is man's communion, then, with what he believes to be a god or gods; his sense of relationship to, and dependence on, a higher and mysterious agency, with all the thoughts, emotions, and actions which proceed therefrom. The communion may be dark and gross, and find expression in impure and bloody rites, or it may be in spirit and in truth, and expressed in ways which educate and elevate both mind and heart. The belief may rest on wild delusions, on authority blindly accepted, or on rational grounds. The god may be some personified power of nature, some monstrous phantom of the brain, some imaginary demon of lust or cruelty; or it may be He in whom all truth, wisdom, goodness, and holiness have their source. But whatever be the form or character which religion presents, it always and everywhere involves belief in a god or object of worship, and feelings and actions corresponding to that belief. It is always and everywhere a consciousness of relationship to a worshipped being.

Is there any truth which can be affirmed to belong universally to this consciousness? If there be, it will hold good universally of religion, and the recognition of it will advance us a step in the knowledge of the nature of religion. One such truth at least, it appears to me, there is—viz., that the religious consciousness, or the frame and condition of spiritual life distinctive and essential in religion, is not peculiar to some one province of human nature, but extends into all its provinces. This truth has been often contradicted in appearance, seldom in reality. The seat of religion, as I indicated in last lecture, has been placed by some in the intellect, by others in the affections, and by others still in the will. It has been represented as knowing, or feeling, or doing. When we examine, however, the multitude of, at first glance, apparently very conflicting views which have originated in thus fixing upon some single mental faculty as the religious faculty, the organ and seat of religion, we soon find that they are not so discordant and antagonistic as they seem to be.

Those who represent religion as essentially knowledge or belief, do not really mean to affirm that anything entitled to be called religion is ever mere knowledge or mere belief; on the contrary, they proceed on the supposition that feeling and volition will correspond to the knowledge or belief. They define religion as knowledge or belief, and not as affection or volition, because, regarding religious knowledge or belief as the ground of religious feeling and willing, they think they may treat the two latter, not as constituents, but as consequences of religion. Then, although a few of those who have defined religion as feeling have written as if they supposed that the feeling rested upon no sort of apprehension or conviction, they have been very few, and they have never been able to explain what they meant. In presence of the Power which is manifested in the universe, or of the moral order of the world, they have felt an awe or joy, it may be, irresistibly raising them above themselves, above the hampering details of earth, and "giving fulness and tone to their existence;" and being unaccustomed to analyse states of consciousness, although familiar with the mechanics and chemistry of matter, they have overlooked the obvious fact, that but for an intellectual perception of the presence of an all-pervading Power, and all-embracing order, the awe and joy could never have been excited. Mere feeling cannot tell us anything about what is out of ourselves, and cannot take us out of ourselves. Mere feeling is, in

fact, mere absurdity. It is but what we should expect, therefore, that all those capable of reflecting in any measure on mental processes who have placed the essence of religion in feeling, have always admitted that the religious feeling could not be wholly separated either from the power of cognition on the one hand, or the exertion of will on the other. Men like Schleiermacher and Opzoomer argue strenuously that religion is feeling and not knowledge or practice; but it is expressly on the ground that, as there can be what is called religious knowledge and practice without piety, the knowledge is a mere antecedent, and the practice a mere consequent. Those, again, who make religion consist essentially in an act of will, in the self-surrender of the soul to the object of its worship, do so, they tell us, because pious feeling, even though based on knowledge, is only religiousness, not religion—the capacity of being religious, not actually being so; and religion only exists as a reality, a completed thing, when the will of man submits itself to the Divine Will. But this is to acknowledge, you observe, that both thought and feeling are present and presupposed wherever religion exists.

Now, if the facts be as I have just stated, obviously the controversy as to whether religion is essentially knowing, feeling, or willing, is mainly verbal. It turns on an undefined use of the term essential. Thought, feeling, and will—knowledge, affection, and self-surrender—are admitted to be indissolubly united, inseparably present, in religion, even by those who will not admit them to be all its equally essential constituents. But in these circumstances, they should carefully explain what they mean by essential and non-essential, and tell us how we are to distinguish among inseparable states those which are essential from those which are non-essential. This they never do; this they cannot do. All facts which always go together, and are always equally found in any state or process, are its equally essential components. When we always find certain elements together, and can neither discover nor imagine them apart, we have no right to represent some of them as essential to the compound into which they enter, and others as non-essential. They are all essential.

The conclusion to which we are thus brought is, that religion belongs exclusively to no one part or province, no one disposition or faculty of the soul, but embraces the whole mind, the whole man. Its seat is the centre of human nature, and its circumference is the utmost limit of all the energies and capacities of that nature. At the lowest it has something alike of intellect, affection, and practical obedience in it. At its best it should include all the highest exercises of reason, all the purest and deepest emotions and affections, and the noblest kind of conduct. It responds to its own true nature only in the measure that it fills the whole intellect with light, satisfies the reverence and love of the most capacious heart, and provides an ideal and law for practical life in all its breadth. There is, then, a general notion of religion which includes all religions, and that notion both suggests to us that the various religions of the world are of very different values, and points us to a standard by which we may determine their respective rank, and estimate their worth. The definition of religion, in other words, though not to be confounded with the type or ideal of religion, is connected with it, and indicates what it is. The type is the normal and full development of what is expressed in the definition. It is the type, of course, and not the definition, which is the standard—the medium and measure of comparison. And the type or ideal of religion is the complete surrender of the heart, and strength, and soul, and mind of man to Deity. Only a religion which admits of a full communion of the reason, affection, and will of the worshipper with the object of his worship—only a religion which presents an object of worship capable of eliciting the entire devotion of the worshipper's nature, and at the same time of ennobling, enlarging, refining, and satisfying that nature—fully realises the idea of religion, or, in other words, can claim to be a perfect religion.^[8]

II.

Applying the very general idea of religion which has now been reached, it soon becomes apparent that no religion can possibly claim to conform to it which does not present to man as the true and supreme object of his adoration, love, and obedience, the One Infinite Personal God—almighty, all-wise, and all-holy; or, in other words, that it is only in a theistic religion that whatever in religion is fitted to satisfy the reason and affections of man, and to strengthen and guide his will, can find its proper development.

Look at polytheism—the worship of more gods than one. Clearly religion can only be very imperfectly realised in any polytheistic form; and still more clearly are most of the forms which polytheism has actually assumed unspeakably degrading. Think for a moment of a human being worshipping a stock or a stone, a plant or a tree, a fish or serpent, an ox or tiger—of the negro of Guinea beating his gods when he does not get what he wishes, or the New Zealander trying to frighten them by threatening to kill and eat them—of the car of Juggernaut, the fires of Moloch, the sacrifices to the Mexican war-god, the abominations ascribed to Jupiter, the licentious orgies so widely practised by the heathen in honour of their deities. Reflect on such a scene as is brought before us in the forty-fourth chapter of Isaiah. The language of the prophet is so graphic that one almost seems to see the man whom he depicts choosing his tree in the forest and hewing it down—to see the smith working at it with his tongs among the coals, and hear the ring of his hammer—to see the carpenter with adze and line and compass shape it into an ugly monstrous shape, bearing faint resemblance to the human—to see the workman with one part of the tree kindling a fire, and baking bread, and roasting roast, and eating it, and then going up to the ugly, wooden, human shape that he has fashioned out of another part of the same tree, prostrating himself before it, feeling awed in its presence, and praying, "Deliver me; for thou art my god." The prophet obviously painted from the life, and his picture is still true to the life where polytheism prevails. But what could be more calculated to inspire both horror and pity? How

awful is it that man should be able so to delude and degrade himself! As a rule, the gods of polytheists are such that, even under the delusion that they are gods, little improving communion with them is possible. As a rule, the religion of polytheists consists of vague, dark, wild imaginations, instead of true and reasoned convictions—of coarse, selfish desires, fear and suspicion, instead of love, and trust, and joy—and of arbitrary or even immoral rites and practices, instead of spiritual worship, and the conformity of the will to a righteous law.

Then, at the very best, polytheism must be far from good,—at its highest, it must be low. Were it much better than it has ever been—had it all the merits of Greek polytheism, without any of its faults, save those which are inherent in the very nature of polytheism—it would still be but a poor religion, for its essential and irremediable defects are such as to render it altogether incapable of truly satisfying the nature of man. It is a belief in more gods than one. This of itself is what reason cannot rest in—what reason is constantly finding out more clearly to be false. The more the universe is examined and understood, the more apparent does it become that it is a single, self-consistent whole—a vast unity in which nothing is isolated or independent. The very notion, therefore, of separate and independent deities, and still more, of course, of discordant or hostile deities, ruling over different departments of nature, is opposed to the strivings and findings of reason. The heart will no less vainly seek satisfaction in the belief of many gods. Its spiritual affections need a single Divine object. To distribute them among many objects is to dissipate and destroy them. The reverence, love, and trust which religion demands are a whole-hearted, absolute, unlimited reverence, love, and trust, such as can only be felt towards one God, with no other beside Him. The will of man in like manner requires to be under not a number of independent wills, but a single, all-comprehensive, perfectly consistent, and perfectly righteous will. It cannot serve many masters; it can only reasonably and rightly serve one. It can only yield itself up unreservedly to be guided by One Supreme Will. If there be no such will in the universe, but only a multitude of independent and co-ordinate wills, that full surrender of the will of the worshipper to the object of his worship, in which religion should find its consummation, is impossible.

Further, polytheism is not only the belief in more gods than one, but in gods all of which are finite. There can be no true recognition of the infinity of God where there is no true recognition of His unity. But the mind of man, although finite itself, cannot be satisfied with any object of worship which it perceives to be finite. It craves an infinite object; it desires to offer a boundless devotion; it seeks an absolute blessedness. The aim of the religious life is the communion of the finite with the infinite; and every religion, however otherwise excellent, which suppresses the infinite, and presents to the finite only the finite, is a failure.

Religion can no more attain to its proper development in pantheism than in polytheism. For pantheism denies that the One Infinite Being is a person—is a free, holy, and loving intelligence. It denies even that we ourselves are truly persons. It represents our consciousness of freedom and sense of responsibility as illusions. God, according to pantheism, alone is. All individual existences are merely His manifestations,—all our deeds, whether good or bad, are His actions; and yet, while all is God and God is all, there is no God who can hear us or understand us—no God to love us or care for us—no God able or willing to help us. Such a view of the universe may have its attractions for the poet and the philosopher in certain moods of mind, but it assuredly affords little foundation for religion, if religion be the communion of the worshipper and the worshipped. What communion of reason can a man have with a being which does not understand him, or of affection with a being which has no love, or of will with a being which has no choice or freedom, and is the necessary cause both of good and evil? Pantheism represents absorption in Deity, the losing of self in God, as the highest good of humanity; but this is a mere caricature of that idea of communion with God in which religion must find its realisation, as pantheism leaves neither a self to surrender, nor a personal God to whom to surrender it. The absorption of the finite in the infinite which pantheism preaches is as different from that surrender of the self to God, which is the condition of God dwelling in us and we in God, as night is from day, as death is from life.

We find ample historical confirmation of what has just been said in the very instructive fact, that widespread as pantheism is, it has never in itself been the religion of any people. It has never been more than the philosophy of certain speculative individuals. India is no exception, for even there, in order to gain and retain the people, pantheism has had to combine with polytheism. It is the personal gods of Hindu polytheism and not the impersonal principle of Hindu pantheism that the Hindu people worship. The Sankhya and Vedanta systems are no more religions than the systems of Spinoza, Schelling, or Hegel. They are merely philosophies. Buddhism has laid hold of the hearts of men to a wonderful extent; not, however, in virtue of the pantheism, scarcely distinguishable from atheism, which underlies it, but because of the attractiveness of the character and teaching of the Buddha Sakyamuni himself, of the man-god who came to save men. The human heart cries out for a living personal God to worship, and pantheism fails miserably as a religion because it wholly disregards, yea, despises that cry.

We are compelled to pass onwards, then, to theism. And here, applying the same view of religion as before, it soon becomes obvious that of the three great theistic religions—Judaism, Christianity, and Mohammedanism—the last is far inferior to the other two, and the first is a transition to and preparation for the second. Although the latest of the three to arise, Mohammedanism is manifestly the least developed, the least matured. Instead of evolving and

extending the theistic idea which it borrowed, it has marred and mutilated it. Instead of representing God as possessed of all spiritual fulness and perfection, it exhibits Him as devoid of the divinest spiritual attributes. Although the Suras of the Koran are all, with one exception, prefaced by the formula, "In the name of Allah, the God of mercy, the merciful," there is extremely little in them of the spirit of mercy, while they superabound in a fierce intolerance. Allah is set before us with clearness, with force, with intense sincerity, as endowed with the natural attributes which we ascribe to God, but only so as to exhibit very imperfectly and erroneously His moral attributes. He is set before us as God alone, beside whom there is none other; as the first and the last, the seen and the hidden; as eternal and unchanging; as omnipotent, omnipresent, and omniscient; as the Creator, the Preserver, and the Judge of all;—but He is not set before us as truly righteous or even as truly reasonable, and still less as Love. He is set before us as an infinite and absolute arbitrary Will, the acts of which are right simply because they cannot be wrong, and which ordains its creatures and instruments to honour or dishonour, heaven or hell, without love or hate, without interest or sympathy, and on no grounds of fitness or justice.

His infinite exaltation above His creatures is recognised, but not His relationship to and interest in His creatures. His almighty power is vividly apprehended, but His infinite love is overlooked, or only seen dimly and in stray and fitful glimpses. His character is thus most imperfectly unveiled, and even seriously defaced; and, in consequence, a whole-hearted communion with Him is impossible. As an unlimited arbitrary Will He leaves man with no true will to surrender to Him. Inaccessible, without sympathy, jealous, and egoistic, His appropriate worship is servile obedience, blind submission—not the enlightened reverence and loving affection of the true piety in which mind and heart fully accord; unquestioning belief, passionless resignation, outward observances, mere external works—not the free use of reason, not the loving dependence of a child on its father, not an internal life of holiness springing from a divine indwelling source. God and man thus remain in this system, theistic although it be, infinitely separate from each other. Man is not made to feel that his whole spiritual being should live and rejoice in God; on the contrary, he is made to feel that he has scarcely any other relation to God than an inert instrument has to the hand which uses it. Submission to the will of God, whatever it may be, without recognition of its being the will of a Father who seeks in all things the good of His children, is the Mussulman's highest conception either of religion or duty, and consequently he ignores the central principle of religious communion and the strongest motive to moral action.

The theism of the Old Testament is incomparably superior to that of the Koran. It possesses every truth contained in Mohammedanism, while it gives due prominence to those aspects of the Divine character which Mohammedanism obscures and distorts. The unity and eternity of God, His omniscience, omnipresence, and inscrutable perfections, the wonders of His creative power, His glory in the heavens and on the earth, are described by Moses and the author of the Book of Job, by the psalmists and the prophets, in language so magnificent that all the intervening centuries have been unable to surpass it. And yet far greater stress is justly laid by them on the moral glory of God, which is reflected in so dim and broken and disproportionate a way through the visions of Mohammed. It is impossible to take a comprehensive view of the Old Testament dispensation without perceiving that its main aim, alike in its ceremonial observances, moral precepts, and prophetic teaching, was to open and deepen the sense of sin, to give reality and intensity to the recognition of moral law, to make known especially that aspect of God's character which we call His righteousness, His holiness. At the same time God is set forth as merciful, long-suffering, and gracious; as healing our diseases, redeeming our life, and crowning us with loving-kindnesses; as creating in us clean hearts, and desiring not sacrifice but a broken spirit.

Before the close of the Old Testament dispensation, a view of God's character had been attained as complete as could be reached through mere spiritual vision and expressed through mere words. The character of God was so disclosed that His people longed with their whole hearts for the blessedness of true spiritual communion with Him, and worthily apprehended what that communion ought to be. But with the widening of their views and the deepening of their longings as to this the supreme good, they realised the more how far they were from the attainment of it. From the beginning Judaism looked beyond itself and confessed its own preparatory and transitional character. And this consciousness grew with its growth. In the days of the later prophets men knew far better what spiritual communion with God ought to be than in the days of the patriarchs, but they did not actually enjoy even the same measure of childlike communion with Him. The law had done its work; it had made men feel more than ever the need of being in communion with God, but it had made them realise also the distance between God and them, and especially the awful width of the gulf between them caused by sin.

That gulf no mere spiritual vision of man could see across, and no mere declarations of love and mercy even from God Himself could bridge over. The reason of man could only be enlightened—the heart of man could only be satisfied—as to how God would deal with sin and sinners, by an actual self-manifestation of God in humiliation, suffering, and sacrifice, which would leave men in no doubt that high and holy as God was, He was also in the deepest and truest sense their Father, and that they were His ransomed and redeemed children. It was only when this was accomplished that religion and theism were alike perfected. Then the character of God was unveiled, the heart of God disclosed, and in such a manner that the most childlike confidence in Him could be combined with the profoundest sense of His greatness and righteousness. Perfect communion with Him in trustful love no longer supposed, as it did in earlier times, an imperfect knowledge, on the part of the worshipper, either of God's character or of his own. It required no overlooking of the evil of sin, for it rested on the certainty that sin had been overcome. Only the

life hid with God in Christ can completely realise the idea of religion, for only in Christ can the heart of sinful man be sincerely and unreservedly yielded to a holy God. "I am the way, the truth, and the life; no man cometh unto the Father, but by me," are words of the Lord Jesus which can only be denied by those who do not understand what they mean—what the truth and the life are, what fatherhood signifies, and what is involved in coming to a Father.

Christian theism alone gives us a perfect representation of God. It precedes and surpasses reason, especially in the disclosure of the depths of fatherly love which are in the heart of the infinite Jehovah; but it nowhere contradicts reason—nay, it incorporates all the findings of reason. It presents as one great and brilliant light all the scattered sparks of truth which scintillated amidst the darkness of heathendom; it combines into a living unity all the separate elements of positive truth which are to be found in systems like pantheism, deism, rationalism; it excludes all that is false in views lower than or contrary to its own. Whenever it maintains a truth regarding God, reason finds that it is defending a principle of Christian theism; whenever it refutes an error regarding Him, it finds itself assailing some one of the many enemies of Christian theism.

III.

Theism, I argued in last lecture, can never be reasonably rejected in the name of religious liberty. I may now, I think, maintain that it can never be reasonably thrown off in the name of religious progress. It can never be an onward step in the spiritual life to pass away from the belief which is distinctive and characteristic of theism. The highest possible form of religion must be a theistic religion—a religion in which the one personal and perfect God is the object of worship. Fetichism, nature-worship, humanitarian polytheism, and pantheism, are all very much lower forms of religion, and therefore to abandon theism for any of them is not to advance but to retrograde, is not to rise but to fall. We can turn towards any of them only by turning our back on the spiritual goal towards which humanity has been slowly but continuously moving through so many ages. There is no hope or possibility of advance on the side of any of the old forms of heathendom.

Shall we try, then, to get out of and beyond theism on that other side to which some moderns beckon us? Shall we suppose that as men have given up the lower for the higher forms of polytheism, and then abandoned polytheism for theism, so they may now surrender theism itself for systems like the positivism of Comte or the new faith of Strauss? No. And for two reasons. First, so far as there is any religion in these systems there is no advance on theism in them but the reverse. Comte strives to represent humanity, and Strauss to represent the universe, as a god, by imaginatively investing them with attributes which do not inherently and properly belong to them; but with all their efforts they can only make of them fetich gods; and Europeans, it is to be hoped, will never fall down and worship fetiches, however big these fetiches may be, and whoever may be willing to serve them as prophets or priests. Humanity must be blind to its follies and sins, insensible to its weakness and miseries, and given over to the madness of a boundless vanity, before it can raise an altar and burn incense to its own self. "Man," says an eloquent author, "is great is sublime, with immortal hope in his heart and the divine aureole around his brow; but that he may preserve his greatness let us leave him in his proper place. Let us leave to him the struggles which make his glory, that condemnation of his own miseries which does him honour, the tears shed over his faults which are the most unexceptionable testimony to his dignity. Let us leave him tears, repentance, conflict, and hope; but let us not deify him; for no sooner shall he have said, 'I am God,' than, deprived that instant of all his blessings, he shall find himself naked and spoiled."^[9] Man, I may add, if his eyes be open and capable of vision, can still less worship the universe than he can worship himself. Mind can never bow down to matter except under the influence of delusion. Man is greater than anything he can see or touch; and those who believe only in what they can see and touch, who have what Strauss calls a feeling for the universe, but no true feeling for what is spiritual and divine, must either worship humanity or something even less worthy of their adoration. There is thus no advance on this side either, even if the systems which we are invited to adopt could be properly regarded as religious. But, secondly, we may safely say that so far as they are theories based on science, there is no religion in them; and that, consequently, to give up a religion for them would be to give up not one form of religion for another, a lower for a higher, but would be to give up religion for what is not religion, or, in other words, would be to cast off religion altogether. And to cease to be religious can surely never be to advance in religion. Positivism and materialism are not stages beyond theism, for they are not on the same road. They are not phases in the development of religion; they are forms of the denial of religion. The grossest fetichism has more of religion in it than either of them can consistently claim on scientific grounds. There is nothing in science, properly so called, which justifies the exaltation either of matter or man to the rank of gods even of the lowest fetich order.

It is only, then, by keeping within the limits of theism that further religious progress is possible. If we would advance in religion, it must be, not by getting rid of our belief in God, but by getting deeper and wider views of His character and operations, and by conforming our hearts and lives more sincerely and faithfully to our knowledge. There is still ample room for religious progress of this kind. I do not say, I do not believe indeed, that we shall find out any absolutely new truth about God. Were a man to tell me that he had discovered a Divine attribute which had never previously been thought of, I should listen to him with the same incredulous pity as if he were to tell me that he had discovered a human virtue which had escaped the notice of all other men. In a real and important sense, the revelation of God made in Scripture, and more particularly and especially the revelation of God in Jesus Christ, is most justly to be regarded as complete, and

incapable of addition. But there may be no limits to the growth of our apprehension and realisation of the idea of God there set before us perfectly as regards general features. To perceive the mere general outline and general aspect of a truth is one thing, and to know it thoroughly, to realise it exhaustively—which is the only way thoroughly to know it—is another and very different thing; and centuries, yea, millenniums without number, may elapse between the former and the latter of these two stages, between the beginning and the end of this process. Thousands of years ago there were men who said as plainly as could be done or desired that God was omnipotent; but surely every one who believes in God will acknowledge, that the discoveries of modern astronomy give more overwhelming impressions of Divine power than either heathen sage or Hebrew psalmist can be imagined as possessing. It is ages since men ascribed perfect wisdom to God; but all the discoveries of science which help us to understand how the earth is related to other worlds—how it has been brought into its present condition—how it has been stocked, adorned, and enriched with its varied tribes of plants and animals—and how these have been developed, distributed, and provided for,—must be accepted by every intelligent theist as enlarging and correcting human views as to God's ways of working, and consequently as to His wisdom. The righteousness of God has been the trust and support of men in all generations; but history is a continuous unveiling of the mysteries of this attribute: through the discipline of Providence individuals and nations are ever being more thoroughly instructed in the knowledge of it. I have, indeed, heard men say—I have heard even teachers of theology say—that the knowledge of God is unlike all other knowledge, in being unchanging and unprogressive. To me it seems that of all knowledge the knowledge of God is, or at least ought to be, the most progressive. And that for this simple reason, that every increase of other knowledge,—be it the knowledge of outward nature, or of the human soul, or of history—be it the knowledge of truth, or beauty, or goodness,—ought also to increase our knowledge of Him. If it do not, it has not been used aright; and the reason why it has not been so used must be that we have looked upon God as if He were only one among many things, instead of looking upon Him as the One Being of whom, through whom, and to whom are all things; and that we have, in consequence, kept our knowledge of Him wholly apart from our other knowledge, instead of centring all our knowledge in it, because we feel it to be "the light of all our seeing," as well as "a lamp to our feet." In other words, our knowledge of God is in this case not a living, all-diffusive knowledge. Only a dead knowledge of Him is an unprogressive knowledge. That, I admit, is unprogressive. It may fade away and be effaced, but it does not grow, does not absorb and assimilate, and thereby transmute and glorify all our other knowledge.

Growth in the knowledge of God is a kind of progress which can have absolutely no end, for the truth to be realised is infinite truth; truth unlimited by time or space; truth involved in all actual existence, and containing the fulness of inexhaustible possibilities. It is, I shall conclude by adding, a kind of progress which underlies and determines all other progress. Whenever our views of truth, of righteousness, of love, of happiness rise above experience; whenever we have ideals of existence and conduct which transcend the actual world and actual life; whenever we have longings for a perfection and blessedness which finite things and finite persons cannot confer upon us,—our minds and hearts are really, although it may be unconsciously, feeling after God, if haply they may find Him. It is only in and through God that there is anything to correspond to these ideals and longings. If man be himself the highest and best of beings, how comes it that all the noblest of his race should be haunted and possessed as they are by aspirations after what is higher and better than themselves—by visions of a truth, beauty, and holiness which they have not yet attained—by desires for a blessedness which neither earth nor humanity can bestow? Must not, in that case, his ideals be mere dreams—his longings mere delusions? Pessimists like Schopenhauer and Hartmann and their followers, openly avow that they believe them to be so; that the history of the world is but the series of illusions through which these ideals and longings have impelled humanity; that our ideals never have been and never will be realised; that our longings never have been and never will be satisfied, for, "behold, all is vanity." I believe them to be quite logical in thinking so, seeing that they have ceased to believe in God, who is the ideal which alone gives meaning to all true ideals, who can alone satisfy the deeper spiritual longings of the heart, and likeness to whom is the goal of all mental, moral, and religious progress. Of course, if the pessimists can persuade mankind that the sources of progress are not the truths and affections by which Infinite Goodness is drawing men to itself, but mere fictions of their own brains and flatteries of their own hearts, progress must soon cease. When a delusion is seen through, the power of it is gone. But the pessimists will not, we may trust, succeed. They will mislead for a time, as they are now misleading, certain unstable minds; but the main result of their activity must be just the opposite of what they anticipate. It must be that men will prize more the doctrines the most opposite to the dreary view of life and history which they propagate. Pessimism must send the philosophical few back with deepened reverence and quickened insight to Plato, in order to master more thoroughly, and take to heart more seriously, his great message to the world, that the actual and the ideal meet and harmonise in God, who is at once the First and the Final Cause, the Absolute Idea, the Highest Good; and it must increase the gratitude of the many, whether learned or unlearned, for the Gospel which has taught them that to glorify God is an end in which there is no illusion, and to enjoy Him a good which never disappoints. God, as the presupposition of all elevating ideals, and the object of all ennobling desires, is the primary source and the ultimate explanation of all progress.^[10]

I.

If we believe that there is one God—the Creator, Preserver, and Ruler of all finite beings—we ought to have reasons or grounds for this belief. We can have no right to believe it simply because we wish or will to believe it. The grounds or reasons which we have for our belief must be to us proofs of God's existence. Those who affirm that God exists, and yet deny that His existence can be proved, must either maintain a position obviously erroneous, or use the term proof in some extraordinary sense, fitted only to perplex and mislead. True and weighty, therefore, seem to me these words of one of the most distinguished of living German philosophers: "The proofs for the existence of God, after having long played a great part in philosophy and theology, have in recent times, especially since Kant's famous critique, fallen into disrepute. Since then, the opinion has been widely spread, both among believers and unbelievers, that the existence of God does not admit of being proved. Even theologians readily assent to this opinion, deride the vain attempts, and imagine that in so doing they are serving the faith which they preach. But the proofs for the existence of God coincide with the grounds for the belief in God; they are simply the real grounds of the belief established and expounded in a scientific manner. If there be no such proofs, there are also no such grounds; and a belief which has no ground, if possible at all, can be no proper belief, but an arbitrary, self-made, subjective opinion. Yes, religious belief must sink to the level of the mere illusion or fixed idea of a mind which is insane, if contradicted by all reality, all facts scientifically established, and the theory of the universe which such facts support and justify."^[11]

The proofs of God's existence must be, in fact, simply His own manifestations; the ways in which He makes Himself known; the phenomena on which His power and character are imprinted. They can neither be, properly speaking, our reasonings, nor our analyses of the principles involved in our reasonings. Our reasonings are worth nothing except in so far as they are expositions of God's modes of manifestation; and even when our reasonings are correct, our analyses of them, supposing we attempt to analyse them, may be erroneous. The facts,—the works and ways of God—which are the real evidences of His existence and the true indications of His character,—may raise countless minds to God which can give no general description of the process by which they are thus elevated, and are still less capable of resolving it into its principles. It is late in the history both of the individual mind and of the collective mind before they can so reflect on their own acts, so distinguish them one from another, and so discern the characteristics of each, as to be able even to give a clear and correct account of them; and it is much later before they can detect their conditions and laws. The minds of multitudes may therefore readily be supposed to rise legitimately from perception of the visible universe to apprehension of the invisible personal Creator, although either wholly unconscious or only dimly and inaccurately aware of the nature of the transition, and although, if called on to indicate the conclusion at which they had arrived, they would employ far weaker reasons in words than those by which they were actually convinced in thought. The principles of the theistic inference may be very badly determined, and yet the theistic inference itself may be perfectly valid.

If the real proofs of God's existence are all those facts which cannot be reasonably conceived of as other than the manifestations of God—His glory in the heavens, His handiwork on the earth, His operations in the soul, His ways among the nations—and if the task of the theist is to trace out these facts, and to show that they cannot reasonably be denied to be marks or impressions of Divine agency, then must a theist, when seeking or expounding the reasons for his belief, feel that his mind is conversant not with mere thoughts of his own, but with the manifested thoughts or acts of God Himself. He must carry into his inquiry the consciousness that he is not simply engaged in an intellectual process, but is trying to apprehend and actually apprehending the Divine Being. To him, therefore, the inquiry as to the ultimate source and reason of things must be an essentially solemn and awe-inspired one. To the atheist it must, of course, be much less so; but even he ought to feel it to be not only a most important inquiry, but one which carries him into the presence of a vast, eternal, and mysterious power—a power in darkness shrouded, yet on which hang all life and death, all joy and woe.

According to the view just stated, the evidences or proofs of God's existence are countless. They are to be found in all the forces, laws, and arrangements of nature—in every material object, every organism, every intellect and heart. At the same time, they concur and coalesce into a single all-comprehensive argument, which is just the sum of the indications of God given by the physical universe, the minds of men, and human history. Nothing short of that is the full proof. There may be points in space and instants in time where creative and sustaining power appear to our narrow and superficial intellects to have been strangely limited, but surely we ought not so to concentrate our attention on any such points or instants as to be unable to take in a general impression of the immeasurable power displayed throughout the realms of space and the ages of time. It may be possible to show that many things which have been regarded as evidences of intelligence or wisdom are not really so, and yet the universe may teem with the manifestations of these attributes. Faith in the righteousness and moral government of God must be able to look over and to look beyond many things calculated to produce doubt and disbelief. No man can judge fairly as to whether or not there is a God, who makes the question turn on what is the significance of a few particular facts, who is incapable of gathering up into one general finding the results of innumerable indications. A true religious view of the world must be a wide, a comprehensive view of it, such as demands an eye for the whole and not merely for a part—the faculties which harmonise and unify, and not merely those which divide and analyse. A part, a

point, the eye of an insect, the seed of a fruit, may indeed be looked at religiously, but it must be in the light of the universe as a whole, in the light of eternity and infinity.

"Flower in the crannied wall,
I pluck you out of the crannies;
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."

In another respect the theistic proof is exceedingly complex and comprehensive. It takes up into itself, as it were, the entire wealth of human nature. The mind can only rise to the apprehension of God by a process which involves all that is most essential in its own constitution. Thus the will is presupposed. Theistic inference clearly involves the principle of causality. God can only be thought of in the properly theistic sense as the cause of which the universe is the effect. But to think of God as a cause—to apprehend the universe as an effect,—we must have some immediate and direct experience of causation. And such experience we have only in the consciousness of volition. When the soul wills, it knows itself as an agent, as a cause. This is the first knowledge of causation which the mind requires, and the most perfect knowledge thereof which it ever requires. It is a knowledge which sheds light over all the regions of experience subsequently brought under the principle of causality, which accompanies the reason in its upward search until it rests in the cognition of an ultimate cause, and which enables us to think of that cause as the primary, all-originating will. If we did not know ourselves as causes, we could not know God as a cause; and we know ourselves as causes only in so far as we know ourselves as wills.

But the principle of causality alone or by itself is quite insufficient to lead the mind up to the apprehension of Deity; and an immediate and direct consciousness of far more within us than will is required to make that apprehension possible. The evidences of intelligence must be combined with the evidences of power before we can be warranted to infer more from the facts of the universe than the existence of an ultimate force; and no mere force, however great or wonderful, is worthy to be called God. God is not only the ultimate Cause, but the Supreme Intelligence; and as it is only in virtue of the direct consciousness of our volitions that we can think of God as a cause, so is it only in virtue of the direct consciousness of our intellectual operations that we can think of Him as an intelligence. It is not from the mere occurrence of a change, or the mere existence of a derivative phenomenon, that we infer the change or phenomenon to be due to an intelligent cause, but from the mode of the occurrence or the character of the phenomenon being such that any cause but an intelligent cause must be deemed an insufficient cause. The inference supposes, however, that we already have some knowledge of what an intelligent cause is—that we have enough of knowledge of the nature of intelligence to convince us that it alone can fully account for order, law, and adjustment. Whence do we get this knowledge? We have not far to seek it; it is inherent in self-consciousness. We know ourselves as intelligences, as beings that foresee and contrive, that can discover and apply principles, that can originate order and adjustment. It is only through this knowledge of the nature of intelligence that we can infer our fellow-men to be intelligent beings; and not less is it an indispensable condition of our inferring God to be an intelligence.

Then, causality and design, and the will and intelligence within us through which they are interpreted, cannot, even when combined, enable us to think of the Creative Reason as righteous; although obviously, until so thought of, that reason is by no means to be identified with God. The greatest conceivable power and intelligence, if united with hatred of righteousness and love of wickedness, can yield us only the idea of a devil; and if separated from all moral principle and character, good or bad, only that of a being far lower than man, which might have reason for worshipping man, but which man cannot worship without degrading himself. The existence, however, of a moral principle within us, of a conscience which witnesses against sin and on behalf of holiness, is of itself evidence that God must be a moral being, one who hates sin and loves holiness; and the light of this, "the candle of the Lord," in the soul, enables us to discover many other reasons for the same conclusion in the constitution of society and the course of history. But if we had no moral perceptions on the contemplation of our own voluntary acts, we certainly would not, and could not, invest the Divine Being with moral perfections because of His acts.

There is still another step to be taken in order to obtain an apprehension of God; and it is one where the outward universe fails us, where we are thrown entirely, or nearly so, on our internal resources. The universe, interpreted by the human mind in the manner which has been indicated, may warrant belief in a Being whose power is immense, whose wisdom is inexpressibly wonderful, and whose righteousness is to be held in profoundest admiration and reverence, notwithstanding all the clouds and darkness which may in part conceal it from our view; but not in a Being whose existence is absolute, whose power is infinite, whose wisdom and goodness are perfect. We cannot infer that the author of a universe which is finite, imperfect, and relative, and all the phenomena of which are finite, imperfect, and relative, must be, in the true and strict sense of the terms, infinite, perfect, and absolute. We cannot deduce the infinite from the finite, the perfect from the imperfect, the absolute from the relative. And yet it is only in the recognition of an absolute Being of infinite power, who works with perfect wisdom towards the accomplishment of perfectly holy ends, that we reach a true knowledge of God, or, which is much the same thing, a knowledge of the true God. Is there, then, any warrant in our own nature for thinking of God as infinite, absolute, and perfect, since there seems to be little or none in

outward nature? Yes, there are within us necessary conditions of thought and feeling and ineradicable aspirations which force on us ideas of absolute existence, infinity, and perfection, and will neither permit us to deny these perfections to God nor to ascribe them to any other being.

Thus the mental process in virtue of which we have the idea of God comprehends and concentrates all that is most essential in human nature. It is through bearing the image of God that we are alone able to apprehend God. Take any essential feature of that image out of a human soul, and to apprehend God is made thereby impossible to it. All that is divine in us meets, unites, co-operates, to lay hold of what is divine without us. Hence the fuller and clearer the divine image is in any man, the fuller and clearer will be his perception of the divine original. Hence what is more or less true everywhere, is especially and emphatically true in religion, that "the eye sees only what it brings with it the power of seeing." Where the will, for example, is without energy—where rest is longed for as the highest good, and labour deemed the greatest evil—where extinction is preferred to exertion,—the mind of a nation may be highly cultured, and subtle and profound in speculation, and yet may manifest a marked inability to think of God as a cause or will, with a consequently inveterate tendency to pantheism. The Hindu mind, and the systems of religion and philosophy to which it has given birth, may serve as illustration and proof. Where the animal nature of man is strong, and his moral and spiritual nature still undeveloped, as is the case among all rude and undisciplined races, he worships not the pure and perfect supreme Spirit, whose goodness, truth, and righteousness are as infinite as His power and knowledge, but gods endowed in his imagination chiefly with physical and animal qualities. "Recognition of Nature," says Mr Carlyle, "one finds to be the chief element of Paganism; recognition of Man and his Moral Duty—though this, too, is not wanting—comes to be the chief element only in purer forms of religion. Here, indeed, is a great distinction and epoch in Human Beliefs; a great landmark in the religious development of Mankind. Man first puts himself in relation with Nature and her Powers, wonders and worships over those; not till a later epoch does he discern that all Power is Moral, that the grand point is the distinction for him of Good and Evil, of *Thou shalt, and thou shalt not.*" The explanation of the historical truth thus stated by Mr Carlyle is just that man is vividly alive to the wants and claims of his body and merely natural life during long ages in which he is almost dead to the wants and claims of his spirit or true self and the moral life. So the ordinary mind is prone, even at present, in the most civilised countries of the world, to think of God after the likeness of man, or, in other words, as a vastly magnified man. Why? Because the ordinary mind is always very feebly and dimly conscious of those principles of reason which demand in God the existence of attributes neither to be found in the physical universe nor in itself. Some exercise in speculation, some training in philosophy, is needed to make us reflect on them; and until we reflect on them we cannot be expected to do them justice in the formation of our religious convictions. Those who have never thought on what infinite and unconditioned mean, and who have never in their lives grappled with a metaphysical problem, will infer quite as readily as if they had spent their days in philosophical speculation that all the power and order in the universe, and all the wisdom and goodness in humanity, are the reflections of a far higher power, wisdom, and goodness in their source—the Divine Mind; but they must realise much less correctly in what respects God cannot be imaged in His works: they may do equal or even fuller justice to what is true in anthropomorphism, but they cannot perceive as distinctly where anthropomorphism is false. It is only through the activity of the speculative reason that religion is prevented from becoming a degrading anthropomorphism, that the mind is compelled to think of God not merely as a Father, King, and Judge, but as the Absolute and Infinite Being. This is, perhaps, the chief service which philosophy renders to religion; and it ought not to be undervalued, notwithstanding that philosophy has often, in checking one error, fallen into another as great, or even greater, denying that there is any likeness between God and man.

While the mental process which has been described—the theistic inference—is capable of analysis, it is in itself synthetic. The principles on which it depends are so connected that the mind can embrace them all in a single act, and must include and apply them all in the apprehension of God. Will, intelligence, conscience, reason, and the ideas which they supply; cause, design, goodness, infinity, with the arguments which rest on these ideas,—all coalesce into this one grand issue. The inferences are as inseparable as the principles from which they spring. A very large number of the objections to theism arise wholly from inattention to this truth. Men argue as if each principle involved in the knowledge of God were to be kept strictly by itself, as if each argument brought forward as leading to a theistic conclusion were to be jealously isolated; and then, if the last result of the principle, the conclusion of the argument, be not an adequate knowledge of God, they pronounce the principle altogether inapplicable, and the argument altogether fallacious. It is strange that this procedure should not be universally seen to be sophistical in the extreme—a kind of reasoning which, if generally adopted, would at once arrest all science and all business; but obviously anti-theists think differently, for they habitually have recourse to it. If you argue, for example, that the universe is an event or effect which must have an adequate cause, they will question your right to refer to the order which is in the universe as a proof that it is an event or effect, because order implies another principle, and is the ground of another argument. They overlook that you are not making an abstract use of the principle of causality, and that you are not arguing from the mere terms universe and event, but from the universe itself; and that in order to know whether it be an event or not—an effect or not—you must study it as it is, and take everything into account which bears on the question. They reason as if they supposed that a cause and an intelligence must be two different things, and that a cause cannot be an intelligence, nor an intelligence a cause. Similarly, the arguments from the

power, order, and goodness displayed in nature have often been objected to altogether, have often been pronounced worthless, because they do not in themselves prove God to be *infinitely* powerful, wise, and good. They are brought forward to show that the Author of the universe must have the power, wisdom, and goodness required to create and govern it; and forthwith many oppose them by declaring that they do not show Him to be infinite. Now, no man who did not imagine nature to be infinite ever adduced them to prove God infinite. Their not proving that, is therefore no reason for denying them to prove what they profess to prove. No argument can stand if we may reject it because it does not prove more than it undertakes to prove.

It is clear that the evidences of design, instead of being wholly distinct from the evidences of power, and independent of the principle of causality, are evidences of a kind of power and manifestations of a kind of causality—intelligent power and causality. In like manner the evidences of goodness are also evidences of design, for goodness is a form of design—morally, beneficent design. Although causality does not involve design, nor design goodness, design involves causality, and goodness both causality and design. The proofs of intelligence are also proofs of power; the proofs of goodness are proofs both of intelligence and power. The principles of reason which compel us to think of the Supreme Moral Intelligence as a self-existent, eternal, infinite, and unchangeable Being, supplement the proofs from other sources, and give self-consistency and completeness to the doctrine of theism. The various theistic arguments are, in a word, but stages in a single rational process, but parts of one comprehensive argument. They are naturally, and, as it were, organically related—they support and strengthen one another. It is therefore an arbitrary and illegitimate procedure to separate them any farther than may be necessary for the purpose of clear and orderly exposition. It is sophistry to attempt to destroy them separately by assailing each as if it had no connection with the other, and as if each isolated fragmentary argument were bound to yield as large a conclusion as all the arguments combined. A man quite unable to break a bundle of rods firmly bound together may be strong enough to break each rod separately. But before proceeding to deal with the bundle in that way, he may be required to establish his right to untie it, and to decline putting forth his strength upon it as it is presented to him.^[12]

II.

The theistic inference, although a complex process, is not a difficult one. It looks, indeed, long and formidable when analysed in books of evidences, and elaborated with perverse ingenuity into series of syllogisms. But numerous processes, very simple and easy in themselves, are toilsome and troublesome to analyse, or describe, or comprehend. Vision and digestion are, in general, not difficult bodily functions, but they have been the subjects of a great many very large treatises; and doubtless physiologists have not even yet found out all that is to be known about them. As a rule, the theistic process is as simple and easy an operation for the mind as vision or digestion for the body. The multitude of books which have been written in explanation and illustration of it, and the subtle and abstruse character of the researches and speculations contained in many of these books, are not the slightest indications of its being other than simple and natural in itself. The inferences which it involves are, in fact, like those which Weber, Helmholtz, and Zöllner have shown to be implied in the perceptions of sense, involuntary and unconscious. If not perfectly instantaneous, they are so rapid and spontaneous as to have seemed to many intuitive. And in a loose sense, perhaps, they may be considered so. Not, however, strictly and properly, since the idea of Deity is no simple idea, but the most complex of ideas, comprehending all that is great and good in nature and man, along with perfections which belong to neither nature nor man; and since the presence of Deity is not seen without the intervention of any media—face to face, eye to eye—but only as "through a glass darkly." The contemplation of nature, and mind, and history is an indispensable stage towards the knowledge of Him. Physical and mental facts and laws are the materials or data of reason in its quest of religious truth. There is a rational transition from the natural to the supernatural, wherever the latter is reached.

Our knowledge of God is obtained as simply and naturally as our knowledge of our fellow-men. It is obtained, in fact, mainly in the same way. In both cases we refer certain manifestations of will, intelligence, and goodness—qualities which are known to us by consciousness—to these qualities as their causes. We have no direct or immediate knowledge—no intuitive or *a priori* knowledge—of the intelligence of our fellow-creatures, any more than we have of the intelligence of our Creator; but we have a direct personal consciousness of intelligence in ourselves which enables us confidently to infer that the works both of God and of men can only have originated in intelligences. We grow up into knowledge of the mind of God as we grow in acquaintance with the minds of men through familiarity with their acts. The Father in heaven is known just as a father on earth is known. The latter is as unseen as the former. No human being has really ever seen another. No sense has will, or wisdom, or goodness for its object. Man must infer the existence of his fellow-men, for he can have no immediate perception of it; he must become acquainted with their characters through the use of his intelligence, because character cannot be heard with the ear, or looked upon with the eye, or touched with the finger. Yet a child is not long in learning to know that a spirit is near it. As soon as it knows itself, it easily detects a spirit like its own, yet other than itself, when the signs of a spirit's activity are presented to it. The process of inference by which it ascends from the works of man to the spirit which originates them is not more legitimate, more simple, or more natural, than that by which it rises from nature to nature's God.

In saying this, I refer merely to the process of inference in itself. That is identical in the two cases. In other respects there are obvious differences, of which one important consequence is,

that while the scepticism which denies the existence of God is not unfrequently to be met with, a scepticism which denies the existence of human beings is unknown. The facts which prove that there are men, are grouped together within limits of space and of time which allow of their being so easily surveyed, and they are in themselves so simple and familiar, that all sane minds draw from them their natural inference. The facts which prove that there is a God need, in order to be rightly interpreted, more attention and reflection, more comprehensiveness, impartiality, and elevation of mind. Countless as they are, they can be overlooked, and often have been overlooked. Clear and conspicuous as they are, worldliness and prejudice and sin may blind the soul to their significance. True, the existence and possibility of atheism have often been denied, but the testimony of history to the reality of atheism cannot be set aside. Although many have been called atheists unjustly and calumniously, and although a few who have professed themselves to be atheists may have really possessed a religious belief which they overlooked or were averse to acknowledge, we cannot reasonably refuse to take at their own word the majority of those who have inculcated a naked and undisguised atheism, and claimed and gloried in the name of atheist. Incredible as it may seem that any intelligent being, conscious of human wants and weaknesses, should be able to look upon the wonders of the heavens and of the earth, of the soul within him and of society around him, and yet say that there is no God, men have done so, and we have no alternative but to accept the fact as we find it. It is a fact which involves nothing inconsistent with the truth that the process by which the mind attains to a belief in God is of the same natural and direct, yet inferential, character as the process by which it attains to belief in the existence of finite minds closely akin to itself.

Our entire spiritual being is constituted for the apprehension of God in and through His works. All the essential principles of mental action, when applied to the meditative consideration of finite things, lead up from them to Infinite Creative Wisdom. The whole of nature external to us is a revelation of God; the whole nature within us has been made for the reception and interpretation of that revelation. What more would we have? Strange as it may seem, there are many theists at the present day who represent it as insufficient, or as even worthless, and who join with atheists in denying that God's existence can be proved, and in affirming that all the arguments for His existence are inconclusive and sophistical. I confess I deem this a most erroneous and dangerous procedure. Such theists seem to me not only the best allies of atheists, but even more effective labourers in the cause of unbelief than atheists themselves. They shake men's confidence to a far greater extent in the reasonable grounds of faith in God's existence, and substitute for these grounds others as weak and arbitrary as any atheist could possibly wish. They pronounce illegitimate and invalid the arguments from effect to cause, from order and arrangement to intelligence, from history to providence, from conscience to a moral governor,—an assertion which, if true, infallibly implies that the heavens do not declare the glory of God, and that the earth does not show forth His handiworks—that the course of human events discloses no trace of His wisdom, goodness, or justice—and that the moral nature of man is wholly dissociated from a Divine law and a Divine lawgiver. Then, in place of a universe revealing God, and a soul made in His image, and a humanity overruled and guided by Him, they present to us as something stronger and surer—an intuition or a feeling or an exercise of mere faith. For it is a noticeable and certainly not a promising circumstance, that there is no general agreement as to what that state of mind is on which the weight of the entire edifice of theism is proposed to be rested even among those who profess to possess it. An intuition, a feeling, and a belief are very different things; and not much dependence is to be put on the psychology which is unable to distinguish between them.

Man, say some, knows God by immediate intuition; he needs no argument for His existence, because he perceives Him directly—face to face—without any medium. It is easy to assert this, but obviously the assertion is the merest dogmatism. Not one man in a thousand who understands what he is affirming will dare to claim to have an immediate vision of God, and nothing can be more likely than that the man who makes such a claim is self-deluded. It is not difficult to see how he may be deluded. There is so much that is intuitive involved in the apprehension of God that the apprehension itself may readily be imagined to be intuitive. The intuitive nature of the conditions which it implies may arrest the attention, and the fact that they are simply conditions may be overlooked. The possibility, however, of analysing the apprehension into simpler elements—of showing that it is a complex act, and presupposes conditions that can be indicated—is a conclusive proof that it is no intuition, that our idea of God is no more or otherwise intuitive than our idea of a fellow-man. Besides, what seem intuitions are often really inferences, and not unfrequently erroneous inferences; what seem the immediate dictates of pure reason, or the direct and unclouded perceptions of a special spiritual faculty, may be the conceits of fancy or the products of habit and association, or the reflections of strong feeling. A man must prove to himself, and he must prove to others, that what he takes to be an intuition is an intuition. Is that proof in this case likely to be easier or more conclusive than the proof of the Divine existence? The so-called immediate perception of God must be shown to be a perception and to be immediate; it must be vindicated and verified: and how this is to be done, especially if there be no other reasons for believing in God than itself, it is difficult to conceive. The history of religion, which is what ought to yield the clearest confirmation of the alleged intuition, appears to be from beginning to end a conspicuous contradiction of it. If all men have the spiritual power of directly beholding their Creator—have an immediate vision of God—how happens it that whole nations believe in the most absurd and monstrous gods? that millions of men are ignorant whether there be one god or thousands? that even a people like the Greeks could suppose the highest of their deities to have been born, to have a body, and to have committed the vilest actions? A true power of intuition is little susceptible of growth, and its testimonies vary within

narrow limits; any development of which it admits is only slightly due to external conditions, and mainly the necessary consequence of internal activity, of inherent expansibility. It is thus, for example, with the senses of sight and hearing, in so far as they are intuitive. But it is manifestly very different with the religious nature. Its growth is mainly dependent, not on the organic evolution of a particular faculty, but on the general state of the soul, on the one hand; and on the influence of external circumstances—education, example, law, &c.—on the other hand. It is this difference in the character of their development which explains why the deliverances of the senses are so uniform and nearly infallible, while the most cursory survey of the religious world shows us the greatest want of uniformity and truthfulness in religious judgments. The various phases of polytheism and pantheism are inexplicable, if an intuition of God be universally inherent in human nature. Theism is perfectly explicable without intuition, as the evidences for it are numerous, obvious, and strong.

The opinion that man has an intuition or immediate perception of God is untenable; the opinion that he has an immediate feeling of God is absurd. A man feels only in so far as he perceives and knows. Feeling is in consciousness essentially dependent on, and necessarily subsequent to, knowing. Mere feeling—feeling without knowing—is an utterly inconceivable and impossible experience. Admit, however, not only that there may be a mere feeling, but that there is a mere feeling of God. What worth can it have? By supposition—by definition—no knowledge of God underlies and explains it. But in that case, how can any man pretend to get a knowledge of God out of it? What right can any one have to represent it as a source of knowledge of God? I am not aware that these questions have ever been answered except by the merest verbal jugglery. The very men who tell us that we cannot know God, but that we feel Him, tell us also that the feeling of Him is an immediate consciousness of Him, and that immediate consciousness is its own self-evidence, is absolute certainty, or, in other words, the highest and surest knowledge. We do not know God, but we feel Him; however, to feel Him is to know Him,—such is their answer more or less distinctly expressed, or, I should rather say, more or less skilfully concealed. It is at once a Yes and a No, the affirmation of what is denied and the denial of what is affirmed. And it is this because it cannot be anything else—because mere feeling is an impossible experience—and because feeling, so far as it is uncaused and unenlightened by knowledge, testifies only to the folly or insanity of the being which feels. If theism have no other basis than feeling, it is a house which foolish men have built upon the sand. The first storm will cast it down, and no wise man will regret its fall. Whatever is founded on mere emotion—on emotion which is not itself explained and justified by reason—stands but by sufferance; has no right to stand; ought to be cast down and swept from the earth. But the storms which have already in the course of the ages spent their force against theism with no other effect than to make its strength more conspicuous, and to carry away what would have weakened or deformed it, are sufficient to show us that it has been built on eternal truth by the finite human reasons which have been enlightened by Infinite and Divine Reason.

The strangest of all theories as to the foundation of our belief in God is, that it has no foundation at all—that it is a belief which rests upon itself, an act of faith which is its own warrant. We are told that we can neither know that God is nor what God is, but that we can nevertheless believe in God, and ought to believe in Him, and can and ought to act as if we knew His existence and character. But surely belief without a reason must be arbitrary belief, and either to believe or act as if we knew what we do not know, can never be conduct to be justified, much less commended. Faith which is not rational is faith which ought to be rejected. We cannot believe what we do not know or think that we know. We have no right to believe more than we know. I know, for example, that the grass grows, and consequently I believe, and am justified in believing, that it grows. I do not know how the grass grows, and I do not believe how it grows; I can justify my believing about its growth nothing beyond what I know to be true. This law of belief is as binding for the highest as for the lowliest objects. If I have no reason for believing that there is a God, I have no right to believe that there is a God. If I do not know that God is infinite, I am bound not to believe that He is infinite. Belief is inseparable from knowledge, and ought to be precisely coextensive with knowledge. Those who deny this fundamental truth will always be found employing the words knowledge and belief in a capricious and misleading way.^[13]

III.

When man apprehends God as powerful, wise, and good—as possessed of will, reason, and righteousness—obviously he thinks of Him as bearing some likeness to himself, as having in an infinite or perfect measure qualities which human creatures have in a finite and imperfect measure. This can be no stumbling-block to any one who believes that God made man in His image, after His likeness. If man be in some respects like God, God must, of course, be in some respects like man. Power and freedom, knowledge and wisdom, love, goodness, and justice, are, according to this view, finitely in man, because they are infinitely in God. But it is a view which excites in certain minds deep aversion. There are men who protest, in the name of religion, in the name of God, against this anthropomorphic theism, as they call it. According to them, to attribute to God any human qualities, even the highest and best, is to limit and degrade Him—is contrary to reason and contrary to piety—is idolatrous and profane. The Psalmist represents the Lord as reproaching the wicked for supposing that He was like them in their wickedness—"altogether such an one as themselves;" but the modern philosophers to whom I am referring are horrified at the thought that the most righteous man, even in his righteousness, has any likeness to God. According to them, to think of God as wise is to dishonour Him, and to declare Him holy is to calumniate Him. To think of Him as foolish, and to pronounce Him wicked, are, in their eyes, only a little more irreverent and no more irrational.

"We must not fall down and worship," writes one of these philosophers, "as the source of our life and virtue, the image which our own minds have set up. Why is such idolatry any better than that of the old wood and stone? If we worship the creations of our minds, why not also those of our hands? The one is, indeed, a more refined self-adoration than the other; but the radical error remains the same in both. The old idolaters were wrong, not because they worshipped themselves, but because they worshipped their creation as if it were their creator; and how can any anthropomorphic theory 'escape the same condemnation'?"^[14] The writer does not see that God can only be thought of as wise and righteous and free because the mind of man is His creation, so that His being thus thought of can be no proof that He is *its* creation. The fact that we can think of God as wise and righteous and free is no evidence that He is an image which our own minds have set up. The man who draws such an inference from such a premiss can be no dispassionate reasoner. And certainly the fact that we can think of God as possessed of intellectual and moral perfections is no reason for our not falling down and worshipping Him, and no evidence that our doing so is idolatry. To fall down and worship any being whom we do not know to possess these characteristics is what would clearly be idolatry. And this idolatry is what the philosophers to whom I refer are manifestly chargeable with encouraging. When they have rejected the living, personal, righteous, loving God, in whom humanity has so long trusted, they can only suggest as a substitute for Him a mysterious Power which is wholly unknown, and even unknowable. Great is their simplicity if they fancy that they can persuade men to receive any such god as that, or if they fancy that men would be any better for a faith so vague and empty. To believe in we know not what, is directly contrary to reason; to worship it would be "an idolatry no better than that of the old wood and stone." What we know is often not the creation of our minds: the unknowable is in itself nothing at all to us, and, as a thought, is always the mere creation of our minds; it is different for each creature, each mind; it is the mere result and reflection of our finiteness. There can be no unknown or unknowable to an infinite mind. To worship what is unknowable would be, therefore, simply to worship our own ignorance—one of the creations of our minds least worthy, perhaps, of being worshipped. There is, at least, no kind of worship less entitled "to escape condemnation," even as anthropomorphic idolatry, than the worship of the Unknowable,—the god proposed to us by some as the alone true God, belief in whom—perhaps I should rather say, belief in which—is to be the final and perfect reconciliation of science and religion.

All true theism implies a certain likeness between God and man. It holds that God is not merely an all-pervading and all-sustaining Power, but an omniscient Mind and perfectly holy Will. It refuses to think of Him merely according to the analogies of the physical world, as if human reason and human love were less worthy expressions of His perfections than mechanical or brute force. It refers to Him not only "all the majesty of nature, but all the humanity of man." This truth—that there is a likeness between God and man—must, however, be combined with two other truths, otherwise it will lead to the gravest errors.

The first is, that while God and man are both like each other, in that both possess certain excellences, they are utterly unlike, in that God possesses these excellences in all their perfection and in an infinite measure, while man possesses them in a very small degree and violated with many flaws and faults. The highest glory which a man can hope for is, that he should be made wholly into the image of God; but never can God be rightly thought of as mainly, and still less as merely, in the image of man. It was the great error of classic heathendom that it thus conceived of the Divine. "Men," says Heraclitus, "are mortal gods, and the gods immortal men." And the gods of Greece, as represented by her poets and adored by her people, were simply magnified and immortal men—a race closely akin to their worshippers in weaknesses and vices no less than in powers and virtues. They were supposed to be born as men are, to have voice and figure, parts and passions, and even at times to cheat and rail and lie. They reflected all the tendencies of the Greek mind, both good and evil.

Worshippers of the one God can scarcely fall into the same extravagance of error in this respect as the Greeks and Romans did, as all polytheists do; but they can, and often do, fall into the error, and think of God as subject to limits and defects, which are only in themselves. For instance, what is called deism, as distinguished from theism, rests wholly on the conception that the presence and power of God are limited, and that He acts in the manner to which man as a finite creature is restricted. The deist thinks of God as outside of and away from the universe; he thinks of the universe as a mechanism which God has contrived, and which He has endowed with certain powers, in virtue of which it is able to sustain itself in existence, and to perform its work so as to save God, as it were, all further trouble and labour concerning it. It is a great gain for us to have a machine doing what we desire without our needing to pay any attention to it or even to be present where it is, because we cannot give our attention to more than one object at one and the same instant of time, and cannot be present at the same time in more places than one; but those who liken God to man in this respect, divest Him of His omnipresence and omnipotence, and represent Him as characterised in some measure by their own impotency. There is a truth which Pantheism often claims as peculiarly and distinctively its own,—the truth that in God we and all things live, and move, and have our being—that of Him, and through Him, and to Him, are all things,—but which theism must sincerely and fully appropriate as one of its simplest and most certain elements, otherwise the charge against it of being a false and presumptuous likening of God to man will be warranted. We must not think of Him as "an absentee God, sitting idle ever since the first Sabbath, at the outside of His universe, and 'seeing it go'"—as a God at hand but not afar off, or afar off but not at hand—as here, not there, or there, not here; but we must think of Him as everywhere present, everywhere active—as at once the source of all order, the spring

of all life, and the ground of all affection and thought.

We need to be still more on our guard against limiting His wisdom or righteousness or love, as it is what we are still more prone to do. These attributes of God are often thought of in the meanest and most unworthy ways; and doubtless it has to a large extent been horror at the consequent degradation of the idea of God which has made some men refuse to assign to Him any of the properties of humanity, saying, with Xenophanes, that if the animals could think, they would imagine the Deity to be in their likeness—and with Spinoza, that if a circle could think, it would suppose His essence to be circularity. But this is to flee from one extreme to another extreme, from one error to a still more terrible error, through utterly failing to distinguish between perfection and imperfection, between what ought and what ought not to be ascribed to God. Circularity, animal forms and dispositions, human limitations—these are imperfections, and we must not refer them to God; but intelligence, righteousness, love—these are so little in their own nature imperfections that an intelligent being, however feeble, would be more excellent than an omnipotent and omnipresent being destitute of intelligence; and righteousness and love are as much superior to mere intelligence as it is to mere power and magnitude. To ascribe these to God, if we only ascribe them to Him in infinite perfection, is no presumption, no error; not to ascribe them to Him is the greatest presumption, the most lamentable error.

The second truth necessary to be borne in mind, whenever we affirm the likeness of God to man, is, that in whatever measure and to whatever extent God may be known, our knowledge of Him is, and always must be, very inadequate. In these latter days of science we are proud of our knowledge of the universe; and yet, although we do know a little of far-away stars and systems, what is this, after all, but, as Carlyle says, the knowledge which a minnow in its native creek has of the outlying ocean? And our knowledge of God must fall unspeakably farther short of being coextensive with its object. To illustrate the disproportion there, no comparison can be appropriate. "Canst thou by searching find out God? Canst thou find out the Almighty unto perfection? It is high as heaven; what canst thou do? Deeper than hell; what canst thou know? The measure thereof is longer than the earth, and broader than the sea." Our idea of God may contain nothing which is not true of God, and may omit nothing which it is essential for our spiritual welfare that we should know regarding Him; but it is impossible that it should be a complete and exhaustive idea of Him. We have scarcely a complete and exhaustive idea of anything, and least of all can we have such an idea of the infinite and inexhaustible source of all being. God alone can have a complete and exhaustive idea of Himself. There must be infinitely more in God than we have any idea of. There must be many qualities, powers, excellences, in Divine nature, which are wholly unknown to men, or even wholly unknowable by them, owing to their want of any faculties for their apprehension. And even as to what we do know of God, our knowledge is but partial and inadequate. We know that God knows, that He feels, that He acts; but as to how He knows, feels, and acts, as to what is distinctive and characteristic of His knowing, feeling, and acting, we have little or no notion. We can *apprehend* certain attributes of God, but we can *comprehend*, or fully grasp, or definitely image, not one of them. If we could find out God unto perfection in any respect, then, either we must be infinite or God must be finite in that respect. The finite mind can never stretch itself out in any direction until it is coextensive with the Infinite Mind. Man is made in the image of God, but he is not the measure of God.

LECTURE IV.

NATURE IS BUT THE NAME FOR AN EFFECT WHOSE CAUSE IS GOD.

I.

We have now to consider the principle of causality so far as it is implied in the theistic inference, and the theistic inference so far as it is conditioned by the principle of causality. It is not necessary to discuss the nature of the principle of causality in itself or for its own sake; it is even expedient, I believe, not to attempt to penetrate farther into its metaphysics and psychology than the work on hand imperatively requires. We must of course go as far as those have gone who have maintained on metaphysical or psychological grounds that the principle of causality warrants no theistic inference; we must show that their metaphysics and psychology are irrelevant when true, and false when relevant; but we may be content to stop when we have reached this result. The truth of theism has been very generally represented, both by those who admit and by those who deny the validity of the theistic inference, as much more dependent than it really is on the truth or falsity of some one or other of the many views which have been entertained as to the nature of causation, and the origin of the causal judgment. We are constantly being warned by theists that unless we accept this or that particular notion of causation, and account for it in this or that particular manner, we cannot reasonably believe in the existence of God; we are constantly being assured by anti-theists that belief in God is irrational, because it assumes some erroneous view of causation, or some erroneous explanation of the process by which causation is apprehended. But it will be found that representations of this kind seldom prove more than one-sidedness and immaturity of thought in those who make them. An accurate and comprehensive view of the nature of causation, and of our apprehension of it, will, it is true, have here as elsewhere great advantages over an erroneous and narrow one, but hardly any of the theories which have been held on these points can be consistently argued by those who hold them to invalidate theistic belief. Even utterly inadequate statements and

explanations of the principle of causality—as, for example, those of Hume and J. S. Mill—are not more incompatible with the theistic inference than they are with any other inference which is a real extension of knowledge. Unless they are understood and applied more rigidly than by those who propound them, they allow us to draw the theistic inference; if understood and applied so as to forbid our drawing it, they logically disallow all scientific inference except such as is purely formal and deductive. In a word, if compatible with science they are compatible with theism, and if incompatible with theism they are incompatible with science.

When we assume the principle of causality in the argument for the existence of God, what precisely is it that we assume? Only this: that whatever has begun to be, must have had an antecedent, or ground, or cause which accounts for it. We do not assume that every existence must have had a cause. We have no right, indeed, to assume that any existence has had a cause until we have found reason to regard it as not an eternal existence, but one which has had an origin. Whatever we believe, however, to have had an origin, we at once believe also to have had a cause. The theistic argument assumes that this belief is true. It assumes that every existence, once new, every event or occurrence or change, must have a cause. This is certainly no very large assumption: on the contrary, if any assumption can claim to be self-evident, it surely may. Thought implies the truth of it every moment. Sensation only gives rise to thought in virtue of it. Unless it were true there could be no such thing as thought. To deny that the principle of causality, understood as has been indicated, is true, would be to deny that reason is reason; it would be equivalent to affirming that to seek for a reason is always and essentially an unreasonable process. And, in fact, so understood, the principle never has been denied. Hume even did not venture to deny it, although he ought in consistency to have denied it, and obviously desired to be able to deny it. He did not, however, deny that every object which begins to exist must have a cause,—he did not venture to do more than deny that this is either intuitively or demonstratively certain, and that any bond or tie can be perceived between what is called a cause and what is called an effect. The inquiry which he instituted was not whether we pronounce it necessary that everything whose existence has a beginning should also have a cause or not, but for what reason we pronounce it necessary. He assumed that we pronounce it necessary, and his elaborate investigation into the nature of causation was undertaken expressly and entirely to discover why we do so. The conclusion to which he came—viz., that the causal judgment is an "offspring of experience engendered upon custom"—was not only a very inadequate and erroneous one in itself, but inconsistent with the reality of what it professed to explain: still the admission which has been mentioned was what was professed to be explained.

Now, if it be true at all that every event, whether it be a new existence or a change in an old existence, presupposes an explanatory antecedent or cause, there can of course be no accepting in all its breadth one of the propositions which Hume urges most strenuously—viz., that the mere study of an event can tell us nothing about its cause. We may grant that it can tell us very little,—that Hume performed an immense service in showing how extremely little we can know of the particular causes of particular events apart from the study of both in connection, apart from observation, experiment, and induction,—but we cannot grant that the event itself teaches us absolutely nothing. If every event must have a cause, every event must have a sufficient cause. For these two statements, although verbally different, are really identical. The second seems to mean, but does not actually mean, more than the first. The whole cause of the elevation of a weight of ten pounds a foot high cannot be also the whole cause of the elevation of twenty pounds to the same height, for the simple reason that in the latter case the elevation of ten pounds—of half the weight—would be an event which had no cause at all. And this is universally true. If every event have not a sufficient cause, some events have no cause at all. This, then, I say, we necessarily know that the efficient cause of every event is a sufficient cause, however vague may be our knowledge of efficiency and sufficiency.

If every event—using this term as convenient to denote either a new existence or a change in some existence—must have a cause, to prove that the universe must have had a cause we require to prove it to have been an event—to have had a commencement. Can this be done? That is *the* question in the theistic argument from causality. Compared therewith, all other questions which have been introduced into or associated with the argument are of very subordinate importance. Now there is only one way of reasonably answering the question, and that is by examining the universe, in order to determine whether or not it bears the marks of being an event—whether or not it has the character of an effect. We have no right to *assume* it to be an event, or to have had a beginning. The entire argument for the Divine existence, which is at present under consideration, can be no stronger than the strength of the proof which we can adduce in favour of its having had a beginning, and the only valid proof of that which reason can hope to find must be derived from the examination of the universe itself.

What, then, is the result of such an examination? An absolute certainty that all the things which are seen are temporal,—that every object in the universe which presents itself to the senses has had a beginning,—that the most powerful, penetrating, and delicate instruments devised to assist our senses reach no cause which is not obviously also an effect. The progress of science has not more convincingly and completely disproved the once prevalent notion that the universe was created about six thousand years ago, than it has convincingly and completely established that everything of which our senses inform us has had a commencement in time, and is of a compound, derivative, and dependent nature. It is not long since men had no means of proving that the rocks, for example, were not as old as the earth itself—no direct means of proving even that they were not eternal; but science is now able to tell us with confidence under what conditions, in what order, and in what epochs of geological time they were formed. We have

probably a more satisfactory knowledge of the formation of the coal-measures than of the establishment of the feudal system. We know that the Alps, although they look as if they might have stood for ever, are not even old, as geologists count age. The morning and night, the origin and disappearance of the countless species of living things which have peopled the earth from the enormously remote times when the rocks of the Laurentian period were deposited down to the births and deaths of contemporaneous animals, have been again brought into the light of day by the power of science. The limits of research are not even there reached, and with bold flight science passes beyond the confines of discovered life—beyond the epochs of formation even of the oldest rocks—to a time when there was no distinction of earth and sea and atmosphere, as all were mingled together in nebulous matter, in some sort of fluid or mist or steam; yea, onwards to a time when our earth had no separate existence, and suns, moons, and stars were not yet divided and arranged into systems. If we seek, then, after what is eternal, science tells us that it is not the earth nor anything which it contains, not the sea nor the living things within it, not the moving air, not the sun, nor the moon, nor the stars. These things when interrogated all tell us to look above and beyond them, for although they may have begun to be in times far remote, yet it was within times to which the thoughts of finite beings can reach back.

There is no denying, then, that the universe is to a great extent an effect, an event, something which has begun to be, a process of becoming. Science is, day by day, year by year, finding out more and more that it is an effect. The growth of science is in great part merely the extension of the proof that the universe is an effect. But the scientific proof of the non-eternity of matter is as yet far from a complete one. It leaves it possible for the mind to refer the phases through which the universe has passed, and the forms which it has assumed, to an underlying eternal source in nature itself, and, therefore, not to God. And this is by far the most plausible and forcible way of combating the argument we are employing. It meets it with a direct counter-argument, which every person must acknowledge to be relevant, and which, if sufficiently made out, is obviously decisive. That counter-argument we are bound, therefore, to dispose of. It has been thus stated by Mr J. S. Mill: "There is in nature a permanent element, and also a changeable: the changes are always the effects of previous changes; the permanent existences, so far as we know, are not effects at all. It is true we are accustomed to say not only of events, but of objects, that they are produced by causes, as water by the union of hydrogen and oxygen. But by this we only mean that when they begin to exist, their beginning is the effect of a cause. But their beginning to exist is not an object, it is an event. If it be objected that the cause of a thing's beginning to exist may be said with propriety to be the cause of the thing itself, I shall not quarrel with the expression. But that which in an object begins to exist, is that in it which belongs to the changeable element in nature; the outward form and the properties depending on mechanical or chemical combinations of its component parts. There is in every object another and a permanent element—viz., the specific elementary substance or substances of which it consists and their inherent properties. These are not known to us as beginning to exist: within the range of human knowledge they had no beginning, and consequently no cause; though they themselves are causes or non-causes of everything that takes place. Experience, therefore, affords no evidences, not even analogies, to justify our extending to the apparently immutable, a generalisation grounded only on our observation of the changeable."^[15]

On this I would remark, first, that mere experience does not take us to anything which we are entitled to call even apparently immutable. It only takes us, even when extended to the utmost by scientific instruments and processes, to elements which we call simple because we have hitherto failed to analyse them into simpler elements. It is a perfectly legitimate scientific hypothesis that all the substances recognised by chemists as elementary and intransmutable, are in reality the modifications or syntheses of a single material element, which have been produced under conditions that render them incapable of being affected by any tests or agencies which the analyst in his laboratory can bring to bear upon them. Indeed, unless this hypothesis be true, the theory of development, so generally accepted at present, can hardly be supposed to be of any very wide application, seeing that at its very outset it has to affirm the existence of no fewer than sixty-four true untransformable species. But suppose the so-called elementary substances of chemistry to be simple, no one can reasonably suppose them as known to us to be ultimate. In oxygen there may be no atoms which are not atoms of oxygen, but we know by experience only oxygen, not atoms of oxygen. No man has ever been able to put himself in sensible contact with what alone can be immutable in oxygen, if there be anything immutable in it, its ultimate atoms. No man has seen, heard, touched, or tasted an ultimate atom of any kind of matter. We know nothing of atoms—nothing of what is permanent in nature—from direct experience. We must pass beyond such experience—beyond all testimony of the senses—when we believe in anything permanent in nature, not less than when we believe in something beyond and above nature. The atomic theory in chemistry demands a faith which transcends experience, not less than the theistic theory in religion.

Then, secondly, although we grant that there is a permanent element in the physical universe, something in matter itself which is self-existent and eternal, we still need, in order to account for the universe which we know, an Eternal Intelligence. The universe, regarded even only so far as it is admitted by all materialists no less than by theists and pantheists to be an effect, cannot be explained, as materialists think, merely physically. The atoms of matter are, it is said, eternal and immutable. Grant them to be so. There are, however, countless millions of them, and manifestly the universe is one, is a single, magnificent, and complicated system, is characterised by a marvellous unity in variety. We must be informed how the universe came to be a universe,—how it came to have the unity which underlies its diversity,—if it resulted from a countless multitude

of ultimate causes. Did the atoms take counsel together and devise a common plan and work it out? That hypothesis is unspeakably absurd, yet it is rational in comparison with the notion that these atoms combined by mere chance, and by chance produced such a universe as that in which we live. Grant all the atoms of matter to be eternal, grant all the properties and forces which with the smallest degree of plausibility can be claimed for them to be eternal and immutable, and it is still beyond all expression improbable that these atoms with these forces, if unarranged, uncombined, ununified, unutilised by a presiding mind, would give rise to anything entitled to be called a universe. It is millions to one that they would never produce the simplest of the regular arrangements which we comprehend under the designation of course of nature, or the lowest of vegetable or animal organisms; millions of millions to one that they would never produce a solar system, the earth, the animal kingdom, or human history. No number of material atoms, although eternal and endowed with mechanical force, can explain the unity and order of the universe, and therefore the supposition of their existence does not free us from the necessity of believing in a single intelligent cause—a Supreme Mind—to move and mould, combine and adjust, the ultimate atoms of matter into a single orderly system. There at once rises the question, Is it really necessary to believe both matter and mind to be eternal? No, must be our answer. The law of parsimony of causes directly forbids the belief, unless we can show that one cause is insufficient to explain the universe. And that we cannot do. We can show that matter is insufficient,—that it cannot account of itself even for the physical universe,—but not that mind is insufficient, not that mind cannot account for anything that is in matter. On what grounds can it be shown that a mind possessed of sufficient power to originate the universe, the ultimate elements of matter being given, could not also have created these elements? that the Supreme Intelligence, which gave to each sun, and planet, and satellite its size, and shape, and position, and motion, could not have summoned into being their constituent particles? On none whatever. We may not understand how they could be created, but we have no reason for thinking that they could not be created; and it is surely far easier and far more reasonable to believe that they were created, than that a countless number of inconceivably small indivisible particles of matter, lying far beyond the range of any of our senses, but extending through immeasurable fields of space, should all, inconceivably minute although they be, be self-existent and eternal. The man who asks us to accept the latter supposition, asks us, it seems to me, to believe what is not only as mysterious as the self-existence of Deity, but millions of millions of times more mysterious. I should require strong reasons for assigning infinitely great attributes to excessively little things, and to an inconceivable number of them; but I can in this instance find no reasons at all.

Then, in the third place, any plausible conceptions we can form of the ultimate nature of matter lead to the belief that even that is an event or effect, a something derivative and caused. It must be admitted that the most plausible of these conceptions are vague and conjectural. We have a practical and relative knowledge of matter which is both exact and trustworthy,—a knowledge of its properties from which we can mathematically deduce a multitude of remote consequences of an extremely precise character—but we are hardly entitled to characterise as knowledge at all any of the views which have been propounded as to what it is in itself. It is only the unreflecting who fancy that matter in itself is something very clear and obvious, which they may apprehend by merely opening their eyes and stretching out their hands. Those who have never reasoned on the subject are apt to imagine that the nature of matter is of all things the easiest to understand, and they unhesitatingly invest it with their own sensations and perceptions. That is the so-called commonsense view of matter; but the slightest inquiry proves it to be delusive and nonsensical. Colour, for example, is just what is seen, and sound just what is heard; they are not qualities inherent in objects independent of the eye and ear: the matter which is supposed to cause by its motions on our senses these and other perceptions of the material world, we cannot see, hear, or apprehend by any sense. Change our senses and the universe will be thereby changed, everything in it becoming something other than it was before, green perhaps red, the bitter sweet, the loudest noise a gentle whisper, the hardest substance soft. As soon, then, as we thoughtfully ask ourselves, What is matter? we begin to discover that it is in itself something utterly mysterious. The collection of phenomena which we call its properties are quite unlike the phenomena of mind in this most important respect, that whatever they may be they are not what they appear to be. A state of mind is what we feel it to be; a state of matter is certainly not what we seem to ourselves to perceive it to be. No one, of course, knew all this better than Mr Mill. He, as a philosopher, had asked himself what matter is; he had formed a theory in answer to the question. And what is his theory? Just this,—that we cannot find a permanent element in matter; that we have no right to suppose that there is a permanent real existence or actual substance in matter; that all that we are warranted to affirm about the ultimate nature of matter is that it is a permanent possibility,—the permanent possibility of sensations. That was the conclusion which he arrived at when he theorised on matter without any theological aim. But he appears to have forgotten it when he came to criticise the argument for a first cause. He could not otherwise have written as if it were quite certain that there was in matter "a permanent element," not an underlying possibility but an inherent real substance. Had he remembered what his own theory as to the nature of matter was, he would have avoided as utterly untrue and misleading every expression which could suggest the notion of there being a permanent element in matter, and would have admitted that very probably the permanent possibilities of sensation, the causes of all material phenomena, lay in the Divine will, since he had been unable to find anything else permanent in which they could be supposed to subsist. That is a view which many profound thinkers have adopted. They have been led to hold that matter is essentially force, and nothing but force; that the whole material world is ultimately resolvable into forces; and that all its forces are but manifestations or outgoings of will-force. If so, the whole material world is not only dependent on, but *is*, the will of God, and has no being of any kind apart from the will of God. If

so, God's will is not only the cause and controlling power of nature, but its substance, its self. And this view, that what alone substantially underlies all the phenomena we designate material is an acting mind, an energising will, has not only been reached by mental philosophers and idealistic speculators, but by those physicists who, like Boscovitch and Faraday, have found themselves forced to conclude that what is constitutive of matter is not indivisible particles, even infinitesimally small, but mere centres of force, since force necessarily implies some sort of substance, and, therefore, spirit where not matter.

But suppose the substratum of the universe to consist of a countless number of inconceivably small indivisible particles of matter, and do we not even on this hypothesis reach by a single step the truth on which theism rests, and on which only theism can be based? "None of the processes of nature," says one of the most eminent of our physical philosophers, "since the time when nature began, have produced the slightest difference in the properties of any molecule. We are therefore unable to ascribe either the existence of the molecules or the identity of their properties to the operation of any of the causes which we call natural. On the other hand, the exact quality of each molecule to all others of the same kind gives it, as Sir John Herschel has well said, the essential character of a manufactured article, and precludes the idea of its being eternal and self-existent. Thus we have been led, along a strictly scientific path, very near to the point at which science must stop. Not that science is debarred from studying the external mechanism of a molecule which she cannot take to pieces, any more than from investigating an organism which she cannot put together. But, in tracing back the history of matter, science is arrested when she assures herself, on the one hand, that the molecule has been made, and on the other that it has not been made by any of the processes we call natural."^[16] I believe that no reply to these words of Professor Clark Maxwell is possible from any one who holds the ordinary view of scientific men as to the ultimate constitution of matter. They must suppose every atom, every molecule, to be of such a nature, to be so related to others, and to the universe generally, that things may be such as we see them to be; but this their fitness to be built up into the structure of the universe is a proof that they have been made fit, and since natural forces could not have acted on them while not yet existent, a supernatural power must have created them, and created them with a view to their manifold uses. Every atom, every molecule, must even in what is ultimate in it bear the impress of a Supernatural Power and Wisdom; must, from the very nature of the case, reflect the glory of God and proclaim its dependence upon Him.

In like manner the latest speculation regarding the nature of matter—the vortex-atom theory of Sir William Thomson—seems, so far from having any tendency to exclude creative action, necessarily to imply it. He supposes that the atoms may be small vortex-rings in the ether, the rotating portions of a perfect fluid which fills all space. But a perfect fluid can neither explain its own existence nor the commencement of rotation in any part of it. Rotation once commenced in a perfect or frictionless and incompressible fluid would continue for ever, but it never could naturally commence. There is nothing in a perfect fluid to account either for the origin or cessation of rotation, and consequently nothing, on the vortex-atom hypothesis, to account either for the production or destruction of an atom of matter. The origin and cessation of rotation in fluids are due to their imperfection, their internal friction, their viscosity. The origin or cessation of rotation in a perfect fluid must be the effect of supernatural action; in other words, every vortex-atom must owe the rotation which gives it its individuality to a Divine impulse.

A theist has certainly no need, then, to be afraid of researches into the ultimate nature of matter. Our knowledge thereof is exceedingly small and imperfect, but all that we do know of it, all that we can even rationally conceive of it, leads to the inference that it is not self-existent, but the work of God. The farther research is pushed, the more clearly, we may be assured, will this become apparent, for the more wonderfully adapted will the ultimate constituents of matter be found for assuming countless forms and composing countless objects—the air, the land, the sea, and starry heavens, with all that in or on them is. Research has already shown us reason to believe "that even chemical atoms are very complicated structures; that an atom of pure iron is probably a vastly more complicated system than that of the planets and their satellites; that each constituent of a chemical atom must go through an orbit in the millionth part of the twinkling of an eye, in which it successively or simultaneously is under the influence of many other constituents, or possibly comes into collision with them; that each of these particles is, as Sir John Herschel has beautifully said, for ever solving differential equations which, if written out in full, might perhaps belt the earth."^[17] Now, what does this mean, if not that every ultimate atom of matter is full to the very heart of it with evidences of the power and wisdom of God, and that every particle of dust or drop of water is crowded with traces of the action of the Divine Reason, not less marvellous, it may be, than those which astronomy exhibits in the structure of the heavens and the evolutions of the heavenly bodies? Those who hoped that molecular science would help them to get rid of God have obviously made a profound mistake. It has already shown far more clearly than ever was or could have been anticipated, that every atom of matter points back beyond itself to the all-originating will of God, and refuses to receive the idolatrous homage of those who would put it in the place of God.

To these considerations it has to be added that some of our ablest physicists believe that in the present age a strictly scientific proof has been found of the position that the universe had a beginning in time. "According to Sir W. Thomson's deductions from Fourier's Theory of Heat, we can trace down the dissipation of heat by conduction and radiation to an infinitely distant time when all things will be uniformly cold. But we cannot similarly trace the heat-history of the universe to an infinite distance in the past. For a certain negative value of the time the formulæ give impossible values, indicating that there was some initial distribution of heat which could not

have resulted, according to known laws of nature, from any previous distribution. There are other cases in which a consideration of the dissipation of energy leads to the conception of a limit to the antiquity of the present order of things."^[18] If this theory be true, physical science, instead of giving any countenance to the notion of matter having existed from eternity, distinctly teaches that creation took place, that the present system of nature and its laws originated at an approximately assignable date in the past. The theory is supported by the most eminent physical philosophers of this country, and if there be any oversight or error in the principles or calculations on which it is founded, it would appear not to have been as yet detected. It is a theory on which, however, only specialists are entitled to pronounce judgment; and therefore, although those who assume that matter was not created are bound to refute it, I do not wish myself to lay any stress upon it—the more especially as I believe that apart from it there is amply sufficient evidence for holding that "Nature is but the name for an effect whose cause is God."^[19]

II.

It seems to me, then, that the universe when examined must be concluded to be throughout—from centre to circumference—alike in what is most permanent and what is most changeable in it,—an event or effect, and that its only adequate cause is a Supreme Intelligence. It is only such a cause which is sufficient to explain the universe as we know it, and that universe is what has to be explained. The assertion of Kant that the principle of causality cannot take us beyond the limits of the sensible world is only true if causality be confined to strictly material events which display no signs of law and order, and the progress of science is one long uninterrupted proof that no such events are to be discovered; that it is hopeless to look for them; that matter and its changes are ordained, arranged, adjusted phenomena. The assertion of Kant is clearly false, if we are not to exclude from the event anything which demands explanation; if we are to reason from the universe itself and not from its name; if we are to infer a particular cause from a knowledge of the nature of a given particular event. This, the so-called concrete use of the principle of causality, is the only use of it which is legitimate, the only use of it which is not extremely childish.

The opposite—the absurd—notion that the principle of causality is abstractly applied, has led some to argue that it leads legitimately to nothing else than an infinite regress—an eternal succession of causes and effects. But whatever it may lead to, it certainly does not lead to that conclusion, and has never led any human being, either legitimately or illegitimately, to that conclusion. Those even who have maintained that the principle of causality cannot lead to a first cause, to an eternal self-existent cause, but only to an eternal succession of causes and effects, have all, without a single exception, allowed themselves to be led by it to a first cause and not to an eternal succession of causes. They have all believed what they say they ought to have disbelieved; they have all disbelieved what they say they ought to have believed. They have all accepted as true that there is a first and self-existent cause, although some have supposed it to be matter, some mind, some within the world, some without the world. They have differed as to what it is, but not as to that it is. None of them have adopted the conclusion to which they have said the argument founded on causation logically leads. No man has ever adopted that conclusion. The human mind universally and instantaneously rejects it as inconceivable, unthinkable, self-contradictory, absurd. We may believe either in a self-existent God or in a self-existent world, and must believe in one or the other; we cannot believe in an infinite regress of causes. The alternatives of a self-existent cause and an infinite regress of causes are not, as some would represent, equally credible alternatives. The one is an indubitable truth, the other is a manifest absurdity. The one all men believe, the other no man believes.

This takes away, it seems to me, all force from the objection that the argument founded on the principle of causality when it infers God as the self-existent cause of the universe infers more than is strictly warranted, a self-existent cause being something which does not in itself fall under the principle of causality. That every event must have a cause will be valid, it is said, for an endless series of causes and effects; but if you stop, if you affirm the existence of what is uncaused, of what is at once, as it were, cause and effect, you may affirm what is true, but you affirm also what is independent of the principle of causation. You claim more than your argument entitles you to; you are not developing a logical conclusion, but concealing under a term which seems to express the same idea what is really the vaulting of the mind to a higher idea which cannot be expressed under the form efficient cause at all.

Now, of course, a self-existent cause does not in itself come completely under the law of causality. That law cannot inform us what self-existence is. A self-existent cause, however, may be known as well as any other cause by its effects. The mind may rise to it from its effects. The principle of causality may lead up to it, although it does not include within itself the proof of the self-existence of the cause. It may at the last stage be attached to some other principle which compels the affirmation of the self-existence of the cause reached; in other words, the affirmation that the first cause is a self-existent cause, may be a distinct mental act not necessitated by the principle of causality itself. It may either be held that this mental necessity is the reason why we cannot entertain the thought of an infinite regress of causes, or that the incapacity of the mind to regard the thought of an infinite regress of causes as other than self-contradictory, is the explanation of its felt necessitation to affirm a self-existent cause; in which latter case the principle of causality really necessitates a belief in the ungenerated and self-existent. Both of these views are plausible, and which of them is true is an interesting subject of metaphysical investigation, but it is one of no practical consequence in the inquiry on which we are engaged. The principle of causality can lead us up from all things which have on them the marks of having

begun to be, and if we at length come to something which bears no such marks, be it matter or be it mind, no man can doubt, or does doubt, that something to be self-existent. This difficulty about a self-existent cause not being able to be arrived at by the principle of causality, will be worth attending to by the theist when it is attended to by any one else,—when any atheist or any anti-theist of any kind is prepared to deny that the last cause in the order of knowledge, and the first in the order of existence, must be a self-existent cause—but not until then; and it is mere sophistry to represent it as of practical importance. Whenever we come to an existence which we cannot regard as an effect or thing generated in time, we, either in consequence of the very nature of the causal judgment, or of some self-evident condition or conditions of knowledge necessarily attached thereto, attribute to it self-existence and eternity. We may dispute as to whether this is done in the one or the other of these two ways, but that is a merely theoretical question; that every one does, and must, as a reasonable being, do it, is what no man disputes, or can dispute,—and this alone is of practical consequence.

Another admission must be made by every man who reflects carefully on the nature of causation. To say that the idea of cause can never demand belief in an uncaused cause, sounds as self-evident; to say that the idea of cause can find no satisfaction save in the belief of an uncaused cause, sounds as a paradox; but let a man meditate for a little with real thoughtfulness on the meaning of these two statements, and he cannot fail to perceive that the former is an undeniable falsehood, and the latter an undeniable truth. An uncaused cause, a first cause, alone answers truly to the idea of a cause. A secondary cause, in so far as secondary, in so far as caused, is not a cause. I witness some event—some change. I am compelled as a rational being to seek its cause. I reach it only to find that this cause was due to a prior cause. What has happened? The cause from which I have had to go back has ceased to be a cause; the cause to which I have had to go back has become the cause of two effects, but it will remain so only if I am not reasonably bound to seek a cause for *it*. If I am, its causality must pass over to its explanatory antecedent. We may go back a hundred, a thousand, a million times, but if the last cause reached be not truly a first cause, an uncaused cause, the idea of cause in our mind will be as unsatisfied at the end of our search as at the beginning, and the whole process of investigation will be aimless and meaningless. A true cause is one to which the reason not only moves but in which it rests, and except in a first cause the mind cannot rest. A first cause, however, is certainly not one which has been itself caused.

We are warranted, then, in looking upon the universe as an event or effect, and we may be certain that it is not the last link of an infinite chain of causes and effects, or of any series of causes and effects, long or short, suspended upon nothing. No chain or series can be, properly speaking, infinite, or without a first link or term. The universe has a First Cause. And its First Cause, I must proceed to remark, reason and observation alike lead us to believe must be one—a single cause. When one First Cause is sufficient to explain all the facts, it is contrary to reason to suppose another or several. We must prove that no one First Cause could account for the universe before we can be entitled to ascribe it to more causes than one. The First Cause, we shall further see afterwards, must have attributes which no two or more beings can be supposed to possess, which one being alone can possess. Then the character of the effect itself refers us back to a single cause. A belief in more gods than one not only finds no support in the universe, but, as the very word universe indicates, is contradicted by it. For, numerous and diverse as are the objects in nature, they are so constituted and connected—so dependent on and related to one another—as to compose a whole which exhibits a marvellous unity in variety. Everything counteracts or balances or assists something else, and thus all things proclaim their common dependence on One Original. Co-ordinate things must all be derivative and secondary, and all things in nature are co-ordinate parts of a stupendous system. Each one of us knows, for example, that a few years ago he was not, and that in a few years hence the place which knows him now will know him no more; and each one of us has been often taught by the failure of his plans, and the disappointment of his hopes, and the vanity of his efforts, that there are stronger forces and more important interests in the world than his own, and that he is in the grasp of a Power which he cannot resist—which besets him behind and before, and hems him in on all sides. When we extend our view, we perceive that this is as true of others as of ourselves, and that it is true even, in a measure, of all finite things. No man lives or dies to himself; no object moves and acts absolutely from and for itself alone. This reveals a single all-originating, all-pervading, all-sustaining principle. These manifold mutually dependent existences imply one independent existence. The limitations assigned to all individual persons and things point to a Being which limits them all. Particular causes and secondary movements lead back to "a cause of causes," "a first mover, itself immovable, yet making all things else to move."

The first cause must be far more truly and properly a cause than any secondary cause. In fact, as we have already seen, a secondary cause is not strictly a cause; so far as secondary, it merely transmits to its consequent what it has received from its antecedent. There may be a succession of a thousand such causes in a process, yet the first cause is also the last, and there is, in fact, all through, but one cause; the others merely convey and communicate its force. A machine, however numerous its parts and movements, does not create the least amount of force; on the contrary, the most perfect machine wastes and absorbs some of the force which is imparted to it. The universe, so far as subject to mechanical laws, is merely a machine which transmits a given quantity of force, but which no more creates it than it creates itself. The author of that force is the one true cause of all physical phenomena. Life is probably, and mind is certainly, not entirely explicable on mechanical principles; but neither life nor mind can be maintained to do more than to determine the direction or application of the power implanted in them, or rendered accessible to them, through the working of the first cause. All things must, consequently, "live, move, and

have their being" therein. It is at their end as well as at their origin; it encompasses them, all round; it penetrates them, all through. The least things are not merely linked on to it through intermediate agencies which go back an enormous distance, but are immediately present to it, and filled to the limit of their faculties with its power. It is in every ray of sunlight, every breath of wind, and blade of grass; it is the source and life of all human minds and hearts. The pantheist errs not so much in what he affirms of it, as in what he denies to it.

This cause—the cause of causes—must, it is further obvious, be in possession of a power far beyond the comprehension of our reasons or imaginations. All other power is derived from its power. All the power which is distributed and distinguished in secondary causes must be combined and united in the first cause. Now, think what an enormous power there is displayed even in this world. In every half-ounce of coal there is stored up power enough, if properly used, to draw two tons a mile. How vast, then, the power which God has deposited in the coal-beds of the world alone! The inhabitants of this little island, by availing themselves of the natural forces which Providence has placed at their disposal, annually accomplish more work than could by any possibility be effected by the inhabitants of the whole earth, if they exerted merely the power which is in their own bodies, the power of human bones and muscles. And yet there can be little doubt that, even in this country, we make no use at all of many natural agents, and only a wasteful use of any of them. "Weigh the earth on which we dwell," says an astronomer; "count the millions of its inhabitants that have come and gone for the last six thousand years; unite their strength into one arm; and test its power in an effort to move the earth. It could not stir it a single foot in a thousand years; and yet, under the omnipotent hand of God, not a minute passes that it does not fly far more than a thousand miles." The earth, however, is but a mere atom in the universe. Through the vast abysses of space there are scattered countless systems, at enormous distances, yet all related; glorious galaxies of suns, planets, satellites, comets, all sweeping onwards in their appointed courses. How mighty the arm which impels and guides the whole! God can do all that, for He continually does it. How much more He could do than He does, we cannot know. The power of no true cause, of no free cause, is to be measured by what it does. It must be adequate to produce its actual effects, but it may be able to produce countless merely possible effects. It has power over its powers, and is not necessitated to do all that it is capable of doing. It is difficult, perhaps, to show that the universe is not infinite. It is obviously unreasonable and presumptuous to deny that the power of its Author may be infinite. And yet we find men who do so. For example, the late Mr John Stuart Mill, for no better reasons than that nature sometimes drowns men, and burns them, and that childbirth is a painful process, maintained that God could not possibly be infinite. I shall not say what I think of the shallowness and self-conceit displayed in such an argument. What it proves is not the finiteness of God, but the littleness of a human intellect. The mind of man never shows itself so small as when it tries to measure the attributes and limit the greatness of its Creator.

A first cause, we have already seen, must be a free cause. It cannot have been itself caused. It is absurd to look for it among effects. But we never get out of the sphere of effects until we enter that of free agency; until we emerge from the natural into the spiritual; until we leave matter and reach mind. The first cause must, indeed, be in—all through—the universe; but it must also be out of the universe, anterior to, and above the universe. The idea of cause is a delusion—the search for causes an inexplicable folly—if there be no first cause, and if that first cause be not a free cause, a Will, a Spirit, a Person. Those who object to the causation argument, that it does not take us beyond the world—does not lead us up to a personal cause of the world—have failed to apprehend what causation signifies. Secondary causes may not be true causes, and yet reason be trustworthy, for there is that behind them on which it can fall back; but if there be no first cause, or if the first cause be not free, reason is throughout a lie. Reason, if honest and consistent, cannot in its pursuit of causes stop short of a rational will. That alone answers to and satisfies its idea of a cause.

The most rapid glance at the universe powerfully confirms the conclusion that its first cause can only be a Mind, a Reason. The universe is a universe; that is to say, it is a whole, a unity, a system. The first cause of it, therefore, in creating and sustaining it, must comprehend, act on, and guide it as a systematic whole; must have created all things with reference to each other; and must continually direct them towards a preconceived goal. The complex and harmonious constitution of the universe is the expression of a Divine Idea, of a Creative Reason. This thought brings me to my next argument and next lecture.^[20]

LECTURE V.

THE ARGUMENT FROM ORDER.

I.

The prevalence of order in nature has already been referred to as contributing to prove that the universe is an event, a generated existence, a something which once began to be. It will now be brought forward as in itself a manifestation of, and consequently a ground for believing in, a Supreme Mind. Where order meets us, the natural and immediate inference is that there is the work of intelligence. And order meets us everywhere in the universe. It covers and pervades the universe. It is obvious to the ordinary naked eye, and spreads far beyond the range of disciplined vision when assisted by all the instruments and appliances which science and art have been able

to invent. It is conspicuous alike in the architecture of the heavens and the structure of a feather or a leaf. It goes back through all the epochs of human history, and all the ages of geological and astronomical time. It is the common work of all the sciences to discover and explain the order in the universe. There is no true science which is not constantly making new and fuller discoveries of the order in nature,—the order within us and without us; not one which is not ever increasingly establishing that in order all things move and have their being. What is maintained by the theist is, that this order, the proof of which is the grand achievement of science, universally implies mind; that all relations of order—all laws and uniformities—are evidences of an intelligent cause.

The order which science finds in nature may be described as either general or special, although in strictness the difference between them is only a difference of degree, the former being the more and the latter the less general, or the former being the less and the latter the more special. In what may be called general order, that which strikes us chiefly is regularity; in what may be called special order, that which chiefly strikes us is adaptation or adjustment. In inorganic nature general order is the more conspicuous; in organic nature special order. Astronomy discloses to us relations of number and proportion so far-reaching that it almost seems as if nature were "a living arithmetic in its development, a realised geometry in its repose." Biology, on the other hand, impresses us by showing the delicacy and subtlety of the adjustment of part to part, of part to whole, and of whole to surroundings, in the organic world. There is, perhaps, sufficient difference between these two kinds of order to warrant their being viewed separately, and as each furnishing the basis of an argument for the existence of God. The argument from regularity has sometimes been kept apart from the argument from adjustment. The former infers the universe to be an effect of mind because it is characterised by proportion or harmony, which is held to be only explicable by the operation of mind. The latter draws the same inference because the universe contains countless complex wholes, of which the parts are so collocated and combined as to co-operate with one another in the attainment of certain results; and this, it is contended, implies an intelligent purpose in the primary cause of these things.

While we may readily admit the distinction to be so far valid, it is certainly not absolute. Regularity and adjustment are rather different aspects of order than different kinds of order, and, so far from excluding each other, they will be found implying each other. It is obvious that even the most specialised adjustments of organic structure and activity presuppose the most general and simple uniformities of purely physical nature. Such cases of adjustment comprehend in fact many cases of regularity. It is less obvious, but not less true, that wherever regularity can be traced adjustment will also be found, if the search be carried far enough. The regularity disclosed by astronomy depends on adjustment as regards magnitude, weight, distance, &c., in the celestial bodies, just as the adjustments brought to light by biology depend on the general regularity of the course of nature. There is no law of nature so simple as not to presuppose in every instance of its action at least two things related to one another in the manner which is meant when we speak of adjustment. It being thus impossible to separate regularity from adjustment as regards the phenomena of the universe, it seems unnecessary to attempt by abstraction to separate them in the theological argumentation, while giving a rapid general glance at the phenomena which display them.

The physical universe has, perhaps, no more general characteristic than this,—its laws are mathematical relations. The law of gravitation, which rules all masses of matter, great or small, heavy or light, at all distances, is a definite numerical law. The curves which the heavenly bodies describe under the influence of that law are the ellipse, circle, parabola, and hyperbola—or, in other words, they all belong to the class of curves called conic sections, the properties of which mathematicians had begun to investigate nearly twenty centuries before Newton established that whatever was true of them might be directly transferred to the heavens, since the planets revolve in ellipses, the satellites of Jupiter in circles, and the comets in elliptical, parabolic, and hyperbolic orbits. The law of chemical combination, through which the whole world of matter has been built up out of a few elements, always admits of precise numerical expression. So does the law of the correlation of heat and gravitation. Each colour in the rainbow is due to a certain number of vibrations in a given time; so is each note in the scale of harmony. Each crystal is a geometrical construction. The pistils of flowers, and the feathers in the wings and tails of birds, are all numbered. If nature had not thus been ruled by numerical laws, the mathematical sciences might have existed, but they would have had no other use than to exercise the intellect, whereas they have been the great instruments of physical investigation. They are the creations of a mental power which, while occupied in their origination and elaboration, requires to borrow little, if anything, from matter; and yet, it is only with their help that the constitution of the material universe has been displayed, and its laws have been discovered, with that high measure of success of which physicists are so proud. But they could not have been applied to the universe at all unless its order had been of the exact numerical and geometrical kind which has been indicated; unless masses had attracted each other, and elements combined with each other, in invariable proportions; unless "the waters had been measured as if in the hollow of a hand, the heaven meted out as with a span, the dust of the earth comprehended in a measure, and the mountains weighed in scales and the hills in a balance." Now it is possible to deny that things have been thus weighed, measured, and numbered by a Creative Intelligence, but not that they have been weighed, measured, and numbered. If we are to give any credit to science, there can be no doubt about the weights and measures and numbers. This question, then, is alone left,—Could anything else than intelligence thus weigh, measure, and number? Could mere matter know the abstrusest properties of space and time and number, so as to obey them in the wondrous way it does? Could what has taken so much mathematical knowledge and research to apprehend, have originated with what was wholly ignorant of all quantitative relations? Or must

not the order of the universe be due to a mind whose thoughts as to these relations are high above even those of the profoundest mathematicians, as are the heavens above the earth? If the universe were created by an intelligence conversant with quantitative truth, it is easy to understand why it should be ruled by definitely quantitative laws; but that there should be such laws in a universe which did not originate in intelligence, is not only inexplicable but inconceivably improbable. There is not merely in that case no discoverable reason why there should be any numerically definite law in nature, but the probability of there being no law or numerical regularity of any kind is exceedingly great, and of there being no law-governed universe incalculably great. Apart from the supposition of a Supreme Intelligence, the chances in favour of disorder against order, of chaos against cosmos, of the numerically indefinite and inconstant against the definite and constant, must be pronounced all but infinite. The belief in a Divine Reason is alone capable of rendering rational the fact that mathematical truths are realised in the material world.^[21]

The celestial bodies were among the earliest objects of science, and before there was any science they stimulated religious thought and awakened religious feeling. The sun and moon have given rise to so extraordinary a number of myths that some authors have referred to them the whole of heathen mythology. There can be little doubt that the growth of astronomical knowledge contributed greatly to bring about the transition from polytheism to monotheism, and that so soon as the heavens were clearly understood to be subject to law, and the countless bodies which circle in them not to be independent agents but parts or members of a single mechanical or organic system, the triumph of the latter was for ever secured. No science, indeed, has hitherto had so much influence on man's religious beliefs as astronomy, although there may now appear to be indications that chemistry and biology will rival it in this respect in the future. And it has been thus influential chiefly because through its whole history it has been a continuous, conspicuous, and ever-advancing, ever-expanding demonstration of a reign of law on the most magnificent scale,—a demonstration begun when with unassisted vision men first attempted roughly to distribute the stars into groups or constellations, and far from yet ended when the same laws of gravitation, light, heat, and chemical combination which rule on earth have been proved to rule on orbs so distant that their rays do not reach us in a thousand years. The system of which our earth is a member is vast, varied, and orderly, the planets and satellites of which it is composed being so adjusted as regards magnitude and mass, distance, rate, and plane of direction, &c., that the whole is stable and secure, while part ministers to part as organ to organ in an animal body. Our own planet, for example, is so related to the sun and moon that seed-time and harvest never fail, and the ebb and flow of the tides never deceive us. And the solar system is but one of hundreds of millions of systems, some of which are incalculably larger than it, yet the countless millions of suns and stars thus "profusely scattered o'er the void immense" are so arranged and distributed in relation to one another and in accordance with the requirements of the profoundest mathematics as to secure the safety of one and all, and to produce everywhere harmony and beauty. Each orb is affecting the orbit of every other—each is doing what, if unchecked, would destroy itself and the entire system—but so wondrously is the whole constructed that these seemingly dangerous disturbances are the very means of preventing destruction and securing the universal welfare, being due to reciprocally compensating forces which in given times exactly balance one another. Is it, I ask, to be held as evidence of the power of the human mind that it should have been able after many centuries of combined and continuous exertion to compute with approximate accuracy the paths and perturbations of the planets which circle round our sun and the returns of a few comets, but as no evidence even of the existence of mind in the First Cause of things that the paths and perturbations of millions on millions of suns and planets and comets should have been determined with perfect precision for all the ages past and future of their existence, so that, multitudinous as they are, each proceeds safely on its destined way, and all united form a glorious harmony of structure and motion?^[22]

A much more recent science than astronomy, the science of chemistry, undertakes to instruct us as to the composition of the universe, and it is marvellous how much it can tell us even of the composition of the stars. What, then, is its most general and certain result? Just this, that order of the strictest kind, the most definite proportions, are wrought into the very structure of every world, and of every compound object in the world, air and water, earth and mineral, plant and animal. The vast variety of visible substances are reducible to rather more than sixty constituent elements, each of which has not only its own peculiar properties but its own definite and unvarying combining proportions with other elements, so that amidst the prodigious number of combinations all is strictly ordered, numerically exact. There is no chemical union possible except when the elements bear to each other a numerically constant ratio. Different compounds are always the products of the combination of the elements in different yet strictly definite proportions, there being no intermediate combinations, no transitional compounds. If each element did not admit of union with many others, the world would be dead and poor, its contents few and unvaried; if their unions were not always regulated by law, disorder would everywhere prevail. How comes it that they are so made in relation to one another that their manifold unions are ever regulated by law, and generate an endless variety of admirable products? Who made them thus? Did they make themselves? or, did any blind force make them? Reason answers that they must have been made by an intelligence which wanted them for its purposes. When the proportions of the elementary constituents are altered, the same elements produce the most diverse substances with the most dissimilar and even opposite properties, charcoal and diamond, a deadly poison or the breath of life, theine or strychnine. These powers all work together for good; but if they worked even a very little differently—if the circumstances in which they work, not to speak of the laws by which they work, were altered—they would spread destruction and

death through the universe. The atmosphere is rather a mixture than a combination of chemical elements, but it is a mixture in which the constituents are proportioned to each other in the only way which fits it to sustain the lives of plants and animals, and to accomplish its many other important services; and wonderful in the extreme is the provision made for the constant restoration of the due proportions amidst perpetual oscillations. One of the chiefs of modern chemistry, Baron Liebig, points to what takes place when rain falls on the soil of a field adapted for vegetable growth as to something which "effectually strikes all human wisdom dumb." "During the filtration of rain-water," he says, "through the soil, the earth does not surrender one particle of all the nutritive matter which it contains available for vegetable growth (such as potash, silicic acid, ammonia, &c.); the most unintermittent rain is unable to abstract from it (except by the mechanical action of floods) any of the chief requisites for its fertility. The particles of mould not only firmly retain all matter nutritive to vegetable growth, but also immediately absorb such as are contained in the rain-water (ammonia, potash, &c.). But only such substances are *completely* absorbed from the water as are indispensable requisites for vegetable growth; others remain either entirely or for the most part in a state of solution." The laws and uses of light and heat, electricity and magnetism, and the adjustments which they presuppose, all point not less clearly to the ordinances of a supremely profound and accurate mind. In a word, out of a few elements endowed with definite powers, this world with its air and its seas, its hills and valleys, its vegetable forms and animal frames, and other worlds innumerable, have been built up by long-sustained and endlessly-varied processes of chemical synthesis mostly conducted under conditions so delicately adjusted to the requirements of each case, that the ablest chemists, with all their instruments and artifices, cannot even reproduce them on any scale however small. Can these elements be reasonably thought of as having been unfashioned and unprepared, or these processes as having been uninstituted and unpresided over by intelligence?^[23]

The sciences of geology and palæontology disclose to us the history of our earth and of its vegetable and animal organisms. They prove that for countless ages, that from the inconceivably remote period of the deposition of the Laurentian rocks, light and heat, air and moisture, land and sea, and all general physical forces have been so arranged and co-ordinated as to produce and maintain a state of things which secured during all these countless ages life and health and pleasure for the countless millions of individuals contained in the multitude of species of creatures which have contemporaneously or successively peopled the earth. The sea, with its winds and waves, its streams and currents, its salts, its flora and fauna, teems with adaptations no less than the land. Probably no one has studied it with more care or to more purpose than Lieutenant Maury, and his well-known work on its physical geography proceeds throughout on the principle that "he who would understand its phenomena must cease to regard it as a waste of waters, and view it as the expression of One Thought, a unity with harmonies which One Intelligence, and One Intelligence alone, could utter;" while many of its pages might appropriately be read as a commentary on these lines of Wordsworth,—

"Huge ocean shows, within his yellow strand,
A habitation marvellously planned,
For life to occupy in love and rest."

The sciences referred to certify further, that as regards the various forms of life there has been from the time when it can be first traced to the present day "advance and progress in the main," and that the history of the earth corresponds throughout with the history of life on the earth, while each age prepares for the coming of another better than itself. But advance and progress presuppose intelligence, because they cannot be rationally conceived of apart from an ideal goal foreseen and selected. Volumes might be written to show how subtly and accurately external nature is adjusted to the requirements of vegetable and animal life, and how vegetable and animal life are inter-related; nay, even on how well the earth is fitted for the development and happiness of man. Think of the innumerable points of contact and connection, for example, between physical geography and political economy, which all indicate so many harmonies between the earth and man's economical condition, capacities, and history.^[24]

The vegetable and animal kingdoms viewed generally, are also striking instances of unity of plan, of progressive order, of elaborately adjusted system. There are general principles of structure and general laws of development common to all organisms, constituting a plan of organisation capable of almost infinite variation, which underlies all the genera and orders of living creatures, vegetable and animal. It comprehends a number of subordinate plans which involve very abstract conceptions, and which even the ablest naturalists still very imperfectly comprehend. These higher plans would probably never have been thought of but for the detection of the numerous phenomena which seemed on a superficial view irreconcilable with the idea of purpose in creation. Just as it was those so-called "disturbances" in the planetary orbits, which appeared at first to point to some disorder and error in the construction of the sidereal system, that prompted Lagrange to the investigations which resulted in establishing that the order of the heavens was of a sublimer and more remarkable character than had been imagined, essentially including these apparent disturbances, so it has been the seeming exceptions to plan which are witnessed in rudimentary and aborted organs (such as the wing-bones in wingless birds, the finger-bones in horses, the legs below the skin in serpents, the teeth which never cut the gums in whales, &c.), that have indicated to modern biologists a unity of organisation far more comprehensive and wonderful than had previously been suspected. The larger and more ideal order thus brought to light as ruling in the organic world is one which could only have originated in a mind of

unspeakable power and perfection. And it not only thus testifies directly of itself in favour of a Divine Intelligence, but the recognition of it, while correcting in some respects earlier conceptions as to the place of utility in nature, far from proving that utility has been disregarded or sacrificed, shows that each organ has been formed, not only with reference to its actual use in a given individual or species, but to the capacity of being applied to use in countless other individuals and species.^[25]

When we enter into the examination of organisation in itself, adjustment becomes still more obvious in the processes of growth, reproduction, fructification, &c., in plants and animals, and in the provisions for locomotion, for securing food and shelter, for sight, hearing, &c., in the latter. The great physician, Sir Charles Bell, devoted a whole treatise to point out those which are to be found in the hand alone. The arrangement of bones, muscles, joints, and other parts in the limb of a tiger or the wing of an eagle are not less admirable. The eye and ear are singularly exquisite structures, the former being far the most perfect of optical, and the latter far the most perfect of acoustic instruments. Instances of this sort are, indeed, so remarkable, and so irresistibly convincing to most minds, that some theists have consented to rest on them exclusively the inference of a designing intelligence. They would grant that the evidences of purpose are only to be traced in organisation. The limitation is inconsistent and untenable, but not inexplicable. The adjustment of parts to one another, and their co-ordination as means to an end, are not more certainly existent in fitting the eye to see and the ear to hear than in securing the stability of the solar system, but they are more obviously visible because compressed into a compass easily grasped and surveyed; because organ and function are the most specialised kinds of means and ends; because organisms are the most curiously and conspicuously elaborate examples of order. And as the telescope can show us no end of the simple and majestic order of the heavens, so the microscope can show us no end of the exquisite and impressive order which discloses even—

"In Nature's most minute design,
The signature and stamp of power divine;
Contrivance intricate, expressed with ease,
Where unassisted sight no beauty sees.
The shapely limb and lubricated joint
Within the small dimensions of a point;
Muscle and nerve miraculously spun,
His mighty work, who speaks and it is done.
The Invisible, in things scarce seen revealed,
To whom an atom is an ample field."—(COWPER.)^[26]

The traces of a Supreme Reason crowd still more upon the vision when we come to the human mind,—

"The varied scene of quick-compounded thought,
And where the mixing passions endless shift."
—(THOMSON.)

The mere existence of originated minds necessarily implies the existence of an unoriginated mind. "What can be more absurd," asks Montesquieu, "than to imagine that a blind fatalistic force has produced intelligent beings?" The complicated and refined adjustments of the body to the mind, and of the mind to the body, are so numerous and interesting that their study has now become the task of a special class of scientific men. A very little disorder in the organisation of the brain—such as even microscopic *post-mortem* examination may fail to detect—suffices to cause hallucinations of the senses, to shake intellect from its throne, to paralyse the will, and to corrupt the sentiments and affections. How precise and skilful must the adjustment be between the sound brain and sane mind! Who sufficiently realises the mystery of wisdom which lies in the familiar fact that the mind, by merely willing to use the members of the body, sets in motion instantaneously and unconsciously, without effort and without failure, cords and pulleys and levers, joints and muscles, of which it only vaguely, if at all, surmises the existence? The laws of our various appetencies, affections, and emotions, and their relations to their special ends or objects, the nature of the several intellectual faculties and their subservience to mental culture, and still more the general constitution of the mind as a system consisting of a multitude of powers under the government of reason and conscience, present to us vast fields filled with the evidences of Divine Wisdom.^[27]

There are others no less extensive and inexhaustible in the principles which underlie and maintain human society, and those which preside over the progressive development of humanity. Political economy is the department of social science which has been cultivated with most success. What, then, is its most comprehensive and best established theorem? This—that although the great majority of men are moved mainly by self-interest, and few seek with much zeal or persistency the general good, the result of their being left in perfect freedom to pursue their own advantage, so long as they do not outwardly violate the rules of justice, is far better for the whole society than if they conformed their conduct to any plan which human wisdom, aiming directly at the general good, could devise; nature having provided in the principles of the human constitution and the circumstances of human life for the selfish plans and passions of individuals so neutralising one another, so counteracting and counterpoising one another, as to secure the social stability and welfare—as to leave general ideas and interests to rule with comparatively little resistance. It is surely a natural inference from this that a Supreme Reason grasps all

human reasons, and uses them in order to realise a purpose grander and better than any which they themselves contemplate. History viewed as a whole teaches the same truth on a wider scale. An examination of it discloses a plan pervading human affairs from the origin of man until the present day—a progress which has proceeded without break or stoppage, in accordance with laws which are as yet very imperfectly apprehended. Of the countless generations which have come and gone like the leaves of the forest, for unknown thousands of years, few have had the slightest glimpse of the order which connected them with their fellows, and embraced their every action; fewer still have sought to conform to it; the immense majority have set before them only mean and narrow schemes for personal good; all passions have raged and all vices prevailed in their turn; there have been confusion and tumult and war; and yet the order, progress, plan I speak of have been slowly and silently but surely built up. In this evolution of order out of the chaos of millions on millions of conflicting human wills seeking merely their own pleasure, there is, perhaps, even a more impressive proof of the operation of Divine Wisdom than in the origination and preservation of order among the multitudinous stars of heaven. The philosophical historian who has most conclusively shown by the scrutiny of the chief events in the annals of humanity the existence of such a progressive plan, is amply justified in arguing that it cannot have originated with man, or matter, or chance, but must be the work of God. "We have passed in review," he says, "all the theories imagined by philosophers and historians to explain the mysterious fact that there is in the life of man unfolded in history a succession, a plan, a development, which cannot be referred to man himself. Some, despairing from the outset to find a solution, make of their ignorance a blind power which they call hazard. Evidently that is no solution. Hazard is a word, and nothing more. Other writers—the majority of writers—say that this mysterious power is nature, under the form of climate, or races, or the whole of the physical influences which act on the moral world. But what is nature? Whence has it this power, this foresight, this intelligence, which are so conspicuous in the course of our destinies? If nature is matter, and nothing but matter, that too is no answer. Who will believe that matter acts with wisdom—with intelligence? Where there is intelligent action there must be an intelligent being; therefore nature leads us to God. Finally, there are those who substitute for nature general laws. But do not laws suppose a legislator? and who can this legislator be, if not God?"^[28]

There is, then, everywhere, both in the physical and moral worlds, order and adaptation, proportion and co-ordination, and there is very widely present progress—order which advances in a certain direction to a certain end, which is until realised only an ideal. This is the state of things which science discloses. The question is, Is this state of things intelligible on any other supposition than that of a designing mind? The theist holds that it is not; that it directly and imperatively demands an intelligent cause; that to assign it either to no cause, or to any other than an intelligent cause, is, in the strictest and strongest sense of the term, absurd. If we deny that there is such order as I have indicated, we set aside the entire teaching of all the sciences—we pronounce science to be from beginning to end a delusion and a lie. Men in the present day dare not do this. If we deny that such order implies the agency of a Supreme Intelligence, we contradict no express declaration of any of the sciences; we may accept all that they have to tell us about order, and they can tell us about nothing else. But notwithstanding this, it is far more reasonable, far less absurd, to deny that there is order in the universe, than to admit it and deny that its ultimate cause is an intelligence. Further, although we cannot be more certain of the cause than of the effect from which it is inferred, and consequently cannot be more certain that an intelligence has produced the order which is in the universe than that there is order therein, the theistic inference from the whole of that order may well be greatly stronger than the scientific proof of order in any particular instance. Men of science have probably never as good reasons for believing in the laws of order brought to light by their own special science, as the theist has for believing in a Supreme Intelligence because of the order which is the common and concurrent result of all the sciences, and which is obvious to every eye.

II.

The argument from order and adaptation is often spoken of as "the argument from design." The phrase is an unfortunate one. The argument is not *from* but *to* design. To assume design and then to affirm that "every design must have a designer," is manifestly not serious reasoning, but a play upon words. To assume design at all is to assume precisely what one is most bound to prove; and to assume design in the universe is to assume what cannot be proved, yea, what the theist requires to show against the pantheist cannot be proved. In any other than a very loose and metaphorical sense design has no existence except in mind. There is no design in the sky, or the sea, or the land; there are only law, order, and arrangement therein, and these things are not designs although they imply designs. What we can describe as the designs of the lower animals are given to them with their constitutions, and are only a part of the instrumentality which fits them for their place in the world. Men have designs properly so called; but the argument for the existence of God from the evidences of a Supreme Wisdom in the progressive evolution of human history, instead of resting on these designs, is based on the fact that what has actually been realised has far transcended them. Science as a mere exposition of the facts of the universe can never show us Divine design, for the good reason that there is no such design in these facts, although, had it not existed elsewhere, they could never have been what they are. While this is true, it must in justice be added that most if not all of the advocates of theism who have presented the argument under consideration in the faulty form,—*"Design implies a designer; the universe abounds in design; therefore the universe, so far as it abounds in design, implies a designer,"*—have erred more in expression than in thought. In reality they have not meant by design what is properly so called, and consequently have not begun their argument by assuming

what was denied and in need of proof. In reality they have meant by design those characteristics of things which they hold to be the indications or evidences or correlatives of intelligence, and which they might have designated by such terms as order, adjustment, adaptation, fitness, progress, &c. All attempts to refute their reasoning, therefore, by a strict and literal interpretation of the phrase "Design implies a designer," must be pronounced unfair. Censure of the phrase is warranted. Rejection of the argument on account of the phrase is superficial and unjust.

It has been held that the argument from order and adaptation is essentially different from the design argument. The reason given for this has been that the design argument is based on the analogy or supposed analogy between the works of nature and the products of human art. In this argument, we are told, we infer from the likeness which certain natural objects bear to artificial objects that there must be a likeness in their causes. We know, it is said, that only intelligent beings frame such structures as houses, ships, and watches, and seeing that there is in the mechanism of the heavens, the circulation of the blood, and the construction of the eye, arrangements and adjustments of a similar kind, we conclude that they also must have been framed by an intelligent being, who must be as much greater than man as the works of nature are greater than the works of art, for causes are proportional to their effects. Now this may be the design argument as some have presented it who had no particular wish to criticise it severely, and it certainly is the way in which Hume and Kant wished it to be presented; but it has no claim whatever to be considered the only proper form of the argument, and is, in fact, a very bad form of it. It is true that there is an analogy between the works of nature and the works of art, and that on the strength of this analogy the two classes of works, and also their causes, may be compared, but not true that the design argument when correctly stated either rests on such analogy or implies such comparison. The analogy and comparison may be drawn into, and, as it were, incorporated with the design argument, but that is rather as a means of illustration than as a condition of inference. When we infer from an examination of their construction that the eye and the ear have been designed by an intelligent being, we are no more dependent on our knowledge that a watch or a telescope has been designed by an intelligent being than we are dependent on our knowledge of the eye and ear being the products of intelligence when we infer that the watch and the telescope are the products of intelligence. There is an inference in both cases, and an inference of precisely the same nature in both cases. It is as direct and independent when the transition is to God from His works as when to our fellow-men from their works. We are greatly mistaken if we suppose that we have an immediate knowledge of the intelligence of the beings who make watches, houses, and ships; we only know that the beings who make these things are intelligent because such things could not be made without intelligence: in a word, we only know our fellow-creatures to be intelligent beings because they utter and arrange sounds so as to convey a meaning, execute movements which tend to an end, and construct machines. We have no more a direct perception or a personal experience of the intelligence of our fellow-men than we have of the intelligence of God. The mind which has given origin to the order and adjustments of the universe is not more absolutely inaccessible to sense and self-consciousness than the mind which gives origin to the order and adjustments of a watch. It is therefore impossible that our knowledge of the former should be dependent on our knowledge of the latter. In both cases the knowledge is inferential,—in both cases it is dependent on the immediate consciousness of intelligence in ourselves,—but the inference is in the former case neither longer nor less legitimate than in the latter. We deny, then, that there is any truth in the statement that the design argument rests on the analogy between the works of nature and the products of art. It rests directly on the character of the works of nature as displaying order and adjustment. It is essentially identical with the argument which we have expounded.

It is not less objectionable to speak of the argument from order and adaptation as being an argument from final causes than to speak of it as being an argument from design, unless the different significations of final cause be distinguished, and those which are irrelevant and illegitimate be excluded. For the expression "final cause" has various significations which are indeed intimately related, yet which cannot be employed indifferently without leading to utter confusion. These significations may be distributed into two classes. Each class contains three significations, and every signification of the first class has a signification of the second class to correspond to it. In fact, the significations of the first class are simply so many aspects of order or adaptation, and those of the second class so many aspects of design or intention; the former are order and adaptation viewed with reference to the intrinsic, the extrinsic, and the ultimate ends of things, and the latter are design and intention viewed with reference to the same three ends. Final cause sometimes means the intrinsic end of what is orderly and adjusted, the realisation of the nature of anything which is considered as a whole, a complex of order and adjustment. The combined stability and movement of the solar system is in this sense the final cause of the arrangements by which that result is secured. Sight is in this sense the final cause of the eye, because in sight the true nature of the eye manifests itself. Then, final cause sometimes means not the intrinsic but the extrinsic end of what is orderly and adjusted; not merely the realisation of the nature of anything, but its relationship to other things, its adaptations to their requirements, its uses; not merely the end of an arrangement regarded as a self-contained or completed whole, but the end or ends which it serves as a system surrounded by, connected with, and included in other systems. It is impossible to admit final cause in the sense of intrinsic end and to deny it in that of extrinsic end; for the universe is not a mere aggregate of systems placed alongside of one another, but otherwise unconnected—it is itself a system composed of an infinity of systems within systems. Nothing in nature stands alone; nothing lives to itself nor dies to itself. What is a whole with reference to something smaller than itself, is a part with reference to

something larger than itself. The eye is a whole with reference to its own cords, lenses, fluids, and membranes, but it is a part with reference to the body; sight is therefore not more certainly its end than the uses of sight. How can a man admit final cause to be involved in the relationship between his stomach and bodily life, but deny it to be involved in the relationship between his stomach and the vegetable and animal substances with which he satisfies its cravings? Clearly the distinction between intrinsic and extrinsic ends is a narrow one, and exists not so much in the nature of things as in our way of looking at things. We have but to elevate and extend our own view, and what was before an extrinsic end is thereby changed into an intrinsic end. Admit, in fact, final cause anywhere, and you must admit it everywhere; admit anything to have an end, and you must admit all things to have an end; for the world is a grand and wondrous unity in which all objects depend on and serve one another, and all forces contribute to the attainment of a single comprehensive issue. Once accept the principle of finality, and there is no consistent stopping short of the conviction of Aristotle, that on it hang the whole heavens and earth.

It is only when the word final cause is used in one or other of these two senses that we can with any propriety speak of reasoning from final causes to the existence of God. And these are just the senses in which the expression is now least used. Final cause is generally employed at present to signify design. It means, not the arrangement of causes and effects into systematic unities, the parts of which have definite relations to one another and a common issue, or the adaptation of these unities to support and serve one another, but purpose or intention in the Divine Mind with respect to such arrangement or adaptation. This sense of the word is so obviously general enough to refer both to intrinsic and extrinsic ends that it would be unnecessary to direct attention to the fact, were it not that we are much more apt to fall into error regarding extrinsic than intrinsic ends, and consequently, regarding the intention or purpose which refers to them. A thing has just one intrinsic end—namely, the single conspicuous and all-comprehensive function or issue in virtue of which we can regard it as being a whole or unity, and as possessed of a certain relative independence or completeness. There is thus comparatively little possibility of error in determining what the intrinsic end is in a given instance, and comparatively little danger of presumption in affirming it to have been the end contemplated by the Divine Mind. There is no doubt, for example, that the eye is an instrument constructed in a way calculated to attain the intrinsic end—sight; and there can be no presumption in affirming that God must have had that end in view in the construction of the eye. If there be a God, and if He have had anything to do with the making of the eye, He must have designed that His creatures should see with their eyes. It is different with extrinsic ends. A thing has never merely one extrinsic end; it has always a multitude of extrinsic ends, for it is always related to a multitude of other things. If we would speak of the extrinsic end of a thing we must mean thereby the whole of its adaptations to other things, the entire circle of its external relationships, the sum of its uses. But men have always shown themselves prone in judging of the extrinsic ends of things to single out some particular adaptation or use, or at least a few adaptations or uses, and to ignore or exclude all others. And especially have they shown themselves prone to judge of things merely from their relationship and utility to themselves, as if their happiness was the chief if not sole end of all things. This is, of course, an utterly erroneous method of judging, and necessarily leads to ridiculous thoughts about things, and to irreverent thoughts about God's designs in the creation of things. "It can," as Hegel tells us, "truly profit neither religion nor science, if, after considering the vine with reference to the well-known uses which it confers upon man, we proceed to consider the cork-tree with reference to the corks which are cut from its bark to serve as stoppers for wine-bottles."

When we affirm, then, that final causes in the sense of intrinsic ends are in things, we affirm merely that things are systematic unities, the parts of which are definitely related to one another and co-ordinated to a common issue; and when we affirm that final causes in the sense of extrinsic ends are in things, we affirm merely that things are not isolated and independent systems, but systems definitely related to other systems, and so adjusted as to be parts or components of higher systems, and means to issues more comprehensive than their own. We cannot affirm that final causes in the sense of designs are in things; they can only exist in a mind. What do we mean when we hold that final causes in this sense truly are in the Divine Mind, and with reference equally to intrinsic and extrinsic ends? Merely that such order and adjustment as may actually be seen in things and between things—seen with the naked eye it may be, or only to be seen through the telescope or microscope—or which, if they cannot be seen, yet can by scientific induction be proved to be in and between things,—that that order and adjustment which actually exist, were intended or designed by God to exist. Of course every theist who sees evidences of God's existence in the harmonies of nature, must necessarily rise to final causes in this sense from final causes in the other senses which have been indicated; he must pass from material arrangements to the Divine Intelligence which he believes to be manifested by them. And there can be no shadow of presumption in any theist searching for final causes—Divine designs—in this sense and to this extent. What Descartes and others have said against doing so, on the ground that it is arrogant for a man to suppose he can investigate the ends contemplated by the Deity—can penetrate into the counsels of Divine Wisdom—has manifestly no force or relevancy, so long as all that is maintained is that the order which actually exists was meant to exist. The doubt or denial of that is irreverent. To admit the existence of God, and yet to refuse to acknowledge that He purposed and planned the adaptations and harmonies in nature, is surely as presumptuous as it is inconsistent. To assume that God is ignorant of the constitution and character of the universe, and has had no share in the contrivance and management of it, is to degrade Him to the level of the dream-and-dread-begotten gods of Democritus and Epicurus. Better not to think of God at all, than to think of Him in such a way.

The final cause of a thing, however, may mean, and with reference both to adjustment and design, neither its intrinsic nor extrinsic, but its ultimate end. It may mean, not merely that a thing is and was intended to be the mechanism or organism which science analyses and explains, and to stand in the relationships and fulfil the uses which science traces, but also that it will have, and was intended to have, a destination in the far future. We may ask, What is the goal towards which creation moves? What will be the fate of the earth? In what directions are vegetable and animal life developing? What is the chief end of man? Whither is history tending? What is the ideal of truth which science has before it, and which it hopes to realise? of beauty, which art has before it? of goodness, which virtue has before it? And although to most if not all of these questions probably no very definite and certain answer can be given, to deny that they can in any measure be answered, to pronounce all speculation regarding ultimate ends as wholly vain, would justly be deemed the expression of a rash and thoughtless dogmatism. Science claims not only to explain the past but to foretell the future. The power of prevision possessed by a science is the best criterion of its rank among the sciences when rank is determined by certitude. And most significant is the boldness with which some of the sciences have of late begun to forecast the future. Thus, with reference to the end of the world, the spirit of prophecy, which until very recently was almost confined to the most noted religious visionaries, is now poured largely out upon our most distinguished physicists. This we regard as a most significant and hopeful circumstance, and trust that ere long the prophets of science will be far less discordant and conflicting in their predictions even of the remotest issues than they must be admitted to be at present.

While speculation as to final causes in the sense of ultimate ends is, within certain limits, as legitimate as it is natural, its results are undoubtedly far too meagre and uncertain to allow of our reasoning from them to the existence or wisdom of God. We must prove that there is a Divine Intelligence from what we actually perceive in things, and not from what we can conjecture as to the final destinies of things. In fact, until we have ascertained that there is a Divine Intelligence, and in some measure what are the principles on which that Intelligence proceeds, our chance of reaching truth through speculation as to the ultimate ends of things is, in all probability, exceedingly small. It is on no hazardous speculations of this kind that we would rest an argument for the Divine existence, although questions have been raised as to the Divine character and government which will, at a later stage of the discussion, involve us to some extent in the consideration of ultimate ends.

When final cause is employed to signify design in any reference, be it to intrinsic, extrinsic, or ultimate ends, I have nothing to object to Bacon and Descartes's condemnation of it as illegitimate and unprofitable in science. I know of no science, physical or moral, in which, while thus understood, it can be of the slightest use as a principle of scientific discovery. It is as much out of place in the world of organic as of inorganic nature. It is quite incorrect to say that although it does not lead to the discovery of new truths in strictly physical science, it does so in physiology for example, or in psychology, or in ethics. It is only when it means merely the inherent order and adjustment of things—not when it means designs and purposes regarding them—that the search after it can possibly lead to scientific truth, and, when so understood, it leads to truth in all sciences alike. It was the suggestive principle in Adams and Leverrier's discovery of the planet Neptune from certain unexplained perturbations of the planet Uranus, quite as much as in Harvey's discovery of the circulation of the blood from the observation of certain unexplained valves at the outlet of the veins and the rise of the arteries. It is involved in the very nature of the inductive process, and is only confirmed and enlarged by the progress of inductive research. It stands in no opposition to the principle of efficient causes, and is in no degree disproved by the discovery of such causes. Assertions to the effect that it has gradually been driven by the advance of knowledge from the simpler sciences into those which are complex and difficult,—that it is being expelled even out of biology and sociology—and that it always draws its confirmation, not from phenomena which have been explained, but from phenomena which await explanation,—are often made, but they rest almost exclusively on the wishes of those who make them. They have no real historical basis.^[29]

LECTURE VI.

OBJECTIONS TO THE ARGUMENT FROM ORDER EXAMINED.

I.

The universe is a system which comprehends countless subordinate systems. It is full of combinations of parts which constitute wholes, and of means which conspire to ends. The natural and obvious explanation of the order and adjustments which it thus presents is that they are due to a mind or intelligence. And this is the only rational explanation of them. Mind can alone account for order and adjustment, for the co-ordination of parts into a whole, or the adaptation of means to an end. If we refer them to anything else, the reference is essentially contrary to reason, essentially irrational. It may seem at the first superficial glance as if there were a variety of hypotheses as to the origin of the order we everywhere see around us, all equally or nearly equally credible; but adequate reflection cannot fail to convince us that they must be reduced to a single alternative—to two antagonistic theories. Our only choice is between reason and unreason, between a sufficient and an insufficient cause, between, we may even say, a cause and

no cause. This will be brought out by an examination of the various hypotheses which have been suggested by those who are unwilling to admit that the order of the world originated in mind. They try their best to suggest some other alternative than that which I have said is inevitable; but every suggestion they make only raises the alternative which they would avoid—mind or chance, reason or unreason, a sufficient explanation or an absurd one. Before proceeding to establish this, however, it may be necessary to remark on some direct objections which have been taken to the design argument,—objections which might be valid, although no explanation of order could be given or were even attempted.

The inference which the theist requires to draw from the existence of order in the universe is merely the existence of an intelligence who produced that order. It follows that it is an unfair objection to his argument to urge, as has often been urged, that it does not directly and of itself prove God to be the creator of the universe, but only the former of it—not the author of matter, but only of the collocations of matter. This objection, which men even like Hume and Kant and J. S. Mill, have thought worth employing, is simply that the argument does not prove more than it professes to prove. It does not pretend to make all other reasoning for the Divine existence superfluous. It is no condition of its validity that it should stand alone; that it should contribute nothing to other arguments and receive nothing from them. The objection is thus entirely irrelevant. It may be a wise caution to those who would trust exclusively to it, and neglect or depreciate other arguments. It is no objection to its legitimacy.

It is remarkable, too, that those who have urged this objection have never felt that before employing it they were bound to satisfy themselves and to prove to others that order is a mere surface or superficial thing—outside of matter, superimposed on it. If order be something inherently and intrinsically in matter—be of its very essence—belong to what is ultimate in it; if matter and its form be inseparable,—then the author of its order must have been also the author of itself; and all that this objection shows us is, that those who have employed it have had mistaken notions about the nature of matter. Now, as I have already had to indicate, modern science seems rapidly perfecting the proof of this. The order in the heavens, and in the most complicated animal organisms, appears to be not more wonderful than the order in the ultimate atoms of which they are composed. The balance of evidence is in favour of the view that order extends as far and penetrates as deep as matter itself does. The human intellect is daily learning that it is foolish to fancy that there is anywhere in matter a sphere in which the Divine Wisdom does not manifest itself in and through order.

There is still another remark to be made on the objection under consideration. The immediate inference from the order of the universe is to an intelligent former of the universe, not to a creator. But this does not preclude the raising of the question, Is it reasonable to believe the former of the world merely its former? Must not its former be also its creator? On the contrary, the inference that the order of the world must be the result of intelligent agency ought to suggest this question to every serious and reflective mind, and it should even contribute something to its answer. The order of the universe must have originated with intelligence. What is implied in this admission? Clearly that the order of the universe cannot have originated with matter,—that matter is unintelligent, and cannot account either for intelligence or the effects of intelligence. But if so, the intelligence which formed the universe must be an eternal intelligence. The supposition that matter is eternal must in this case be supplemented by the admission that mind is eternal. In other words, the affirmation that the former of the world is merely its former—the denial that its former is also its creator—means dualism, the belief in two distinct eternal existences,—an eternal mind and eternal matter. Whoever is not prepared to accept this hypothesis must abandon the affirmation and denial from which it necessarily follows. And who can, after due deliberation, accept it? The law of parsimony of causes absolutely forbids our assuming, for the explanation of anything, more causes than are necessary to account for it. It forbids, therefore, our belief in an eternal matter and an eternal mind, unless we can show reason for holding that one of them alone is not a sufficient cause of the universe. Now those who grant the inference from order to intelligence, themselves admit that matter is not a sufficient First Cause of the universe as it actually exists. Do they find any person admitting that mind would be an insufficient First Cause? Do they themselves see any way of showing its insufficiency? Do they not even perceive that it would be foolish and hopeless to try to show that an eternal mind could not create a material universe, and that all they could show would be, the here quite irrelevant truth, that the human mind is ignorant of the manner in which this could be done? If the answers to these questions are what I believe they must be, it must also be acknowledged that the former of the universe can only be rationally thought of as also its creator.

I turn to the consideration of another equally futile objection to the argument from order. That argument, it is said, does not prove the Divine Intelligence to be infinite. The universe, as a system of order, is finite, and we have no right to conclude that its cause is in respect of intelligence, or in any other respect, infinite. We must attribute to the cause the wisdom necessary to produce the effect, but no more. The obvious reply is, that this is precisely what we do. The argument is not employed to prove the infinity of the Divine Intelligence, but to prove that the order and adaptations which everywhere abound in the universe must have had an intelligence capable of conceiving and producing them. It is an obvious and legitimate argument to that extent, and it is pushed no farther. The inference that the world had an intelligent author is as simple, direct, and valid, as that any statue, painting, or book had an intelligent author. When Mr Spencer, Mr Lewes, and Professor Tyndall argue that the cause of the universe cannot be known to be intelligent, because the reason of man, being finite, cannot comprehend the infinite, they overlook that the reason of man has no need to comprehend the infinite in order to

apprehend such manifestations of the infinite as come before it. Just as a person reading the works of the able men who urge this weak objection feels certain that these books must have had their origin in minds endowed with certain intellectual powers, and cannot have been produced by chance, or blind forces, or bodies destitute of minds, and this although much in their minds is and always must be inscrutable to him; so, when he studies the books of nature and of history, he feels equally certain, and in the same way certain, that they are the compositions of a most amazing intellect; and his certainty as to this need not be lessened, clouded, or in any degree affected, by the great and indubitable, but here irrelevant, truth—that the mind of God is in itself, in its essence, inscrutable; and in its greatness, its infinity, incomprehensible.

The argument from order must further be admitted sufficient to show, if valid at all, that the wisdom of the First Cause is of the most wondrous character. The more nature and mind and history are studied by any one who sees in them evidence of design at all, the more wondrous must the wisdom displayed in them be felt to be. Whoever realises that that wisdom is at once guiding the countless hosts of heavenly bodies in all their evolutions through the boundless realms of space, and fashioning and providing for the countless hosts of microscopic creatures dwelling on the leaf of a flower or in a drop of water, everywhere accomplishing a multitude of ends by few and simple means, or effecting single and definite purposes by the most elaborate and complex contrivances, must feel that rash beyond all expression is the short-sighted mortal who can venture to affirm that it is not infinite. If "the Lord by wisdom hath founded the earth, and by understanding hath established the heavens," His wisdom and His understanding are at least so great that we cannot measure them, and have no right to pronounce them limited. The adjustments and harmonies of the universe, as we know it, indicate a depth and richness of wisdom in its Author which far pass our comprehension; and the universe which we know is probably less in comparison with the universe which God has made, than the leaf on which a host of animalcules live and die is in comparison with the vastest of primeval forests, or an ant-hill with the solar system. The universe which we see and know is a noble commentary on such words of Scripture as these: "I wisdom dwell with prudence, and find out knowledge of witty inventions. The Lord possessed me in the beginning of His way, before His works of old. I was set up from everlasting, from the beginning, or ever the earth was. When He prepared the heavens, I was there: when He set a compass on the face of the depth: when He established the clouds above: when He strengthened the fountains of the deep: when He gave to the sea his decree, that the waters should not pass His commandment: when He appointed the foundations of the earth: then I was by Him, as one brought up with Him; and I was daily His delight, rejoicing always before Him." But beyond the universe which we see and do not know, extend illimitable fields of space and stretches of time which we do not see and do not know, but which may be even more crowded with the works of Divine Intelligence than any which are within our range of bodily or mental vision. The ingenious authors of the book entitled 'The Unseen Universe' suppose the entire visible universe to be but a local product and temporary phase of a far older and greater universe, which itself again may be only an island in the ocean of a universe still more stupendous and refined. Whatever error may be mingled with this thought in the work mentioned, there is, I doubt not, at least this much of truth also, that the entire course of nature which science reveals is but a ripple, a current, in the ocean of God's universal action. The man whose mind is duly open to the possibility of this will not venture to pronounce the intelligence of God to be finite. The man who fails to recognise its possibility is very blind, very thoughtless.

It is scarcely credible that the evidences of God's wisdom should have been argued to be proofs of His weakness. And yet this has happened. "It is not too much to say," wrote Mr J. S. Mill, "that every indication of design in the Kosmos is so much evidence against the omnipotence of the Designer. For what is meant by design? Contrivance: the adaptation of means to an end. But the necessity for contrivance—the need of employing means—is a consequence of the limitation of power. Who would have recourse to means if to attain his end his mere word was sufficient? The very idea of means implies that the means have an efficacy which the direct action of the being who employs them has not. Otherwise they are not means, but an encumbrance. A man does not use machinery to move his arms. If he did, it could only be when paralysis had deprived him of the power of moving them by volition. But if the employment of contrivance is in itself a sign of limited power, how much more so is the careful and skilful choice of contrivances? Can any wisdom be shown in the selection of means when the means have no efficacy but what is given them by the will of him who employs them, and when his will could have bestowed the same efficacy on any other means? Wisdom and contrivance are shown in overcoming difficulties, and there is no room for them in a being for whom no difficulties exist. The evidences, therefore, of natural theology distinctly imply that the author of the Kosmos worked under limitations."^[30]

This, it seems to me, is very strange and worthless reasoning. According to it, the ability of God to form and execute a purpose is evidence not of power but of weakness. I wonder if Mr Mill imagined that the inability of God to form and carry out a purpose would have been evidence not of His weakness but of His power. Or did he suppose, perhaps, that both ability and inability were signs of weakness, and that, consequently, for once opposites were identical? Or did he not think on the subject at all, and so reasoned very much at random? I confess I cannot see how ability to contrive things is weakness, or inability to contrive them power. I hold to Bacon's maxim that "knowledge is power," and refuse to admit that wisdom is weakness. But God, if omnipotent, it is said, did not need to contrive: His mere word must have been sufficient. Yes, is the obvious answer; His mere word, His mere will, was sufficient to produce all His contrivances, and has produced them all. There is no shadow of reason for suspecting that anything was difficult to Him or for Him. No such suspicion is entertained by those who employ the design argument; and

those who would rationally object to that argument must find something else to insist on than the power of God's mere will. The will of God is everywhere as efficacious as He in His omnipotence and omniscience chooses that it should be. At the same time, if He desire certain ends, His will cannot remain mere will and dispense with the contrivance of appropriate means. If He wish to bestow happiness on human beings, He must create human beings, and contrive their bodies and minds. To speak of His will as able to "bestow the same efficacy on any means" is no less contrary to reason than it would be to speak of it as able to make the part greater than the whole. It is only in the world imagined by Mr Mill—one in which two and two might be five—that a sunbeam could serve the same purpose as a granite pillar or a steam-engine; and such a world, most people will assuredly hold, even omnipotence could not create. Infinite power and wisdom must necessarily work "under limitations" when they originate and control finite things; but the limitations are not in the infinite power and wisdom themselves—they are in their operations and effects. According to Mr Mill's argument, infinite power could not create a finite world at all: only a finite power could do so. That surely means that a finite power must be mightier than an infinite power; and that, again, is surely a plain self-contradiction, a manifest absurdity.

There is another objection which, although in itself unworthy of answer, has been urged so often and presented in so many forms, some of which are rhetorically impressive, that it cannot be wholly passed over. The design argument has been censured as "assuming that the genesis of the heavens and the earth was effected somewhat after the manner in which a workman shapes a piece of furniture"—as "converting the Power whose garment is seen in the visible universe into an Artificer, fashioned after the human model, and acting as man is seen to act"—as "transforming the First Cause into a magnified mechanist who constructs a work of art, and then sits apart from it and observes how it goes," &c. Now the heavens and the earth are to such a wonderful extent exemplifications both of mechanical laws and æsthetic principles, that no man of sense, I think, will deny that they may most justly be compared to machines or works of art, or even pronounced to be machines and works of art. They are that, although they are more than that. An animal is a machine, although an organism too. Every organism is a machine, although every machine is not an organism. Art and nature are not antagonistic and exclusive. Man and all man's arts are included in nature, and nature is the highest art. While, however, it is legitimate and even necessary to illustrate the design argument by references to human inventions, the numerous and immense differences between the works of man's art and the processes of nature must not be overlooked; and there is no excuse for saying that they have been overlooked. It is precisely because the universe is so above anything man has made or can make, and because vegetable and animal organisms are so different from watches and statues, that the argument in question leads us to a divine and not to a merely human intelligence. It implies that both the works of God and the works of man are products of intelligence; but it does not require that they should have anything else in common. It recognises that the most elaborate and exquisite contrivances of man fall immeasurably below "nature's most minute designs." So far from requiring, it forbids our carrying any of the limitations or peculiarities of human contrivance over to that which is divine. Besides, the belief in design is held in conjunction with the belief in creation out of nothing. The same persons who recognise that there is a divine wisdom displayed in the constitution and course of nature believe the universe to have been called into being by the mere volition of the Almighty. But among all theories of the genesis of the heavens and the earth, that is the only one which does not represent the First Cause as working like a man. Man never creates—he cannot create. To produce anything he must have something to work on—he must have materials to mould and modify.^[31]

II.

Those who refuse to refer the order and adaptations in the universe to a designing intelligence are bound to account for them in some other way. Has this been done? Has any person succeeded in tracing them back to any other principle which can be reasonably regarded as their cause, or as adequate to their production? This is the question which we have now to consider.

Matter, some would have us believe, is the origin of the order of the universe. Grant it, and there is still the question—What is the origin of matter?—to be disposed of. We have seen that this is a question which we are bound to raise; we have seen that there are strong reasons for holding that matter had an origin, had a beginning in time, and none whatever for regarding it as self-existent and eternal. The very existence of order and system, of mechanical adjustments and organic adaptations in the universe, seems to prove that matter must have had a beginning. If certain collocations of matter evince design, and must have had a beginning, the adaptation of the parts to form the collocation evinces design, and implies a beginning. And if matter had a beginning, its cause can only have been mind. To say that it originated with chance or necessity is plainly absurd. Chance and necessity are meaningless terms unless mind or matter be presupposed. There can be no accidents where neither mind nor matter exists. There can be no chance where there is no law. Chance or accident is what occurs when two or more independent series of phenomena meet, without their meeting having been premeditated and provided for. When one series of causes leads a man to pass a house at a given moment of a given day, and another series of causes, coexistent with but wholly independent of the former series, determines that a heavy body shall fall from the roof of that house at that moment of that day and kill that man, the consequence—his death—is what may be properly called an accident, or matter of chance. One who believes, indeed, in the omniscience and universal foreordination and government of God, will hold that even in such a case the accident or chance is merely apparent; but he will not deny the right of the atheist to speak of chance or accident in this way, or to explain as matters of chance whatever he can. The word chance, or accident, can have no

intelligible sense, however, unless there be such independent series of phenomena—unless there be mental and material existences, mental and material laws. Chance cannot be conceived of, even by the atheist, as the origin of existence. The same may be said of necessity. Matter or mind may act necessarily, but necessity cannot act without matter or mind. If it be requisite, therefore, to seek a cause for matter, mind alone can be assigned as its cause. If we are justified in seeking for the origin of matter at all, our choice of an answer lies between mind and absurdity, between a real and sufficient cause and an imaginary and inconceivable cause. Besides, how could matter of itself produce order, even if it were self-existent and eternal? It is far more unreasonable to believe that the atoms or constituents of matter produced of themselves, without the action of a Supreme Mind, this wonderful universe, than that the letters of the English alphabet produced the plays of Shakespeare, without the slightest assistance from the human mind known by that famous name. These atoms might, perhaps, now and then, here and there, at great distances and long intervals, produce, by a chance contact, some curious collocation or compound; but never could they produce order or organisation, on an extensive scale or of a durable character, unless ordered, arranged, and adjusted in ways of which intelligence alone can be the ultimate explanation. To believe that their fortuitous and undirected movements could originate the universe, and all the harmonies and utilities and beauties which abound in it, evinces a credulity far more extravagant than has ever been displayed by the most superstitious of religionists. Yet no consistent materialist can refuse to accept this colossal chance-hypothesis. All the explanations of the order of the universe which materialists, from Democritus and Epicurus to Diderot and Lange, have devised, rest on the assumption that the elements of matter, being eternal, must pass through infinite combinations, and that one of these must be our present world—a special collocation among the countless millions of collocations, past and future. Throw the letters of the Greek alphabet, it has been said, an infinite number of times, and you must produce the Iliad and all Greek books. The theory of probabilities, I need hardly say, requires us to believe nothing so absurd. Throw letters together without thought through all eternity, and you will never make them express thought. All the letters in the Iliad might have been tossed and jumbled together from morning to night by the hands of the whole human race, from the beginning of the world until now, and the first line of the Iliad would have been still to compose, had not the genius of Homer been inspired to sing the wrath of Achilles and the war around Troy. But what is the Iliad to the hymn of creation, and the drama of providence? Were these glorious works composed by the mere jumbling together of atoms, which were not even prepared beforehand to form things, as letters are to form words, and which had to shake themselves into order without the help of any hand? They may believe that who can. It seems to me that it ought to be much easier to believe all the Arabian Nights.

To ascribe the origination of order to *law* is a manifest evasion of the real problem. Law is order. Law is the very thing to be explained. The question is—Has law a reason, or is it without a reason? The unperverted human mind cannot believe it to be without a reason. "The existence of a law connecting and governing any class of phenomena implies a presiding intelligence which has preconceived and established the law. The regulation of events by precise rules of time and space, of number and measure, is evidence of thought and mind." So says Dr Whewell; and the statement is amply justified by the fact, that all laws and rules in the universe imply that existences are related to one another in a way of which intelligent adjustment alone is the adequate and ultimate explanation. The existence of a law uniformly involves the coexistence of several conditions, and that is a phenomenon which, whenever the conditions and law are physically ultimate, and consequently physically inexplicable, clearly presupposes mind. Laws, in a word, are not the causes but the expressions of order. They are themselves the results of delicately accurate adjustments, which indicate the operation of a divine wisdom. There are chemical laws, for example, simply because there are chemical elements endowed with affinities, attractions, or forces the most diverse, yet so balanced and harmonised as to secure the welfare of the world. Besides, laws do not act of themselves. No law produces of itself any result. It is the agents which act according to the law that produce results, and the nature of the result produced depends on the number and character of the agents, and how each is situated and circumstanced. If the agents oppose each other, or are inappropriately distributed, they bring about disorder and disaster in conformity to law. There is no calamity, no evil, no scene of confusion, in the known world, which is not the result of the action of agents which operate in strictest accordance to law. The law of gravitation might rule every particle of matter, and yet conflict and confusion and death would prevail throughout the entire solar system were harmony and stability and life not secured by very special arrangements. Matter might have all its present inherent and essential laws, and yet remain for ever a chaos. Apart from a designing and superintending intelligence, the chances in favour of chaos and against cosmos, even allowing matter to have uncreated properties and laws, were incalculable. The obvious inference is that which Professor Jevons expresses in these words—"As an unlimited number of atoms can be placed in unlimited space in an unlimited number of modes of distribution, there must, even granting matter to have had all its laws from eternity, have been at some moment in time, out of the unlimited choices and distributions possible, that one choice and distribution which yielded the fair and orderly universe that now exists." Only out of rational choice can order have come.

The most common mode, perhaps, of evading the problem which order presents to reason, is the indication of the process by which the order has been realised. From Democritus to the latest Darwinian there have been men who supposed that they had completely explained away the evidences for design in nature when they had described the physical antecedents of the arrangements appealed to as evidences. Aristotle showed the absurdity of the supposition more than 2200 years ago. But those who deny final causes have gone on arguing in the same

irrational manner down to the present time. They cannot, in fact, do otherwise. They are committed to a false position, and they dare not abandon the sophism on which it rests. Nothing else can explain how any sane mind should infer that because a thing is conditioned it cannot have been designed. The man who argues that the eye was not constructed in order to see because it has been so constructed as to be capable of seeing, is clearly either unable to reason correctly, or allows his reasoning faculty to be terribly perverted by prejudice. That a result is secured by appropriate conditions can seem to no sound and unprejudiced intellect a reason for regarding it to have been undesigned. And yet what other reason is involved in all the attempts to explain away final causes by means of the nebular, Darwinian, and other development hypotheses?

M. Comte imagines that he has shown the inference of design, from the order and stability of the solar system, to be unwarranted, when he has pointed out the physical conditions through which that order and stability are secured, and the process by which they have been obtained. He refers to the comparative smallness of the planetary masses in relation to the central mass, the feeble eccentricity of their orbits, the moderate mutual inclination of their planes, and the superior mean density of their solid over their fluid constituents, as the circumstances which render it stable and habitable, and these characteristic circumstances, as he calls them, he tells us flow naturally and necessarily from the simple mutual gravity of the several parts of nebulous matter. When he has done this, he supposes himself to have proved that the heavens declare no other glory than that of Hipparchus, of Kepler, and of Newton.

Now, the assertion that the peculiarities which make the solar system stable and the earth habitable have flowed naturally and necessarily from the simple mutual gravity of the several parts of nebulous matter, is one which greatly requires proof, but which has never received it. In saying this, we do not challenge the proof of the nebular theory itself. That theory may or may not be true. We are quite willing to suppose it true; to grant that it has been scientifically established. What we maintain is, that even if we admit unreservedly that the earth, and the whole system to which it belongs, once existed in a nebulous state, from which they have been gradually evolved into their present condition conformably to physical laws, we are in no degree entitled to infer from the admission the conclusion which Comte and others have drawn. The man who fancies that the nebular theory implies that the law of gravitation, or any other physical law, has of itself determined the course of cosmical evolution, so that there is no need for believing in the existence and operation of a Divine Mind, proves merely that he is not exempt from reasoning very illogically. The solar system could only have been evolved out of its nebulous state into that which it now presents if the nebula possessed a certain size, mass, form, and constitution—if it was neither too rare nor too dense, neither too fluid nor too tenacious; if its atoms were all numbered, its elements all weighed, its constituents all disposed in due relation to each other—that is to say, only if the nebula was in reality as much a system of order, which intelligence alone could account for, as the worlds which have been developed from it. The origin of the nebula thus presents itself to the reason as a problem which demands solution no less than the origin of the planets. All the properties and laws of the nebula require to be accounted for. What origin are we to give them? It must be either reason or unreason. We may go back as far as we please, but at every step and stage of the regress we must find ourselves confronted with the same question—the same alternative.

The argument of Comte, it is further obvious, proceeds on the arbitrary and erroneous assumption that a process is proved to have been without significance or purpose when the manner in which it has been brought about is exhibited. It is plain that on this assumption even those works of man which have cost most thought might be shown to have cost none. A house is not built without considerable reflection and continuous reference to an end contemplated and desired, but the end is only gradually realised by a process which can be traced from its origin onwards, and through the concurrence or sequence of a multitude of conditions. Would a description of the circumstances on which the security and other merits of a house depend,—of the peculiarities in its foundation, walls, and roof, in its configuration and materials, which render it convenient and comfortable, or of the processes by which these peculiarities were attained,—prove the house to have been unbuilt by man, to have been developed without the intervention of an intelligent architect? It would, if Comte's argument were good; if it would not, Comte's argument must be bad. But can any one fail to see that such an argument in such a case would be ridiculous? The circumstances, peculiarities, and processes referred to are themselves manifest evidences of design and intelligence. They are a part of what has to be explained, and a part of it which can only be explained on the supposition of a contriving and superintending mind. They entitle us to reject all hypotheses which would explain the construction of the house without taking into account the intelligence of its architect. The circumstances, peculiarities, and process described by Comte, as rendering the earth an orderly system and the abode of life, are no less among the evidences for the belief that intelligence has presided over the formation of the earth. They require for their rational comprehension to be thought of as the means and conditions by which ends worthy of intelligence have been secured. They require to be accounted for; and they cannot be reasonably accounted for except on the supposition of having been designed. If we reject that view we must accept this, that the present system of things is a special instance of order which has occurred among innumerable instances of disorder, produced by the interaction of the elements or atoms of matter in infinite time. These elements or atoms we must imagine as affecting all possible combinations, and falling at length, after countless failures, into a regular and harmonious arrangement of things. Now, we can in a vague, thoughtless way imagine this, but we cannot justify our belief of it either by particular facts or general reasons. It is an act of imagination wholly divorced from intelligence. Thus to refer the origin and

explanation of universal order to chance, is merely mental caprice.

If the evolution of the earth and the heavenly bodies from a nebula destroy neither the relevancy nor the force of the design argument, the development of complex organisms from simple ones, and the descent of all the plants and animals on earth from a very few living cells or forms, will not remove or lessen the necessity for supposing an intelligence to have designed all the organisms, simple and complex alike, and to have foreordained, arranged, and presided over the course of their development. Were it even proved that life and organisation had been evolved out of dead and inorganic matter, the necessity of believing in such an intelligence would still remain. Nothing of the kind has yet been proved. On the contrary, scientific experimentation has all tended to show that life proceeds only from life. But had it been otherwise—had this break and blank in the development theory been filled up—matter would only have been proved to be more wonderful than it had been supposed to be. The scientific confirmation of the hypothesis of what is called spontaneous generation would not relieve the mind from the necessity of referring the potency of life and all else that is wonderful in matter either to design or chance, reason or unreason—it would not free it from the dilemma which had previously presented itself.^[32]

The development of higher from lower organisms, of course, still less frees us from the obligation to believe that a supreme intelligence presides over the development. Development is not itself a cause, but a process,—it is a something which must have a cause; and the only kinds of development which have yet been shown to be exemplified in the organic world demand intelligence as their ultimate cause. I do not know that I can better prove that there is no opposition between development and design than by referring to an illustration which Professor Huxley made use of with a directly contrary view. To show that the argument from final causes, or what is often called the theological argument, had, as commonly stated, received its death-blow from Mr Darwin, he wrote as follows: "The theological argument runs thus—an organ or organism (A) is precisely fitted to perform a function or purpose (B); therefore it was specially constructed to perform that purpose. In Paley's famous illustration, the adaptation of all the parts of the watch to the function or purpose of showing the time, is held to be evidence that the watch was specially contrived to that end, on the ground that the only cause we know of competent to produce such an effect as a watch which shall keep time is a contriving intelligence, adapting the means directly to that end. Suppose, however, that any one had been able to show that the watch had not been made directly by any person, but that it was the result of the modification of another watch which kept time but poorly, and that this, again, had proceeded from a structure which could hardly be called a watch at all, seeing that it had no figures on the dial, and the hands were rudimentary, and that, going back and back in time, we come at last to a revolving barrel as the earliest traceable rudiment of the whole fabric. And imagine that it had been possible to show that all these changes had resulted first from a tendency in the structure to vary indefinitely, and secondly from something in the surrounding world which helped all variations in the direction of an accurate time-keeper and checked all those in other directions,—then it is obvious that the force of Paley's argument would be gone. For it would be demonstrated that an apparatus thoroughly well adapted to a particular purpose might be the result of a method of trial and error worked by unintelligent agents, as well as of the direct application of the means appropriate to that end by an intelligent agent."^[33]

Our great comparative physiologist would probably not write so at present. He may still not accept the design argument; but he is now well aware that it has not got its death-blow, nor even any serious wound, from the theory of evolution. He has since, on more than one occasion, shown the perfect compatibility of development with design. He might, perhaps, in defence of his earlier and less considerate utterances, maintain that no organ has been made with the precise structure which it at present possesses in order to accomplish the precise function which it at present fulfils; but he admits that the most thoroughgoing evolutionist must at least assume "a primordial molecular arrangement, of which all the phenomena of the universe are the consequences," and "is thereby at the mercy of the theologian, who can always defy him to disprove that this primordial molecular arrangement was not intended to evolve the phenomena of the universe." Granting thus much, he is logically bound to grant more. If the entire evolution of the universe may have been intended, the several stages of its evolution may have been intended; and they may have been intended for their own sakes as well as for the sake of the collective evolution or its final result. If eyes and ears were contrived for a purpose, the eyes and ears of each species of animals may have been made with the precise structure which they exhibit for the precise purposes which they fulfil, although they may have been developed out of a different kind of eyes and ears, and will, in the lapse of ages, be developed into still other kinds. The higher theology, the general designs, which Professor Huxley admits evolution cannot touch, is in no opposition to the lower theology, the special designs, which he strangely supposes it to have definitively discarded.

Nothing can be more certain than that Dr Paley would have held the design argument to have been in no degree weakened by the theory of evolution, and that he would have been very much astonished by Professor Huxley's remarks on that argument. In referring to the mechanism of a watch as an evidence of intelligence in its maker, Dr Paley pointed out that our idea of the greatness of that intelligence would be much increased if watches were so constructed as to give rise to other watches like themselves. He must necessarily have admitted that the watch imagined by Professor Huxley was still more remarkable, and implied a still greater intelligence in its contrivance. The revolving barrel must have had wonderful capabilities, which only intelligence could confer. All the circumstances in which it was to be placed must have been foreseen, and all the influences which were to act upon it must have been taken into account,

which could only be done by intelligence. All that helped variations in the direction of an accurate time-keeper must have been brought into requisition, and all that hindered it, or favoured variations in other directions, must have been detected and checked; but no unintelligent agents can be conceived of as accomplishing such work, or as more than the means of accomplishing it employed by a providential Reason. The greater the distance between the revolving barrel and the most elaborated watch—the greater the number of mechanisms between the first and the last of these two terms, or between the commencing cause and the final result—the greater the necessity for a mind the most comprehensive and accurate, to serve as an explanation of the entire series of mechanisms and the whole process of development.

Mr Darwin, and a large number of those who are called Darwinians, profess to prove that all the order of organic nature may have been unintentionally originated by the mechanical operation of natural forces. They think they can explain how, from a few simple living forms, or even from a single primordial cell, the entire vegetable and animal kingdoms, with all their harmonies and beauties, have arisen wholly independent of any ordaining and presiding mind, by means of the operation of the law of heredity that like produces like; of variability from the action of the conditions of life, and from use and disuse; of over-production, or a ratio of increase so high as to lead to a struggle for existence; of natural selection, or the survival and prevalence of the fittest, and the disappearance and extinction of what is unsuited to its circumstances and inferior to its competitors; and of sexual selection. But the remarkable originality, ingenuity, and skill which they display in endeavouring to establish, illustrate, and apply these laws, make all the more striking the absence of freshness and independence, of force or relevancy, in the reasonings by which they would attach to them an irreligious inference. The same men who have adduced so many new facts, and thrown so much new light on facts previously known, in support of the real or alleged laws indicated, have not adduced a single new reason, and scarcely even set in a more plausible light a single old reason, for the denial of design. They assure us, copiously and vehemently, that the laws which they claim to have proved are in themselves a disproof of design; but they somehow forget that it is incumbent on them to bestow the labour requisite to make this manifest. They reason as if it were almost or wholly self-evident, whereas a little more thought would show them that all their laws imply mind and purpose.

There is a law of heredity: like produces like. But why is there such a law? Why does like produce like? Why should not all nature have been sterile? Why should there have been any provision for the propagation of life in a universe ruled by a mere blind force? And why should producer and produced be like? Why should offspring not always be as unlike their parents as tadpoles are unlike frogs? The offspring of all the higher animals pass through various embryological stages in which they are extremely unlike their parents. Why should they ever become like to them? Physical science cannot answer these questions; but that is no reason why they should not both be asked and answered. I can conceive of no other intelligent answer being given to them than that there is a God of wisdom, who designed that the world should be for ages the abode of life; that the life therein should be rich and varied, yet that variation should have its limits; that there should be no disorder or confusion; and who, to secure this result, decreed that plants should yield seeds, and animals bring forth, after their kind. He who would disprove design must certainly not start with the great mystery of generation.

Then, the so-called law of variability is the expression of a purpose which must have Reason at its beginning, middle, and end. There is in no organism an absolutely indefinite tendency to vary. Every variation of every organism is in some measure determined by the constitution of the organism. "A whale," as Dr Huxley says, "does not tend to vary in the direction of producing feathers, nor a bird in the direction of producing whalebone." But a tendency to definite variation is an indication of purpose. If a man could make a revolving barrel with a tendency to develop into a watch, he would have to be credited with having designed both the barrel and watch, not less than if he had contrived and constructed the two separately. Further, variation has proceeded in a definite direction. Darwin admits that there is no law of necessary advancement. There is no more reason in the nature of the case for improvement than for deterioration. Apart from the internal constitution of an organism having been so planned, and its external circumstances so arranged, as to favour the one rather than the other, its variations could not have been more towards self-perfection than self-destruction. But variation, according to the Darwinians, has taken place in one direction and not in another; it has been forward, not backward; it has been a progression, not a retrogression. Why? Only because of a continuous adjustment of organisms to circumstances tending to bring this about. Had there been no such adjustment, there might have been only unsuitable variations, or the suitable variations might have been so few and slight that no higher organisms would have been evolved. Natural selection might have had no materials, or altogether insufficient materials, to work with. Or the circumstances might have been such, that the lowest organisms were the best endowed for the struggle of life. If the earth were covered with water, fish would survive, and higher creatures would perish. Natural selection cannot have made the conditions of its own action—the circumstances in the midst of which it must operate. Therefore, there is more in progressive variation than it can explain: there is what only an all-regulative intelligence can explain.

Again, there is a law of over-production, we are told, which gives rise to a struggle for existence. Well, is this law not a means to an end worthy of Divine Wisdom? In it we find the reason why the world is so wonderfully rich in the most varied forms of life. What is called over-production is a productivity which is in excess of the means of subsistence provided for the species itself; but no species exists merely for itself. The ratio of the production of life is probably none too high for the wants of all the creatures which have to be supplied with food and enjoyment. And the wants of

all creatures are what have to be taken into account; not the wants of any single species—not the wants of man alone. If we adequately realised how vast is the number of guests which have constantly to be fed at the table of nature, we would, I have no doubt, acknowledge that there is little, if any, real waste of life in the world. Then, the struggle to which the rate of production gives rise is, on the showing of the Darwinians themselves, subservient to the noblest ends. Although involving privation, pain, and conflict, its final result is order and beauty. All the perfections of sentient creatures are represented as due to it. Through it the lion has gained its strength, the deer its speed, the dog its sagacity. The inference seems natural that these perfections were designed to be attained by it; that this state of struggle was ordained for the sake of the advantages which it is actually seen to produce. The suffering which the conflict involves may indicate that God has made even animals for some higher end than happiness—that He cares for animal perfection as well as for animal enjoyment; but it affords no reason for denying that the ends which the conflict actually serves, it was also intended to serve. Besides, the conflict is clearly not a struggle for bare existence; it is, even as regards the animals, a struggle for the largest amount of enjoyment which they can secure, and for the free and full exercise of all their faculties. It thus manifests, not only indirectly but also directly, what its ends are. They are ends which can only be reasonably conceived of as having been purposed by an intelligence, and which are eminently worthy of a Divine intelligence.

But what of the law, or so-called law, of natural selection? In itself, and so far as physical science can either prove or disprove it, it is simply an expression of the alleged fact, that in the struggle of life, any variation, however caused, which is profitable to the individuals of a species, will tend to their preservation, will have a chance of being transmitted to their offspring, and will be of use to them likewise, so that they will survive and multiply at the expense of competitors which are not so well endowed. But natural selection thus understood is obviously in no opposition to design; on the contrary, it is a way in which design may be realised. Some might even hold that design cannot be conceived of as realised in any other natural way; that if not thus realised, it could only be miraculously realised. But Mr Darwin, and many of those who call themselves his followers, tell us not only that there is natural selection, but that blind forces and mechanical laws alone bring it about; that intention and intelligence have nothing to do with it. What proof do they give us? Alas! the painful thing is that they give us none. They point out the blind forces and the mechanical laws by which the selection is effected and its results secured; they show how they are adapted to accomplish their work: and then they assert that these forces and laws explain the whole matter; that no underlying and all-embracing reason has prepared, arranged, and used them. They see the physical agencies and the physical process by which order and beauty have been attained—they do not see intelligence and design; and because they do not see them, they conclude that they have no existence. They describe the mechanism which their senses apprehend, and affirm it to have made itself, or at least to have been unmade, and to work of itself, because the mind which contrived it and directs it is inaccessible to sense. All their reasoning resolves itself into a denial of what is spiritual because it is unseen.

The only instances of natural selection which have been adduced to show that blind forces may bring about results as remarkable, and of the same kind, as those which are accomplished by intelligent agents, are manifestly irrelevant. They are of such a nature that every teleologist must hold them to imply what they are intended to disprove. When Professor Huxley points to the winds and waves of the Bay of Biscay as carefully selecting the particles of sea-sand on the coast of Brittany, and heaping them, according to their size and weight, in different belts along the shore; to a frosty night selecting the hardy plants in a plantation from among the tender ones; and to a hurricane transporting a sapling to a new seat in the soil,—he completely mistakes what the problem before him is. Fire and water can produce wonderful effects in a steam-engine; but the man who should infer, from there being no intelligence in the fire and water themselves, that intelligence must have had nothing to do with their effects when they were brought into contact in a steam-engine, would deserve no great credit for his reasoning. It is precisely Professor Huxley's reasoning. He looks at the fire and water separately, and completely ignores the engine. Because in a world which is a system of order and law a certain collocation and combination of physical conditions and forces will produce an orderly result, he infers that design and intelligence are not needed to produce such a result. I submit that that is illegitimate and irrelevant reasoning. It resolves itself into a denial of Divine and intelligent agency, because the senses apprehend merely physical elements and a physical process. It assumes a selected adaptation, which presupposes intelligence in order to get rid of intelligence. It begs the whole question.

The so-called law of sexual selection, if it be a law at all, is obviously teleological in its nature. Its end is the production of beauty in form and colour. Can blind physical forces, if not subservient to intelligence, be conceived of as working towards so essentially ideal a goal as beauty?

I think enough has now been said to show that the researches and speculations of the Darwinians have left unshaken the design argument. I might have gone farther if time had permitted, and proved that they had greatly enriched the argument. The works of Mr Darwin are invaluable to the theologian, owing to the multitude of "beautiful contrivances" and "marvellous adjustments" admirably described in them. The treatises on the fertilisation of orchids and on insectivorous plants require only to have their legitimate conclusions deduced and applied in order to be transformed into treatises of natural theology. If Paley's famous work be now somewhat out of date, it is not because Mr Darwin and his followers have refuted it, but because they have brought so much to light which confirms its argument.^[34]

I have challenged the theology of Mr Darwin, and those who follow his guidance in theology. I have no wish to dispute his science. I pass no judgment on his theories so far as they are scientific theories. It may be safely left to the progress of scientific research to determine how far they are true and how far erroneous. We ought not to assail them needlessly, or to reject the truth which is in them, under the influence of a senseless dread that they can hurt religion. In so far as they are true, they must be merely expressions of the way in which Divine intelligence has operated in the universe. Instead of excluding, they must imply belief in an all-originating, all-foreseeing, all-foreordaining, all-regulative intelligence, to determine the rise and the course and the goal of life, as of all finite things. That intelligence far transcends the comprehension of our finite minds, yet we apprehend it as true intelligence. It is no blind force, but a Reason which knows itself, and knows us, and knows all things, and in the wisdom of which we may fully confide, even when clouds and darkness hide from us the definite reasons of its operations. We can see and know enough of its wisdom to justify faith where sight and knowledge are denied to us. Let us trust and follow it, and, without doubt, it will lead us by a path which we knew not, and make darkness light before us, and crooked things straight.

LECTURE VII.

MORAL ARGUMENT—TESTIMONY OF CONSCIENCE AND HISTORY.

I.

WE have seen how the power manifest in the universe leads up to God as the First Cause, the all-originating Will. We have seen also how the order manifest in the universe leads up to Him as the Supreme Intelligence. But there is more in the universe than force and order; there is force which works for good, and a just and benevolent order; there are moral laws and moral actions, moral perceptions and moral feelings. Can anything be thence inferred as to whether God is, and what He is? I think we shall find that they clearly testify both as to His existence and character.

The moral law which reveals itself to conscience has seemed to certain authors so decisive a witness for God, that all other witnesses may be dispensed with. Kant, who exerted his great logical ability to prove that the speculative reason in searching after God inevitably loses itself in sophisms and self-contradictions, believed himself to have found in the practical reason or moral faculty an assurance for the Divine existence and government capable of defying the utmost efforts of scepticism. Sir William Hamilton has also affirmed that "the only valid arguments for the existence of God, and for the immortality of the human soul, rest on the ground of man's moral nature." Dr John Newman has insisted that conscience is the creative principle of religion, and has endeavoured to show how the whole doctrine of natural religion should be worked out from this central principle. A well-known living theologian of Germany, Dr Schenkel, has attempted to build up a complete theology on conscience as a basis, starting from the position that conscience is "the religious organ of the soul"—the faculty through which alone we have an immediate knowledge of God. These thinkers may have erred in relying thus exclusively on the moral argument—I believe that they have—but the error, if error there be, shows only the more clearly how convincing that argument has seemed to certain minds, and these assuredly not feeble minds.

There is, besides, valuable truth underlying any exaggerations into which they may have fallen on the subject. There is probably no living practical belief in God which does not begin with the conscience. It is not reasoning on a first cause, nor even admiration of the wisdom displayed in the universe, which makes the thought of God habitually and efficaciously present to the mind. It is not any kind of thinking nor any kind of feeling excited by the physical universe or by the contemplation of society, which gives us an abiding and operative sense of God's presence, and of His relationship to us. It is only in and through an awakened and active conscience that we realise our nearness to God—His interest in us, and our interest in Him. Without a moral nature of our own, we could not recognise the moral character and moral government manifested by Him. We might tremble before His power, or we might admire His skill, but His righteousness would be hidden from us, His moral laws would be meaningless to us, and their sanctions would be merely a series of physical advantages or physical disasters. But a God without righteousness is no true God, and the worship which has no moral element in it is no true worship. As, then, it is only through the glass of conscience that the righteousness of God can be discerned, and as that attribute alone can call forth, in addition to the fear, wonder, and admiration evoked by power and intelligence, the love, the sense of spiritual weakness and want, and the adoring reverence, which are indispensable in true worship—such worship as God ought to receive and man ought to render—the significance of the moral principle in the theistic argumentation is vast indeed.

It follows, however, from the entire course of the reasoning in which we have been engaged, that the moral argument is not to be exclusively relied on. It is but a part of a whole from which it ought not to be severed. It cannot be stated in any valid form which does not imply the legitimacy of the arguments from efficiency and order. If other facts do not refer us back to a primary case, neither will moral facts lead us to the primary moral agent. If order is no evidence of intelligent purpose, moral order can be no evidence of moral purpose. The moral argument proves more, but also less, than the arguments which have been already expounded. It shows us that God is endowed with the highest moral excellence, and is the source of moral law and of moral government, but it does not prove Him to be the Creator of the universe or the Author of all order

in the universe. It contributes to the idea of God an essential element, without which that idea would be lamentably defective, but it supposes other elements also essential to be given by other arguments. The office of bearing witness to the existence and character of God can be safely devolved on no one principle alone, even although that principle be conscience. It is a work in which all the principles of human nature are privileged to concur. Either all bear true testimony, or all have conspired to deceive us. The self-manifestation of God is addressed to the entire man, and can only be rightly apprehended by the concurrent action of all the energies and capacities of the soul.^[35]

It is, perhaps, especially important in conducting the moral argument to ask ourselves distinctly, Whence ought we to begin? Is there any point, any fact or principle, which we are in reason bound to start from? Inattention to this preliminary inquiry has caused many to try to look at moral facts *en masse*, as it were, and to endeavour to draw an inference from them in virtue of something common to them all. This can only lead to confusion and error. Moral facts are of two radically distinct classes, and cannot be comprehended under any higher generalisation, which can be taken as the foundation of a theistic inference. The facts need to be distributed and interpreted—to have their characters discriminated; and we must begin with the principle by which this is done—that is, with conscience itself. We need no more attempt to judge of moral qualities without reference to our moral perceptions and feelings—to the information given us through conscience—than to pass a judgment on colours before seeing them, or irrespective of how they appeared to us when we saw them. If we look at the moral facts of the universe from any outside point of view—not from that of conscience—how can we escape ascribing the evil as well as the good to God, and trying His character either from both or from the preponderance of the one over the other? But if we do so,—if we seek to rise to God through an induction from all moral facts—we shall form a miserable notion of God, and we shall, besides, ride rough-shod, as it were, over conscience. For what is it that conscience declares most clearly about moral good and evil, right and wrong? Is it not that they are radically antagonistic—irreconcilable and contradictory,—that they cannot have the same ultimate author—that if the one be the expression of God's will, the other must be the expression of His aversion? If conscience have any testimony to give about God at all, it is that, as the author of good, He must be the enemy of evil. The contemplation of the moral world may perplex us, but conscience is an assurance that evil, however perplexing, is not to be referred to the same source as good.

The testimony of conscience on behalf of God has been presented in various ways, and it need not surprise us to find some of them unsatisfactory. I regard as unwarranted the view that conscience is "the religious organ of the soul," the sole faculty through which the human mind is in contact and communion with God. There is no one specific power or organ of the mind in virtue of which exclusively man is a religious being. It is by the whole make and constitution of his nature, not by a particular faculty, that he is framed for religion. I more than question if we have a right even to ascribe to conscience an immediate intuition of God. It brings us, some have affirmed, in a strict and positive sense into the real presence of God, with nothing intervening between us and Him—He as the absolute personality standing sharply and distinctly over against our personality. This doctrine has, however, one obvious and serious difficulty before it. Conscience—that is a word which has got in ordinary use a very clear and definite meaning. We all know what conscience is as well as we know what the eye or the ear is, and we all know what an act of conscience is as well as we know what seeing or hearing is. It is not more certain that by the eye we see colours, and that by the ear we hear sounds, than that by conscience we discern good and evil. When, therefore, any man comes and assures us that through conscience we have an immediate apprehension of God, it is natural that we should answer at once, You may as well assure us that through sight we immediately hear sounds or smell odours. What we immediately apprehend through conscience is the right or wrong in actions, and therefore not God. Morality is the direct object of conscience; God can therefore only be the presupposition or postulate of conscience,—can only be given in conscience as implied in morality. This, I say, is an obvious objection to the assertion that God is immediately known in conscience. It is an objection which has not been got over, and which, I believe, cannot be got over.^[36]

The argument from conscience, like all the other theistic arguments, is extremely simple. It is the obvious inference from the most obvious facts of our moral consciousness. It demands of us no subtle analysis of conscience. It is not dependent on the truth of some one particular theory as to the origin of conscience. It is based directly on what cannot be denied or disputed,—the existence of conscience, the existence of certain moral judgments and feelings common to the experience of all men. Conscience exists. It exists as a consciousness of moral law; as an assertion of a rule of duty; as a sense of responsibility. When it pronounces an action right, it does so because it recognises it to be conformed to law; when it pronounces an action wrong, it does so because it recognises it to fall short of or to transgress law. It acts as the judge of all that we do, and as such it accuses or excuses, condemns or approves, punishes or rewards us, with a voice of authority, which we may so far disregard, but the legitimacy of which we cannot dispute. It claims to rule over body and soul, heart and mind, all our appetites, affections, and faculties; and the claim is implicitly admitted even by those who have most interest in denying it. But it does not rule, nor pretend to rule, as an autocratic authority; it does not give us, nor pretend to give us, a law of its own: on the contrary, it claims to rule in us only in virtue of recognising a law which is over us; its authority is derived wholly from a law which it interprets and applies, but does not create. It thus speaks not of itself but as the deputy of another. It unequivocally declares itself a delegated authority. Some may say that the law of conscience is set by man's own will, and that the will is a law unto itself; but this assertion cannot bear examination. The will apart

from reason and conscience is a mere force, not a true will. It has a rational law only through its connection with reason, a moral law only through its connection with conscience. Whoever affirms that the will is its own law must grossly abuse language, and signify by the term will what others mean by reason and will, conscience and will. He must do worse than this, bad as it is. He must contradict the plain dictates of his own consciousness. The will and its law are distinctly felt to be not one but two. The will is clearly realised in our moral experience as not legislative, as not giving itself a law but as being under a law, the law which conscience apprehends. To identify the will and its law is to confound entirely distinct things. For the will to rule the will, it would need at once to command and to obey, to be bond and free, dependent and independent. To be its own rule were for it to be without rule. Conscience claims to rule my will in virtue of a law which cannot be the expression of my will, and which cannot be anything else than the expression of another will; one often in antagonism to mine—one always better than mine—one which demands from me an unvarying and complete obedience. It comes to me and speaks to me in defiance of my will; when my will is set against hearing it, and still more against obeying it; when my will is bent on stifling and drowning its voice. It warns, threatens, condemns, and punishes me, against my will, and with a voice of authority as the delegate or deputy of a perfectly good and holy will which has an absolute right to rule over me, to control and sway all my faculties; which searches me and knows me; which besets me behind and before. Whose is this perfect, authoritative, supreme will, to which all consciences, even the most erring, point back? Whose, if not God's? Those who object that this argument is a mere verbal inference, or that it rests on a double meaning of the word law, do not understand it, simple as it is. They may be honest enough disputants, but their objection is strangely superficial. In the utterly irrelevant criticism of a word they lose sight of a great fact, and so necessarily fail to perceive its momentous significance. From no mere word, whether law or any other, but from that consciousness of moral dependence which no moral creature can shake off, which conscience implies in every exercise, which reveals itself in a thousand ways in the hearts and lives of men, do we conclude that there is One on whom we morally depend, that we have a holy Creator and Judge to deal with. Reason takes no mere name, but it takes the fact that man feels himself under a law of duty, that he is conscious of obligation and responsibility, that he has a conscience which does not counsel but which commands him to do what is right and to resist what is wrong; and it finds this fact inexplicable, this consciousness a delusion, this conscience a false witness—unless there be a holy God, a Moral Governor.

Conscience reveals a purpose as well as declares a law. Its very existence is a proof of purpose. The eye is not more certainly given us in order that we may see, than conscience is given us in order that we may use all our powers in a righteous and beneficent manner. Is it conceivable that any other than a righteous God would have bestowed on us such a gift, such a faculty? Would an intelligent but unrighteous God have made us to hate and despise what is characteristic of his own nature? Would he have made us better than himself? The purpose which conscience reveals is certainly not our own purpose, just as the law which it declares is not the law of our own will. The purpose which finds its expression in conscience, and our own purpose, are often felt by us to be in direct antagonism. Our souls may be tortured by the conflict between them. But in all phases of the conflict we are sensible that it is our purpose which ought to be abandoned; that the purpose which we dislike is that which we are bound to accept and to obey. In this way, also, conscience speaks to us of a righteous God by speaking in His name. If the inference from effect to cause, from manifestation of purpose to intelligence, is good anywhere, it is good here; and it warrants us to believe that the First Cause of conscience is a righteous Being.^[37]

All the feelings, emotions, and affections which gather around the apprehension of right and wrong, which accompany the sense of duty or conviction of obligation, point to the same conclusion. The consciousness of good or ill desert, remorse and self-approval, moral hopes and fears, concur in referring to a holy God. They imply that man is a person related not merely to things and laws, but to another person who is his rightful and righteous Judge. The atheist himself, when he grieves even for secret and private sins, or enjoys the inner peace which only his own heart knoweth, mourns and rejoices as if in the presence of a higher personal Being—the God whom he denies. Neither his sorrow nor his satisfaction is fully intelligible if his soul have before it only an impersonal law or the abstract nature of things; both presuppose that he has some kind of consciousness of being under the cognisance of a Person possessed of moral attributes. If men felt that they were responsible for their evil thoughts and words and deeds to no one higher than themselves or their fellows, is it conceivable that the consciousness of guilt and the fear of retribution would have been what experience and history testify them to have been? Would prayers and penances and sacrifices have prevailed so widely, if the law of right and wrong when broken had been merely felt to be broken—if there were no underlying sense of the existence of One behind the law whose righteousness must be satisfied, and whose wrath must be turned away by the breaker of the law? Would there have been in that case any moral conflicts in the human heart akin to those which a Sophocles or a Shakespeare has delineated? Were there no God, there ought to be no fear of God awakened even by crime; but atheism itself cannot protect a criminal when alive to his guilt from being haunted and appalled by fears of a judgment and a justice more terrible than those of man. When we are perfectly willing to bear any pain which the mere laws of nature attach to our sins, and when our reason assures us that we have nothing to fear on account of them from the law or even the opinion of society, why, if our moral natures are not seared and deadened, do we yet fear, and fear most when most alone? "Inanimate things," says Dr Newman, "cannot stir our affections; these are correlative with persons. If, as is the case, we feel responsibility, are ashamed, are frightened, at transgressing the voice of conscience, this implies that there is One to whom we are responsible, before whom we are

ashamed, whose claims upon us we fear. If, on doing wrong, we feel the same tearful, broken-hearted sorrow which overwhelms us on hurting a mother; if, on doing right, we enjoy the same seeming serenity of mind, the same soothing, satisfactory delight which follows on one receiving praise from a father,—we certainly have within us the image of some person to whom our love and veneration look, in whose smile we find our happiness, for whom we yearn, towards whom we direct our pleadings, in whose anger we are troubled and waste away. These feelings in us are such as require for their exciting cause an intelligent being; we are not affectionate towards a stone, nor do we feel shame before a horse or a dog; we have no remorse or compunction in breaking mere human law: yet, so it is, conscience excites all these painful emotions, confusion, foreboding, self-condemnation; and, on the other hand, it sheds upon us a deep peace, a sense of security, a resignation, and a hope, which there is no sensible, no earthly object to elicit. 'The wicked flees, when no one pursueth;' then why does he flee? Whence his terror? Who is it that he sees in solitude, in darkness, in the hidden chambers of his heart? If the cause of these emotions does not belong to this visible world, the Object to which his perception is directed must be Supernatural and Divine; and thus the phenomena of conscience, as a dictate, avail to impress the imagination with the picture of a Supreme Governor, a Judge, holy, just, powerful, all-seeing, retributive."^[38]

It will, I need scarcely say, be objected to the arguments which have now been presented, that conscience is a product of association or a consequence of evolution; that it has been developed either in the experience of individuals or in the course of ages, out of sensations of pleasure and pain, out of benefits and injuries; and that the convictions and feelings implicated in it are due to the circumstances under which it has grown up and the causes which have combined to generate it. But to this it may be answered either that conscience has not been shown to have grown up by association and development out of sensuous experiences, or that even if this were proved the argument would continue good; in other words, either the truth or the relevancy of the objection may be denied. All associationist and evolutionist theories of conscience seem to many of the most competent psychologists to have failed as regards their main object, although they may admit them to contain important elements of truth. This view I share. It does not seem to me that even Mr J. S. Mill, Prof. Bain, Mr Spencer, and Mr Darwin, have been able to show that conscience contains in it nothing original. But, of course, I am aware that the vindication of my dissent would require an adequate examination of associationism and evolutionism as explanations of the origin of conscience. No such examination is here possible. Nor is it required; on the contrary, a discussion of the kind ought, I believe, to be avoided in an inquiry like the present. No psychological investigation of a difficult and delicate nature is, so far as I can judge, essentially involved in the theistic argumentation at any stage. It is certainly unnecessary in conducting the moral argument to engage in any scientific disquisition as to the origin of conscience.^[39] For our second or alternative answer will suffice. It does not matter, so far as our present purpose is concerned, whether conscience be primary or derivative. It exists; it bears a certain testimony; it gives rise necessarily to the thoughts and feelings which I have mentioned. Are these thoughts and feelings true? If not, conscience is a delusion; it utters lies; the completest moral scepticism is justified. If they are, the argument stands. The mode in which they have been acquired is in this reference a matter of indifference.

The argument from conscience, I may add, rests on the general and distinctive characteristics of our moral nature; not on the truth of particular moral judgments or the purity of particular moral affections. It cannot, therefore, be affected by the fact that moral perceptions and emotions admit of variation and development, and are sometimes false and depraved. However important in other respects may be the circumstance that men's thoughts and sentiments as to right and wrong are not always identical or even accordant, it is plainly irrelevant as an objection to any of the forms in which the argument for the Divine existence from the constitution of our moral nature has just been stated. It cannot be necessary to do more than merely indicate this, although some who maintain the wholly derivative nature of conscience appear to believe that the moral differences to be traced among men disprove all inferences from the moral faculty which they feel disinclined to accept.

II.

Is the testimony which conscience gives to the existence and character of God confirmed when we look out into the moral world? No one will say that all is clear and unambiguous in that world—that it is nowhere shrouded in unpenetrated, if not impenetrable, darkness—that it contains no perplexing anomalies. There is an enormous mass of sin on earth, and the mere existence of sin is a mystery under the government of an omnipotent God who hates sin. There is a vast amount of apparently prosperous sin, and a vast amount of temporarily suffering virtue, and these are often severe trials of faith in the justice and holiness of God. Pessimism may exaggerate the emptiness and the sadness of life, but it has done service by exposing and discrediting the optimism which ignores the dark features and tragic elements of existence. Can an unprejudiced mind, however, even with all the sins and sufferings of the world before its view, and although consciously unable to resolve the difficulties which they suggest, refuse to acknowledge that the general testimony rendered by the moral world to the being and righteousness of its Author is ample and unmistakable? I think not. The conclusion which we have drawn from the character of the sentiments inevitably excited by the contemplation of virtue and vice, is also that which follows from the natural tendencies and issues of good and evil affections and actions. Virtue does not always meet with its due reward, nor vice with its due punishment, in any obvious outward shape; if they did, earth would cease to be a scene of moral discipline; but internal moral laws of an essentially retributive nature are in incessant operation, and show not obscurely or doubtfully

what is the judgment of God both on character and conduct. Virtue is self-rewarding and vice is self-punishing. Virtue tends of its very nature to honour and life, vice to dishonour and death. There are outward bonds between virtue and happiness, vice and misery, which may be severed; but there are also inward bonds which cannot be broken—relations of cause and effect as inflexible as any in the physical world. Virtue may be followed by no external advantages, or may even involve the possessor of it in suffering; but infallibly it ennobles and enriches, elevates and purifies the soul itself, and thus gradually and increasingly imparts "a peace above all earthly dignities." Vice may outwardly prosper and meet only with honour from men, but it cannot be said to be passing wholly unpunished so long as it weakens, poisons, and corrupts the spiritual constitution. Now this it always does, and never more actively than when the individual who is guilty has silenced the voice of his conscience, and when a depraved society encourages him in his wickedness. The law—"he that soweth to his flesh shall of the flesh reap corruption"—is never even for an instant suspended, although the growth and ripening of the seed into its fruit may be unobserved. In the very commission of sin the soul violates the conditions of its own welfare, destroys its own best feelings, impoverishes and ruins itself.

"He that has light within his own clear breast,
May sit in the centre, and enjoy bright day;
But he that hides a dark soul and foul thoughts,
Benighted walks under the mid-day sun—
Himself is his own dungeon."^[40]

When we look from individuals to societies, we perceive the same truth confirmed on a more comprehensive and conspicuous scale. It is true that in the social world there are bad triumphs and impious successes—that the victory of good over evil is often reached only after a long series of defeats. But it is equally true that the welfare of society is dependent on a practical recognition of moral principles—that the laws of morality are conditions of the progress, and even of the existence, of society. A cynical moralist of the eighteenth century maintained that private vices were public benefits; but, of course, his sophisms were easily exposed: he failed to convince any one of the correctness of his paradox. No inductive truth can be easier to establish, or better established, than that righteousness exalteth a nation, while sin lowers and destroys it. The vicious affections which torment and debase isolated men, equally disturb and degrade a tribe or nation. The virtuous affections which diffuse peace and happiness in a single heart, equally spread harmony and prosperity through the largest community. Thus the general conditions of social life testify that God loves virtue and hates vice. Then, if we examine history as a whole, we cannot but recognise that it has been in the main a process of moral progress, of moral growth. The children of the present day may be born with no better dispositions than those of five thousand years ago, and men may be now as guilty, as wilful sinners against what they know to be right, as ever they were; in that sense there may be no moral progress; but of this there can be, I think, no reasonable doubt in the mind of any impartial student of history, that the thoughts of men have been surely, if slowly, widened as to liberty, chastity, justice, benevolence, piety—and that their feelings have been correspondingly modified, their manners refined, and their laws and institutions improved. There may be no such thing as the inheritance or transmission of virtue, and every step of moral advance may have to be gained by the free exertion of each individual, people, and generation in succession; but, as a matter of fact, our race does on the whole advance, and not recede, in the path towards good. Just as reason, although it may be feebler than the passions in a short struggle, can always conquer them if it get time to collect its energies—so virtue gains and vice loses advantages with the lapse of years; for, while the prejudices which opposed the former subside and its excellences become ever increasingly apparent, as history flows onward, those who leagued themselves in support of the latter quarrel among themselves, its fascinations decay, and its deformities become more manifest and repulsive. Age is linked to age, and in the struggle of good and evil which pervades all the ages, victory is seen slowly but steadily declaring itself for the good. The vices die—the virtues never die. Some great evils which once afflicted our race have passed away. What great good has ever been lost? Justice carries it over injustice in the end. Now, whatever be the means by which moral progress is brought about, the testimony which it involves as to the moral character of God is none the less certain. The successful application of Darwinian principles, for example, to the explanation of human progress, would be no disproof of design in social evolution. If a natural selection, based on force, were shown to have prepared the way for a natural selection based on craft, which in its turn gave place to justice, and that again to love, God must none the less be credited with having contemplated the final result, and that result must none the less be held to be an indication of His character. When what is called the struggle for existence has been proved to lead, not to the deterioration but to the improvement of life—to the greatest abundance of the highest kinds of life possible in the circumstances—it will have been vindicated and shown to have been a means to secure such ends as a wise and benevolent Being would entertain. When it has been proved to have constrained men gradually to recognise that the virtues are the conditions of the most desirable existence, and that the vices are so many obstacles to the attainment of such an existence, it will have been still further vindicated by having been thus shown to be the mode in which righteousness is realised in the world. It matters little, so far as the religious inference is concerned, after what natural process and by what natural laws moral progress has been brought about; for whatever the process and laws may be discovered to be, they will be those which God has chosen, and will be fitted to show forth the glory of His wisdom, love, and justice.^[41]

LECTURE VIII.

CONSIDERATION OF OBJECTIONS TO THE DIVINE WISDOM, BENEVOLENCE, AND JUSTICE.

I.

Conscience testifies that there is a God who is good and just; and society and history, on the whole, confirm its testimony. But there are a multitude of moral evils in the world, and these may seem to warrant an opposite inference, or at least so to counterbalance what has been adduced as evidence for the goodness and justice of God as to leave us logically unable to draw any inference regarding His moral character. We must consider, therefore, whether these evils really warrant an anti-theistic conclusion; and as they are analogous to, and closely connected with, those facts which have been argued to be defects in the physical constitution of the universe inconsistent with wisdom, or at least with perfect wisdom, in the Creator, it seems desirable to ask ourselves distinctly this general question, Are there such defects in the constitution and course of nature that it is impossible for us to believe that it is the work of a wise and holy God?

Epicurus and Lucretius imagined that the world was formed by a happy combination of atoms, acting of themselves blindly, and necessarily after innumerable futile conjunctions had taken place. Lange, the most recent historian of materialism, has revived the hypothesis, and represented the world as an instance of success which had been preceded by milliards of entire or partial failures. This is the theory of natural selection applied to account for the origin of worlds; and no one, I believe, who combines the hypotheses of natural selection and atheism can consistently entertain any other conception of the origin of worlds. But where are the milliards of mishaps which are said to have occurred? Where are the monstrous worlds which preceded those which constitute the cosmos? We must, of course, have good evidence for their existence before we can be entitled to hold Nature responsible for them; we must not charge upon her the mere dreams of her accusers. Not a trace, however, of such worlds as, according to the hypothesis, were profusely scattered through space, has been pointed out. It would be a waste of time for us to argue with men who invent worlds in order to find fault with them. We turn, therefore, to those who censure not imaginary worlds but the actual world.

Comte, following Laplace, has argued that there is no evidence of intelligence or design in the solar system, because its elements and members are not disposed in the most advantageous manner. The moon, in particular, we are assured, should have been so placed that it would revolve round the earth in the same time that the earth revolved round the sun. In that case she would appear every night, and always at the full. Storms, volcanoes, earthquakes, and deserts have been often argued to be defects which mar both the beauty and utility of creation. Changes in the polar regions, in the physical character of Africa, in the position of the Asiatic continent, and in the Pacific Ocean, have been suggested as improvements on the constitution of the world. The actual climates of various countries have been maintained to be not the most favourable to life which are possible under the existing laws of nature.^[42]

A little reflection will enable us to assign its just value to such criticism of creation. Remark, then, in the first place, that there may be abundant evidence of intelligence where there is not evidence of perfect intelligence. Although very considerable defects were clearly shown to exist in the constitution and arrangements of the physical world, there might yet be ample and unmistakable proof of the vast wisdom of its Author. Were it even true that science could show that the mechanism of the heavens, and the distribution of land and sea, heat and cold, on earth, were not in every respect the best, that would not prove that there was no intelligence, no design whatever, involved therein. The question, Did the earth and the solar system originate with intelligence? is distinct from the question, Was the intelligence in which they originated perfect? It is conceivable that the one question might have to be answered in the affirmative and the other in the negative. It is obvious that the former question ought to be considered apart from and before the latter. The theist proposes, of course, to prove in the end that there is a perfect intelligence, but he is content to establish at first that there is an intelligence. Aware that whoever admits intelligence to be the first cause of the universe may be forced also to admit that the creative intelligence is perfect, he is under no temptation himself to confound two entirely distinct questions, and he is obviously entitled to protest against so illogical a procedure in others.

Remark, in the second place, that we are plainly very incompetent critics of a system so vast as the universe. We are only able to survey a small portion of it, and the little that we perceive we imperfectly comprehend. We see but an exceedingly short way before us into the future, and can form only the vaguest and most general conception of the final goal to which creation, as a whole, is tending. This need not, and ought not, to prevent us from recognising the evident indications of intelligence which fall within our range of apprehension; but it may well cause us to hesitate before pronouncing that this or that peculiarity, which appears to us a defect, is an absolute error or evil. There is no one who would not feel it very unwise to pronounce an apparent defect, even in an elaborate human mechanism with which he was only imperfectly acquainted, an unmistakable blunder, and surely far more caution is required in a critic of the constitution of the universe; for, as Bishop Butler truly observes, "The most slight and superficial view of any human contrivance comes abundantly nearer to a thorough knowledge of it than that part which we know of the government of the world does to the general scheme and system of it." All Nature is one great whole, and each thing in it has, as I have previously had to insist, a multitude of uses and relations, with reference to all of which it must be viewed, in order that a complete and

definitive judgment regarding it may be formed. Has this fact been adequately realised by those who have criticised, in the manner which has been indicated, the wisdom displayed in the system of Nature? I think not. In regard to the moon, it would seem that, even if that luminary were intended to serve no other purpose than to give light on earth, it is not the Maker of it who has blundered, but Comte and Laplace. The real consequences of their pretended improvement have been shown to be that the moon would give sixteen times less light than it does, and be in constant danger of extinction. In other words, what they have demonstrated is, that their own mathematical and mechanical knowledge was so inferior to that of the intelligence which placed the moon where it is, that they could not appreciate the correctness of its procedure in the solution of a comparatively simple astronomical problem. But even if the change which they suggested would really have rendered the moon a better lamp to the inhabitants of the earth, they were not entitled to infer that it was an error to have placed it elsewhere, unless they were warranted to assume that the moon was meant merely to be a lamp to the inhabitants of the earth. But that they were clearly not entitled to assume. To give light on earth is a use of the moon, but it is foolish to imagine that this is its sole use. It serves other known ends, such as raising the tides, and may serve many ends wholly unknown to us. So in regard to volcanoes, earthquakes, &c. Any single generation of men and beasts might well dispense, perhaps, with their existence, and yet they may be most appropriate instrumentalities for securing order and welfare in the economy of the universe as a whole. It is not by their relations to the present and local only, but by their relations to all the past and future of the entire system of things, that they are to be judged of. If Greenland were submerged, and the Asiatic and North American continents so altered that no large rivers should flow into the polar ocean, the climate of Iceland and Canada might be greatly improved. Would the world thereby, however, be made better as a whole, and throughout all its future history? He must be either a very wise man or a very foolish one who answers this question by a decided affirmation; and yet he who cannot so answer it has obviously no right to hold that the changes mentioned would really be improvements.

Could we survey the whole universe, and mark how all its several parts were related to each other and to the whole, we might intelligently determine whether or not an apparent defect in it was real; but we cannot do this with our present powers. We can readily imagine that any one thing in the world, looked at by itself or in relation to only a few other objects, might be much better than it is, but we cannot show that the general system of things would not be deranged and deteriorated thereby. Considered merely in reference to man, the relative imperfections of the world may be real advantages. A world so perfect that man could not improve it, would probably be, paradoxical as the statement may sound, one of the most imperfect worlds men could be placed in. An imperfect world, or in other words, a world which can be improved, can alone be a fitting habitation for progressive beings. Scripture does not represent nature even before the Fall as perfect and incapable of improvement, but only as "very good;" and still less does it require us to believe that the actual course of nature is perfect. The true relation of man to nature can only be realised when the latter is perceived to be imperfect,—a thing to be ruled, not to be obeyed—improved, not imitated—and yet a thing which is essentially good relatively to the wants and powers of its inhabitants. No created system, it must further be remembered, can be *perfect* in the sense of being *the best possible*. None can be so good but that a better may be imagined. What is created must be finite in its perfections, and whatever is finite can be imagined to be increased and improved. The Creator Himself—the absolutely perfect God—the Highest Good—is, as Plato and Anselm so profoundly taught, the only best possible Being. In Him alone the actual is coincident and identical with the possible, the real with the ideal. Whoever receives this truth as it ought to be received, cannot fail to see that all speculations as to a best possible world, and all judgments of the actual world based on such speculations, are vain and idle imaginations.^[43]

I may add, that when a man argues, as Comte does, that we can know nothing of final causes, nothing of the purposes which things are meant to accomplish, and yet that they might have realised their final causes, fulfilled their purposes, better than they do, he obviously takes up a very untenable and self-contradictory position. If we can have no notion of the purpose of a thing, we cannot judge whether it is fulfilling its purpose or not, whether it is fulfilling it well or ill. The denial of the possibility of knowing the ends of things is inconsistent with the assertion that things might have been constituted and arranged in a happier and more advantageous manner.

Organic nature has been still more severely criticised than the inorganic world. There have been pointed out a few fully developed organs, as, for example, the spleen, of which the uses are unknown, and a multitude of organs so imperfectly developed as to be incapable of performing any serviceable functions. Even the most elaborate organisms have been maintained to have essential defects; thus the eye has been argued by Helmholtz to be not a perfect optical instrument, and on the strength of the proof one writer at least has declared that if a human optician were to blunder as badly as the supposed author of eyes must have done, he would be hissed out of his trade. Stress has been laid on the fact that abortions and monsters are not rare. Many seemingly intelligent contrivances, we are reminded, serve mainly to inflict pain and destruction. And the inference has been drawn that the first cause of organic existences was not Divine Wisdom but mere matter and blind force.

The considerations which have already been brought forward should enable us to answer all reasonings of this kind. An organ is not to be pronounced useless because its uses have not yet been discovered. To the extent that evolutionism is true, rudimentary and obsolete organs are accounted for, and the wisdom displayed in them amply vindicated; and if evolutionism be not true, they can still be explained on the theory of types. They are stages in the realisation of the

Divine conception; indications of an order which comprehends and conditions the law of use and contrivance for use; keys to the understanding of the Divine plan. Theism cannot have much to fear from the fact that all human eyes are limited in their range and finite in their perfections, or even from the fact that a great many persons have very bad eyesight. Whatever may be its imperfections, the eye, if viewed with a comprehensive regard to its manifold uses and possibilities, must be admitted by every unprejudiced judge to be incomparably superior to every other optical instrument: indeed it is the only real optical instrument; all so-called optical instruments are merely aids and supplements to it. If the eye had been absolutely perfect, its modification or evolution could only have been deterioration, artificial optical instruments would not have been needed, and all man's relations to creation must have been essentially different from what they are. Who can rationally assure us that this was to be desired? Abortions and monsters are at least exceptions. If mind were not what is ultimate in the universe—if nature worked blindly—if there were any truth in what Lange and Huxley have said of her procedure, that it is "like shooting a million or more loaded guns in a field to kill one hare,"—this could not be the case; the bullets which miss would then be incalculably more numerous than those which hit, and the evidence of her failures ought to be strewn far more thickly around us than the remains of her successes; there would be, as it were, no course of nature because of the multitude of deviations, no rule in nature because of the multitude of exceptions. But what are the facts? These: the lowest organisms are as perfectly adapted to their circumstances as the highest, the earliest as the latest; there is a vast amount of death and a vast amount of life in the world, but, whatever some men may thoughtlessly assert, no man can show that there is too much of either, any real waste, if the wants of creation as a whole are to be provided for; abortions and monsters, which are the only things in nature which can be plausibly characterised as "failures," as "bullets which have fallen wide of the mark," are comparatively few and far between; and the monsters, even, are not really exceptions to law and order, are not strictly monsters. The labours of teratologists have scientifically established the grand general result that there are no monsters in nature in the sense which Empedocles imagined; none except in the sense in which a man who gets his leg broken is a monster. A monster is simply a being to whom an accident not fatal has happened in the womb. Why should an accident not occur there as well as elsewhere? Why should God not act by general laws there as well as elsewhere? Who is entitled to say that any result of His general laws is a failure; that any so-called accident was not included in His plan; that a world in which a child could not be born deformed nor a grown man have a leg broken, would be, were all things taken into account, as good as the world in which we actually live? Huxley, Lange, and those whom they represent, have failed to show us any of nature's "bullets which have missed the mark," and have not sufficiently, I think, realised how imperfect might be their own perception of nature's target. The contrivances for the infliction of pain and death displayed in the structure of animals of prey are none the less evidences of intelligence because they are not also, at least immediately or directly, evidences of beneficence. Intelligence is one thing, benevolence is another, and what conclusively disproved benevolence might conclusively prove intelligence.^[44]

II.

Let us pass on to the contemplation of greater difficulties; to suffering, which seems to conflict with the benevolence of God—and to sin, which seems irreconcilable with His righteousness.

I cannot agree with those who think that there is no mystery in mere pain; that it is sufficiently accounted for by moral evil, and involves no separate problem. The history of suffering began on our planet long before that of sin; ages prior to the appearance of man, earth was a scene of war and mutual destruction; hunger and fear, violence and agony, disease and death, have prevailed throughout the air, the land, and ocean, ever since they were tenanted. And what connection in reason can there be between the sin of men or the sin of angels and the suffering endured or inflicted by primeval saurians? The suffering of the animals is, in fact, more mysterious than the suffering of man, just because so little of the former and so much of the latter can be traced, directly or indirectly, to sin. But every animal is made subject to suffering; every animal appetite springs out of a want; every sense and every faculty of every animal are so constituted as to be in certain circumstances sources of pain; hosts of animals are so constructed that they can only live by rending and devouring other animals; no large animal can move without crushing and killing numbers of minute yet sentient creatures. How can all this be under the government of Infinite Goodness?

The human mind may very probably be unable fully to answer this question. It can only hope truthfully to answer it even in a measure by studying the relevant facts, the actual effects and natural tendencies of suffering; general speculations are not likely to profit it much. Now, among the relevant facts, one of the most manifest is that pain serves to warn animals against what would injure or destroy them. It has a preservative use. Were animals unsusceptible of pain, they would be in continual peril. Bayle has ingeniously devised some hypotheses with a view to show that pain might have safely been dispensed with in the animal constitution, but they are obviously insufficient. It would be rash to affirm that pain is indispensable as a warning against danger, but certainly no one has shown how it could be dispensed with, or even plausibly imagined how it might be dispensed with. For anything we can see or even conceive, animal organisms could only be preserved in a world like ours by being endowed with a susceptibility to pain. For anything we know or can even imagine, the demand that there should be no pain is implicitly a demand that there should be no animal life and no world like the earth;—a most foolish and presumptuous demand. But however this may be, pain has, as a fact, plain reference to the prevention of physical injury. "Painful sensations," says Professor Le Conte, "are only watchful vedettes upon

the outposts of our organism to warn us of approaching danger. Without these, the citadel of our life would be quickly surprised and taken." Now, to the whole extent that what has just been said is true, pain is not evil but good, and justifies both itself and its author. It is not an end in itself, but a means to an end, and its end is a benevolent one. The character of pain itself is such as to indicate that its author must be a benevolent being,—one who does not afflict for his own pleasure, but for his creatures' profit.

Another fact makes this still more evident. Pain is a stimulus to exertion, and it is only through exertion that the faculties are disciplined and developed. Every appetite originates in the experience of a want, and the experience of a want is a pain; but what would the animals be without their appetites and the activities to which these give rise? Would they be the magnificent and beautiful creatures so many of them are? If the hare had no fear, would it be as swift as it is? If the lion had no hunger, would it be as strong as it is? If man had nothing to struggle with, would he be as enterprising, as ingenious, as variously skilled and educated as he is? Pain tends to the perfection of the animals. It has, that is to say, a good end; an end which justifies its use; one which would do so even if perfection should not be conducive to happiness. Perfection, it seems to me, is a worthy aim in itself, and the pain which naturally tends to it is no real evil, and needs no apology. I fail to see that the nearest approximation to the ideal of animal life is the existence of a well-fed hog, which does not need to exert itself, and is not designed for the slaughter. Whatever pain is needed to make the animals so exercise their faculties as to improve and develop their natures, has been wisely and rightly allotted to them. We assign a low aim to Providence when we affirm that it looks merely to the happiness even of the animals. It would be no disproof of benevolence in the Creator if pain in the creatures tended simply to perfection and not to happiness; while it must be regarded as a proof of His benevolence if the means which lead to perfection lead also to happiness. And this they do. The pain which gives rise to exertion and the pain which is involved in exertion are, as a rule, amply rewarded even with pleasure. Perhaps susceptibility to pain is a necessary condition of susceptibility to pleasure; perhaps the bodily organism could not be capable of pleasure and insensible to pain; but whether this be the case or not, it is a plain and certain matter of fact that the activities which pain originates are the chief sources of enjoyment throughout the animal creation. This fact entitles us to hold that pain itself is an evidence of the benevolence of God. The perfecting power of suffering is seen in its highest form not in the brute, but in man; not in its effects on the body, but in its influence on the mind. It is of incalculable use in correcting and disciplining the spirit. It serves to soften the hard of heart, to subdue the proud, to produce fortitude and patience, to expand the sympathies, to exercise the religious affections, to refine, strengthen, and elevate the entire disposition. To come out pure gold, the character must pass through the furnace of affliction. And no one who has borne suffering aright has ever complained that he had been called on to endure too much of it. On the contrary, all the noblest of our race have learned from experience to count suffering not an evil but a privilege, and to rejoice in it as working out in them, through its purifying and perfecting power, an eternal weight of glory.

In the measure that the theory of evolution can be established, the wisdom and benevolence displayed in pain would seem to receive confirmation. So far as that theory can be proved, want, the struggle for existence, the sufferings which flow from it, and death itself, must, it would appear, be regarded as means to the formation, improvement, and adornment of species and races. The afflictions which befall individuals will in this case be scientifically demonstrated to have a reference not merely to their own good, but to the welfare of their kind in all future time. The truth that nothing lives or dies to itself would thus receive remarkable verification. But although it should never receive this verification, although a strictly scientific proof of it shall never be forthcoming, there is already sufficient evidence for it of an obvious and unambiguous kind. Every being, and the animated certainly not less than the inanimate, is adjusted, as I have previously had occasion to show, to every other. "All are but parts of one stupendous whole." This is a truth which throws a kindly and cheering light on many an otherwise dark and depressing fact. Turn it even towards death. Can death itself, when seen in the light of it, be denied to be an evidence of benevolence? I think not. The law of animal generation makes necessary the law of animal death, if the largest amount of animal happiness is to be secured. If there had been less death there must have been also less life, and what life there was must have been poorer and meaner. Death is a condition of the prolificness of nature, the multiplicity of species, the succession of generations, the coexistence of the young and the old; and these things, it cannot reasonably be doubted, add immensely to the sum of animal happiness.

Such considerations as have now been indicated are sufficient to show that suffering is a means to ends which only a benevolent Being can be conceived of as designing. They show that pain and death are not what they would have been if a malevolent Being had contrived them; that they are characterised by peculiarities which only love and mercy can explain. We do not need for any practical spiritual purpose to know more than this. An objector may still ask, Could not God have attained all good ends without employing any painful means? He may still confront us with the Epicurean dilemma: "The Deity is either willing to take away all evil, but is not able to do so, in which case He is not omnipotent; or He is able to remove the evil, but is not willing, in which case He is not benevolent; or He is neither willing nor able, which is a denial of the Divine perfections; or He is both able and willing to do away with the evil, and yet it exists." But only superficial and immature minds will attach much weight to questionings and reasonings of this kind. A slight tincture of inductive science will suffice to make any man aware that speculations as to what God can or can not do, as to what the universe might or might not have been, belong to a very different region from investigations into the tendencies of real facts and processes. It would seem as if, with our present faculties, these speculations could lead us to no reliable

conclusions. We clearly perceive that pain and death serve many good ends; but we should require a knowledge of God and of the universe far beyond that which we possess, to be able to state, even as an intelligent conjecture, that these evils could be wisely dispensed with, or that there is anything in them in the least inconsistent either with the power or the benevolence of God.^[45]

A large amount of human suffering is accounted for by its connection with human sin. Whatever so-called physical evil is needed to prevent moral evil, or to punish it, or to cure it, or to discipline in moral good, is not really evil. Any earthly suffering which saves us from sin is to be classed among benefits. There is nothing to perplex either mind or heart in the circumstance that sin causes a profound and widespread unhappiness. It is strange that it should sometimes apparently produce so little misery; only a dull conscience, I think, will be surprised that it produces so much. It is merely in so far as physical evil is dissociated from moral evil that its existence is a problem and a perplexity. But the very existence of moral evil is a most painful mystery. The absence of physical evil while moral evil was present would be inconsistent with a moral government of the world; whereas if moral evil were removed no real difficulty would be left. Physical evil may be a relative good, which God can easily be conceived of as causing and approving; moral evil is an unconditional evil, and cannot be the work of any morally perfect being.

Have we any reason, however, to suppose that sin is willed by God in the sense either of being caused or approved by Him? All the sin we know of on earth is willed by man, and all the sin which Scripture tells us of as existing elsewhere is said to be willed by evil spirits; neither nature nor Scripture informs us that there is any moral evil willed by God. In other words, there are no facts which refer us to God as the author of evil. In the absence of facts, we can, it is true, form conjectures, and give expression to them in such questions as, How could God make beings capable of sinning? Why did He not prevent them sinning? Wherefore has He permitted sin to endure so long and spread so widely? But thoughtful searchers for truth, at least after a certain age, cannot feel much interested in, or much perplexed by, questions like these. They will be quite willing to leave the discussion of them to debating societies. They will resolutely refuse to assign the same value to conjectures as to facts.

Sin is not God's work. Moral order may exist without moral disorder, but moral disorder can only exist as rebellion against moral order. The very notion of moral evil implies a moral good which it contravenes, and a moral law by which it is condemned. It can never be thought of as other than a something grafted on nature, by which nature is perverted and depraved. It is not natural, but unnatural; not primary and original, but secondary and derivative; not the law, but the violation of the law.

"The primal Will, innately good, hath never
Swerved, or from its own perfect self declined."

Between this Will and sin there are ever interposed created wills, which are conscious of their power to choose good or evil, obedience or disobedience to God's law. God bestows on His creatures only good gifts, but one of the best of all these gifts includes in its very nature ability to abuse and pervert itself and all things else. Freewill needs no vindication, for it is the primary and indispensable condition of moral agency. Without it there might be a certain animal goodness, but there could be no true virtue. A virtuous being is one which chooses of its own accord to do what is right. The notion of a moral creature being governed and guided without the concurrence and approval of its own will is a contradiction. If God desired to have moral creatures in His universe He could only have them by endowing them with freewill, which is the power to accept or reject His own will. The determination to create moral beings was a determination to create beings who should be the causes of their own actions, and who might set aside His own law. It was a determination to limit His own will to that extent and in that manner. Hence, when He created moral beings, and these beings, in the free exercise of their power, violated His law, sin entered into the world, but not through His will. It resulted from the exercise of an original good gift which He had bestowed on certain of His creatures, who could abuse that gift, but were not necessitated to abuse it. Their abuse of it was their own action, and the action consisted not in conforming to, but in contravening, God's will. Thus, God's character is not stained by the sins which His creatures have committed.

But, it will be objected, could not God have made moral creatures who would be certain always to choose what is right, always to acquiesce in His own holy will? and if He could do this, why did He not? Why did He create a class of moral creatures whom He could not but foresee to be certain to abuse their power of choice between obedience and disobedience to His law? Well, far be it from me to deny that God could have originated a sinless moral system. If anything I have already said be understood to imply this, it has been completely misunderstood. I have no doubt that God has actually made many moral beings who are certain never to oppose their own wills to His; or that He might, if it had so pleased Him, have created only such angels as were sure to keep their first estate. But if questioned as to why He has not done the latter, I feel no shame in confessing my ignorance. It seems to me that when you have resolved the problem of the origin of moral evil into the question, Why has God not originated a moral universe in which the lowest moral being would be as excellent as the archangels are? you have at once shown it to be speculatively incapable of solution and practically without importance. The question is one which would obviously give rise to another, Why has God not created only moral beings as much superior to the archangels as they are superior to the lowest Australian aborigines? and that to

still another of the same kind, and so on *ad infinitum*? But no complete answer can be given to a question which may be followed by a series of similar questions to which there is no end. We have, besides, neither the facts nor the faculties requisite to answer such questions. A merely imaginary universe is one on which we have no data to reason. We who are so incompetent judges of the actual universe, notwithstanding the various opportunities which we possess of studying it, and the special adaptation of our organs and powers to the objects which it presents, can have no right to affirm its inferiority to any universe which we can imagine as possible. The best world, we may be assured, that our fancies can feign, would in reality be far inferior to the world God has made, whatever imperfections we may think we see in it. We ought to be content if we can show that what God has done is wise and right, and not perplex ourselves as to why He has not done an infinity of other things, the propriety of which we cannot possibly estimate aright or as parts of any scheme unlimited in extent and eternal in duration.

Sin, then, is not God's work, and we are unable to prove that He ought to have prevented it. Can we go any farther than this? Yes; we can show that the permission of it has been made subservient to the attainment of certain great ends. Man has the power to choose evil, but God has also the power to overrule it—to cause it, as it were, to contradict itself, to work out its own defeat and disgrace, to promote what it threatens to hinder; and the facts of experience and history show us that this is what He does. There is thus developed in His human creatures a higher kind of virtue than that of mere innocence; a virtue which can only be reached through suffering, and conflict, and conquest. The struggle with moral evil, still more than that with physical disadvantages and intellectual difficulties, tests and exercises the soul, teaches it its weakness and dependence on Divine strength, and elicits and trains its spiritual faculties. Successive battles with vice raise honest combatants to successive stages of virtue. The type of character presented to us in the second Adam is no bare restoration of that which was lost in the first Adam, but one immeasurably superior. The humblest of true Christians now aspires after a far grander moral ideal than that of an untested innocence. Is there not in this fact a vindication of God's wisdom and holiness worth more than volumes of abstract speculation?

Due weight ought also to be given to the circumstance that the system of God's moral government of our race is only in course of development. We can see but a small part of it, for the rest is as yet unevolved. History is not a whole, but the initial or preliminary portion of a process which may be of vast duration, and the sequel of which may be far grander than the past has been. That portion of the process which has been already accomplished, small though it be, indicates the direction which is being taken; it is, on the whole, a progressive movement; a movement bearing humanity towards truth, freedom, and justice. Is it scientific, or in any wise reasonable, to believe that the process will not advance to its legitimate goal? Surely not. The physical history of the earth affords abundant evidence of the realisation of the most comprehensive plans, and no indication of failure. We can have no right to imagine that it will be otherwise in the moral sphere; that the ideals towards which history shows humanity to have been approaching in the past will not be reached even in the most distant future. But if moral progress will, no less than physical progress, be carried on unto completion, the future cannot fail to throw light on the past—cannot fail to some extent to justify the past. The slowness of the progress may perplex us, and yet, perhaps, it is just what we ought to expect, both from God's greatness and our own littleness. He is patient because eternal. His plans stretch from everlasting to everlasting, and a thousand years are in His sight but as yesterday when it is past. We have not the faculties which fit us for rapid movements and vast achievements. We need to be conducted by easy and circuitous courses. "Lofty heights must be ascended by winding paths."

"We have not wings, we cannot soar,
But we have feet to scale and climb
By slow degrees, by more and more,
The cloudy summits of our time."

It must be added that whoever acknowledges Christianity to be a revelation from God, must see in it reasons which go far to explain the permission of sin. There is, it is true, in the authoritative records of the Christian religion, the Hebrew and Greek Scriptures, no explanation of the origin of moral evil as a speculative problem. The account of the first parents of the human race introducing sin into the world by yielding to the seduction of a being who had himself sinned, is wholly of a historical character, and can neither be compared nor contrasted with the theories of philosophers as to the nature, possibility, and cause of sin. To measure the one by the others, or to set the one over against the others, is to do injustice both to Scripture and philosophy. But the whole scheme of Christianity must seem to those who accept it the strongest possible of practical grounds for the Divine permission of man's abuse of freewill. The existence of sin has, according to the Christian view, been the occasion and condition of a manifestation of the Divine character far more glorious than that which had been given by the creation of the heavens and the earth. It called forth a display of justice, love, and mercy before which all moral beings in the universe may well bow down in wonder and adoration, and man especially with unspeakable gratitude. If God has really manifested Himself in Christ for the reconciliation of the world to Himself, His permission of sin has certainly to all practical intents been amply justified.

But I must conclude. Let it be in leaving with you the lesson that belief in conscience and belief in God—belief in the moral order of the universe and belief in a moral Governor and Judge—are most intimately connected and mutually support each other. Many of you will remember how Robertson of Brighton,—when describing the crisis of the conflict between doubt and faith in the awful hour in which, as he says, life has lost its meaning, and the grave appears to be the end of

all, and the sky above the universe is a dead expanse, black with the void from which God has disappeared,—tells us that he knows but of one way in which a man may come forth from this agony scatheless—namely, by holding fast to those things which are certain still, the grand, simple landmarks of morality. "In the darkest hour," are his words, "through which a human soul can pass, whatever else is doubtful, this at least is certain,—If there be no God, and no future state, even then, it is better to be generous than selfish, better to be chaste than licentious, better to be brave than to be a coward. Blessed, beyond all earthly blessedness, is the man who in the tempestuous darkness of the soul has dared to hold fast to these venerable landmarks. Thrice blessed is he who, when all is drear and cheerless within and without, when his teachers terrify him and his friends shrink from him, has obstinately clung to moral good. Thrice blessed, because his night shall pass into clear bright day." Now there is a great truth, a most sacred and solemn truth, in these words. But it is only a half truth, and it should not be mistaken for the whole truth. It is not less true, and it is true, perhaps, of a far greater number of human souls, that there are dark and dreadful hours when they are tempted to believe that virtue is but a name, that generosity is not better than selfishness, truth not better than falsehood, and the courage which defends a post of dangerous duty not better than the cowardice which abandons it; and in these hours I know not how the soul is to regain its trust in human goodness, except by holding fast its faith in Divine goodness; or how it can be strengthened to cling to what is right, except by cleaving to God. It is as possible to doubt of the authority of conscience as to doubt of the existence of God. There are few souls which have not their Philippi, when they are tempted to cry like Brutus, "O virtue, thou art but an empty name!" Blessed in such an hour is he who, feeling himself to be sinking in gloomy waters, cries to that God who is able to rescue him from the abyss, and clings to that justice in heaven which is the pledge that justice will be done on earth below. Thrice blessed, because he will be guided through the darkness of a sea of doubts even thus terrible to a haven of light and safety. Faith in duty helps us to faith in God: faith in God helps us to faith in duty. Duty and God, God and duty, that is the full truth.^[46]

LECTURE IX.

A PRIORI THEISTIC PROOF.

I.

The arguments which we have been considering are not merely proofs that God is, but indications of what He is. They testify to the Divine existence by exhibiting the Divine character. They are expressions of how He manifests Himself, and expositions of how we apprehend His self-manifestations. We have seen that against each of them various objections have been urged, but that these objections when examined do not approve themselves to reason; they leave the arguments against which they have been thrown quite unshaken. These arguments, however, although perfectly conclusive so far as they go, do not, even in combination, yield us the full idea of God which is entertained wherever theism prevails. They show Him to be the First Cause of the world—the Source of all the power, wisdom, and goodness displayed therein. They do not prove Him to be infinite, eternal, absolute in being and perfection. Yet it cannot be questioned that the cultivated human mind thinks of God as the absolute, infinite, eternal, perfect First Cause, and that no lower idea of God can satisfy it. The intellect cannot accept, and the heart also revolts against, the thought that God is dependent on any antecedent or higher Being; that He is limited to a portion either of time or space; or that He is devoid of any excellence, deficient in any perfection. Such a thought is rejected as at once utterly unworthy of its object, and inherently inconsistent.

Are we, then, rationally warranted to assign to God those attributes which are called absolute or incommunicable? This is the question we have now to answer. What has been proved makes it comparatively easy to establish what is still unproved. We have ascertained that there is a God, the First Cause of the universe, the powerful, wise, good, and righteous Author of all things. We are conscious, also, that we have ideas of infinity, eternity, necessary existence, perfection, &c. We may be doubtful as to whence we got these ideas—we may feel that there is very much which is vague and perplexing in them; but we cannot question or deny that we have them. Having them, no matter how or whence we have got them, and knowing that God is, as also in a measure what He is, the remaining question for us is, Must these ideas apply to God or not? Must the First Cause be thought of as eternal or not—as infinite or finite, as perfect or imperfect? Reason, after it has reached a certain stage of culture, has never found this a difficult question. Indeed, often even before freeing itself from polytheism, it has been internally constrained to ascribe to some of the objects of adoration those very attributes of eternity, infinity, and perfection which polytheism implicitly denies. Once it has come to believe that the universe has its origin in a rational and righteous creative Will, it can hardly refuse to admit that that Will must be infinite and eternal. Where it has rejected polytheism without accepting theism, it has been forced to acknowledge the world itself to be infinite and eternal. When it has risen beyond the world, when it has reached an intelligent cause of the world, it cannot, of course, refuse to that cause the perfections which it would have granted to the effect—to the Creator what it would have attributed to the creation. The first and ultimate Being, and not any derived and dependent Being, must obviously be the infinite, eternal, and perfect Being.

The proof that God is absolute in being and perfection should, it seems to me, not precede but

follow the proofs that there is a cause sufficiently powerful, wise, and good to account for physical nature, the mind of man, and the course of history. The usual mode of conducting the theistic argumentation has been the reverse; it has been to begin by endeavouring to prove, from principles held to be intuitive and ideas held to be innate, the necessary existence, absolute perfection, infinity, and eternity of God; or, in other words, with what is called the *a priori* or ontological arguments. This mode of procedure seems to me neither judicious nor effective. If we have not established that there is a God by reasoning from facts, we must demonstrate His existence from ideas: but to get from the ideal to the actual may be impossible, and is certain to be difficult; whereas, if we have allowed facts to teach us all that they legitimately can about the existence, power, wisdom, and righteousness of God, it may be easy to show that our ideas of absolute being and perfection must apply to Him, and can only apply to Him.

Theism, according to the view now expressed, is not vitally interested in the fate of the so-called *a priori* or ontological arguments. There may be serious defects in all these arguments, considered as formal demonstrations, and yet the conclusion which it is their aim to establish may be in no way compromised. It may be that the principles on which they rest do not directly involve the existence of God, and yet that they certainly, although indirectly, imply it, so that whoever denies it is rationally bound to set aside the fundamental conditions of thought, and to deem consciousness essentially delusive. It may be that the *a priori* arguments are faulty as logical evolutions of the truth of the Divine existence from ultimate and necessary conceptions, and yet that they concur in manifesting that if God be not, the human mind is of its very nature self-contradictory; that God can only be disbelieved in at the cost of reducing the whole world of thought to a chaos. Whether this be the case or not, some of the *a priori* proofs are so celebrated that I cannot pass them over in entire silence.^[47]

There is a charge which has been very often brought against the *a priori* proofs, but which may be at once set aside as incorrect. It has been alleged that they proceed on forgetfulness of the truth that the Divine existence is the first and highest reality, and therefore cannot be demonstrated from anything prior to or higher than itself. But in no case that I know of have those who adopted what they supposed to be the *a priori* line of argument been under the delusion that the ground of the existence of God was not in Himself, but in something outside of or above Himself, from which His existence could be deduced. Such a notion is, in fact, so self-contradictory, that no sane mind could deliberately entertain it. It would imply that theism could be founded on atheism. Whatever *a priori* proof of the Divine existence may be, it has certainly never been imagined by those who employed it to be demonstration from an antecedent necessary cause.^[48]

A *a priori* proof is proof which proceeds from primary and necessary principles of thought. From its very nature it could only appear at a comparatively late period in the history of intelligence. It is only a profound study of the constitution of thought, only a refined reflective analysis of consciousness into its elements, which can bring to light the principles which necessarily underlie and govern all intellectual activity; and it is only on these principles that a *a priori* proof is based. As these principles never exist in an absolutely pure form, as what is universal and necessary in thought is never found wholly apart from what is particular and contingent, no absolutely pure *a priori* argumentation need be looked for, and certainly none such can be discovered in the whole history of speculation.

Plato was, perhaps, the first to attempt to prove the existence of God from the essential principles of knowledge. He could not consistently reason from the impressions of sense or the phenomena of the visible world. He denied that sense is knowledge, and that visible things can be more than images and indications of truth. He maintained, however, that besides the visible world there is an intelligible world, with objects which reason sees and not sense. These objects are either conceptions or ideas, either hypothetical principles or absolute principles, either scientific assumptions and definitions or necessary and eternal truths which have their reality and evidence in themselves. The mathematical sciences deal with conceptions; but their chief value, according to Plato, is that they help the mind to rise to that absolute science—dialectics—which is conversant with ideas. The apprehension of ideas is the apprehension of the common element in the manifold, the universal in the individual, the permanent in the mutable. Reason contemplates ideas, and participates in ideas, and ideas are at once the essences of things and the regulative principles of cognition. By communion with them the reason reaches objective reality and possesses subjective certainty. They are not isolated and unconnected, but so related that each higher idea comprehends within it several lower ones, and that all combined constitute a graduated series or articulated organism, unified and completed by an idea which has none higher than itself, which is ultimate, which conditions all the others while it is conditioned by none. The supreme idea, which contains in itself all other ideas, is absolute truth, absolute beauty, absolute good, absolute intelligence, and absolute being. It is the source of all true existence, knowledge, and excellence. It is God. In this part of its course the dialectic of Plato is simply a search for God. It is *a priori* inasmuch as it rests on necessary ideas, but *a posteriori* inasmuch as it proceeds from these ideas upwards to God in a manner which is essentially analytic and inductive. Only when God—the principle of principles—is reached, can it become synthetic and deductive.

The question, Is the Platonic proof of the Divine existence substantially true? is precisely equivalent to the question, Is the Platonic philosophy substantially true? Of course, I cannot here attempt to argue a theme so vast as Spiritualism *versus* Empiricism, Platonism *versus* Positivism. My belief, however, is, that Platonism is substantially true; that the objections which the

empiricism and positivism at present prevalent urge against its fundamental positions are superficial and insufficient; that what is essential in its theory of ideas, and in the theism inseparable from that theory, must abide with our race for ever as a priceless possession. The Platonic argument—by which is meant not a particular argument incidentally employed by Plato, but the reasoning which underlies and pervades his entire philosophy as a speculative search for certainty—has been transmitted from age to age down to the present day by a long series of eminent thinkers. Augustine, for example, argues for the existence of God from the very nature of truth. It is impossible to think that there is no truth. If there were none, to affirm that there was none would be itself true; or, in other words, the denial of the existence of truth is a self-contradiction. But what is truth? It is not mere sensuous perception, not a something which belongs to the individual mind and varies with its moods and peculiarities, but a something which is unsensuous, unchangeable, and universal. The human reason changes and errs in its judgments; but ideas, necessary truths, are not the products, but the laws and conditions, of the human reason—they are over it, and it is only through apprehending, realising, and obeying them, that it enlightens and regulates our nature. These ideas—the laws of our intellectual and moral constitution—cannot have their source in us, but must be eternally inherent in an eternal, unchangeable, and perfect Being. This Being—the absolute truth and ultimate ground of all goodness—is God. Anselm reasoned in altogether the same spirit and in nearly the same manner. In one of his works he institutes an inquiry as to whether the goodness in good actions is or is not the same thing present in all; and when he has convinced himself that it is the same thing, he asks, What is it? and where has it a real existence? Ascending upwards by these stages, Good *is*; Good is *perfect*; Good is *one*; the one perfect Good is God,—he comes to the conclusion that the goodness constitutive of good actions has necessarily its source in God, and that the absolutely and essentially good is identical with God. In another of his works he similarly inquires whether there is any truth except mere actual existence. He holds that there is, and argues, as he had done before in regard to the good, that the absolute and ultimate truth must be God. Thomas Aquinas was at one with Anselm thus far. The very nature of knowledge seemed to him to show that it was in man only through the dependence of the human intelligence on an underived and perfect intelligence.

Among the many modern philosophers who have adopted and enforced the same doctrine I shall refer only to a few. Lord Herbert of Cherbury, the founder of English deism, is very explicit on the subject. He thought of the human mind as united in the closest and most comprehensive way to the Divine mind through the universal notions of what he called the rational instinct. These notions are the laws which every faculty is meant to conform to and obey—the laws of all thought, affection, and action. As to nature and origin, they are, in Herbert's view, Divine; thoughts of God present in the mind of man; true revelations of the Father of spirits to His children. In apprehending one of them we have truly an intuition of a Divine attribute, of some feature of the Divine character. It is through contact, through communion with the Divine Intelligence, Love, and Will, that we know and feel and act. The Divine is the root and the law of human thought, emotion, and conduct. Not afar off, not to be realised by great stretch of intellect, not separated by innumerable existences which intervene between Him and us, but close around us, yea, with nothing between Him and our inmost souls, is the Being with whom we have to do. "In Him," really and without any figure of speech, "we live, and move, and have our being."

Among the various metaphysical proofs of Divine existence employed by Cudworth, one is in like manner founded on the very nature of knowledge. Knowledge, it is argued, is possible only through ideas which have their source in an eternal reason. Sense is not only not the whole of knowledge, but is in itself not at all knowledge; it is wholly relative and individual, and not knowledge until the mind adds to it what is absolute and universal. Knowledge does not begin with what is individual, but with what is universal. The individual is known by being brought under a universal, instead of the universal being gathered from a multitude of individuals. And these universals or ideas which underlie all the knowledge of all men, which originate it and do not originate in it, have existed eternally in the only mode in which truths can be said to be eternal, in an eternal mind. They come to us from an eternal mind, which is their proper home, and of which human reason is an emanation. "From whence it cometh to pass, that all minds, in the several places and ages of the world, have ideas or notions of things exactly alike, and truths indivisibly the same. Truths are not multiplied by the diversity of minds that apprehend them; because they are all but ectypal participations of one and the same original or archetypal mind and truth. As the same face may be reflected in several glasses; and the image of the same sun may be in a thousand eyes at once beholding it; and one and the same voice may be in a thousand ears listening to it: so when innumerable created minds have the same ideas of things, and understand the same truths, it is but one and the same eternal light that is reflected in them all ('that light which enlighteneth every man that cometh into the world,') or the same voice of that one everlasting Word that is never silent, re-echoed by them."

Malebranche's celebrated theory of "seeing all things in God" is but an exaggeration of the doctrine that "God is the light of all our seeing." It found a zealous English defender in John Norris of Bemerton. According to Malebranche and Norris, all objects are seen or understood through ideas, which derive their existence neither from the senses nor from the operations of the mind itself but are created in us by the Deity; and which are not drawn from contemplation of the perfections of the soul, but are inherent in the Divine nature. Better guarded statements of the Platonic argument from necessary ideas will be found in Leibnitz, and Bossuet, and Fenelon.

In the hands of Cousin more was again attempted to be deduced from it than it could legitimately

yield. We may reject, however, his opinion that reason is not individual or personal, without rejecting with it the substance at least of what he has so eloquently said regarding the necessary ideas which govern the reason, or the reasoning by which he seeks to show that truth is incomprehensible without God, and that all thought implies a spontaneous faith in God. The most recent defenders of theism employ in one form or another the same argument. In the works of Ulrici, Hettinger, and Luthardt, of Saisset and Simon, of Thompson and Tulloch, it still holds a prominent place.

I pass from it to indicate the character of some other arguments, which are of a much more formal nature, but which have by no means commanded so wide an assent. In fact, the arguments to which I now refer have never laid hold of the common reason of men. They are the ingenious constructions of highly-gifted metaphysicians, and have awakened much interest in a certain number of speculative minds, but they have not contributed in any considerable degree either to the maintenance or the diffusion of theistic belief, and have had no lengthened continuous history. They obviously stand, therefore, on a very different footing from the proofs which have already been adduced—proofs which are as catholic as the conclusions which they support, or as any of the doctrines of the Christian system.

The Stoic philosopher Cleanthes, author of the famous Hymn to Zeus, argued that every comparison, in affirming or denying one thing to be better than another, implied and presupposed the existence of a superlative or an absolutely good and perfect Being. Centuries later, Boethius had recourse to nearly identical reasoning. It is only, he maintained, through the idea of perfection that we can judge anything to be imperfect; and the consciousness or perception of imperfection leads reason necessarily to believe that there is a perfect existence—one than whom a better cannot be conceived—God. Cleanthes and Boethius were thus the precursors of Anselm, who was, however, the first to endeavour to show that from the very idea of God as the highest Being His necessary reality may be strictly deduced. In consequence, Anselm was the founder of that kind of argumentation which, in the opinion of many, is alone entitled to be described as *a priori* or ontological. He reasoned thus: "The fool may say in his heart, There is no God; but he only proves thereby that he is a fool, for what he says is self-contradictory. Since he denies that there is a God, he has in his mind the idea of God, and that idea implies the existence of God, for it is the idea of a Being than which a higher cannot be conceived. That than which a higher cannot be conceived cannot exist merely as an idea, because what exists merely as an idea is inferior to what exists in reality as well as in idea. The idea of a highest Being which exists merely in thought, is the idea of a highest Being which is not the highest even in thought, but inferior to a highest Being which exists in fact as well as in thought." This reasoning found unfavourable critics even among the contemporaries of Anselm, and has commended itself completely to few. Yet it may fairly be doubted whether it has been conclusively refuted, and some of the objections most frequently urged against it are certainly inadmissible. It is no answer to it, for example, to deny that the idea of God is innate or universal. The argument merely assumes that he who denies that there is a God must have an idea of God. There is also no force, as Anselm showed, in the objection of Gaunilo, that the existence of God can no more be inferred from the idea of a perfect being, than the existence of a perfect island is to be inferred from the idea of such an island. There neither is nor can be an idea of an island which is greater and better than any other that can ever be conceived. Anselm could safely promise that he would make Gaunilo a present of such an island when he had really imagined it. Only one being—an infinite, independent, necessary being—can be perfect in the sense of being greater and better than every other conceivable being. The objection that the ideal can never logically yield the real—that the transition from thought to fact must be in every instance illegitimate—is merely an assertion that the argument is fallacious. It is an assertion which cannot fairly be made until the argument has been exposed and refuted. The argument is that a certain thought of God is found necessarily to imply His existence. The objection that existence is not a predicate, and that the idea of a God who exists is not more complete and perfect than the idea of a God who does not exist, is, perhaps, not incapable of being satisfactorily repelled. Mere existence is not a predicate, but specifications or determinations of existence are predicable. Now the argument nowhere implies that existence is a predicate; it implies only that reality, necessity, and independence of existence are predicates of existence; and it implies this on the ground that existence *in re* can be distinguished from existence *in conceptu*, necessary from contingent existence, self-existence from derived existence. Specific distinctions must surely admit of being predicated. That the exclusion of existence—which here means real and necessary existence—from the idea of God does not leave us with an incomplete idea of God, is not a position, I think, which can be maintained. Take away existence from among the elements in the idea of a perfect being, and the idea becomes either the idea of a nonentity or the idea of an idea, and not the idea of a perfect being at all. Thus, the argument of Anselm is unwarrantably represented as an argument of four terms instead of three. Those who urge the objection seem to me to prove only that if our thought of God be imperfect, a being who merely realised that thought would be an imperfect being; but there is a vast distance between this truism and the paradox that an unreal being may be an ideally perfect being.

The Cartesian proofs have been much and keenly discussed. The one which founds on the fact of our existence and its limitations is manifestly *a posteriori*. The other two both proceed from the idea of a perfect being. The first is, that the idea of an all-perfect and unlimited being is involved in the very consciousness of imperfection and limitation. The imperfect can only be seen in the light of the perfect; the finite cannot be conceived of except in relation to the infinite. But can a finite and imperfect cause—like the human mind or the outward world—be reasonably supposed to originate the idea of an infinite and perfect being? Descartes holds that it cannot; that the idea

of an infinite and perfect being can only be explained by the existence and operation of such a being. Was he correct in this judgment? Perhaps not; but what has been urged in refutation of it is probably by no means conclusive. It has been said that the ideas of infinity and perfection are mere generalisations from experience. But this is a statement which can only be proved on the principles of sensationalism, and never has been proved. It has been likewise said that these ideas are purely subjective, or, in other words, that there may be nothing whatever to correspond to them. But this is a meaningless collocation of words. No finite mind can conceive the infinite, for example, as within itself at all. The human mind can only think of the infinite as without itself. If the infinite be not objective, the idea of the infinite is false and delusive. The infinite, it has been further objected, means merely what is not finite; and the perfect what is not imperfect. So be it; the argument is as valid if the words be taken in that sense as in any other. Only do not add, as some do, that the perfect and the imperfect, the finite and the infinite, are mere verbal correlatives. Such a proposition can be spoken, but it cannot be thought; and it is most undesirable to divorce thought from speech. It has also been urged that all men have not the idea of perfection; that different men have different ideas thereof; and that in each man who possesses it the idea is constantly changing. This must be granted; but it does not affect the argument, which is founded on the existence of the idea of a perfect being, and not on the perfection of the idea itself.

The second form of the Cartesian argument is, that God cannot be thought of as a perfect Being unless He be also thought of as a necessarily existent Being; and that, therefore, the thought of God implies the existence of God. "Just as because," for example, "the equality of its three angles to two right angles is necessarily comprised in the idea of a triangle, the mind is firmly persuaded that the three angles of a triangle are equal to two right angles; so, from its perceiving necessary and eternal existence to be comprised in the idea which it has of an all-perfect Being, it ought manifestly to conclude that this all-perfect Being exists." Kant met this argument thus: "It is a contradiction that there should be a triangle the three angles of which are not equal to two right angles, or that there should be a God who is not necessarily existent. I cannot in either case retain the subject and do away with the predicate. If I assume a triangle, I must take it with its three angles. If I assume a God, I must grant Him to be necessarily existent. But why should I assume either that there is a triangle or that there is a God? I may annul the subject in both cases, and then there will be no contradiction in annulling the predicate in both cases. There may be no such thing as a triangle, why should there be such a Being as God?"

This reasoning of Kant has generally been accepted as conclusive. It does not appear to me to be so. He ought not merely to have asserted but to have shown that we can annul the subject in either of the cases mentioned. We obviously cannot. I can say "there is no triangle," but instead of annulling that implies the idea of a triangle, and from the idea of a triangle it follows that its three angles are equal to two right angles. In like manner I can say "there is no God," but that is not to annul but to imply the idea of God, and it is from the idea of God that, according to Descartes, the existence of God necessarily follows. Kant should have seen that the proposition "there is no God" could be no impediment to an argument the very purpose of which is to prove that that proposition is a self-contradiction. It is futile to meet this by saying that existence ought not to be included in any mere conception, for it is not existence but necessary existence which is included in the conception reasoned from, and that God can be thought of otherwise than as necessarily existent requires to be proved, not assumed. To affirm that existence cannot be given or reached through thought, but only through sense and sensuous experience, can prove nothing except the narrowness of the philosophy on which such a thesis is based.

Cudworth, Leibnitz, and Mendelssohn modified the Cartesian argument last specified in ways which do not greatly differ from one another. It may be doubted whether their modifications were improvements.

In the eighteenth century there were elaborated a great many proofs which claimed to be *a priori* theistic demonstrations based on the notions of existence and causality. Assuming that something is, and that nothing cannot be the cause of something, these arguments attempted to establish that there must be an unoriginated Being of infinite perfection, and possessed of the attributes which we ascribe to God. The most famous of them was, perhaps, that of Dr Samuel Clarke, contained in the Boyle Lecture of 1704. But Dr Richard Fiddes, the Rev. Colin Campbell, Mr Wollaston, Moses Lowman, the Chevalier Ramsay, Dean Hamilton, and many others, devised ingenious demonstrations of a similar nature. It is impossible for me to discuss here their merits and demerits. Probably not one of them has completely satisfied more than a few speculative minds. They are certainly not fitted to carry conviction to the ordinary practical understanding. Yet it is not easy to detect flaws in some of them; and the more carefully they are studied, the more, I am inclined to think, will it be recognised that they are pervaded by a substantial vein of truth. They attempted logically to evolve what was implied in certain primary intuitions or fundamental conditions of the mind, and although they may not have accomplished all that they aimed at, they have at least succeeded in showing that unless there exists an eternal, infinite, and unconditioned Being, the human mind is, in its ultimate principles, self-contradictory and delusive.^[49]

There must, for example, unless consciousness and reason are utterly untrustworthy, be an eternal Being. Present existence necessarily implies to the human intellect eternal existence. The man who says that a finite mind cannot rise to the idea of an eternal Being talks foolishly, for all the thinking of a finite mind implies belief in what he says is inaccessible to human thought. No man can thoughtfully affirm his own existence, or the existence even of a passing fancy of his

mind, or of a grain of sand, without feeling that that affirmation as certainly implies that something existed from all eternity as any mathematical demonstration whatever implies its conclusion. And this truth, that the most transient thing cannot be conceived of as existing unless an eternal Being exist, may be syllogistically expressed and exhibited in a variety of ways, because the contradictions involved in denying it are numerous. This is what has been done by the authors above mentioned with much ingenuity, and by some of them in a manner which never has been and never can be refuted. It may be doubted whether they did wisely in throwing their arguments into syllogistic form; but as nobody ventures to undertake the refutation of them, they must be admitted to be substantially valid. The reasonings of men like Clarke and Fiddes, Lowman and Ramsay, have sufficiently proved that whoever denies such propositions as these,—Something has existed from eternity; The eternal Being must be necessarily existent, immutable, and independent; There is but one unoriginated Being in the universe; The unoriginated Being must be unlimited or perfect in all its attributes, &c.,—inevitably falls into manifest absurdities.

This, it may be objected, is not equivalent to a proof of the existence of an infinite and eternal Being. It leads merely to the alternative, either an infinite and eternal Being exists, or the consciousness and reason of man cannot be trusted. The absolute sceptic will rejoice to have the alternative offered to him; that the human mind is essentially untrustworthy is precisely what he maintains. I answer that I admit that the arguments in question do not amount to a direct positive proof, but that they constitute a *reductio ad absurdum*, which is just as good, and that if they do not exclude absolute scepticism, it is merely because absolute scepticism is willing to accept what is absurd. I am not going to examine absolute scepticism at present. I shall have something to say regarding it when I treat of antitheistic theories. Just now it is sufficient simply to point out that if disbelief in an infinite, self-existent, eternal Being necessarily implies belief in the untrustworthiness of all our mental processes, the absolute sceptic is the only man who can consistently disbelieve in God. Unless we are prepared to believe that no distinction can be established between truth and error—that there is no certainty that our senses and our understandings are not at every moment deceiving us—no real difference between our perceptions when we are awake and our visions when we are asleep—no ground of assurance that we are not as much deluded when following a demonstration of Euclid as any have been who busied themselves in attempting to square the circle,—we must accept all arguments which show that disbelief of the existence of an infinite and eternal Being logically involves a self-contradiction or an absurdity, as not less valid than a direct positive demonstration of the existence of such a Being. If, although I am constrained to conclude that there is an infinite and eternal Being, I may reject the conclusion on the supposition that reason is untrustworthy, I am clearly bound, in self-consistency, to set aside the testimony of my senses also by the assumption that they are habitually delusive. When any view or theory is shown to involve absolute scepticism it is sufficiently refuted, for absolute scepticism effaces the distinction between reason and unreason, and practically prefers unreason to reason.

II.

The *a priori* arguments have a value independent of their truth and of their power to produce conviction. True or false, persuasive or merely perplexing, they are admirable means of disciplining the mind distinctly to apprehend certain ideas which experience cannot yield, yet which must be comprehended in any worthy view taken of God. They help us steadily to contemplate and patiently to consider such abstract and difficult thoughts as those of being, absolute being, necessary being, cause, substance, perfection, infinity, eternity, &c.; and this is a service so great, that it may safely be said—as some writer whose name I cannot recall has said—that they will never be despised so long as speculative thinking is held in repute.

While believing that several of these arguments on the whole accomplish what they undertake, I am not prepared to maintain that any of them are faultless or even conclusive throughout. They are all, probably, much too formal and elaborate, so far as any directly practical purpose is concerned. It ought to be constantly kept in view that they presuppose an immediate apprehension of the infinite, and that their value consists entirely in establishing that that apprehension implies the reality and presence of God. The simplest mode of doing this must be the best. It may be thought that no reasoning at all is needed; that the intuition does not require to be supplemented by any inference; that if the infinite be apprehended, the living God must be self-evidently present to the human mind. But this is plainly a hasty view. Few atheists will deny that something is infinite, or that they immediately apprehend various aspects of infinity. What they refuse to acknowledge is, that the apprehension of the infinite implies more than the boundlessness of space, the eternity of time, and the self-existence of matter. There is certainly some reasoning needed in order to show that this interpretation of the intuition is inadequate. But such reasoning cannot be too direct, for otherwise the function of the intuition is almost certain to be obscured, and argument is almost certain to be credited with accomplishing far more than it really effects.

According to the view of the theistic argumentation which has been given in the present course of lectures, all that is now necessary to complete the theistic proof is very simple indeed. The universe has been shown to have an inconceivably powerful and intelligent cause, a Supreme Creator, who has dealt bountifully with all His creatures, who has given to men a moral law, and who has abundantly manifested in history that He loveth righteousness and hateth iniquity. We are further conscious of having ideas or intuitions of infinity, eternity, necessary existence, and perfection. We may dispute as to whence and how we have got them, but we cannot deny that we possess them. Were any person, for example, to affirm that he did not believe that there is a self-

existent or necessary being—a being which derived its existence from no other and depends upon no other but is what it is in and of itself alone—we should be entitled to tell him either that he did not know the meaning of what he said, or that he did not himself believe what he said. But if we undoubtedly possess these ideas, they must, unless they are wholly delusive—which is what we are unable to conceive—be predicable of some being. The sole question for us is, Of what being? And the whole of our previous argumentation has shut us up to one answer. It must be, Of Him who has been proved to be the First Cause of all things—the Source of all the power, wisdom, and goodness displayed in the universe. It cannot be the universe itself, for that has been shown to be but an effect—to have before and behind it a Mind, a Person. It cannot be ourselves or anything to which our senses can reach, seeing that we and they are finite, contingent, and imperfect. The author of the universe alone—the Father of our spirits, and the Giver of every good and perfect gift—can be uncreated and unconditioned, infinite and perfect.

This completes the idea of God so far as it can be reached or formed by natural reason. And it gives consistency to the idea. The conclusions of the *a posteriori* arguments fail to satisfy either mind or heart until they are connected with, and supplemented by, this intuition of the reason—infinity. The conception of any other than an infinite God—a God unlimited in all perfections—is a self-contradictory conception which the intellect refuses to entertain. The self-contradictions inherent in such a conception have been exposed times without number, and in ways which cannot possibly be refuted. The chief value of most of the *a priori* arguments lies in such demonstration; and no theologian who has thoughtfully discussed either the immanent or the transitive attributes of God has been able to dispense with as much of *a priori* reasoning as necessary to establish that a denial of the eternity, or immutability, or omnipotence, or ubiquity, or omniscience, or any other attribute implied in the infinity of the Divine Being, logically leads to absurdity. If the infinity or independence, for example, of the First Cause be questioned, whoever would maintain it must return some such answer as that which Mr Spencer, although not assenting to it, puts in these words: "If we go a step further, and ask what is the nature of this First Cause, we are driven by an inexorable logic to certain further conclusions. Is the First Cause finite or infinite? If we say finite, we involve ourselves in a dilemma. To think of the First Cause as finite is to think of it as limited. To think of it as limited necessarily implies a conception of something beyond its limits: it is absolutely impossible to conceive a thing as bounded without conceiving a region surrounding its boundaries. What now must we say of this region? If the First Cause is limited, and there consequently lies something outside of it, this something must have no First Cause—must be uncaused. But if we admit that there can be something uncaused, there is no reason to assume a cause for anything. If beyond that finite region over which the First Cause extends there lies a region which we are compelled to regard as infinite, over which it does not extend—if we admit that there is an infinite uncaused surrounding the finite caused—we tacitly abandon the hypothesis of causation altogether. Thus it is impossible to consider the First Cause as finite. And if it cannot be finite it must be infinite. Another inference concerning the First Cause is equally unavoidable. It must be independent. If it is dependent, it cannot be the First Cause; for that must be the First Cause on which it depends. It is not enough to say that it is partially independent; since this implies some necessity which determines its partial dependence, and this necessity, be it what it may, must be a higher cause, or the true First Cause, which is a contradiction. But to think of the First Cause as totally independent, is to think of it as that which exists in the absence of all other existence; seeing that if the presence of any other existence is necessary, it must be partially dependent on that other existence, and so cannot be the First Cause."

It is impossible, I think, to show that we are justified in ascribing to God the attributes most essential to His nature without having recourse to a very considerable extent to reasoning of an *a priori* kind similar to that of which we have a specimen in the passage just quoted. Such reasoning may be perfectly legitimate and conclusive. Mr Spencer, I have said, does not accept as valid the arguments cited. But he admits that from their inferences "there appears to be no escape," characterises their logic as "inexorable," and makes not the slightest attempt directly to refute them. On what grounds, then, does he withhold his assent from them?

One reason is, that the very conclusions which such arguments yield, lead, he thinks, by a logic as inexorable, to self-contradictions as great as those found to be involved in the denial of the infinity, independence, &c., of God. Reasoning from which there appears to be no escape, and in which no logical fallacy can be detected, yields the conclusion that there is an infinite and absolute First Cause; but reasoning as faultless yields also the conclusion that an infinite and absolute First Cause is a self-contradiction—that there is no infinite and absolute First Cause. In other words, an inexorable logic proves both that there is an infinite and absolute First Cause, and that there is none. Therefore it proves nothing at all except the worthlessness of logic when applied to such an idea as that of a First Cause.

Most persons will probably be of opinion that a view like this is its own sufficient refutation; that the reasoning which tries to prove that reasoning may be necessarily and essentially self-contradictory is self-condemned. And they will be quite right in their opinion. If for any proposition the proof and counter-proof be equally cogent—if for contradictories there may be perfect demonstrations—it is not God only, but everything, that we shall have to cease to believe in. Such a *reductio ad absurdum* of a proposition would be also a *reductio ad absurdum* of the reason itself, leaving no inference, no intuition, no perception, to be rationally trusted. A scepticism more absolute and comprehensive than any human being has dared to advocate, would be the only legitimate result. Our whole nature would have to be regarded as a lie. But we need have no fear of reason thus terminating its existence by committing suicide. If we are

disposed to be afraid that the human mind is in danger of so terrible a calamity, an examination of the reasoning by which it has been attempted to show that the idea of an infinite and absolute First Cause involves a variety of contradictions ought speedily to reassure us. Few persons of ordinary reasoning powers, if not committed to a foregone conclusion, will regard as "inexorable logic" the argumentation by which Mr Mansel and Mr Spencer fancy that they show that one and the same Being cannot be a cause, infinite and absolute, or its inferences as those "from which there appears to be no escape." On the contrary, ninety-nine men in a hundred will deem them extremely weak, and possessed of no other plausibility than that which they derive from an inaccurate and ambiguous use of language. There are arguments proving that there is a First Cause, and that the First Cause must be infinite and absolute, in which no fallacy can be detected. But the only arguments which have yet been invented to show that the First Cause cannot without contradiction be thought of as infinite and absolute, are good for little else than to exercise students of logic in the examination of fallacies. The two sets of arguments are by no means of equal worth and weight.

They are also notably different in nature. Those which attempt to prove the First Cause to be infinite and absolute imply no more than that the mind may conclude that such a cause is not finite, dependent, and imperfect. In this there is nothing arrogant. Those which attempt to prove that the First Cause cannot be infinite and absolute are of a much less humble character. They imply that we have a positive and comprehensive knowledge of the First Cause; the infinite, and the absolute; that we can define, compare, and contrast them, and thus find out that they are incompatible and contradictory. But we may be quite unable to do anything of the kind, and yet be fully entitled to hold that the First Cause is not finite, dependent, or imperfect. We may reason *to* the infinite, if we only know what the finite is and is not, without being justified in reasoning *from* the infinite, as if we knew definitely, not to say exhaustively, its nature.

The idea of an infinite First Cause—the idea of the infinite God—contains no self-contradiction; on the contrary, it solves certain otherwise inevitable self-contradictions of thought. It is only by the apprehension of a Being who passeth knowledge that knowledge can be rendered self-consistent; only by the admission that all existence is not included within the conditions of the finite that thought can escape self-destruction. But, of course, we may easily put contradictions into our idea of an infinite Being, by assuming that we know more about unoriginated existence, primary causation, infinity, independence, &c., than we really do, and by defining or describing them in ways for which we have no warrant. The idea of an infinite First Cause is, it must not be forgotten, the idea of an incomprehensible Being. No sane mind can refuse to acknowledge that something is eternal and immense; but we cannot comprehend eternity and immensity, and when we reason as if we comprehended them, we speedily find ourselves involved in absurdities. We may know and believe that God is eternal and immense, but if He be so, we undoubtedly cannot comprehend Him. We cannot think of God otherwise than as self-existent, yet we certainly cannot comprehend the nature of self-existence. We can think of it negatively as unoriginated and independent existence, and consequently as a positive, most perfect, and peculiar manner of existence, unlike that which is characteristic of ourselves and other finite beings; but we are ignorant wherein its peculiarities and perfections positively consist.

The incomprehensibility of the Divine perfections is no reasonable objection against their reality. We do not comprehend the manner even of our own existence, although we are quite certain that we do exist. Assent, however, has often been refused to *a priori* theistic argumentation, not on the ground that it is illogical, but on the ground that the conclusions inferred are incomprehensible. Thus the author of whom I have just been speaking urges in favour of the procedure which he adopts the following argument, in addition to the one already specified: "Self-existence necessarily means existence without a beginning; and to form a conception of self-existence is to form a conception of existence without a beginning. Now by no mental effort can we do this. To conceive existence through infinite past-time, implies the conception of infinite past-time, which is an impossibility." "Those who cannot conceive a self-existent universe, and who therefore assume a creator as the source of the universe, take for granted that they can conceive a self-existent creator. The mystery which they recognise in this great fact surrounding them on every side, they transfer to an alleged source of this great fact, and then suppose that they have solved the mystery. But they delude themselves. Self-existence is rigorously inconceivable; and this holds true whatever be the nature of the object of which it is predicated. Whoever agrees that the atheistic hypothesis is untenable because it involves the impossible idea of self-existence, must perforce admit that the theistic hypothesis is untenable if it contains the same impossible idea."

Now, that we can by no mental effort conceive existence without a beginning is certain, if by conceive be meant to comprehend, or definitely imagine, or sensibly represent; but that we not only conceive but cannot avoid conceiving such existence is equally certain, if by conceive be simply meant to be conscious of, to know to be true, to be rationally convinced. It is impossible seriously to doubt that existence was without beginning. Something is, and something never sprang from nothing. From nothing nothing ever came or can come. Something always was. Being was without beginning. Mr Spencer can no more deliver himself from the sublime and awful necessity of acknowledging an eternal something—a self-existent reality—underlying the whole universe, than any one else. His own Absolute is such a something, such a reality; and although, in accordance with his peculiar use of the words "know" and "conceive," he denies that that Absolute can be known or conceived, he admits that its positive existence is a "necessary datum of consciousness." Further, no intelligent theist argues "that the atheistic hypothesis is untenable because it involves the impossible idea of self-existence." On the contrary, the theist,

far from objecting to the idea of self-existence as impossible, admits it to be a necessary idea. He recognises that the universe must be allowed to be self-existent until it is shown to be a creation or event. It is only after an examination of its character—only after having convinced himself that it is an effect—that he transfers the attribute of self-existence to its cause or creator. To say that in doing so he flees from one mystery to another as great, is a statement which admits of no possible justification. In a word, Mr Spencer's account of the reasoning of the theist is an inexplicable caricature.

The *a priori* reasoning employed in the establishment of theism is independent of any particular theory as to the origin of our ideas of infinity. It presupposes merely that these ideas are valid—are not delusive. It is only as predisposing to, or implying, scepticism, as to their truth or objective worth, that a theory as to their origin has a bearing on their application. Such scepticism cannot be logically limited to the ideas in question. If we do not accept these ideas as true and trustworthy, absolute scepticism is rationally inevitable. An examination of the nature and principles of scepticism will make this manifest, but I cannot enter on that examination at present.

In conclusion, I remark that the conception of any other than an infinite God—a God unlimited in all perfections—is not only a self-contradictory but an unworthy conception; it not only perplexes the intellect but revolts the spiritual affections. The heart can find no secure rest except on an infinite God. If less than omnipotent, He may be unable to help us in the hour of sorest need. If less than omniscient, He may overlook us. If less than perfectly just, we cannot unreservedly trust Him. If less than perfectly benevolent, we cannot fully love Him. The whole soul can only be devoted to One who is believed to be absolutely good.

LECTURE X.

MERE THEISM INSUFFICIENT.

I.

I have endeavoured to show, in the course of lectures which I am now bringing to a close, that the light of nature and the works of creation and providence prove the existence, and so far manifest the goodness, wisdom, and power of God. This truth ought always to be combined with another—namely, that the light of nature and the works of creation and providence "are not sufficient to give that knowledge of God, and of His will, which is necessary unto salvation." Reason sends forth a true light which is to be trusted and followed so far as it extends, but which is much more limited than the wants of human nature. The deepest discoveries and the highest achievements of the unaided intellect need to be supplemented by truths which can only come to us through special revelation. The natural knowledge of God which man can attain by the exercise of his own faculties is not sufficient to make him feel that the Eternal bears to him fatherly love, or to break the power of sin within him and over him, or to sustain and develop his moral and spiritual life. It falls far short of what is required to enable a human soul, a religious and immortal being, to accomplish its true destination. It falls far short, in other words, of being what is "necessary unto salvation," in the broad and comprehensive sense which the term salvation bears throughout Scripture.

There are those who, instead of regarding theism as simply so much fundamental truth which Christianity presupposes and applies, would oppose theism to Christianity, and substitute theism for Christianity. They would rest in mere theism and would reject Christianity. They represent theism, dissociated from Christianity, as all-sufficient, and as the religion to which alone the future belongs. In doing so, these men—many of them most earnest and excellent men—seem to me to show great want of reflection, great ignorance of the teachings of history, and a very superficial acquaintance with human nature.

Atheism, polytheism, and pantheism have always proved stronger than mere theism—more popular, more influential on ordinary minds. It is only in alliance with revelation that theism has been able to cope successfully with these foes. In no land, and in no age, has a theism resting exclusively on the authority of reason gained and retained the assent of more than a small minority of the community. Its adherents may have been men who did credit to their creed—honourable, high-minded, cultivated men—but they have always been few. In India, in Persia, in Greece, in Rome, some specially gifted and religious minds reached, or at least approached, theism; but, on the whole, the development of belief in all these countries was not towards but away from theism. The Israelites, although authoritatively taught monotheism, fell back again and again into polytheism. Mythology is not merely "a disease of language," but also a testimony to the fact that the minds and hearts of the mass of mankind cannot be satisfied with a Deity who is only to be apprehended by abstract thought,—a proof that while a few speculative philosophers may rest content with the God discovered by pure reason, the countless millions of their fellow-men are so influenced by sense, imagination, and feeling, that they have ever been found to substitute for such a God deities whom they could represent under visible forms, as subject to the limitations of space and time, and as actuated by the passions of humanity. Pantheism has a powerful advantage over theism, inasmuch as it can give a colouring of religion to what is virtually atheism, and a semblance of reason even to the most wildly extravagant polytheism. There is no logical necessity why a mere theist should become an atheist, but the causes which

tend to produce atheism are too strong to be counteracted by any force inherent in mere theism; and hence, as a matter of historical fact, mere theism has always, even in modern Christendom, largely given place to atheism. All the powers of the world above, and of the world to come, are needed to oppose the powers of the world below, and of the world which now is. Only a much fuller exhibition of the Divine character than is presented to us by mere theism can make faith in God the ruling principle of human life. Mere theism might have sufficed us had we remained perfectly rational and perfectly sinless; but those who fancy that it is sufficient for men as they are, only make evident that they know not what men are. In the state into which we have fallen, we need a higher light to guide us than any which shines on sea or land; we need the light which only shines from the gracious countenance of Christ.

"The world by wisdom knew not God." The whole history of the heathen world testifies to the truth of this affirmation of St Paul. It is an indubitable historical fact that, outside of the sphere of special revelation, man has never obtained such a knowledge of God as a responsible and religious being plainly requires. The wisdom of the heathen world, at its very best, was utterly inadequate to the accomplishment of such a task as creating a due abhorrence of sin, controlling the passions, purifying the heart, and ennobling the conduct. Not one religion devised by man rested on a worthy view of the character of God; not one did not substitute for the living and true God false and dead idols, or represent Him in a mean and dishonouring light. We are apt to associate with the religion of Greece and Rome the religious philosophy of a few eminent Greek and Roman thinkers who rose above the religion of their age and country. The religion itself was mainly the creation of imagination, and in various respects was extremely demoralising in its tendencies. The worshippers of Jupiter and Juno, of Mars and Venus, and the gods and goddesses who were supposed to be their companions, must have been very often not the better but the worse for worshipping such beings. Certainly, they could find no elevating ideal or correct and consistent rule of moral life among the capricious and unrighteous and impure objects of their adoration. It was less from the religion, the idolatrous polytheism, of Greece and Rome that the human soul in these lands drew spiritual inspiration, than from philosophy, from reason apprehending those truths of natural religion which the positive religion concealed and disfigured and contradicted. If salvation be deliverance from darkness to light, from sin to holiness, from love of the world to love of God, no sane man will say that the Greek or Roman religion was the way to it, or an indication of the way to it.

Did, then, the philosophers discover the way? There is no need that we should depreciate what they did. Men like Socrates, Plato, and Aristotle, among the Greeks—like Cicero, Epictetus, and Antoninus, among the Romans—obtained wonderful glimpses of Divine truth, and gave to the world noble moral instructions, which are of inestimable value even to this day. But they all failed to effect any deep and extensive reform. They did not turn men from the worship of idols to the service of the true God. They were unable to raise any effective barrier either to superstition or to vice. They were insufficiently assured in their own minds, and spoke as without authority to others. They saw too clearly to be able to believe that the popular religion was true, but not clearly enough to know what to put in its place. In the systems and lives of the very greatest of them there were terrible defects, and neither the doctrine nor the conduct of the majority of those who pretended to follow them, the common specimens of philosophers, was fitted to improve society. Philosophy found out *many truths*, but not *the truth*. It did not disclose the holiness and love of God—discovered no antidote for the poison of sin—showed the soul no fountain of cleansing, healing, and life.

The true character of the philosophical theism of antiquity has been admirably described by one of the ablest theologians of the present day. "Theism was discussed as a philosophical, not as a religious question, as one rationale among others of the origin of the material universe, but as no more affecting practice than any great scientific hypothesis does now. Theism was not a test which separated the orthodox philosopher from the heterodox, which distinguished belief from disbelief; it established no breach between the two opposing theorists; it was discussed amicably as an open question: and well it might be, for of all questions there was not one which could make less practical difference to the philosopher, or, upon his view, to anybody, than whether there was or was not a God. Nothing would have astonished him more than, when he had proved in the lecture-hall the existence of a God, to have been told to worship Him. 'Worship whom?' he would have exclaimed; 'worship what? worship how?' Would you picture him indignant at the polytheistic superstition of the crowd, and manifesting some spark of the fire of St Paul 'when he saw the city wholly given to idolatry,' you could not be more mistaken. He would have said that you did not see a plain distinction; that the crowd was right on the religious question, and the philosopher right on the philosophical; that however men might uphold in argument an infinite abstraction, they could not worship it; and that the hero was much better fitted for worship than the Universal Cause—fitted for it not in spite of, but in consequence of, his want of true divinity. The same question was decided in the same way in the speculations of the Brahmans. There the Supreme Being figures as a characterless, impersonal essence, the mere residuum of intellectual analysis, pure unity, pure simplicity. No temple is raised to him, no knee is bended to him. Without action, without will, without affection, without thought, he is the substratum of everything, himself a nothing. The Universal Soul is the Unconscious Omnipresent *Looker-on*; the complement, as coextensive spectator, of the universal drama of nature; the motionless mirror upon which her boundless play and sport, her versatile postures, her multitudinous evolutions are reflected, as the image of the rich and changing sky is received into the passive bosom of the lake. Thus the idea of God, so far from calling forth in the ancient world the idea of worship, ever stood in antagonism with it: the idol was worshipped because he was not God, God was not worshipped because He was. One small nation alone out of all antiquity worshipped God,

believed the universal Being to be a personal Being. That nation was looked upon as a most eccentric and unintelligible specimen of humanity for doing so; but this whimsical fancy, as it appeared in the eyes of the rest, was cherished by it as the most sacred deposit; it was the foundation of its laws and polity; and from this narrow stock this conception was engrafted upon the human race."^[50]

It is historically certain, then, that the world by its unaided wisdom failed to know God. Of course, it may be said that the experiment was incomplete; that even if Christianity had not appeared, the human mind would have found out in process of time all the religious truth needed to satisfy the human heart, guide human life, and sustain human society. But such an assertion is quite arbitrary. History gives it no confirmation. It was only after human wisdom had a lengthened and unembarrassed opportunity of showing what it could accomplish in the most favourable circumstances, and after it had clearly displayed its insufficiency, that Christianity appeared. Christ did not come till it was manifest that reason was wandering farther and farther away from God—that religion had no inherent principle of self-improvement—that man had done his utmost with the unaided resources of his nature to devise a salvation, and had failed. There was no probability whatever that a new and higher civilisation would rise on the ruins of that which fell when the hordes of Northern barbarians subdued and overran the Roman empire, had not Christianity been present to direct the work of construction.

We need not, however, discuss what might or might not have happened, supposing the sun of Christianity had not appeared on the horizon when that of classical civilisation was hastening to its setting, since it is obvious that the science and philosophy even of the present day, dis severed from revelation, can produce no religion capable of satisfying, purifying, and elevating man's spiritual nature. They are far advanced beyond the stage which they had reached in the time of St Paul. Knowledge has since received large accessions from all sides, and reflection has been taught by a lengthened and varied process of correction and discipline valuable lessons. In mathematical and physical science especially there has been enormous progress. The human mind is now enriched not only with the intellectual wealth which it has inherited from Greece and Rome, but with that of many ages not less fruitful than those in which they flourished. Can we accomplish, then, what the Greeks and Romans so signally failed to achieve? Can we, with all our knowledge of nature and man, devise a religion which shall be at once merely rational and thoroughly effective? Can we, when we set aside Christianity, construct a creed capable of not only commanding the assent of the intellect, but of attracting and changing the heart, quickening and guiding the conscience, and purifying and ennobling the conduct? Can we build a system worthy to be called a religion on any other foundation than that which has been laid in the Gospel? If science and philosophy cannot do anything of this kind even at the present day, we are surely at length entitled to say that the world needs to know more about God than it can find out for itself. In proof that they cannot, we would appeal both to facts and reason—both to the character of what science and philosophy have actually done in this connection, and to the nature of the task which their injudicious friends would impose on them.

What, then, even at the present day, do the ablest of those who reject Christianity propose to offer us instead? Comte would have us to worship humanity. Can we? Comte himself did not believe that we can in any but a very partial and insincere way. If we could, would our worship do either our minds or hearts more good than the worship of Jupiter and Juno did the Greeks of old? Strauss would have us to revere the universe. Is that not to go back to fetichism? Might we not just as wisely and profitably adore a stock or stone? Herbert Spencer would present to us for God the Unknowable. But what thoughts, what feelings, can we have about the Unknowable? Might we not as well worship empty space, the eternal no, or the absolute nothing? Schopenhauer, Hartmann, Mainlander, and others, would have us to go back to Buddhism and welcome annihilation. But it is clear as the light that if the advice were acted on, the springs of intellectual life and social progress would soon be dried up. The philosophy and science on which they exclusively rely have enabled none of these men to find out God; nay, they have left them under the delusion that there is no God to find out, except those strange gods to which I have referred. And being without God in the world, these philosophers, with all their knowledge and accomplishments, are also without any hope of a life beyond the grave. No man need go to them with the question, "What shall I do to inherit eternal life?" Among all their differences—and they are many and radical—on one point they are agreed, and it is that eternal life is but a dream; that the highest hope even of the best of mankind is to survive for a time as a memory and an influence in the minds and conduct of others, after having ceased to be real and personal beings; that the only form in which the aspiration after immortality can be rationally cherished is that which the greatest of contemporary novelists and among the greatest of contemporary poets has expressed in the words:—

"O may I join the choir invisible
Of those immortal dead who live again
In minds made better by their presence: live
In pulses stirred to generosity,
In deeds of daring rectitude, in scorn
For miserable aims that end with self,
In thoughts sublime that pierce the night like stars,
And with their mild persistence urge man's search
To vaster issues....

This is life to come,
Which martyred men have made more glorious

It is as true, then, as ever it was, that the world by wisdom knows not God. The advantages which the eighteen Christian centuries have brought us only make more manifest the world's inability by its own wisdom to know God. The longer the trial has lasted, the more manifest has it become that God's revelation of Himself is indispensable—is what man can provide no substitute for. The philosophy which sets itself in opposition to revelation—which professes to supply in another and better way the spiritual wants to which revelation responds—which aims at constructing a religion out of the conclusions of science—is a mournful failure. The only religious constructions which it has been able to raise, even with all the scientific resources of the nineteenth century at its command, are simply monuments of human folly.

This is just what was to be expected; for apart from special Divine teaching, apart from special Divine revelation, man cannot truly know God, as a sinful being needs to know Him. Apart, for example, from the revelation which God has made of Himself in Christ, the mind cannot possibly attain to a sincere and well-grounded conviction even of that primary truth on which all the perfection of religion and all the happiness and hopes of mankind depend—the truth that God is really a Father, with all a Father's love, to the children of men. There are manifold signs or evidences of God's goodness and bounty in creation and providence, but, unless seen in the light reflected on them from redemption, they fall far short of a complete proof of God's cherishing fatherly love to sinful men. In the light of the Cross it is otherwise; the man who looks at the works of creation in that light will unhesitatingly and with full reason say, "My Father made them all," and will easily and clearly trace in all the dealings of providence a Father's hand guiding His children. Suppose, however, that blessed light not shining or shut out, and that creation and providence are before us in no other light than their own,—what then? What can creation and providence teach us about God?

Substantially this only: that He has vast power, since He has created and sustains and controls the whole of this mighty universe; wondrous wisdom, since He has arranged everything so well and directs everything so well; and a goodness corresponding to His power and wisdom, since a beneficent purpose may be detected underlying all His works of creation and pervading the course of providence. I cannot suppose that any one will seriously maintain that creation and providence teach us more than that God is thus powerful and wise and good; and fully granting that they teach us all this, if any one mean by God being the Father of men no more than that He is as good as He is powerful and wise, and that His power and wisdom have been so employed on behalf of men that good gifts meet them at every step, I readily agree with him that creation and providence are sufficient to show God to be a Father in that sense and to that extent.

But is there nothing more, nothing higher than this, implied in fatherhood among men? Unquestionably there is. Love in the form of mere goodness is far from the noblest and most distinctive quality in a human father's heart; nay, there is no true fatherliness of heart at all in a man in whom there is nothing better than that. One can, by an effort of imagination, indeed, conceive a man to have children so absolutely innocent and happy, and so perfectly guarded from all possibility of evil and suffering, that love in the form of goodness or kindness would be the only kind of love he could show them; but would his fatherly love be ever really tested in that case? Could he ever show the deeper, the truly distinctive feelings of a father's heart—those we so often see manifested in the toils, the hardships, the dangers, the sacrifices of wealth, comfort, and even life, which parents undertake and endure for their children? Certainly not. Apply this to God. In what sense is He a Father? In what sense has He fatherly love? Among the angels this question could have no place, for they were such perfectly innocent and happy children that love in the form of goodness was all they required—all that could be shown to them. And it would have been the same with men also, if they had not fallen. But as soon as sin, suffering, and death invaded earth, and seized on man's body and soul, and help or healing there was none for him in any creature, the most awful of questions for the human race came to be, whether or not God was a Father in the full meaning of that term, or, in other words, whether or not He had a love which, in order to save men, would submit to humiliation, suffering, sacrifice?

Now that is what I say creation and providence cannot prove. Point to anything in creation or to anything in ordinary providence which you can show to have *cost* God anything. You can easily point to thousands and thousands of things and events which you may justly conclude to be signs or gifts of God's goodness; but can you point to one thing in creation, one event in ordinary providence, which you can seriously maintain to come from a self-sacrificing love such as a father displays when he rushes into a house in flames, or throws himself into a raging flood, to save the life of his child at the risk of his own? If you cannot, you fail to prove God a Father in the sense I mean. And in that sense, which is the true sense, there seems to me no possibility of proving God a Father from creation and providence, apart from redemption.

Wherein is it that both fail? Obviously in this, that they can show no traces of sacrifice on God's part. But it is just here that the revelation of redemption comes in. God, in the unspeakable gift of His Son, shows us a power of sacrifice infinitely above anything known among men—an intensity of tenderest fatherly affection of which the strongest fatherly affection on earth is but a pale and feeble reflection; and Christ in His incarnation, life, sufferings, and death, reveals to us not merely the power, and wisdom, and goodness of God, but the very depths, if we may so speak, of His heart as a Father, enabling us to feel without a doubt that now indeed are we the sons of God. Nothing but a special revelation, however, could thus unveil and disclose God. The natural reason could not thus discern Him by its unaided power. And yet it is only in the knowledge of God as a Father that the soul can either discern or realise its true destiny.

There are many other precious truths set before us in the Gospel which we might in like manner show to be at once most necessary for human guidance, and inaccessible to unaided human research. We shall not, however, dwell on them or even enumerate them. The entire problem of our present and future salvation is beyond our powers of solution. The light of nature and the works of creation and providence cannot show man a way of reconciliation to God. No man by mere human wisdom, by any searching into the secrets of nature or providence, can find that out. Mere human wisdom is utter folly here; and if man may be wise at all in this connection, he must confess his natural folly, the powerlessness of his own reason, and must consent to be guided by the wisdom of God—or, in other words, to accept Christ, who is the wisdom of God to us for salvation, who is God's solution of the problem of our salvation. The only real wisdom possible to man must, from the very nature and necessity of the case, be the wisdom of renouncing his own wisdom. If he say, I shall solve this awful problem for myself, without help from any one, then he in his wisdom is a most manifest fool, whose folly will ruin him; but if he have the candour to confess his own folly, to admit his own intellect powerless here, and to acknowledge the wisdom of God and acquiesce in His plan of salvation, then, in the very act of confessing himself foolish he is made wise, for Christ is made wisdom unto him.

The oracle at Delphi pronounced Socrates the wisest of men. Socrates could not understand it, and yet he was unwilling to disbelieve the oracle, so he went about from one person reputed wise to another, in order to be able to say, "here is a wiser man than I am," or at least to find out what the oracle meant. He went to many, but he found that, while they in reality knew almost nothing that was worth knowing, they thought they knew a great deal, and were angry with one who tried to convince them of their ignorance. So that at last Socrates came to recognise that there was a truth in what had been said about him; to use nearly his own words,—“He left them, saying to himself, I am wiser than these men; for neither they nor I, it would seem, know anything valuable: but they, not knowing, fancy that they do know; I, as I really do not know, so I do not think that I know. I seem, therefore, to be in one small matter wiser than they.” Now it is only the kind of spirit which in its degree and about less important matters was in Socrates—it is precisely that kind of spirit about the things which concern eternal life and peace, that can alone make a man wise unto salvation. The most ignorant person, provided he only know that he must renounce his own wisdom as foolishness—which on subjects pertaining to salvation it really is—and accept what is disclosed in Christ as to salvation, is infinitely wiser than the most able or learned man who trusts solely to his own wisdom apart from Christ's revealed work and will. Both of them are foolish and ignorant; but the one knows it, and, in consequence of knowing it, accepts Christ's plan of salvation, and is made a partaker of infinite wisdom—the other does not know it, and, thinking that he is wise while he is a fool, remains in his folly, and must bear its punishment.

And now I bring this course of lectures to a close. I trust that they may not have been found wholly without profit, through the blessing of Him who despises not even the smallest and most imperfect service, if humbly rendered to Him. I should rejoice to think that I had helped any one to hold, in such a time as the present, with a firmer and more intelligent grasp, the fundamental truth on which all religious faith must rest. Amen.

APPENDIX.

NOTE I., page [6](#).

NATURAL AND REVEALED RELIGION.

The Hindus regard the Vedas, the Parsees the Zend-Avesta, and the Mohammedans the Koran, as having been immediately and specially inspired. This means that they believe the spiritual truth contained in these books to belong to revealed religion, although it in reality is merely a portion of natural religion. The Greeks and Romans could not distinguish between nature and revelation, reason and faith, because ignorant of what we call revelation and faith. Without special revelation or inspiration the oriental and classical mind attained, however, to the possession of a very considerable amount of most precious religious truth. In all ages of the Christian Church there have been theologians who have traced at least the germinal principles of such truth to written or unwritten revelation; and probably few patristic or scholastic divines would have admitted that there was a knowledge of God and of His attributes and of His relations to the world which might be the object of a science distinct from, and independent of, revelation. This is quite consistent with what is also a fact—namely, that the vast majority of Christian writers have always acknowledged that "the light of nature and the works of creation and providence manifest the goodness, wisdom, and power of God," and that this general revelation is implied in the special revelation made at sundry times and divers manners and recorded in the Scriptures. The 'Theologia naturalis sive liber creaturum' of the Spanish physician, Raymond de Sebonde, who taught theology in the University of Toulouse during the earlier part of the fifteenth century, was, so far as I know, the first work which, proceeding on the principle that God has given us two books, the book of nature and the book of Scripture, confined itself to the interpretation of the former, merely indicating the mutual relations of natural and revealed religion. Faustus Socinus was one of the first distinctly to maintain that there was no such thing as natural religion—no knowledge of God attainable except from Scripture: see his 'De Auctoritate Scripturæ Sacræ.' A

conviction of the importance of natural theology spread very rapidly in the seventeenth century. This contributed to awaken an interest in the various religions of the world, and thus led to the rise of what may be called Comparative Theology, although more generally designated the Philosophy of Religion. Its origin is to be sought in the attempts made to prove that the principles of natural theology were to be found in all religions. Lord Herbert of Cherbury's 'De Religione Gentilium,' published in 1663, was one of the earliest and most characteristic attempts of the kind. From that time to the present the study of religions has proceeded at varying rates of progress, but without interruption, and has at length begun to be prosecuted according to the rules of that comparative method which has, in the words of Mr Freeman, "carried light and order into whole branches of human knowledge which before were shrouded in darkness and confusion."

The eighteenth century was the golden age of natural theology. The deists both of England and France endeavoured to exalt natural theology at the expense of positive theology by representing the former as the truth of which the latter was the perversion. "All religions in the world," said Diderot, "are merely sects of natural religion." The prevalent opinion of the freethinkers of his time could not have been more accurately expressed. It was just what his predecessors in England meant by describing Christianity as "a republication of natural religion," and by maintaining that it was "as old as the creation." The wisest opponents of the deists, and thoughtful Christian writers in general—the adherents of the moderate and rational theology of the seventeenth and eighteenth centuries—strove, on the other hand, to show that natural theology was in reality presupposed by revelation, and that it should carry the mind onwards to the acceptance of revelation. But there were some who undertook to maintain that there was no such thing as natural theology; that reason of itself can teach us absolutely nothing about God or our duties towards Him. The Hutchinsonians, for example, whose best representatives, besides the founder, were Bishop Horne of Norwich, and William Jones, curate of Nayland, believed that all knowledge of religion and morals, and even the chief truths of physical science, ought to be drawn from the Bible. Dr Ellis, in his treatise entitled 'The Knowledge of Divine Things from Revelation, not from Reason or Nature' (1743), laboured to prove that neither the being of a God nor any other principle of religion could be legitimately deduced from the study of the phenomena of the universe. He argued on the assumption that the senses are the only natural inlets to knowledge. The late Archbishop Magee adopted his views on this subject. One of the most widely known expositions and defences of the theory is that contained in the 'Theological Institutes' (1823) of the eminent Wesleyan divine, Richard Watson. In order to establish that all our religious knowledge is derived from special revelation, he employs all the usual arguments of scepticism against the proofs of theism and the principles of reason on which they rest. In the Roman Catholic Church, scepticism as to reason and the light of nature has often been combined with dogmatism as to the authority of revelation and the Church. In the system of what is called the theocratic school may be seen the result to which attempts to establish the certitude of authority by destroying the credit of human reason naturally lead. It is a system of which I have endeavoured to give some account in my 'Philosophy of History in France and Germany,' pp. 139-154.

The fact on which I have insisted in the latter part of the lecture—the fact that theism has come to mankind in and through revelation—has caused some altogether to discard the division of religion into natural and revealed. They pronounce it to be a distinction without a difference, and attribute to it sundry evil consequences. It has led, they think, on the one hand, to depreciation of revelation—and, on the other, to jealousy of reason: some minds looking upon Christianity as at best a republication of the religion of nature, in which all that is most essential and valuable is "as old as the creation;" while others see in natural religion a rival of revealed religion, and would exclude reason from the religious sphere as much as possible. The distinction is, however, real, and the errors indicated are not its legitimate consequences. If there be a certain amount of knowledge about God and spiritual things to be derived from nature—from data furnished by perception and consciousness, and accessible to the whole human race,—while there is also a certain knowledge about Him which can only have been communicated through a special illumination or manifestation—through prophecy, or miracle, or incarnation,—the distinction must be retained. It is no real objection to it to urge that in a sense even natural religion may be regarded as revealed religion, since in a sense the whole universe is a revelation of God, a manifestation of His name, a declaration of His glory. That is a truth, and, in its proper place, a very important truth, but it is not relevant here: it is perfectly consistent with the belief that God has not manifested Himself merely in nature, but also in ways which require to be carefully distinguished from the manifestation in nature. In like manner, the distinction is not really touched by showing that revealed religion has embodied and endorsed the truths of natural religion, or by proving that even what is most special in revelation is in a sense natural. These are both impregnable positions. The Bible is to a large extent an inspired republication of the spiritual truths which are contained in the physical creation, and in the reason, conscience, and history of man. But this does not disprove that it is something more. The highest and most special revelation of God—His revelation in Jesus Christ—was also the fullest realisation of the true nature of man. But this is no reason why we should not distinguish between the general and the special in that revelation. We can only efface the distinction by reducing Christ to a mere man, or confounding God with man in a pantheistic manner.

It has been further objected to the division of religion into natural and revealed that it is unhistorical, that natural religion is only revealed religion disguised and diluted—Christianity without Christ. It never existed, we are told, apart from revelation, and never would have existed but for revelation. But this very objection, it will be observed, implies that natural religion is not

identical with revealed religion—is not revealed religion pure and simple—is not Christianity with Christ. Why is this? Is it not because revealed religion contains more than natural religion—what reason cannot read in the physical universe or human soul? Besides, while the principles of natural religion were presented in revelation in a much clearer form than in any merely human systems, and while there can be no reasonable doubt that but for revelation our knowledge of them would be greatly more defective than it is, to maintain that they had no existence or were unknown apart from revelation, is manifestly to set history at defiance. Were there no truths of natural religion in the works of Plato, Cicero, and Seneca? Is there any heathen religion or heathen philosophy in which there are not truths of natural religion?

The belief in a natural religion which is independent alike of special revelation and of positive or historical religions has been argued to have originated in the same condition of mind as the belief in a "state of nature" entertained by a few political theorists in the seventeenth and eighteenth centuries. This can only be done by confounding natural religion with an imaginary patriarchal religion, which is, of course, inexcusable. Natural religion is analogous, not to the state of nature, but to the law of nature of the jurists. Natural religion is the foundation of all theology, as the law of nature is the foundation of all ethical and political science; and just as belief in the law of nature is perfectly independent of the theory of a state of nature, so the belief in natural religion has no connection whatever with any theory of patriarchal or primitive religion.

There is a well-known essay by Professor Jowett on the subject of this note in the second volume of his 'St Paul's Epistles,' &c.

NOTE II., page 9.

INFLUENCE OF RELIGION ON MORALITY.

The assertion of Mr Bentham and of Mr J. S. Mill that much has been written on the truth but little on the usefulness of religion, is quite inaccurate. Most of the apologists of religion have set forth the proof that it serves to sustain and develop personal and social morality; and, from the time of Bayle downwards, not a few of its assailants have undertaken to show that it is practically useless or even hurtful. But Bentham may have been the first who proposed to estimate the utility of religion apart from the consideration of its truth. The notion was characteristically Benthamite. It was likewise far too irrational to be capable of being consistently carried out or applied. The work compiled by Mr Grote from the papers of Mr Bentham, and published under the name of Philip Beauchamp—'Analysis of the Influence of Natural Religion on the Temporal Happiness of Mankind'—and Mr Mill's 'Essay on the Utility of Religion,' are, in almost every second page, as well as in their general tenor, attacks not merely on the utility but on the truth of religion.

The former of these works is an attempt to show that natural religion has done scarcely any good, and produced no end of evils—inflicting, so runs the indictment, unprofitable suffering, imposing useless privations, impressing undefined terrors, taxing pleasure by the infusion of preliminary scruples and subsequent remorse, creating factitious antipathies, perverting the popular opinion, corrupting moral sentiment, producing aversion to improvement, disqualifying the intellectual faculties for purposes useful in this life, suborning unwarranted belief, depraving the temper, and, finally, creating a particular class of persons incurably opposed to the interests of humanity. The author makes out that religion is responsible for this catalogue of mischiefs, by two simple devices. First, he defines religion as "the belief in the existence of an almighty Being, by whom pains and pleasures will be dispensed to mankind during an infinite and future state of existence," or, in other words, he so defines religion as to exclude from the idea of God the thought of moral goodness, righteousness, and holiness. He even insists that the God of natural religion can only be conceived of as "a capricious and insane despot," and bases his argumentation on this assumption. Dr Caselles, who has translated the treatise into French, and prefaced it by an interesting introduction, informs us that the argumentation is not applicable to the new, but only to the old theism. It is historically certain, however, that the "old" theism of Jeremy Bentham and his friends never existed outside of their own imaginations. It is likewise certain that a lamb would acquire a very bad character if it were by definition identified with a wolf, and credited with all that creature's doings. The second device is "a declaration of open war against the principle of separating the abuses of a thing from its uses." The only excuse which can be given for this declaration of a most unjust war is, that Mr Bentham was able completely to misunderstand the obvious meaning of the principle which he assailed. That a book so unfair and worthless should have produced on the mind of Mr J. S. Mill, even when a boy of sixteen, the impression which he describes in his Autobiography would have been inexplicable, had we not known the character of his education.

Mr Mill's own essay is rather strange. It begins with six pages of general observations, which are meant to show that it is a necessary and very laudable undertaking to attempt to prove that the belief in religion, considered as a mere persuasion apart from the question of its truth, may be advantageously dispensed with, any benefits which flow from the belief being local, temporary, and such as may be otherwise obtained, without the very large amount of alloy always contained in religion. Yet we are told that "an argument for the utility of religion is an appeal to unbelievers to induce them to practise a well-meant hypocrisy; or to semi-believers to make them avert their eyes from what might possibly shake their unstable belief; or, finally, to persons in general to abstain from expressing any doubts they may feel, since a fabric of immense importance to mankind is so insecure at its foundations, that men must hold their breath in its neighbourhood for fear of blowing it down." An argument for the utility of religion is "moral bribery." An

argument for its uselessness is highly to be commended. Mr Mill further tells us that "little has been written, at least in the way of discussion or controversy, concerning the usefulness of religion;" and likewise, that "religious writers have not neglected to celebrate to the utmost the advantage both of religion in general and of their own religious faith in particular." The inference must be, that what religious writers urge for the utility of religion is not to be reckoned as reasoning; that only what writers like Mr Bentham and Mr Mill urge against its utility is to be thus regarded. The charity of this view is capped by the assertion that "the whole of the prevalent metaphysics of the present century is one tissue of suborned evidence in favour of religion," an assertion which is made amusing by following a sentence in which Mr Mill speaks of "the intolerant zeal" of intuitionists. After his general considerations, he professes to inquire what religion does for society, but in reality never enters on the investigation. He devotes two pages to insisting on "the enormous influence of authority on the human mind;" three to emphasising "the tremendous power of education;" and ten to enlarging on "the power of public opinion." He might as relevantly have dwelt on the influence of reason, speech, the press, machinery, clothes, marriage, and thousands of other things which undoubtedly affect the intellectual and moral condition of society. It is as unreasonable to infer that religion is useless because authority, education, and public opinion are powerful, as it would be to infer that the fire in a steam-engine might be dispensed with because water is necessary. Any person who assumes, as Mr Mill assumed, that authority, education, or public opinion may be contrasted with religion—who does not see, as Mr Mill did not see, that all these powers are correlatives, which necessarily intermingle with, imply, and supplement one another—is, *ipso facto*, unable intelligently to discuss the question, What does religion do for society? In the second part of his essay, Mr Mill ought, in order to have kept his promise, to have considered what influence religion in the sense of belief in and love of God is naturally calculated to exert on the character and conduct of the individual; but instead of this he applies himself to the very different task of attempting to prove that "the idealisation of our earthly life, the cultivation of a high conception of what it may be made, is capable of supplying a poetry, and, in the best sense of the word, a religion, equally fitted to exalt the feelings, and (with the same aid from education) still better calculated to ennoble the conduct, than any belief respecting the unseen powers." He forgets to inquire whether there is any opposition between "the idealisation of our earthly life" and "belief respecting the unseen powers," or whether, on the contrary, religious belief is not the chief source of the idealisation of our earthly life. That this logical error is as serious as it is obvious, appears from the fact that ten years later Mr Mill himself confessed that "it cannot be questioned that the undoubting belief of the real existence of a Being who realises our own best ideas of perfection, and of our being in the hands of that Being as the ruler of the universe, gives an increase of force to our aspirations after goodness beyond what they can receive from reference to a merely ideal conception" (Theism, p. 252). His proof that the worship of God is inferior to the religion of humanity rests mainly on these three assertions: (1) That the former, "what now goes by the name of religion," "operates merely through the feeling of self-interest;" (2) That "it is impossible that any one who habitually thinks, and who is unable to blunt his inquiring intellect by sophistry, should be able without misgiving to go on ascribing absolute perfection to the author and ruler of so clumsily made and capriciously governed a creation as this planet and the life of its inhabitants;" and (3), That "mankind can perfectly well do without the belief in a heaven." "It seems to me not only possible, but probable, that in a higher, and, above all, a happier condition of human life, not annihilation but immortality may be the burdensome idea; and that human nature, though pleased with the present, and by no means impatient to quit it, would find comfort and not sadness in the thought that it is not chained through eternity to a conscious existence which it cannot be assured that it will always wish to preserve." On this last point more mature reflection brought him to a different and wiser conclusion (see Theism, pp. 249, 250).

Those who wish to study the important subject of the relations of religion and morality will find the following references useful: the last chapter of M. Janet's 'La Morale;' the *étude* on "La Morale indépendante" in M. Caro's 'Problèmes de Morale Sociale;' many articles and reviews in M. Renouvier's 'Critique Philosophique;' Martensen's 'Christian Ethics,' §§ 5-14; O. Pfliegerer's 'Moral und Religion;' Luthardt's 'Apologetic Lectures on the Moral Truths of Christianity;' and Bradley's 'Ethical Studies,' pp. 279-305.

NOTE III., page [18](#).

ETHICS OF RELIGIOUS INQUIRY.

Much has been written regarding the spirit and temper in which religious truth should be pursued and defended. In a large number of the general treatises both of apologetic and systematic theology, the subject is considered, and not a few essays, lectures, &c., have been specially devoted to it. The greater portion of this literature may, I believe, be forgotten without loss, but there is a part of it which will well repay perusal. The "Oratio de recto Theologi zelo" in the first volume of the 'Opuscula' of Werenfels, is worthy of that tolerant and philosophical divine. Archbishop Leighton's 'Exhortations to Students' exhale from every line a heavenly ether and fragrance. It will be long before Herder's 'Letters on the Study of Theology' are out of date.

Dr Chalmers attached high value to the distinction between the ethics of theology and the objects of theology, and expatiated with great eloquence on the duty which is laid upon men by the probability or even the imagination of a God (Nat. Theol., B. i. ch. i. ii.) "Man is not to blame, if an atheist, because of the want of proof. But he is to blame, if an atheist, because he has shut his

eyes. He is not to blame that the evidence for a God has not been seen by him, if no such evidence there were within the field of his observation. But he is to blame if the evidence have not been seen, because he turned away his attention from it. That the question of a God may be unresolved in his mind, all he has to do is to refuse a hearing to the question. He may abide without the conviction of a God, if he so choose. But this his choice is matter of condemnation. To resist God after that He is known, is criminality towards Him; but to be satisfied that He should remain unknown, is like criminality towards Him. There is a moral perversity of spirit with him who is willing, in the midst of many objects of gratification, that there should not be one object of gratitude. It is thus that, even in the ignorance of God, there may be a responsibility towards God. The Discerner of the heart sees whether, for the blessings innumerable wherewith he has strewed the path of every man, He be treated like the unknown benefactor who was diligently sought, or like the unknown benefactor who was never cared for. In respect at least of desire after God, the same distinction of character may be observed between one man and another—whether God be wrapt in mystery, or stand forth in full development to our world. Even though a mantle of deepest obscurity lay over the question of His existence, this would not efface the distinction between the piety on the one hand which laboured and aspired after Him, and the impiety upon the other which never missed the evidence that it did not care for, and so grovelled in the midst of its own sensuality and selfishness. The eye of a heavenly witness is upon all these varieties; and thus, whether it be darkness or whether it be dislike which hath caused a people to be ignorant of God, there is with Him a clear principle of judgment that He can extend even to the outfields of atheism."—(Pp. 72, 73.)

The Rev. Alexander Leitch, in the First Part of his 'Ethics of Theism' (1868), discusses in a thoughtful and suggestive manner the following subjects: the reality and universality of the antithesis between truth and error, the legitimate dependence in all cases of belief on knowledge, the responsibility of man for his whole system of belief, the distinction between mystery and contradiction, the distinction between speculative and practical knowledge, the distinction between certainty and probability, the standard of morality, and the claims of reason and faith.

Mr Venn's 'Hulsean Lectures' for 1869 "are intended to illustrate, explain, and work out into some of their consequences, certain characteristics by which the attainment of religious belief is prominently distinguished from the attainment of belief upon most other subjects. These characteristics consist in the multiplicity of the sources from which the evidence for religious belief is derived, and the fact that our emotions contribute their share towards producing conviction."

What I have said in the text ought not to be understood as implying any doubt that men are largely responsible for their beliefs. This I accept as an indubitable truth, although there is great room for difference of opinion as to the limits of the responsibility; but it is a truth which no one party in a discussion has a right to urge as against another party. It is a law over all disputants, and is abused when severed from tolerance and charity. Perhaps it has never been better expounded and enforced than in Dr Pusey's 'Responsibility of the Intellect in Matters of Faith' (1873).

That religious belief is in a great measure conditioned and determined by character is implied in the whole argument of my third lecture. In this fact lies the main reason why the highest evidence may not produce belief even where there is no conscious dishonesty in those who reject it. A person desirous of working himself fully into the truth in this matter, will find excellent thoughts and suggestions in Dr Newman's 'Fifteen Sermons preached before the University of Oxford, between A.D. 1826 and 1843,' and in Principal Shairp's 'Culture and Religion.'

NOTE IV., page [23](#).

TRADITIVE THEORY OF RELIGION.

Mr Fairbairn makes the following remarks on the theory which traces religion to a primitive revelation: "Although often advanced in the supposed interests of religion, the principle it assumes is most irreligious. If man is dependent on an outer revelation for his idea of God, then he must have what Schelling happily termed 'an original atheism of consciousness.' Religion cannot, in that case, be rooted in the nature of man—must be implanted from without. The theory that would derive man's religion from a revelation is as bad as the theory that would derive it from distempered dreams. Revelation may satisfy or rectify, but cannot create, a religious capacity or instinct; and we have the highest authority for thinking that man was created 'to seek the Lord, if haply he might feel after and find Him'—the finding being by no means dependent on a written or traditional word. If there was a primitive revelation, it must have been—unless the word is used in an unusual and misleading sense—either written or oral. If written, it could hardly be primitive, for writing is an art, a not very early acquired art, and one which does not allow documents of exceptional value to be easily lost. If it was oral, then either the language for it was created or it was no more primitive than the written. Then an oral revelation becomes a tradition, and a tradition requires either a special caste for its transmission, becomes therefore its property, or must be subjected to multitudinous changes and additions from the popular imagination—becomes, therefore, a wild commingling of broken and bewildering lights. But neither as documentary nor traditional can any traces of a primitive revelation be discovered, and to assume it is only to burden the question with a thesis which renders a critical and philosophic discussion alike impossible."—Studies in the Philosophy of Religion and History, pp. 14, 15.

There is an examination of the same theory in the learned and able work of Professor Cocker of Michigan on 'Christianity and Greek Philosophy' (1875). He argues: 1. "That it is highly improbable that truths so important and vital to man, so essential to the wellbeing of the human race, so necessary to the perfect development of humanity as are the ideas of God, duty, and immortality, should rest on so precarious and uncertain a basis as tradition." 2. "That the theory is altogether incompetent to explain the *universality* of religious rites, and especially of religious ideas." 3. "That a verbal revelation would be inadequate to convey the knowledge of God to an intelligence purely passive and utterly unfurnished with any *a priori* ideas or necessary laws of thought."—Pp. 86-96.

A good history of the traditive theory of the diffusion of religion is a desideratum in theological literature.

NOTE V., page [29](#).

NORMAL DEVELOPMENT OF SOCIETY.

The truth that social development ought to combine and harmonise permanence and progress, liberty and authority, the rights of the individual and of the community, has been often enforced and illustrated. The earnestness with which Comte did so in both of his chief works is well known. A philosopher of a very different stamp, F. v. Baader, has in various of his writings given expression to profound thoughts on the subject. His essay entitled 'Evolutionismus und Revolutionismus des gesellschaftlichen Lebens' merits to be specially mentioned. Alexander Vinet has often been charged with a one-sided individualism, and perhaps not altogether without justice; but he always maintained that he was merely the advocate of individuality. "Individualism and individuality are two sworn enemies; the first being the obstacle and negation of all society—the second, that to which society owes all it possesses of savour, life, and reality. Nowhere does individualism prosper more easily than where there is an absence of individuality; and there is no more atomistic policy than that of despotism." Vinet has probably not held the balance exactly poised between the individual and society; but his dissertations, 'Sur l'individualité et l'individualisme' and 'Du rôle de l'individualité dans une réforme sociale,' would have been far less valuable than they are if he had forgotten that, although it is the individual who thinks, the thought of the individual cannot form itself outside of society nor without its aid. But he did not, as words like the following sufficiently prove:—"It is better to connect ourselves with society than to learn to dispense with it, or rather to persuade ourselves that we are able to dispense with it. It is only given to the brute to suffice to itself. Man has been chained to man. We hardly give more credit to spontaneous generation in the intellectual sphere than in the physical world; the most individual work is to a certain point the work of all the world; everywhere *solidarity* reappears, without, however, any prejudice to liberty: God has willed it so." "It is with the soul engaged in the life of religion, or that of thought, as with the vessel launched upon the waters, and seeking beyond the ocean for the shores of a new world. This ocean is society, religious or civil. It bears us just as the ocean does—fluid mass, on which the vessel can indeed trace furrows, but may nowhere halt. The ocean bears the ship, but the ocean may swallow it up, and sometimes does so; society swallows us up still more often, but yet it is what upbears us; nor can we arrive without being upborne by it, for it is like the sea, which, less fluid than the air, and less dense than the earth, just yields to and resists us enough to sustain without impeding our progress towards the desired goal." There are no finer pages in Martensen's 'Christian Ethics' than those in which he treats of "individualism and socialism," "liberty and authority in the development of society," and "conservatism and progress." The most adequate historical proof and illustration of the truth in question as to the nature of social evolution will be found in the Earl of Crawford's 'Progression by Antagonism' and 'Scepticism and the Church of England.'

NOTE VI., page [32](#).

DEFINITION AND CLASSIFICATION BY THE HIGHEST TYPE.

Dr Whewell maintained that in natural history groups are fixed not by definition, but by type. "The class," he wrote, "is steadily fixed, though not precisely limited; it is given, though not circumscribed; it is determined not by a boundary-line without, but by a central point within; not by what it strictly excludes, but by what it eminently includes; by an example, not by a precept; in short, instead of Definition we have a Type for our director. A type is an example of any class—for instance, a species of a genus—which is considered as eminently possessing the characters of the class. All the species which have a greater affinity with this type-species than with any others form the genus, and are ranged about it, deviating from it in various directions and different degrees."—Philosophy of the Inductive Sciences, vol. i. pp. 476, 477. Dr Whewell, it will be observed, was more cautious in his language than the theologians to whom I have referred. He did not speak of defining by type, but only of classifying, not by definition, but by type. His motive, however, for entertaining the view he laid down, was obviously the same which has led so many theologians to give definitions of religion which are only applicable to its highest forms. Probably it was insufficient. Prof. Huxley (Lay Sermons, pp. 90-92) very justly, it seems to me, argues that classification by type is caused by ignorance, and that as soon as the mind gets a scientific knowledge of a class it defines. Nothing which is not precisely limited is steadily fixed; nothing which is not circumscribed is exactly given: if the boundary-line is not determined, the central point cannot be accurately ascertained; what is eminently included cannot be known so long as what is strictly excluded is unknown. While assenting to the view of Prof. Huxley in the

passage indicated, I may remark that he falls into one error which rather forcibly illustrates what is said in the page to which this note refers regarding the necessary poverty of the significance of a strictly scientific definition of an extensive class. He instances as a definition which is of a truly scientific kind and "rigorous enough for a geometrician," the following: "Mammalia are all animals which have a vertebrated skeleton and suckle their young." But clearly this definition says too much if we are to criticise it rigorously. Were it true, there would be no males among mammalia. The definition is in strictness applicable to females only.

NOTE VII., page 38.

PSYCHOLOGICAL NATURE OF RELIGION.

In this note I shall briefly summarise three class lectures on the psychological nature of religion.

1. Investigations into the psychological nature of religion date only from about the end of last century.

For ages previously men sought to know what religion was; but they attempted to find an answer merely by reflection on positive or objective religion. Kant opened up to them a new path—that of investigation into the nature of religion as an internal or mental fact. O. Pflleiderer's account (*Die Religion*, pp. 5-124) of the researches thus started characterised, and criticised.

2. The testimony of consciousness is sufficient to establish the existence of religion as a subjective or mental state, but cannot certify whether, as such, it be simple or complex, primary or derivative, coextensive with human consciousness, or wider or narrower, or whether there be anything objectively corresponding to it.

3. In order to analyse religion, the ultimate genera of consciousness must be ascertained, which has only been slowly done. History of the process: Plato, Aristotle, their followers, Descartes, Spinoza, the English philosophers from Bacon to Dugald Stewart, Kant and the German psychologists, Brown, Hamilton, and Bain. Establishment of the threefold division of mental phenomena into cognitions, emotions, and volitions. Difficulties of the division shown by the author in 'Mind,' No. V.

Religion must be a state of intellect, sensibility, or will, or some combination of two or all of these factors.

4. Religion may be held to consist essentially and exclusively of knowledge; but this mistake is too gross to have been frequently committed.

The Gnostics, the earlier and scholastic theologians, the rationalists, Schelling and Cousin, have been charged with this error. The grounds of the charge indicated. Shown to be in all these cases exaggerated.

5. Schleiermacher refutes the theory by the consideration that the measure of our knowledge is not the measure of our religion.

Vindication and illustration of his argument. Service rendered by Schleiermacher to religion and theology in this connection.

6. Hegel came nearest to the identification of religion and thought, maintaining that sentiment was the lowest manifestation of religion, while the comprehension of the absolute, the highest knowledge, was its complete realisation, as also that religion was the self-consciousness of God through the mediation of the finite spirit.

Exposition and criticism of this theory. Examination of Vera's defence of it. Worship supposes two persons morally and spiritually as well as intellectually related.

7. While no mere intellectual act constitutes religion, the exercise of reason is an essential part of religion.

The denial of this an error prevalent among the modern theologians of Germany, owing to their accepting Kant's argumentation against the possibility of apprehending God by the speculative or pure reason as conclusive. If religion have no rational foundation, it has no real foundation. Reason does not apprehend merely what is finite. True place of reason in religion.

8. Religion has often been resolved into feeling or sentiment, but erroneously, since whatever feeling is fixed on requires some explanation of its existence, and this can only be found in some act or exercise of intellect.

9. Epicurus, Lucretius, and Hume have traced religion to fear.

10. Fear explains atheism better than it explains religion, and in order even to be feared God must be believed in.

Men fear a great many things. Mere fear founds nothing, but only causes efforts to avoid the presence or thought of its object. Fear enters into religion, and is filial in the higher, and servile in the lower, forms of religion.

11. Feuerbach resolves religion into desire—into an ignorant and illusive personification of man's own nature as he would wish it to be.

12. This view presupposes the truth of atheism, does not explain why man should refer to supramundane ends or objects, and is contradicted by the historical facts, which show that reason and conscience have at least co-operated with desire in the origination and development of religion.

13. Schleiermacher resolves religion into a feeling of absolute dependence—of pure and complete passiveness.

Statement of his theory. Shown to rest on a pantheistic conception of the Divine Being. His reduction of the Divine attributes into *power*.

14. No such feeling can exist, the mind being incapable of experiencing a feeling of nothingness—a consciousness of unconsciousness.

15. Could it be supposed to exist, it would have no religious character, because wholly blind and irrational.

16. The theory of Schleiermacher makes the moral and religious consciousness subversive of each other, the former affirming and the latter denying our freedom and responsibility.

17. Mansel supposes the religious consciousness to be traceable to the feeling of dependence and the conviction of moral obligation; but the latter feeling implies the perception of moral law, and is not religious unless there be also belief in a moral lawgiver.

18. Schenkel represents conscience as 'the religious organ of the soul,' but this is not consistent with the fact that conscience is the faculty which distinguishes right from wrong.

Schenkel's view of conscience shown to make its religious testimony contradict its ethical testimony.

19. Strauss combines the views of Epicurus, Feuerbach, and Schleiermacher; but three errors do not make a truth.

Account of the criticism to which the Straussian theory of religion has been subjected by Vera, Ulrici, and Professor H. B. Smith.

20. Although there can be no true religion without love, and although to love the true God with the whole heart is the ideal of religion, religion cannot be resolved exclusively into love; since love presupposes knowledge, and is not the predominant feeling, if present at all, in the lower forms of religion.

21. Religion includes will, implying the free and deliberate surrender of the soul to God,—the making self an instrument where it might, although wrongfully, have been made an end,—but it is not merely will, since all volition, properly so called, presupposes reason and feeling.

22. Kant made religion merely a sanction for duty, and duty the expression of a will which is its own law, and which is unaffected by feeling; but this view rested on erroneous conceptions as to (1) the relation of religion and morality, (2) the nature of the will, and (3) the place of feeling in the mental economy.

Religion and morality inseparable in their normal conditions; but not to be identified, religion being communion with God, while morality is conformity to a law which is God's will but which may not be acknowledged to be His will, so that they may and do exist in abnormal forms apart from each other.

The will has not its law in itself. Kant's errors on this subject.

Feeling is the natural and universal antecedent of action. Kant's errors on this subject.

23. Dr Brinton (*Religious Sentiment, &c.*, 1876) analyses religion into emotion and idea—an effective and intellectual element—the latter of which arises necessarily from the law of contradiction and excluded middle.

Merits and defects of his theory.

24. The religious process is at once rational, emotional, and volitional.

Its unity, and the co-operation of knowing, feeling, and willing.

25. Description of (1) its essential contents, (2) its chief forms, (3) its principal moments or stages, and (4) its manifestations in spiritual worship and work.

NOTE VIII., page 58.

ARGUMENT E CONSENSU GENTIUM.

Pessimism will be treated of along with other anti-theistic theories. The fact that religion is a natural and universal phenomenon, as widespread as humanity and as old as its history, and the fact insisted on in the lecture, that religion can only realise its proper nature in a theistic form, give us, when adequately established, the modern and scientific statement of the old argument—*e consensu gentium*. This argument, which we already meet with in Cicero (*De Nat. Deor.*, i. 17; *Tusc. Ques.*, i. 13; *De Leg.*, i. 8) and Seneca (*Epist.* 117), in Clement of Alexandria (*Strom.*, v.

14) and Lactantius (Div. Inst., i. 2), has gradually grown into the science of comparative theology. An instructive essay might be written on its development.

Mr J. S. Mill, who had obviously no suspicion that there had been any development of the kind, criticised the argument in his essay on Theism, pp. 154-160. He was entirely mistaken in representing it as an appeal to authority—"to the opinions of mankind generally, and especially of some of its wisest men." It has certainly very rarely—probably never—been advanced in a form which could justify such an account of it. He was also mistaken in supposing that it had any necessary connection with the view which ascribes to men "an intuitive perception, or an instinctive sense, of Deity." I agree with his objections to that view; but the argument does not imply it. If it prove that man's mental constitution is such that, in the presence of the facts of nature and life, religion necessarily arises, and that the demands of reason, heart, and conscience, in which it originates, can only be satisfied by the worship and service of one God, with the attributes which theism assigns to Him, it has accomplished all that can reasonably be expected from it.

Mr Mill was, however, it seems to me, perfectly correct in holding that the mere prevalence of the belief in Deity afforded no ground for inferring that the belief was native to the mind in the sense of independent of evidence. In no form ought the argument from general consent to be regarded as a primary argument. It is an evidence that there are direct evidences—and when kept in this its proper place it has no inconsiderable value—but it cannot be urged as a direct and independent argument. This is a most important consideration, which is in danger of being overlooked in the present day. Some authors would actually contrast the argument for theism or Christianity derivable from the comparative study of religion with the ordinary or formal proofs, and would substitute it for them, not seeing that, although powerful in connection with, and dependence on, these proofs, it has little relevancy or weight when dissociated from them.

The two recent writers who have made most use of the argument are, perhaps, Ebrard, who has devoted to it the whole of the second volume of his *Apologetics*, and Baumstark, whose '*Christian Apologetics on an Anthropological Basis*' has for its exclusive aim to prove that man has been made for religion, and that the non-Christian religions do not, while Christianity does, satisfy his religious cravings and needs. In this country we ought not to forget the service which Mr Maurice rendered by his '*Religions of the World*,' and Mr Hardwicke by his '*Christ and other Masters*.'

The position maintained by Sir John Lubbock, that religion is not a universal phenomenon, and that advocated by Comte, that it is a temporary and transitional phenomenon, will be examined in the volume on Anti-theism.

NOTE IX., page [75](#).

THE THEISTIC EVIDENCE COMPLEX AND COMPREHENSIVE.

Cousin has said, "There are different proofs of the existence of God. The consoling result of my studies is, that these different proofs are more or less strict in form, but they have all a depth of truth which needs only to be disengaged and put in a clear light, in order to give incontestable authority. Everything leads to God. There is no bad way of arriving at Him, but we go to Him by different paths."

The truth, that all the faculties of man's being must co-operate in the formation of the idea of God, is well enforced and illustrated in an article on "The Origin of the Concept of God," by the Rev. George T. Ladd, in the '*Bibliotheca Sacra*,' vol. xxxiv.; also in Principal M'Cosh's '*Method of the Divine Government*,' B. i., c. i., sec. 1, and '*Intuitions of the Mind*,' Pt. iii., B. ii., c. v., sec. 2. The following quotation from Mr Ladd's article is a statement of its central idea: "Nothing is more necessary, in the endeavour to understand how the concept under consideration originates, than to hold correct views of the entire relation of man to truth. The view which, if not held as a theory, is quite too frequently carried out in the practical search after knowledge, seems to be this one—that truth is a product of mind wrought out by the skilful use of the ratiocinative faculties. It follows, then, that the correct working of these faculties is almost the only important or necessary guarantee of truth. But it is not any lone faculty or set of faculties which is concerned in man's reception of truth. The truth becomes ours only as a gift from without. All truth is of the nature of a revelation, and demands that the organ through which the revelation is made should be properly adjusted. The organ for the reception of truth is symmetrically cultured manhood, rightly correlated action, and balanced capabilities of man's different powers. The attitude of him who would attain to truth is one of docility, of receptiveness, of control exercised upon all the powers of the soul,—so that none of them, by abnormal development or activity, interfere with the action of all the rest.... If the statements just made are true with regard to human knowledge in general, they are pre-eminently true with regard to such knowledge as is presented to the soul in the form of the concept of God. The pure in heart shall see God; they that obey shall know of the doctrine; the things of the spirit are spiritually judged of. These statements are as profound in their philosophic import as they are quickening in their practical tendencies. This concept comes as God's revelation of Himself within all the complex activities of the human soul. It is adapted to man as man in the totality of his being and energies. And the whole being of man must be co-operative in the reception of this self-revelation of God, as well as met and filled by the form which the revelation takes, in order that the highest truth concerning God may become known.... In his work on Mental Physiology, Dr Carpenter speaks of certain

departments of science 'in which our conclusions rest, not on any one set of experiences, but upon our *unconscious co-ordination of the whole aggregate of our experience*; not on the conclusions of any one train of reasoning, but on *the convergence of all our lines of thought toward one centre*.' These words, italicised by that author himself, well represent the form in which the knowledge of God is given to the human soul. It is the convergence of these lines of thought that run together from so many quarters which makes a web of argument far stronger to bind men than any single thread could be. This is a form of proof which, while it is, when understood aright, overwhelmingly convincing, gives also to all the elements of our complex manhood their proper work to do in its reception. In its reception it makes far greater difference, whether the moral and religious sections of the whole channel through which the truth flows are open or not, than whether the faculty of the syllogism is comparatively large or not. Nor is there any effort to disparage any intellectual processes involved, in thus insisting upon the complete and co-ordinated activity of the soul, as furnishing the organon for the knowledge of God. All the strings of the harp must be in tune, or there will be discord, not harmony, when the breath of the Lord blows upon it."

That the power of apprehending God is conditioned by the character of man's nature as a whole, was clearly seen and beautifully expressed by the ancient Christian apologist, Theophilus. "If thou sayest, show me thy God, I answer, show me first thy man, and I will show thee my God. Show me first, whether the eyes of thy soul see, and the ears of thy heart hear. For as the eyes of the body perceive earthly things, light and darkness, white and black, beauty and deformity, &c., so the ears of the heart and the eyes of the soul can perceive divine things. God is seen by those who can see Him, when they open the eyes of their soul. All men have eyes, but the eyes of some are blinded that they cannot see the light of the sun. But the sun does not cease to shine because they are blind; they must ascribe it to their blindness that they cannot see. This is thy case, O man! The eyes of thy soul are darkened by sin, even by thy sinful actions. Like a bright mirror, man must have a pure soul. If there be any rust on the mirror, man cannot see the reflection of his countenance in it; likewise if there be any sin in man, he cannot see God."—Ad Autolyicum, i. c. 2.

There is an improper use of the fact that the emotional capacities as well as the intellectual faculties are concerned in the apprehension of God. Some persons express themselves as if there was an evidence for God in the feelings not only as well as in the intellect, but distinct from, and independent of, the evidence on which the intellect has to decide. They reason as if although the latter were necessarily and in its own nature inconclusive, the former might still warrant belief, or as if at least feelings might so supplement weak arguments as to allow of their conclusions being firmly held. They virtually acknowledge that, although it were incontestably proved that the theistic inference was such as could not reasonably be deemed trustworthy or sufficient by the intellect, they would believe in the existence of God all the same in reliance on their feelings, because the heart is as trustworthy as the head and as well entitled to be heard. This is a very different doctrine from what I regard to be the true one—namely, that neither the head nor the heart is a competent witness in the case under consideration when the one is dissociated from the other. Purity of heart and obedience to the will of God enable us to see God and to know His character and doctrine, but they do not dispense with vision and knowledge, nor do they create a vision and knowledge which are distinct from, and independent of, reason. The heart must be appealed to and satisfied as well as the head, but not apart from or otherwise than through the head, or the appeal is sophistical and the satisfaction illegitimate. Our feelings largely determine whether we recognise and assent to reasons or not, but they ought not to be substituted for reasons, or even used to supplement reasons. The sentimentalism which pleads feelings in deprecation of the rigid criticism of reasons, or in order to retain a conviction which it cannot logically justify, necessarily tends to scepticism, and, indeed, is a kind of scepticism.

NOTE X., page [86](#).

INTUITION, FEELING, BELIEF, AND KNOWLEDGE IN RELIGION.

There are few who hold in a consistent manner that God is known by immediate intuition. The great majority of those who profess to believe this, so explain it as to show that they believe nothing of the kind. Dr Charles Hodge (Systematic Theology, pt. i. ch. i.) may be indicated as an example. Professing to hold that the knowledge of God is innate and intuitive, he so explains and restricts these terms as would make our knowledge of our fellow-men as much innate and intuitive as our knowledge of God, or even more so; and even after all these qualifications finds that nothing more can be maintained than "that a sense of dependence and accountability to a being higher than themselves exists in all minds"—which is far from being equivalent to the conclusion that God is intuitively known. Cousin is sometimes represented as an advocate of the view in question, but erroneously. Discounting a few inaccurate phrases, his theory as to the nature of the theistic process is substantially identical with that expounded in the lecture. Its purport is not that reason directly and immediately contemplates the Absolute Being, but that it is enabled and necessitated by the essential conditions of cognition, the *a priori* ideas of causality, infinity, &c., to apprehend Him in His manifestations. To find intuitionists who in this connection really mean what they say, we must go to Hindu Yogi, Plotinus and the Alexandrian Mystics, Schelling, and a few of his followers—or, in other words, to those who have thought of God as a pantheistic unity or a Being without attributes.

Many German theologians, unduly influenced by the authority of Schleiermacher, and destitute of a sound knowledge of psychology, have rested religion on feeling—mere or pure feeling. Hegel

opposed the attempt to do this, with considerable effect, although on erroneous principles. Krause exposed it, however, with far more thoroughness in his 'Absolute Religionsphilosophie.' It is on feeling that belief is rested by most of the advocates of what is called "the faith philosophy." With thinkers of this class a man like Cousin must not be confounded, although he maintained that religion begins with faith and not with reflection; or like Hamilton, although he denied that the infinite can be *known* while affirming that it "is, must, and ought to be, *believed*." Cousin meant by faith "nothing else than the consent of reason," and Hamilton meant by belief "assent to the original data of reason."

The words faith and belief are used in a bewildering variety of senses. A few remarks will make this apparent.

(a) By belief or faith is sometimes meant *reason* as distinguished from *understanding*, and sometimes *reason* as distinguished from *reasoning*. These two senses are so very closely allied that we may allow them to count as but a single signification. It is extraordinary that in either sense belief should be contrasted with reason, as it is by those who tell us that the infinite is an object only of faith, and that reason has to do exclusively with the finite, or that first principles are inaccessible to reason but revealed to faith. To create an appearance of conflict between reason and faith by identifying faith with reason in a special sense, and reason with understanding or reasoning, is unwarranted, if not puerile. What use can there be in telling us that God cannot be known—cannot be apprehended by reason—but is only an object of faith, a Being merely to be believed in, when what is meant is that we have the same immediate certainty of His existence as of the truth of an axiom of geometry?

(b) Belief may be limited to apprehension, and knowledge to comprehension. It may be said that "we have but faith, we cannot know" the unseen and infinite, just as it is said that we believe that the grass grows but do not know how it grows. It is obvious, however, that if apprehension be knowledge, as it surely is, we believe only what we know. We know—*i.e.*, apprehend—the existence of God and the growth of the grass, and we believe what we thus know. We do not know—*i.e.*, comprehend—the nature of God or the nature of growth, and what we do not thus know neither do we believe.

(c) At other times faith or belief relates to probable, as opposed to certain, knowledge. "We do not know this, but we believe it," often means, "We are not sure of this, but we think it likely." It is not in this sense, of course, that any one except a religious sceptic will allow that the existence of God is a matter of faith. A man may admit that religion and science differ as faith and knowledge, but if he is willing to understand this as signifying that while science is certain, religion is at the most merely probable, he must necessarily be a doubter or an unbeliever.

(d) Faith or belief sometimes refers to the knowledge which rests on personal testimony, Divine or human. Such faith may be more certain than assent given to the evidence furnished by science. It ought to be precisely proportioned to the evidence that there is such and such testimony, and that the testimony is trustworthy.

(e) By faith or belief is sometimes meant trust in a person or fidelity to a truth; the yielding up of the heart and life to the object of faith. Faith or belief of this kind always involves "preparedness to act upon what we affirm." It does not appear to me that such preparedness is, as Professor Bain maintains, "the genuine, unmistakable criterion of belief" in general. This kind of faith, like all other faith, ought to rest on the assent of the intellect to evidence, although what is characteristic of it is to be found not in the intellect but in the emotions and will. Since it constitutes and produces, however, spiritual experience, it is a condition and source as well as a consequence of knowledge. There can be, in fact, no profound religious knowledge, because there can be no vital religion, without it.

In religion, as in every other department of thought and life, man is bound to regulate his belief by the simple but comprehensive principle that evidence is the measure of assent. Disbelief ought to be regulated by the same principle, for disbelief is belief; not the opposite of belief, but belief of the opposite. Unbelief is the opposite both of belief and disbelief. Ignorance is to unbelief what knowledge is to belief or disbelief. The whole duty of man as to belief is to believe and disbelieve according to evidence, and neither to believe nor disbelieve when evidence fails him.

NOTE XI., page [118](#).

THE THEOLOGICAL INFERENCE FROM THE THEORY OF ENERGY.

A remarkably clear account of the chief theories as to the nature of matter will be found in Professor Tait's 'Lectures on some Recent Advances in Physical Science,' Lect. XII. In Thomson and Tait's 'Natural Philosophy,' Thomson's article on "The Age of the Sun's Heat" ('Macmillan's Magazine,' March 1862), Tait's 'Thermodynamics,' Helmholtz's 'Correlation and Conservation of Forces,' Balfour Stewart's 'Treatise on Heat,' &c., the facts and theorems which seem to establish that the material universe is a temporary system will be found fully expounded.

I am not acquainted with any more effective criticism of the argumentation by which the eminent physicists mentioned support their conclusion than that of the Rev. Stanley Gibson; and, although it seems to me not to come to very much, I feel bound in fairness to give it entire. After an exposition of the theory of energy, and of the reasoning founded on it by which we seem necessitated to infer that the universe tends at last to be a scene of rest, coldness, darkness, and

death, he thus writes: "Is this reasoning, I ask, open to any objection? and if not, does it bear out the theological conclusion here sought to be rested upon it? In attempting to pass a verdict upon the question here raised, we cannot but feel, not only the grandeur of the subject before us, but also the imminent risk of its being affected by considerations unknown to us. We certainly need to judge with diffidence. Perhaps the first question which arises is, Are we to take the material universe to be infinite? If it be, and if its stores of energy, potential and kinetic, have no limit, then it is no longer clear that the final stage of accumulation need have been reached, however long its past history may have been; nor yet, I may add, that it would ever be reached in the future. I may be reminded that at present, at all events, only finite accumulations have arisen, and that this is not consistent with an accumulation through a past eternity. But this objection assumes that there never could have been more than some assignable degree of diffusion of matter. Why should this be? If at any past period there was a certain degree of diffusion, why may there not have been a greater degree at an earlier period? And if so, why may not this integrating, as I should propose to call it, have been going on for ever?"

"If, on the other hand, the universe be finite, then, according to the principle of the conservation of energy, reflection of heat must take place from its boundaries, and there may be reconcentration of energy on certain points, according to the form of the bounding surface.

"A second inquiry arises thus. If it be impossible to imagine the present history of the universe continued backward indefinitely under its present code of laws, are we therefore obliged to assume some anomalous interference? We speak, of course, of these laws as they are known to us. Might there not be others, yet unknown, that would solve the difficulty?"

"The history of the universe, as immediately known to us, offers as its leading feature the falling together of small discrete bodies in enormous numbers and with great velocities, or the condensation of very rare and diffused gases. Hence the formation of bodies, some of vast size, others smaller, but all originally greatly heated. This process seems to point to an earlier state of things, in which such accumulations of matter, though sparse even now, were far less common—a state in which, to use the expression which I have proposed, matter was far less integrated. It is quite true that the great change of which we thus obtain a glimpse is not a recurring process. It is not therefore fitted for eternal repetition and continuance. But it is a bold thing to say that this earlier state of things may not have followed from one still older by a natural process, and this again from one before, and so on through an indefinite regression. We have seen what an important part the ether plays in the present process of the dissipation of energy. The existence of that ether, the separation of matter into two main forms, may have sprung out of some previous condition of things wholly unknown to us. And so also there may be forms and stores of energy as yet unknown.

"Mr Proctor, in his work on the sun, has cautioned us how we speculate on the physical constitution of that body, whilst we must feel uncertain how far the physical laws, which we observe here, will hold under the vastly different conditions obtaining there. He supports his caution by referring to cases in which what had been confidently thought by many to be safe generalisations have been shown to fail in novel circumstances. Thus it was thought that the passage of a gas from the gaseous into the liquid form was always an abrupt change. But it has been found that carbonic acid gas can be made to pass into the liquid state by insensible gradations. Again, it had been thought that gas, when incandescent, always gave light whose spectrum was broken into thin lines; but it has been shown that hydrogen, under high pressure, may be made to give forth light with a continuous spectrum. Now surely this caution, which Mr Proctor enters in the case of which he speaks, might still more wisely be entered when we come to consider a state of things so novel, so remote from our experience, as that which attended the origin of the universe, or rather of that state of the universe with which we are acquainted. We certainly must not be in haste to conclude that because the laws of nature, as they are known to us, will not explain what must have taken place at some very remote period, therefore those events must have been altogether anomalous."—*Religion and Science*, pp. 71-74.

It is here virtually—perhaps I may say expressly—conceded that if the matter and energy of the universe be finite and located in infinite space, the reasoning by which the theorists of thermodynamics maintain that perpetual motion is incompatible with the transformation and dissipation of energy, cannot be resisted. Unless matter and energy be infinite or space finite, the known laws of nature must eventually abolish all differences of temperature and destroy all life—this is what is admitted. To me it seems to amount to yielding all that is demanded; because whoever seriously considers the difficulties involved in believing either matter infinite or space finite must, I am persuaded, come to regard it as equivalent to an acknowledgment that the world will have an end and must have had a beginning.

Zoellner, in his ingenious work on the nature of comets, endeavours to avoid this inference by recourse to the hypotheses of Riemann and others as to a space of n dimensions. In such a space the shortest line would be a circle, and a body might move for ever, yet describe a limited course. Matter, space, and inferentially time, would, in fact, according to this hypothesis, be both finite and infinite. It is to be hoped that few persons in the full possession of their intellects will ever accept a view like this. The imaginary geometry may be thoroughly sound reasoning, but it is reasoning from erroneous premises, and it can only be useful so long as it is remembered that its premises are erroneous. They have only to be assumed to be true to experience and reality, and all science must be set aside in favour of nonsense. Logic ought not, however, to be confounded with truth.

Caspari fancies that by representing the universe as not a mechanism but an organism, he preserves the right to believe it eternal. But surely the laws of heat apply to organisms no less than to mechanisms.

In an article concerning the cosmological problem, published in the first number of the 'Vierteljahrsschrift f. Wissenschaftliche Philosophie,' Professor Wundt rejects the theory in question on extremely weak grounds. "It is easy to see," he says, "that, in the case of the English physicists at least, the desire of harmonising the data of the exact sciences with theological conceptions has not been without influence on this limitation of the universe." The rashness displayed by such a statement, and the utter want of evidence or probability for it, as regards men like Thomson or Tait, need not be pointed out. Besides, Clausius and Helmholtz are neither English physicists nor likely to be influenced by theological conceptions. Will it be believed that, notwithstanding this charge against others, Professor Wundt's own reasoning is not scientific, but merely anti-theological? Such is the case. If the Thomsonian theory be admitted, a place is left for creative action, for miracle; and this, he argues, is a contradiction of the principle of causality. Therefore the theory must be rejected. It is to be regretted that so eminent a man of science should employ so unscientific an argument.

There is obviously a very widespread unwillingness to accept the Thomsonian theory; but, so far as I am aware, good reasons have not yet been given for its rejection. The contrast between the reception which it has received and that which has been accorded to the Darwinian theory is certainly curious, and probably instructive.

NOTE XII., page [130](#).

THE HISTORY OF THE ÆTIOLOGICAL ARGUMENT.

The argument for the Divine existence which proceeds on the principle of causality is generally called the cosmological argument, but sometimes, and perhaps more accurately, the ætiological argument. The proof from order is not unfrequently termed cosmological. It is impossible to keep the ætiological argument entirely separate either from the ontological or cosmological argument. Ætiological reasoning may be detected as a creative factor in the rudest religious creeds. The search for causes began not with the origin of philosophy but with the origin of religion. Passages like Ps. xc. 1, 2, cii. 26-28; Rom. i. 19, 20; Heb. i. 10-12—have been referred to as anticipations of the argument. Wherever nature is spoken of in Scripture, it is as the work of an uncreated being, of a free and sovereign mind. Aristotle gave a formal expression to the ætiological argument by inferring from the motion of the universe the existence of a first unmoved mover—Phys., vii. 1, 2, viii. 7, 9, 15. Cicero repeated his reasoning, and tells us it had been also employed by Carneades, De Nat. Deor., ii. 9, iii. 12, 13. Well known is St Augustine's "Interrogavi terram, et dixit: non sum. Interrogavi mare et abyssos—et responderunt: non sumus deus tuus, quære super nos. Interrogavi cœlum, solem, lunam, stellas: neque nos sumus deus, quem quæris, inquit. Et dixi omnibus iis—dicite mihi de illo aliquid. Et exclamaverunt voce magna: ipse fecit nos. Interrogavi mundi molem de Deo meo et respondit mihi: non ego sum, sed ipse me fecit."—Conf., x. 6. Diodorus of Tarsus (Phot. Bib. Cod., 223, p. 209 Bekk.), and John of Damascus (De Fid. Orth., i. 3), inferred the necessity of a creative unity from the mutability and corruptibility of worldly things. Thomas Aquinas argued on the principle of causality in three ways—viz.: 1. From motion to a first moving principle, which is not moved by any other principle; 2. From effects to a first efficient cause; and 3. From the possible and contingent to what is in itself necessary.—Summa. P. i., Qu. 2, 3. Most of the theologians of the sixteenth, seventeenth, and eighteenth centuries who treat of the proofs of the Divine existence, employ in some form the argument from causation. Thus, in Pearson 'On the Creed' and Charnock's 'Discourses on the Existence and Attributes of God' will be found good examples of how it was presented in this country in the seventeenth century. Hume's speculations on causation attracted attention to it. The philosophers of the Scottish school and their adherents among the theologians laboured to present it in a favourable light. In Germany, Leibnitz (Théodicée, I. c. 7) and Wolff (Rational Thoughts of God, § 928) laid stress on the accidental contingent character of the world and its contents, and, relying on the principle of the sufficient reason, concluded that there must be a universal and permanent cause of all that is changing and transitory, an absolute ground of all that is relative and derivative. Further, Wolff and his followers raised on this reasoning a large amount of metaphysical speculation as to the nature of a necessary cause, the properties of an absolute Being, which was of a very questionable sort in itself, and had no proper connection with the so-called cosmological argument. To this argument, as stated by Wolff, Kant applied his transcendental criticism, and proved, as he thought, that it was "a perfect nest of dialectical assumptions." His argumentation may be allowed to have had force against Wolff, but it is weak wherever it is relevant to the ætiological proof rightly understood. In fact, his objections openly proceed on the assumption that the principle of causality is only applicable within the sphere of sense experience. If this be true, no objections, of course, are necessary. As a rule, the ætiological argument is not skilfully or even carefully treated in the works of recent German theologians. It has been expounded, however, with great philosophical ability and with a rare wealth of scientific knowledge, by Professor Ulrici of Halle, in the work entitled 'Gott und die Natur.' A translation of this treatise would confer a real service both on the theology and philosophy of this country.

NOTE XIII., page [137](#).

"Another science regarded as barren of religious applications, and even as sometimes positively injurious, is mathematics. Its principles are, indeed, of so abstruse a nature, that it is not easy to frame out of them a religious argument that is capable of popular illustration. But, in fact, mathematical laws form the basis of nearly all the operations of nature. They constitute, as it were, the very framework of the material world.... It seems, then, that this science forms the very foundation of all arguments for theism, from the arrangements and operations of the material universe. We do, indeed, neglect the foundation, and point only to the superstructure, when we state these arguments. But suppose mathematical laws to be at once struck from existence, and what a hideous case would the universe present! What then would become of the marks of design and unity in nature, and of the theist's argument for the being of a God?... It is said, however, that mathematicians have been unusually prone to scepticism concerning religious truth. If it be so, it probably originates from the absurd attempt to apply mathematical reasoning to moral subjects; or rather, the devotees of this science often become so attached to its demonstrations, that they will not admit any evidence of a less certain character. They do not realise the total difference between moral and mathematical reasonings, and absurdly endeavour to stretch religion on the Procrustean bed of mathematics. No wonder they become sceptics. But the fault is in themselves, not in this science, whose natural tendencies, upon a pure and exalted mind, are favourable to religion."—Hitchcock's Religion of Geology, pp. 387-389.

"Nor can we fail to notice how frequently the law which men have invented proves to have been already known and used in nature. The mathematician devises a geometric locus or an algebraic formula from *a priori* considerations, and afterward discovers that he has been unwittingly solving a mechanical problem, or explaining the form of a real phenomenon. Thus, for example, in Peirce's 'Integral Calculus,' published in 1843, is a problem invented and solved purely in the enthusiasm of following the analytic symbols; but in 1863 it proved to be a complete prophetic discussion and solution of the problem of two pendulums suspended from one horizontal cord. Thus also Galileo's discussion of the cycloid proved, long afterward, to be a key to problems concerning the pendulum, falling bodies, and resistance to transverse pressure. Four centuries before Christ, Plato and his scholars were occupied upon the eclipse as a purely geometric speculation, and Socrates seemed inclined to reprove them for their waste of time. But in the seventeenth century after Christ, Kepler discovers that the Architect of the heavens had given us magnificent diagrams of the eclipse in the starry heavens; and, since that time, all the navigation and architecture and engineering of the nineteenth century have been built on these speculations of Plato. Equally remarkable is the history of the idea of extreme and mean ratio. Before the Christian era geometers had invented a process for dividing a line in this ratio, that they might use it in an equally abstract and useless problem—the inscribing a regular pentagon in a circle. But it was not until the middle of the present century that it was discovered that this idea is embodied in nature. It is hinted at in some animal forms, it is very thoroughly and accurately expressed in the angles at which the leaves of plants diverge as they grow from the stem, and it is embodied approximately in the revolutions of the planets about the sun.... Now, in all these cases of the embodiment in nature of an idea which men have developed, not by a study of the embodiment, but by an *a priori* speculation, there seems to us demonstrative evidence that man is made in the image of his Creator; that the thoughts and knowledge of God contain and embrace all possible *a priori* speculations of men. It is true that God's knowledge is infinite, and beyond our utmost power of conception. But how can we compare the reasonings of Euclid upon extreme and mean ratio with the arrangement of leaves about the stem, and the revolutions of planets around the sun, and not feel that these phenomena of creation express Euclid's idea as exactly as diagrams or Arabic digits could do; and that this idea was, in some form, present in the creation?"—The Natural Foundations of Theology. By T. Hill, D.D., LL.D.

There is an ingenious and judicious little work by Charles Girdlestone, M.A., published in 1875, and entitled 'Number: a Link between Divine Intelligence and Human. An Argument.'

NOTE XIV., page [140](#).

ASTRONOMY AND THE DESIGN ARGUMENT.

The design argument has always drawn some of its data from astronomy. The order and beauty of the heavenly bodies, the alternation of day and night, the succession of the seasons, and the dependence of living creatures on these changes, are referred to as indications of God's character and agency in many passages of Scripture. Thus, to select only from the Psalms: "When I consider Thy heavens, the work of Thy fingers, the moon and the stars, which Thou hast ordained; what is man, that Thou art mindful of him? and the son of man, that Thou visitest him?"—viii. 3, 4. "The heavens declare the glory of God; and the firmament showeth His handiwork. Day unto day uttereth speech, and night unto night showeth knowledge."—xix. 1, 2. "He appointed the moon for seasons; the sun knoweth his going down. Thou makest darkness, and it is night: wherein all the beasts of the forest do creep forth.... The sun ariseth, they gather themselves together, and lay them down in their dens. Man goeth forth unto his work and to his labour until the evening. O Lord, how manifold are Thy works! in wisdom hast Thou made them all."—civ. 19-24. Among classical writers, Cicero has presented the design argument as founded on the arrangements and movements of the heavenly bodies in a very striking manner, when, referring to the instrument by which Posidonius had ingeniously represented them, he asks whether, if that instrument were carried into Scythia or Britain, any even of the barbarians of these lands would doubt that it was the product of reason, and rebukes those who would regard

the wondrous system of which it was a feeble copy as the effect of chance. "Quod si in Scythiam aut in Britanniam, sphæram aliquis tulerit hanc, quam nuper familiaris noster effecit Posidonius, cujus singulæ conversiones idem efficiunt in sole, et in lunâ, et in quinque stellis errantibus, quod efficitur in cœlo singulis diebus et noctibus: quis in illâ barbarie dubitet, quin ea sphæra sit perfecta ratione? Hi autem dubitant de mundo, ex quo et oriuntur et fiunt omnia, casune ipse sit effectus, aut necessitate aliquâ, an ratione ac mente divinâ: et Archimedes arbitrantur plus valuisse in imitandis sphæræ conversionibus, quam naturam in efficiendis, præsertim cum multis partibus sint illa perfecta, quam hæc simulata, sollertius."—De Nat. Deorum, ii. 34, 35. The 'Astro-Theology' of Wm. Derham, published in 1714, was perhaps the first work entirely devoted to the illustration of the design argument from astronomical facts and theories. Among comparatively recent works of a similar kind I may mention Vince's 'Confutation of Atheism from the Laws and Constitution of the Heavenly Bodies,' Whewell's 'Bridgewater Treatise,' Dick's 'Celestial Scenery,' Mitchell's 'Planetary and Stellar Worlds,' and Leitch's 'God's Glory in the Heavens.' They afford ample evidence of the erroneousness of Comte's assertion that "the opposition of science to theology is more obvious in astronomy than anywhere else, and that no other science has given more terrible shocks to the doctrine of final causes." Kepler did not think so, for he concludes his work on the 'Harmony of Worlds' with these devout words: "I thank Thee, my Creator and Lord, that Thou hast given me this joy in Thy creation, this delight in the works of Thy hands. I have shown the excellency of Thy work unto men, so far as my finite mind was able to comprehend Thine infinity. If I have said aught unworthy of Thee, or aught in which I may have sought my own glory, graciously forgive it." Nor did Newton, for he wrote: "Elegantissima hæcce compages solis, planetarum, et cometarum (et stellarum), non nisi consilio et dominio Entis cujusdam potentis et intelligentis oriri potuit." And in our own times such men as Herschel, Brewster, Mädler, &c., have protested against the notion that astronomy tends to atheism.

The late Professor De Morgan demonstrated in his 'Essay on Probability,' when only eleven planets were known, that the odds against chance, to which in such a case intelligence is the only alternative, being the cause of all these bodies moving in one direction round the sun, with an inconsiderable inclination of the planes of their orbits, were twenty thousand millions to one. "What prospect," are his own words, "would there have been of such a concurrence of circumstances, if a state of chance had been the only antecedent? With regard to the sameness of the directions, either of which might have been from west to east, or from east to west, the case is precisely similar to the following: There is a lottery containing black and white balls, from each drawing of which it is as likely a black ball shall arise as a white one: what is the chance of drawing eleven balls all white?—answer 2047 to one against it. With regard to the other question, our position is this: There is a lottery containing an infinite number of counters, marked with all possible different angles less than a right angle, in such a manner that any angle is as likely to be drawn as another, so that in ten drawings the sum of the angles drawn may be anything under ten right angles: now, what is the chance of ten drawings giving collectively less than one right angle?—answer 10,000,000 to one against it. Now, what is the chance of both these events coming together?—answer, more than 20,000,000,000 to one against it. It is consequently of the same degree of probability that there has been something at work which is not chance in the formation of the solar system."

There are several departments of science as much, or even more, adapted than astronomy, to furnish proofs of the wisdom of God; but there is none which affords us such evidence of His power, or so helps us to realise His omnipresence, our own nothingness before Him, and the littleness of our earth in the system of His creation. Those who wish to have impressions of this kind deepened may be recommended to read the works of Proctor and Flammarion.

What is said in the paragraph to which this note refers must not be so understood as to be in consistent with the possibility or probability, if not demonstrated certainty, that the universe is not a perfectly conservative system, but one which is tending surely although slowly to the destruction of the present condition of things. This fact, if it be a fact, can no more affect the design argument in its relation to astronomy, than the decay of plants and the death of animals can affect it in relation to vegetable and animal physiology.

NOTE XV., page [143](#).

CHEMISTRY AND THE DESIGN ARGUMENT.

The history of chemistry is of itself sufficient to disprove the view of Comte that the initial and conjectural stages of a science are those in which it affords most support to theology. It was only after the definitive constitution of chemistry as a science, only after the discovery of positive and precise chemical laws, that the teleological argument for the Divine existence began to be rested to a certain extent upon it.

The Honourable Robert Boyle, the founder of the Boyle Lectureship, was one of the most distinguished chemists of his age, a zealous defender of final causes, and the author of several treatises intended to diffuse worthy views and sentiments as to the character and operations of the Creator.

Probably the two best English treatises on the relationship of chemistry to theism are the Bridgewater Treatise of Dr Prout, 'Chemistry, Meteorology, and the Function of Digestion, considered with reference to Natural Theology' (3d ed., 1845), and the Actonian Prize Essay of Professor Fownes, 'Chemistry as exemplifying the Wisdom and Beneficence of God' (1844). Both

writers were chemists of high reputation, but they were not very conversant with theology or philosophy, and have, in consequence, by no means fully utilised the excellent scientific materials which they collected.

This makes it all the more to be regretted that the late Professor George Wilson was not permitted to accomplish his design of writing "a book corresponding to the 'Religio Medici' of Sir Thomas Browne, with the title 'Religio Chemici.'" Among the fragments comprised in the work published under that title after his death, three essays—"Chemistry and Natural Theology," "The Chemistry of the Stars," and "Chemical Final Causes"—are most interesting and suggestive.

The attempts of writers like Moleschott and Büchner to draw atheistic inferences from the theories or hypotheses of modern chemistry have given rise to a multitude of answers, but it may be sufficient to refer to the 'Antimaterialismus' of Dr L. Weiss. Liebig in his 'Chemical Letters' manifests profound contempt for the materialistic and anti-theistic speculations attempted to be based on the science of which he was so illustrious a master.

NOTE XVI., page [145](#).

GEOLOGY, GEOGRAPHY, ETC., AND THE DESIGN ARGUMENT.

The single fact that geology proves that every genus and species of organic forms which exist or have existed on the earth had a definite beginning in time, gives to this science great importance in reference to theism. It decides at once and conclusively what metaphysics might have discussed without result for ages. Its religious bearings are exhibited in Buckland's 'Geology and Mineralogy considered in reference to Natural Theology,' Hugh Miller's 'Footprints of the Creator,' Hitchcock's 'Religion of Geology,' and many other works. Lyell concludes both his 'Elements of Geology' and 'Principles of Geology' by affirming that geological research finds in all directions the clearest indications of creative intelligence; that "as we increase our knowledge of the inexhaustible variety displayed in nature, and admire the infinite wisdom and power which it manifests, our admiration is multiplied by the reflection, that it is only the last of a great series of pre-existing creations, of which we cannot estimate the number or limit in times past."

The numerous adaptations which exist between the terrestrial and celestial economies are dwelt on in detail by M'Culloch in the second volume of his 'Proofs and Illustrations of the Attributes of God from the Facts and Laws of the Physical Universe,' and by Buchanan in 'Faith in God and Modern Atheism,' vol. i. pp. 132-156. These two authors have also treated of the adaptations subsisting between the organic and inorganic worlds. The Bridgewater Treatise of Chalmers was on 'The Adaptation of External Nature to the Moral and Intellectual Constitution of Man;' and that of Kidd, on 'The Adaptation of External Nature to the Physical Constitution of Man.'

In Ritter's 'Geographical Studies,' Guyot's 'Earth and Man,' Kapp's 'Allgemeine Erdkunde,' Lotze's 'Mikrokosmos,' B. vi. c. 1, Duval's 'Des Rappports entre la Géographie et l'Economie Politique,' Cocker's 'Theistic Conception of the World,' ch. vii., &c., will be found a rich store of teleological data as to the fitness of the earth to be the dwelling-place and the schoolhouse of human beings. Of course, those who attempt to prove this thesis require carefully to resist the temptation to conceive of the relation of nature to man as not one of cause and effect, of action and reaction, of mutual influence, but as an immediate and inexplicable pre-established harmony like that which Leibnitz supposed to exist between the body and the soul. This was the theory which Cousin set forth in a celebrated lecture on the part of geography in history. Regarding it I may quote the words which I have used elsewhere: "This notion is not only purely conjectural, but inconsistent with the innumerable facts which manifest that nature does influence man, and that man does modify nature. It is impossible to hold, either in regard to the body and soul, or in regard to nature and man, *both* the theory of mutual influence and of pre-established harmony. All that, in either case, proves the former, disproves the latter. The belief in a pre-established harmony between man and nature is, indeed, considerably more absurd than in a pre-established harmony between the body and soul; for when a body is born, a soul is in it, which remains in it till death, and is never known to leave it in order to take possession of some other body: but every country is not created with a people in it, nor is every people permanently fixed to a particular country. Imagination may be deceived for a moment by an obvious process of association into this belief of certain peoples being suited for certain lands, independently of the action of natural causes—the Greeks, let us say, for Greece, the Indian for the prairies and forests of America, the Malayan for the islands of the Indian Archipelago; but a moment's thought on the fact that the Turk has settled down where the Greeks used to be—that mighty nations of English-speaking men are rising up where the Indian roamed, and that Dutchmen are thriving in the lands of the Malayan, should suffice to disabuse us. Besides, just as the dictum, 'Marriages are made in heaven,' is seriously discredited by the great number that are badly made, so the kindred opinion that every country gets the people which suits it, and every people the country, as a direct and immediate consequence of their pre-established harmony, is equally discredited by the prevalence of ill-assorted unions, a great many worthless peoples living in magnificent lands, while far better peoples have much worse ones."—Philosophy of History in France and Germany, pp. 191, 192.

NOTE XVII., page [146](#).

THE ORGANIC KINGDOM AND DESIGN.

The order and system in the vegetable and animal kingdoms are undeniable general facts, whatever may have been the secondary agencies by which they have been produced; and the inference of design from these facts is valid, whatever may have been the mode of their production. The characters and relationships of organic forms constitute a proof of intelligence, whether their genera and species be the immediate and immutable expressions of the ideas of the Divine Mind, or the slowly-reached results of evolution. Of course, if there has been a process of evolution, it must have been one exactly fitted to attain the result. But the discovery or exhibition of such a process will be sufficient to cause a certain class of minds to believe that there has been no cause but the process—that the process completely explains both itself and the result, and leaves no room for intelligence.

The character of the order and system in the organic world is so extremely abstruse, subtle, and comprehensive, that all the attempts at classification in botany prior to De Candolle, and in zoology prior to Cuvier, were failures. The labours of the great naturalists and biologists of the present century have, doubtless, accomplished much; but the light reached is still but the feeble light of an early dawn. Yet that light is most pleasant and satisfying to the eye of the mind. The reason sees in it a profound significance and a wonderful beauty. How, it may well be asked, can a scheme of order which tasks to such an extent the powers of comprehension possessed by the human mind, and yet which is perceived, when discovered, to be admirably rational, be supposed to have originated elsewhere than in a Mind?

I can only mention a few out of the multitude of books which treat of design in the organic world. Among general works on natural theology it may be sufficient to refer to those of Paley, Buchanan, and Tulloch; and among special works to Professor Balfour's 'Phyto-Theology; or, Botanical Sketches, intended to illustrate the Works of God in the Structure, Functions, and General Distribution of Plants;' M'Cosh's 'Typical Forms and Special Ends in Creation;' Agassiz's 'Structure of Animal Life; being Six Lectures on the Power, Wisdom, and Goodness of God, as manifested in His Works;' Kirby's 'Power, Wisdom, and Goodness of God, as manifested in the Creation of Animals;' Roget's 'Animal and Vegetable Physiology, considered in reference to Natural Theology;' and Sir Charles Bell's 'The Hand, its Mechanism and Vital Endowments, as evincing Design.' The three last-mentioned works are Bridgewater Treatises.

It is a duty to call particular attention to the recent work of M. Janet, 'Les Causes Finales.' Although M. Janet concedes, perhaps, too much to the opponents of finality, his treatise contains the ablest and most adequate discussion of the various problems suggested by the indications which organic nature gives of design that has yet appeared. It is eminently worthy of a careful study. I am glad to know that a translation of this valuable work is in progress.

Among the masters of biological science, Cuvier, V. Baer, Agassiz, and R. Owen may be named, as among those who have set the highest value on the principle of finality. The essay on Classification of Agassiz, and the various essays which Von Baer has published at different times, on what he calls "Zielstrebigkeit," are specially important.

NOTE XVIII., page [148](#).

EVIDENCES OF DESIGN IN ORGANISMS.

"The *savants* are generally too much disposed to confound the doctrine of final cause with the hypothesis of an invisible force acting without physical means, as a *deus ex machinâ*. These two hypotheses, far from reducing themselves the one to the other, are in explicit contradiction; for he who says *design* says at the same time *means*, and, consequently, causes adapted to produce a certain effect. To discover this cause is by no means to destroy the idea of design; it is, on the contrary, to bring to light the condition, *sine quâ non*, of the production of the end. To make clear this distinction we cite a beautiful example, borrowed from M. Claude Bernard. How does it happen, says this eminent physiologist, that the gastric juice, which dissolves all aliments, does not dissolve the stomach itself, which is of precisely the same nature as the aliments with which it is nourished? For a long time the vital force was supposed to intervene—that is to say, an invisible cause which, in some way, suspended the properties of the natural agents, to prevent their producing their necessary effects. The vital force would, by a sort of moral *veto*, forbid the gastric juice to touch the stomach. We see that this would be a real miracle. Everything is explained when we know that the stomach is lined with a coating or varnish which is not attacked by the gastric juice, and which protects the walls which it covers. Who does not see that in refuting the omnipotence of the vital force, very far from having weakened the principle of finality, we have given to it a wonderful support? What could the most perfect art have done to protect the walls of the stomach, but invent a precaution similar to that which exists in reality? And how surprising it is that an organ destined to secrete and use an agent most destructive to itself, is found armed with a protective tunic, which must have always coexisted with it, since otherwise it would have been destroyed before having had time to procure for itself this defence—which excludes the hypothesis of long gropings and happy occurrences."—Janet, 'Final Causes and Contemporaneous Physiology,' *Presb. Quart. Rev.*, April 1876.

Professor Tyndall gives a very graphic description of the combination of remarkable arrangements by which the human ear is fitted to be an organ of hearing. I quote from it the following words, and connect with them some striking observations of Max Müller. "Finally, there is in the labyrinth a wonderful organ, discovered by the Marchese Corti, which is to all appearance a musical instrument, with its chords so stretched as to accept vibrations of different

periods, and transmit them to the nerve-filaments which traverse the organ. Within the ears of men, and without their knowledge or contrivance, this lute of 3000 strings has existed for ages, accepting the music of the outer world, and rendering it fit for reception by the brain. Each musical tremor which falls upon this organ selects from its tensioned fibres the one appropriate to its own pitch, and throws that fibre into unisonant vibration. And thus, no matter how complicated the motion of the external air may be, those microscopic strings can analyse it and reveal the constituents of which it is composed."—On Sound, p. 325. "What we hear when listening to a chorus or a symphony is a commotion of elastic air, of which the wildest sea would give a very inadequate image. The lowest tone which the ear perceives is due to about 30 vibrations in one second, the highest to about 4000. Consider, then, what happens in a *presto*, when thousands of voices and instruments are simultaneously producing waves of air, each wave crossing the other, not only like the surface waves of the water, but like spherical bodies, and, as it would seem, without any perceptible disturbance; consider that each tone is accompanied by secondary notes, that each instrument has its peculiar *timbre*, due to secondary vibrations; and, lastly, let us remember that all this cross-fire of waves, all this whirlpool of sound, is moderated by laws which determine what we call harmony, and by certain traditions or habits which determine what we call melody—both these elements being absent in the songs of birds—that all this must be reflected like a microscopic photograph on the two small organs of hearing, and there excite not only perception, but perception followed by a new feeling even more mysterious, which we call either pleasure or pain;—and it will be clear that we are surrounded on all sides by miracles transcending all we are accustomed to call miraculous."—Science of Language, second series, p. 115.

The structure of the eye has often been described as an evidence of design. There is an extremely interesting comparison of it with the photographic camera in Le Conte's 'Religion and Science,' pp. 20-33.

The whole reading public knows the masterly chapter on "The Machinery of Flight" in the Duke of Argyll's 'Reign of Law.'

NOTE XIX., page [149](#).

PSYCHOLOGY AND DESIGN.

The following writers treat at considerable length of the evidences of design to be traced in the constitution of the mind: Sir Matthew Hale in his 'Primitive Origination of Mankind;' Barrow in the seventh of his 'Sermons on the Creed;' Bentley in the second sermon of his 'Boyle Lecture;' Crombie in the second volume of his 'Natural Theology;' Lord Brougham in his 'Discourse on Natural Theology,' sect. iii., pp. 52-80; Turton's 'Natural Theology Considered,' pp. 65-160; Chalmers's 'Natural Theology,' Book III.; Buchanan's 'Faith in God,' pp. 213-231; Tulloch's 'Theism,' pp. 182-247; and Ulrici's 'Gott und Mensch.'

The phenomena of animal instinct are of themselves an inexhaustible source of instruction as to the Divine wisdom and goodness. "The spinning machinery which is provided in the body of a spider is not more accurately adjusted to the viscid secretion which is provided for it, than the instinct of the spider is adjusted both to the construction of its web and also to the selection of likely places for the capture of its prey. Those birds and insects whose young are hatched by the heat of fermentation, have an intuitive impulse to select the proper materials, and to gather them for the purpose. All creatures, guided sometimes apparently by senses of which we know nothing, are under like impulses to provide effectually for the nourishing of their young; and it is most curious and instructive to observe that the extent of provision which is involved in the process, and in the securing of the result, seems very often to be greater as we descend in the scale of nature, and in proportion as the parents are dissociated from the actual feeding or personal care of their offspring. The mammalia have nothing to provide except food for themselves, and have at first, and for a long time, no duty to perform beyond the discharge of a purely physical function. Birds have more to do—in the building of nests, in the choice of sites for these, and after incubation in the choice of food adapted to the period of growth. Insects, much lower in the scale of organisation, and subject to the wonderful processes of metamorphosis, have to provide very often for a distant future, and for successive stages of development not only in the young but in the *nidus* which surrounds them. Bees, if we are to believe the evidence of observers, have an intuitive guidance in the selection of food which has the power of producing organic changes in the bodies of the young, even to the determination and development of sex, so that, by the administration of it, under what may be called artificial conditions, certain selected individuals can be made the mothers and queens of future hives. These are but a few examples of facts of which the whole animal world is full, presenting, as it does, one vast series of adjustments between bodily organs and corresponding instincts. But this adjustment would be useless unless it were part of another adjustment—between the instincts and perceptions of animals and those facts and forces of surrounding nature which are related to them, and to the whole cycle of things of which they form a part. In those instinctive actions of the lower animals which involve the most distant and the most complicated anticipations, it is certain that the prevision involved is a prevision which is not in the animals themselves. They appear to be, and beyond all doubt really are, guided by some simple appetite, by an odour or a taste, and, in all probability, they have generally as little consciousness of the ends to be subserved as the suckling has of the processes of nutrition. The path along which they walk is a path which they did not engineer. It is a path made for them, and they simply follow it. But the propensities and tastes and feelings which make them follow it, and the rightness of its direction towards the ends to be attained, do

constitute an adjustment which may correctly be called mechanical, and is part of a unity which binds together the whole world of life, and the whole inorganic world on which living things depend."—Duke of Argyll on Animal Instinct (Cont. Rev., July 1875).

Instinctive actions will not be shown to be less evidences of Divine purpose by its being proved that intelligence, at least in the higher animals, probably always co-operates in some degree with instinct, or that much which is referred to instinct may be traced either directly to experience or to the hereditary transmission of qualities originally generated by experience.

NOTE XX., page [152](#)

HISTORY AND DESIGN.

The quotation is from the eighteenth—the concluding—volume of the 'Etudes sur l'Histoire de l'Humanité,' by Professor Laurent of Ghent. I have given some account of his historical doctrine, and endeavoured to defend the theistic inference which he has drawn from his laborious survey of historical facts against the objections of Professor J. B. Meyer, in my 'Philosophy of History in France and Germany,' pp. 321-330. Bunsen, in the work entitled 'God in History,' seeks to establish the same great thesis.

"History," says Niebuhr, "shows, on a hundred occasions, an intelligence distinct from nature, which conducts and determines those things which may seem to us accidental; and it is not true that history weakens our belief in Divine Providence. History is, of all kinds of knowledge, the one which tends most decidedly to that belief."—Lectures on the History of Rome, vol. ii. p. 59.

Süssmilch's celebrated treatise, 'Göttliche Ordnung in der Veränderung des menschlichen Geschlechtes, &c.:' M'Cosh's 'Method of the Divine Government;' and Gillett's 'God in Human Thought,' vol. ii. pp. 724-792, may be consulted as regards the evidences of Divine purpose to be found in the constitution of society.

NOTE XXI., page [168](#).

HISTORY OF THE TELEOLOGICAL ARGUMENT.

The proof of the Divine existence from the order and adaptations of the universe is known as the physico-theological or teleological argument. It has also been sometimes called the cosmological argument; the very word *cosmos*, like the Latin *mundus* and our own universe, implying order. It is so obvious and direct that it has presented itself to the mind from very ancient times. It is implied in such passages of Scripture as Job, xxxvii.-xli.; Ps. viii., xix., civ.; Isa. xl. 21-26; Matt. vi. 25-32; Acts, xiv. 15-17, xvii. 24-28. Pythagoras laid great stress on the order of the world; and it was mainly on that order that Anaxagoras rested his belief in a Supreme Intelligence. Socrates developed the argument from the adaptation of the parts of the body to one another, and to the external world, with a skill which has never been surpassed. His conversation with Aristodemus, as recorded in the 'Memorabilia' of Xenophon, is of wonderful interest and beauty. Few will follow it even now without feeling constrained to join Aristodemus in acknowledging that "man must be the masterpiece of some great Artificer, carrying along with it infinite marks of the love and favour of Him who thus formed it." Plato presents the argument specially in the 'Timæus,' and his whole philosophy is pervaded by the thought that God is the primary source and perfect ideal of all order and harmony. Aristotle expressly maintains that "the appearance of ends and means is a proof of design," and conceives of God as the ultimate Final Cause. Cicero (De Nat. Deor., ii. c. 37) puts into the mouth of Balbus an elaborate exposition of the design argument. The 'De Usu Partium' of Galen is a treatise on natural theology, teaching design in the structure of the body.

This proof is found more frequently than any other in the writings of the fathers and scholastics. "When we see a vessel," says Theophilus, "spreading her canvas, and majestically riding on the billows of the stormy sea, we conclude that she has a pilot on board; thus, from the regular course of the planets, the rich variety of creatures, we infer the existence of the Creator."—Ad Autol., 5. Minucius Felix (c. 18) compares the universe to a house, and Gregory of Nazianzum (Orat., xxviii. 6) compares it to a lyre, in illustrating the same argument. Ambrose, Athanasius, Augustine, Basil the Greek, Chrysostom, &c., employ it. So do Albertus Magnus, Thomas Aquinas, &c.

The opposition of Bacon and Descartes to final causes had no influence in preventing theologians from insisting on their existence. From Boyle and Derham to Paley and the Bridgewater Treatises, an enormous literature appeared in England devoted to this end. Germany, also, in the second half of the eighteenth century, was almost as much overflowed with Lithotheologies, Hydrotheologies, Phytotheologies, Insectotheologies, &c., as it at present is with works on Darwinism. In France, Fenelon in his 'Démonstration de l'Existence de Dieu,' and Bernardin de Saint Pierre in his 'Etudes' and 'Harmonies de la Nature,' eloquently, although not perhaps very solidly or cautiously, reasoned from the wonders of nature to the wisdom of God.

Hume and Kant, by their criticisms of the design argument, rendered to it the great service of directing attention to the principles on which it proceeds. Theologians had previously gone on merely accumulating illustrative instances and instituting minute investigations into the constitutions of the complex objects which they selected with this view. Attention was thus distracted from what really needed argument. Hume and Kant showed men the real point at

issue.

Although Kant rejected the argument, he speaks of it in these terms: "This proof deserves to be mentioned at all times with respect. It is the oldest, the clearest, and the most suited to the ordinary understanding. It animates the study of nature, because it owes its existence to thought, and ever receives from it fresh force. It brings out reality and purpose where our observation would not of itself have discovered them, and extends our knowledge of nature by exhibiting indications of a special unity whose principle is beyond nature. This knowledge, moreover, directs us to its cause—namely, the inducing idea, and increases our faith in a supreme originator to an almost irresistible conviction."

I must refer to the Notes from XIII. to XX. inclusive, for the titles of recent works on the design argument.

"The assertion appears to be quite unfounded that, as science advances from point to point, final causes recede before it, and disappear one after the other. The principle of design changes its mode of application, indeed, but it loses none of its force. We no longer consider particular facts as produced by special interpositions; but we consider design as exhibited in the establishment and adjustment of the laws by which particular facts are produced. We do not look upon each particular cloud as brought near to us that it may drop fatness on our fields; but the general adaptation of the laws of heat and air and moisture to the promotion of vegetation does not become doubtful. We do not consider the sun as less intended to warm and vivify the tribes of plants and animals because we find that, instead of revolving round the earth as an attendant, the earth, along with other planets, revolves round him. We are rather, by the discovery of the general laws of nature, led into a scene of wider design, of deeper contrivance, of more comprehensive adjustments. Final causes, if they appear driven farther from us by such extension of our views, embrace us only with a vaster and more majestic circuit. Instead of a few threads connecting some detached objects, they become a stupendous network, which is wound round and round the universal frame of things."—Whewell, 'History of Scientific Ideas,' vol. ii. pp. 253, 254.

NOTE XXII., page [182](#).

CREATION AND EVOLUTION.

Creation is the *only* theory of the *origin* of the universe. Evolution assumes either the creation or the self-existence of the universe. The evolutionist must choose between creation and non-creation. They are opposites. There is no intermediate term. The attempt to introduce one—the Unknowable—can lead to no result; for unless the Unknowable is capable of creating, it can account for the origin of nothing. All attempts to explain even the formation of the universe, either by the evolution of the Unknowable or by evolution out of the Unknowable, must be of a thoroughly delusive character. The evolution of what is known can alone have significance either to the ordinary or scientific mind. Nothing can be conceived of as subject to evolution which is not of a finite and composite nature. Nothing can be evolved out of a finite and composite existence which was not previously involved in it. And what gives to anything its limits and constitution must be more perfect than itself. Το πρωτον ου σπερμα εστιν, αλλα το τελειον.

"As many philosophers as adopt the supposition—such as the Pythagoreans and Spensippus—that what is best and most fair is not to be found in the principle of things, from the fact that though the first principles both of plants and animals are causes, yet what is fair and perfect resides in created things as results from these,—persons, I say, who entertain these sentiments, do not form their opinions correctly. For seed arises from other natures that are antecedent and perfect, and seed is not the first thing, whereas that which is perfect is."—Aristotle, 'Metaphysics,' xi. 7.

"It is manifest by the light of nature that there must at least be as much reality in the efficient and entire cause as in its effect; for whence can the effect draw its reality if not from its cause? And how could the cause communicate to it this reality unless it possessed it in itself? And hence it follows, not only that what is cannot be produced by what is not, but likewise that the more perfect—in other words, that which contains in itself more reality—cannot be the effect of the less perfect."—Descartes, 'Meditations,' iii.

"In not a few of the progressionists the weak illusion is unmistakable, that, with time enough, you may get everything out of next-to-nothing. Grant us, they seem to say, any tiniest granule of power, so close upon zero that it is not worth begrudging—allow it some trifling tendency to infinitesimal increment—and we will show you how this little stock became the kosmos, without ever taking a step worth thinking of, much less constituting a case for design. The argument is a mere appeal to an incompetency in the human imagination, in virtue of which, magnitudes evading conception are treated as out of existence; and an aggregate of inappreciable increments is simultaneously equated,—in its cause to *nothing*, in its effect to *the whole of things*. You manifestly want the same causality, whether concentrated on a moment or distributed through incalculable ages; only, in drawing upon it, a logical theft is more easily committed piecemeal than wholesale. Surely it is a mean device for a philosopher thus to crib causation by hair's-breadths, to put it out at compound interest through all time, and then disown the debt."—Martineau, 'Essays Philosophical and Theological,' pp. 141, 142.

"Think of it! An endless evolution, an eternal working, an infinite causation, and yet an effect so finite. Nature has been working upward from eternity, and has just passed the long-armed ape

who begat prognathus, as prognathus begat the troglodyte homo. What becomes of our doctrine of progress? As sure as mathematics, it should have been all evolved, all that we now have, over and over again—all *out*, or far more *out* than has come out, incalculable ages ago. An eternal ante-past of progressive working. To what a height should it have arisen! It should have transcended all our ideals. The most exalted finite being should have been reached, the most exalted that our minds can conceive, instead of this creature man, so poor, so low; for you will bear in mind that I am speaking of him as measured by no higher scale of value than that afforded by this physical hypothesis—man evolved from nebular gas—man just coming out of darkness, and so soon to return to darkness again—*e tenebris in tenebras*. This all comes from that hideous *υστερον προτερον*, that inversion of all necessary thinking. Nature first, it says—matter first, an impalpable nebulous nihilism first, the lowest and most imperfect first; life, thought, reason, idea, their junior products, and God, therefore, the last product, if there be a God at all, or anything to which such a name can possibly be given. And we are asked to adopt this, and call it grand, whilst rejecting as narrow and soul-contracting the revelation which makes God first, reason first, idea first, the perfect first,—as has been said before—the imperfect and the finite ever a departure from it, whether in the scale of order or of time, whether as exhibited in processes of lapse and deterioration or the contrary seeming of recovery and restoration in cyclical rounds. The two schemes have two entirely different modes of speech. Says the mere physical hypothesis: In the beginning was the nebula, and all things were in the nebula, and all things were self-evolved from the nebula—even life, thought, consciousness, idea, reason itself, having no other source. The other speaks to us in language like this: *Εν αρχη ην ο Λογος*, "In the beginning was the Word," the *Λογος*, the Reason, "and the Word was with God, and the Word was God. All things came into being by Him. In Him was life," *Ζωη*, and "from this life"—not from motions, or molecules, or correlated forces, or the vibration of fibres, or the arrangements of nebular atoms, but from this life of the *Logos*, the eternal Reason—"came the light of men"—the mind, reason, conscience of humanity—even "the light that lighteth" every rational being "coming into the cosmos."—Prof. Lewis, 'The Kingdom of God' (Dickinson's Theological Quarterly, No. 6).

NOTE XXIII., page [195](#).

THEOLOGICAL INFERENCES FROM THE DOCTRINE OF SPONTANEOUS GENERATION.

An eloquent preacher exclaims, "Great ought to be our compassion for the weak brother whose faith in God would be shaken because a chemist should succeed next year in producing vital cells out of a hermetically-sealed vessel containing only the elements of protoplasm."—Rev. E. A. Abbott, D.D., 'Cambridge Sermons,' p. 33. It must be admitted, however, that many who certainly cannot be fairly described as "weak brethren," entertain very strongly that fear of the doctrine of spontaneous generation which Dr Abbott deprecates. I quote, from the 'Presbyterian Quarterly' of January 1874, the words of President Barnard of Columbia College, New York, expressing an entirely opposite sentiment. I do so without criticism or comment, as I shall have to consider the relation of materialistic theories of the origin of life to theism in next volume.

"To the philosopher, the demonstration of the theory of spontaneous generation, should it ever be demonstrated beyond all possibility of doubt or cavil, cannot but be a matter of the deepest interest. But to the man who finds himself compelled to receive it, this interest, it seems to me, must be no less painful than it is deep. Nor is this the only theory which the investigators of our time are urging upon our attention, of which I feel compelled to make the same remark. There are, at least, two besides which impress me with a similar feeling; and the three together constitute a group which, though to a certain extent independent of each other, are likely in the end to stand or fall together. These are, the doctrine of spontaneous generation, the doctrine of organic evolution, and the doctrine of the correlation of mental and physical forces. If these doctrines are true, the existence of an intelligence separate from organised matter is impossible, and the death of the human body is the death of the human soul. If these doctrines are true, the world becomes an enigma, no less to the theist than it has always been to the atheist. We are told, indeed, that the acceptance of these views need not shake our faith in the existence of an almighty Creator. It is beautifully explained to us how they ought to give us more elevated and more worthy conceptions of the modes by which He works His will in the visible creation. We learn that our complex organisms are none the less the work of His hands because they have been evolved by an infinite series of changes from microscopic gemmules, and that these gemmules themselves have taken on their forms under the influence of the physical forces of light and heat and attraction acting on brute mineral matter. Rather, it should seem, we are a good deal more so. This kind of teaching is heard in our day even from the theologians. Those sentinels on the watch-towers of the faith, whose wont it has been for so many centuries to stand sturdily up in opposition to the science which was not, in any proper sense, at war with them, now, by a sudden and almost miraculous conversion, accept with cheerful countenances, and become in their turn the expounders and champions of the science which is. But while they find the mystery of the original creation thus satisfactorily cleared up in their minds, they seem to have taken very little thought as to what is going to come of the rest of their theology. It is, indeed, a grand conception which regards the Deity as conducting the work of His creation by means of those all-pervading influences which we call the forces of nature; but it leaves us profoundly at a loss to explain the wisdom or the benevolence which brings every day into life such myriads of sentient and intelligent beings only that they may perish on the morrow of their birth. But this is not all. If these doctrines are true, all talk of creation or methods of creation becomes absurdity; for just as certainly as they are true, God Himself is impossible. If intelligence presupposes a material organism, of which it is a mode of action, then God must be a

material organism or there is no God. But it is the law of all living organisms that they grow, mature, and perish; and since God cannot perish, He cannot be an organism."

NOTE XXIV., page [208](#).

DARWIN AND PALEY.

To the two treatises of Mr Darwin mentioned in the lecture, there must now be added another equally rich in fact suggesting theological inferences—"The Different Forms of Flowers on Plants of the same Species."

A multitude of books have been written on Darwinism and Teleology. Most of those published between 1859 and 1875 will be found named in the list of works on Darwinism appended to Seidlitz's 'Darwin'sche Theorie.' There are two good popular accounts of the controversy: 'What is Darwinism?' by Dr Charles Hodge of Princetown, and 'Die Darwin'schen Theorien' of Rudolf Schmid.

As to Paley, it gives one pleasure to quote the following passage from Sir William Thomson's address to the British Association in 1871; because the foolish writing which is so frequently met with in books and journals about "the mechanical God of Paley," about Paley representing Deity as "outside of the universe," or as "a God who makes the world after the manner that a watchman manufactures a watch," &c., can only be explained by utter ignorance of Paley's views: "I feel profoundly convinced that the argument of design has been greatly too much lost sight of in recent zoological speculations. Reaction against the frivolities of teleology, such as are to be found, not rarely, in the notes of the learned commentators on Paley's 'Natural Theology,' has, I believe, had a temporary effect of turning attention from the solid irrefragable argument so well put forward in that excellent old book. But overpowering proof of intelligence and benevolent design lies all around us; and if ever perplexities, whether metaphysical or scientific, turn us away from them for a time, they come back upon us with irresistible force, showing to us through nature the influence of a free will, and teaching us that all living beings depend upon one ever-acting Creator and Ruler."

NOTE XXV., page [214](#).

KANT'S MORAL ARGUMENT.

The unsatisfactoriness of the position that conscience can supply the place of reason, and can do without its help, in the search after God, is clearly seen in the case of the thinker who undertook with most deliberation to maintain that position. When Kant said,—Although all other arguments for the existence of God are delusive, still conscience gives us a feeling of responsibility and a sense of freedom which compel us to believe in One through whom virtue and fortune, duty and inclination, will be reconciled, and in whom the will will be free to do all that it ought,—he saw that he would be met with the retort and reproach that the same process by which he pretended to have demolished the other arguments was just as applicable to this new one; that the ideas of freedom and responsibility might be as delusive when supposed to assure us of reality, as those of causation and design; that if the latter were mere forms of human thought, the former might be held to be so likewise with equal reason, and to be equally incapable of affording a warrant to belief in God Himself; and consequently, that the final religious result of his philosophy was, not that there is a God, but that there is an idea of God, which, although we cannot get rid of it, is full of contradictions, and wholly incapable of justification or verification. He saw all this as clearly as man could do, and it is marvellous that so many authors should have written as if he had not seen it; but certainly he might as well not have seen it, for all that he was able to do in the way of repelling the objection. His reply amounted merely to reaffirming that we are under the necessity of associating the idea of a Supreme Being with the moral law, and then qualifying the statement by the admission that we can know, however, nothing about that Being; that as soon as we try to know anything about Him we make a speculative, not a practical, use of reason, and fall back into the realm of sophistry and illusion from which the Critical Philosophy was designed to deliver us. In other words, what he tells us is, that the argument is good, but only on the conditions that it is not to be subjected to rational scrutiny, and that no attempt is to be made to determine what its conclusion signifies. It seems to me that, on these conditions, he might have found any argument good. Such conditions are inconsistent with the whole spirit and very existence of a critical philosophy. And it is not really God that Kant reaches by his argument: it is a mere moral ideal—a dead, empty, abstract assumption, which is regarded as practically useful, although rationally baseless—a necessary presupposition of moral action, but one which tells us nothing about the nature of its object. Fichte was only consistent when he refused to speak of that object as a Will or Person, and affirmed that God exists only as the Moral Order of the universe, and that we can neither know nor conceive of any other God. He was also, only following out the principles of his master when he represented that order as the creation of the individual mind, the form of the individual conscience, a mode of mental action.

Kant has expounded his argument, and discussed its bearings fully and minutely, in his 'Kritik der Urtheilskraft,' sec. 86-90, and 'Kritik der Praktischen Vernunft, Zweites Buch, Zweites Hauptstück,' v.-viii. M. Renouvier, in an article entitled "De la Contradiction reprochée à la doctrine de Kant" (La Critique Philosophique, 3^{ieme}. Année, No. 29), has exposed some errors on the subject which are common in France, and equally common in England.

DR SCHENKEL'S VIEW OF CONSCIENCE AS THE ORGAN OF RELIGION.

Dr Schenkel has fully set forth his reasons for holding that conscience is the religious organ of the soul, in the ninth chapter of the first volume of his 'Christliche Dogmatik.' He endeavours to meet the objection urged in the text by representing what is truly the primary and distinctive function of conscience as a secondary and derivative function. Its primary activity is, according to him, religious; it unites with God—it is conscious communion with Him. Its ethical activity is only elicited when this communion is disturbed and broken; its source is the religious want occasioned by the rupture of communion. That is felt to be a something abnormal and unsatisfactory, and awakens a desire after the restoration of the lost communion with God. The conscience is cognisant of a moral law only when, its communion with God being disturbed, it seeks its re-establishment. Dr Schenkel thus, as he thinks, accounts for conscience having an ethical function as well as a religious function. But clearly the result at which he arrives is in direct contradiction to the position from which he starts. The affirmation of conscience as religious is represented as being that man is in direct communion with God; and the affirmation of conscience as ethical is represented as being that man is not in direct communion with God, but desires to be so. These are, however, contrary declarations; and to describe conscience in the way Schenkel does, as "a synthesis of the ethical and religious factor," is to represent it as a synthesis of self-contradictory elements—a compound of yes and no. We cannot be conscious both of communion with God and of non-communion with Him. And, on Dr Schenkel's own showing, the evidence for immediate communion with Him is but small. The consciousness of moral law he affirms to be consciousness of the want or need of communion with God, not the consciousness of enjoying it. But is conscience ever independent of the consciousness of moral law? If not, it can never, according to the hypothesis, be a consciousness of God. If it be independent thereof, the fact would require to be better proved than by the misinterpretation of a few texts of Scripture. Solidly proved it never, I believe, can be. A conscience not conscious of a moral law is simply no conscience at all.

CHALMERS AND ERSKINE ON THE ARGUMENT FROM CONSCIENCE.

The moral argument was, as was to be expected, a very favourite one with Dr Chalmers, and his way of stating it was as remarkable for its simplicity and directness as for its eloquence. "Had God," he asks, "been an unrighteous Being Himself, would He have given to the obviously superior faculty in man so distinct and authoritative a voice on the side of righteousness? Would He have so constructed the creatures of our species as to have planted in every breast a reclaiming witness against Himself? Would He have thus inscribed on the tablet of every heart the sentence of His own condemnation; and is this not just as likely, as that He should have inscribed it in written characters on the forehead of each individual? Would He so have fashioned the workmanship of His own hands; or, if a God of cruelty, injustice, and falsehood, would He have placed in the station of master and judge that faculty which, felt to be the highest in our nature, would prompt a generous and high-minded revolt of all our sentiments against the Being who formed us? From a God possessed of such characteristics, we should surely have expected a differently-moulded humanity; or, in other words, from the actual constitution of man, from the testimonies on the side of all righteousness, given by the vicegerent within the heart, do we infer the righteousness of the Sovereign who placed it there."—Natural Theology, vol. i. pp. 323, 324. This argument of Dr Chalmers, like all other arguments from conscience, implies the soundness of the reasoning by which God has been attempted to be shown to be the intelligent cause or author of the universe; and, on that perfectly legitimate presupposition, it seems to me as irresistible as it is simple. An intelligent but unrighteous God would never have made a creature better than himself and endowed with admiration of what is most opposite to himself, the reverse and counterpart of his own character.

The argument as stated by the late Mr Thomas Erskine of Linlathen, is no less simple and direct: "When I attentively consider what is going on in my conscience, the chief thing forced on my notice is, that I find myself face to face with a purpose—not my own, for I am often conscious of resisting it—but which dominates me and makes itself felt as ever present, as the very root and reason of my being.... This consciousness of a purpose concerning me that I should be a good man—right, true, and unselfish—is the first firm footing I have in the region of religious thought: for I cannot dissociate the idea of a purpose from that of a Purposer, and I cannot but identify this Purposer with the Author of my being and the Being of all beings; and further, I cannot but regard His purpose towards me as the unmistakable indication of His own character."—"The Spiritual Order, and other Papers," pp. 47, 48.

ASSOCIATIONIST THEORY OF THE ORIGIN OF CONSCIENCE.

I have indicated to some extent my reasons for regarding this theory as unsatisfactory in an article entitled "Associationism and the Origin of Moral Ideas," in 'Mind,' No. III. (July 1876). In the treatise of M. Carrau, 'La Morale Utilitaire,' the various forms of the theory are examined with fairness and penetration.

Dr Chalmers devotes a chapter of his 'Natural Theology' to the illustration of "the inherent pleasure of the virtuous, and misery of the vicious affections." I do not think the psychological doctrine of that chapter unexceptionable; but, at the same time, I cannot understand on what ground Prof. Bain imagines that it "implies doubts as to the genuineness of the pleasures of malevolence," and virtually denies that "the feeling of gratified vengeance is a real and indisputable pleasure."—See *Emotions and the Will*, pp. 187-189. The very passage which Prof. Bain quotes is quite inconsistent with this view. It is as follows: "The most ordinary observer of his own feelings, however incapable of analysis, must be sensible, even at the moment of wreaking the full indulgence of his resentment on the man who has provoked or injured him, that all is not perfect within; but that in this, and indeed in every other malignant feeling, there is a sore burden of disquietude, an unhappiness tumultuating in the heart, and visibly pictured in the countenance. The ferocious tyrant who has only to issue forth his mandate, and strike dead at pleasure the victim of his wrath, with any circumstance too of barbaric caprice and cruelty which his fancy, in the very waywardness of passion unrestrained and power unbounded, might suggest to him—he may be said through life to have experienced a thousand gratifications, in the solaced rage and revenge which, though ever breaking forth on some new subject, he can appease again every day of his life by some new execution. But we mistake it if we think otherwise than that, in spite of these distinct and very numerous, nay, daily gratifications, if he so choose, it is not a life of fierce internal agony notwithstanding."

The sentence which precedes these words leaves no doubt that Prof. Bain's interpretation of them is incorrect. "True, it is inseparable from the very nature of a desire, that there must be some enjoyment or other at the time of its gratification; but, in the case of these evil affections, it is not unmixed enjoyment." The following passage is, however, still more explicit: "There is a certain species of enjoyment common to all our affections. It were a contradiction in terms to affirm otherwise; for it were tantamount to saying, that an affection may be gratified without the actual experience of a gratification. There must be some sensation or other of happiness at the time when a man attains that which he is seeking for; and if it be not a positive sensation of pleasure, it will at least be the sensation of a relief from pain, as when one meets with the opportunity of wreaking upon its object that indignation which had long kept his heart in a tumult of disquietude. We therefore would mistake the matter if we thought that a state even of thorough and unqualified wickedness was exclusive of all enjoyment, for even the vicious affections must share in that enjoyment which inseparably attaches to every affection at the moment of its indulgence. And thus it is that even in the veriest Pandemonium might there be lurid gleams of ecstasy and shouts of fiendish exultation—the merriment of desperadoes in crime, who send forth the outcries of their spiteful and savage delight when some deep-laid villainy has triumphed, or when, in some dire perpetration of revenge, they have given full satisfaction and discharge to the malignity of their accursed nature. The assertion, therefore, may be taken too generally, when it is stated that there is no enjoyment whatever in the veriest hell of assembled outcasts; for even there, might there be many separate and specific gratifications. And we must abstract the pleasure essentially involved in every affection at the instant of its indulgence, and which cannot possibly be disjoined from it, ere we see clearly and distinctively wherein it is that, in respect of enjoyment, the virtuous and vicious affections differ from each other. For it is true that there is a common resemblance between them; and that, by the universal law and nature of affection, there must be some sort of agreeable sensation in the act of their obtaining that which they are seeking after. Yet it is no less true that, did the former affections bear supreme rule in the heart, they would brighten and tranquillise the whole of human existence; whereas, had the latter the entire and practical ascendancy, they would distemper the whole man, and make him as completely wretched as he was completely worthless." Dr Chalmers, then, did not call in question the pleasures of malevolence.

NOTE XXX., page 232.

HISTORY OF THE MORAL PROOF.

Conscience has from the earliest times and among the rudest peoples exercised great influence in the formation of religious belief. Moral reasons weighed with men in their origination and elaboration of religion long before they expressed them in abstract propositions and logical forms. The historical proof of this truth is so ample that it would require a volume to do it justice: all literatures might be made to yield contributions to it.

The simplest form of the moral argument, and the one which has been most generally employed, is that of an inference from the moral law to a moral lawgiver. Closely associated with it are those forms which rest on the emotions involved in or accompanying virtue and guilt. These are the directest modes of exhibiting what Chalmers calls "the theology of conscience, which is not only of wider diffusion but of far more practical influence than the theology of academic demonstration."

Raymond of Sebonde, in a work which I have previously had occasion to mention, was perhaps the first to present it in a more artificial form. He argues thus: Man is a responsible being who can neither reward nor punish himself, and who must consequently be under a superior being who will reward and punish him, unless his life is to be regarded as vain and purposeless—unless

even the whole of external nature, which is subject to man and exists for his sake, is to be pronounced aimless and useless. External nature, however, is seen to be throughout orderly and harmonious; how can we suppose the moral world to be disorderly and chaotic? As the eye corresponds to things visible, the ear to things audible, the reason to things intelligible, so conscience must correspond to a judgment which implies some one to pronounce it, and to a retribution which implies some one to inflict it. But this some one must be absolutely just; he must be omniscient, as possessing a perfect knowledge of all human actions, and a thorough insight into their moral character; omnipotent, to execute his judgments; and, in a word, must be the most perfect of all beings—*i.e.*, God.

Kant's argument is thus summarised by the Archbishop of York: "The highest good of man consists of two parts, the greatest possible morality and happiness. The former is the demand of his spiritual, the latter of his animal nature. The former only, his morality, is within his own power; and while, by persevering virtue, he makes this his personal character, he is often compelled to sacrifice his happiness. But since the desire of happiness is neither irrational nor unnatural, he justly concludes either that there is a Supreme Being who will so guide the course of things (the natural world, not of itself subject to moral laws) as to render his holiness and happiness equal, or that the dictates of his conscience are unjust and irrational. But the latter supposition is morally impossible; and he is compelled, therefore, to receive the former as true."

Akin to this argument are those which are based on man's desire of good. Proclus, in his 'Theology of Plato,' argues to the following effect: All beings desire the good; but this good cannot be identical with the beings which desire it, for then these beings would be themselves the good, and would not desire what they already possessed. The good is antecedent, therefore, to all the beings who desire it. Since the time of Proclus to the present many have argued that there must be a God because the heart demands one to satisfy its desire of love, or holiness, or happiness; few, perhaps, have done so with more ingenuity of logic or fervour of belief than John Norris in "Contemplation and Love, or the Methodical Ascent of the Soul to God by steps of Meditation," and in "An Idea of Happiness" ('Collection of Miscellanies').

A contemporary theologian, Principal Pirie of Aberdeen, has laid great stress on an argument which we may assign to this class. "No argument," he says, "can be valid which founds on innate ideas, or which embraces considerations so entirely beyond the range of human apprehension that we cannot positively be assured whether they be true or false. Yet we have no hesitation in saying that there is an argument *a priori* for the existence and attributes of a God, which is involved in the very nature of our feelings, and which therefore tells upon the faith of the whole human race, even when they are altogether ignorant of it logically, as existing in the form of a proposition. It makes no appeal, however, to profound metaphysical speculations, and is consequently plain and intelligible to any one capable of exercising reason at all. It rests on the principle which both our feelings and our experience demonstrate to be true, that every primary and essential desire of the human mind has a co-relative—or, in other words, a something to gratify it—existing in the nature of things. The mode in which the development of this principle constitutes an argument *a priori* for the existence and attributes of a God we now proceed to explain. Every human being feels from the moment in which he comes into existence, and through his whole subsequent history, that he is in himself a weak, helpless creature. As we have said, this feeling begins from the very beginning of our conscious existence. The appeals of the infant for aid are made continually.... As we advance to childhood, youth, and manhood, our sense of power gradually increases. We are conscious that under certain circumstances we can do something for ourselves. Yet this capability, we are also conscious in its very exercise, does not depend on us for its continuance. We cannot preserve to ourselves fortune, health, or even life, for a *single moment*. Yet all these things we desire, and desire with the utmost earnestness, and desire as a primary tendency of our minds. We may not indeed always clothe such desire in words—we may not put it into the form of a proposition; but that it exists in every mind as a feeling, and practically operates upon every individual, is as certain as our existence itself, and is indeed manifest every moment in the efforts which we make to preserve these and all other forms of what we believe to involve happiness. In this desire, consequently, we have the voice of nature speaking, and commanding us to use such efforts. Of ourselves we know that they would be insufficient. The results depend upon causes over which we have no control. Our own efforts, we are conscious, are only means which nature has appointed us to employ, but their success depends on circumstances altogether beyond our power. It is, as has been said, the voice of nature telling us that each of our desires has a co-relative, through which it may be fully gratified by the use of the proper means. This co-relative, in the case of intense and permanent happiness, can only be found in the existence of a God, omnipotent, omniscient, true, just, benevolent, and eternal, *in whom we repose entire confidence*. No other assumption could by possibility satisfy our desire for the highest and permanent happiness now and for ever. For to realise thoroughly the argument, it is to be observed that our desire is for the highest and permanent happiness. It is not imperfect or temporary happiness merely which we desire, though we may be compelled to be content with this, if we cannot procure more. It is the highest happiness possible for our natures, and that without end. Now, if such happiness is to be attained at all, it can only be obtained through a God possessed of the attributes which we have enumerated."—Natural Theology, pp. 71-74.

Prof. Wace, in the second course of his Boyle Lectures—Christianity and Morality (1876)—has exhibited, with considerable detail, and in an ingenious and eloquent manner, the testimony which conscience bears to a personal God, a moral Creator, and a moral Governor. A glimpse of his general idea may be obtained from the following words: "In our endeavour to trace in the

conscience, and in the personal experience of individuals, the roots of our faith in a God of infinite power, wisdom, and goodness, we have now advanced two considerable steps beyond our first and simplest sense of right and wrong. We have seen that this sense, when allowed to speak with its full imperative and personal force, arouses in us, as it aroused in the Psalmist, a sense of our being in contact with a personal and righteous Will. This conviction necessarily involves, as it involved in the writer of the 139th Psalm, the further belief that an authority which has this claim upon our obedience in every particular of our conduct, in all our thoughts and acts, must at the same time be the author and source of our whole constitution; that the righteous eyes which now penetrate, whether through darkness or through light, to the very depths of our souls, must also have seen our 'substance, yet being imperfect,' and that in their book must all our members have been written. If it be the imperative and paramount law of our nature to obey our conscience, and to make moral perfection, or spiritual excellence, our ultimate aim, we cannot but conclude that our whole nature, and the whole order of things in which we are placed, is in the hands of a moral power; and that, as we are fearfully and wonderfully made for righteous and reasonable ends, it must be by a righteous and reasonable Will that we are made. The conscience of man must never be omitted from our view of the design of man; and it is only when we contemplate the adjustment of his whole nature to the purposes of the loftiest moral development, that the argument from design acquires its full strength.... The apprehension of a Power which establishes righteousness as the law of life, involves also the conviction that it is able to enforce that law, and to render it finally and everywhere supreme. The conviction, indeed, is one of faith and not of demonstration; and the Scriptures, no less than life, are full of instances in which this faith is tried by the bitterest experience. Even prophets, as I have before observed, are at times driven to the cry that 'the law is slacked, and that judgment doth never go forth.' But the deepest instincts and necessities of conscience forbid the toleration of any such instinct of despair. If right were not essentially and ultimately might, I do not say—God forbid—that it would not still claim the supreme allegiance of the soul; but life would be a bitter mockery and an inexplicable cruelty. Not merely to be under an imperative law to pursue that which cannot be realised, but to be bound to such a fruitless pursuit by every noble and lovely influence—to be condemned in moral and spiritual realities to the torments of a Tantalus—this is a conception of human life against which the whole soul rebels. Accordingly, a God of all righteousness must of necessity be regarded as a God of all power.... That 'categorical imperative' of the conscience, on which the German philosopher insisted, is imperative in demanding not only a God, but an Almighty God."

NOTE XXXI., page [235](#).

DEFECTS IN THE PHYSICAL WORLD.

Lucretius (ii. 177-v. 196) has dwelt on the arrangements which render one zone of the earth torrid and others frigid—on the extent of barren heaths and rocks, of sands and seas—on the prevalence of unseasonable weather, storms, and tempests—and on the abundance of noxious herbs and destructive animals, &c.—as evidences that the earth was faulty and ill made, and could not be the work of a Divine Intelligence. Whether it was well or ill made appears to have been a favourite subject of dispute between the Epicureans and Stoics. Lactantius (*De Ira Dei*, c. xiii.) reports, and attempts to answer, the objections which the Epicureans and Academics were accustomed to urge against the constitution of the physical world. In Cudworth's 'Intellectual System,' vol. iii., pp. 464-8, Bentley's 'Folly of Atheism,' pt. i., Serm. 8; Derham's 'Astro-Theology,' book vii., c. 2, &c., such objections are discussed. In the remarks which I made on the subject in the lecture, I have had chiefly in view the opinions of Comte, J. S. Mill, and J. J. Murphy (*Scientific Bases of Faith*, c. xvi.)

Mr Mill's charges against nature are very vigorously and graphically expressed. "Next to the greatness of these cosmic forces, the quality which most forcibly strikes every one who does not avert his eyes from it, is their perfect and absolute recklessness. They go straight to their end, without regarding what or whom they crush on the road. Optimists, in their attempts to prove that 'whatever is, is right,' are obliged to maintain, not that Nature ever turns one step from her path to avoid trampling us into destruction, but that it would be very unreasonable in us to expect that she should. Pope's 'Shall gravitation cease when you go by?' may be a just rebuke to any one who should be so silly as to expect common human morality from Nature. But if the question were between two men, instead of between a man and a natural phenomenon, that triumphant apostrophe would be thought a rare piece of impudence. A man who should persist in hurling stones or firing cannon when another man 'goes by,' and, having killed him, should urge a similar plea in exculpation, would very deservedly be found guilty of murder. In sober truth, nearly all the things which men are hanged or imprisoned for doing to one another, are Nature's everyday performances. Killing, the most criminal act recognised by human laws, Nature does once to every being that lives, and in a large proportion of cases after protracted tortures, such as only the greatest monsters whom we read of ever purposely inflicted on their living fellow-creatures. If, by an arbitrary reservation, we refuse to account anything murder but what abridges to a certain term supposed to be allotted to human life, Nature also does this to all but a small percentage of lives, and does it in all the modes, violent or insidious, in which the worst human beings take the lives of one another. Nature impales men, breaks them as if on the wheel, casts them to be devoured by wild beasts, burns them to death, crushes them with stones like the first Christian martyr, starves them with hunger, freezes them with cold, poisons them by the quick or slow venom of her exhalations, and has hundreds of other hideous deaths in reserve, such as the ingenious cruelty of a Nabis or a Domitian never surpassed. All this Nature does with the most supercilious disregard both of mercy and of justice, emptying her shafts upon the best

and noblest indifferently with the meanest and worst—upon those who are engaged in the highest and worthiest enterprises, and often as the direct consequence of the noblest acts,—and it might almost be imagined as a punishment for them. She mows down those on whose existence hangs the wellbeing of a whole people, perhaps the prospects of the human race for generations to come, with as little compunction as those whose death is a relief to themselves, or a blessing to those under their noxious influence. Such are Nature's dealings with life. Even when she does not intend to kill, she inflicts the same tortures in apparent wantonness. In the clumsy provision which she has made for that perpetual renewal of animal life, rendered necessary by the prompt termination she puts to it in every individual case, no human being ever comes into the world but another human being is literally stretched on the rack for hours or days, not unfrequently issuing in death. Next to taking life (equal to it, according to a high authority) is taking the means by which we live; and Nature does this, too, on the largest scale and with the most callous indifference. A single hurricane destroys the hopes of a season; a flight of locusts, or an inundation, desolates a district; a trifling chemical change in an edible root starves a million of people. The waves of the sea, like banditti, seize and appropriate the wealth of the rich and the little all of the poor with the same accompaniments of stripping, wounding, and killing, as their human antitypes. Everything, in short, which the worst men commit either against life or property, is perpetrated on a larger scale by natural agents. Nature has *noyades* more fatal than those of Carrier; her explosions of fire-damp are as destructive as human artillery; her plague and cholera far surpass the poison-cups of the Borgias. Even the love of 'order,' which is thought to be a following of the ways of Nature, is, in fact, a contradiction of them. All which people are accustomed to deprecate as 'disorder' and its consequences, is precisely a counterpart of Nature's ways. Anarchy and the Reign of Terror are overmatched in injustice, ruin, and death, by a hurricane and a pestilence."—Three Essays, pp. 28-31.

The opinion that the world would be either physically or morally improved were gravitation to cease when men went by, were fire not always to burn and were water occasionally to refuse to drown, were laws few and miracles numerous, may safely be left to refute itself. Therefore, let me simply set over against Mr Mill's censure of Nature Wordsworth's praise:—

"Nature never did betray
The heart that loved her; 'tis her privilege,
Through all the years of this our life, to lead
From joy to joy; for she can so inform
The mind that is within us, so impress
With quietness and beauty, and so feed
With lofty thoughts, that neither evil tongues,
Rash judgments, nor the sneers of selfish men,
Nor greetings where no kindness is, nor all
The dreary intercourse of daily life,
Shall e'er prevail against us, or disturb
Our cheerful faith, that all which we behold
Is full of blessings. Therefore, let the moon
Shine on thee in thy solitary walk;
And let the misty mountain winds be free
To blow against thee: and, in after years,
When these wild ecstasies shall be matured
Into a sober pleasure, when thy mind
Shall be a mansion for all lovely forms,
Thy memory be as a dwelling-place
For all sweet sounds and harmonies; oh then,
If solitude, or fear, or pain, or grief,
Should be thy portion, with what healing thoughts
Of tender joy wilt thou remember me
And these my exhortations!"

NOTE XXXII., page [241](#).

NO BEST POSSIBLE CREATED SYSTEM.

Dante has given magnificent expression to the truth that no created system can be absolutely perfect:—

"Colui che volse il sesto
Allo stremo del mondo, e dentro ad esso
Distinse tanto occulto e manifesto,
Non poteo suo valor si fare impresso
In tutto l'universo, che il suo verbo
Non rimanesse in infinito eccesso.
E ciò fa certo, che il primo Superbo,
Che fu la somma d'ogni creatura,
Per non aspettar lume, cadde acerbo:
E quinci appar ch' ogni minor natura
È corto recettacolo a quel bene
Che non ha fine, e se in se misura.

Dunque nostra veduta, che conviene
 Essere alcun de' raggi della mente
 Di che tutte le cose son ripiene,
 Non può di sua natura esser possente
 Tanto, che suo principio non discerna
 Molto di là, da quel ch' egli è, parvente.
 Però nella giustizia sempiterna
 La vista che riceve il vostro mondo,
 Com' occhio per lo mare, entro s' interna;
 Che, benchè dalla proda veggia il fondo,
 In pelago nol vede; e nondimeno
 Egli è; ma cela lui l'esser profondo."
 —*Del Paradiso*, cant. xix. 40-63.

"He his compasses who placed
 At the world's limit, and within the line
 Drew beauties, dimly or distinctly traced—
 Could not upon the universe so write
 The impress of his power, but that His Word
 Must still be left in distance infinite:
 And hence 'tis evident that he in heaven
 Created loftiest his fate incurred
 Because he would not wait till light was given.
 And hence are all inferior creatures shown
 Scant vessels of that Goodness unconfined
 Which nought can measure save Itself alone.
 Therefore our intellect—a feeble beam,
 Struck from the light of the Eternal Mind,
 With which all things throughout creation teem,—
 Must by its nature be incapable,
 Save in a low and most remote degree,
 Of viewing its exalted principle.
 Wherefore the heavenly Justice can no more
 By mortal ken be fathomed than the sea:
 For though the eye of one upon the shore
 May pierce its shallows, waves unfathomed bound
 His further sight, yet under them is laid
 A bottom, viewless through the deep profound."
 —WRIGHT.

NOTE XXXIII., page [245](#).

DEFECTS IN THE ORGANIC WORLD.

The objections to final causes from alleged defects in the organic world have been answered with wisdom and success by M. Janet, in his 'Causes Finales,' pp. 313-348.

The views of Professor Helmholtz as to the defects of the eye will be found stated at length in his popular lectures on scientific subjects. The chief defects enumerated are: 1. Chromatic aberration, connected with 2. Spherical aberration and defective centring of the cornea and lens, together producing the imperfection known as astigmatism; 3. Irregular radiation round the images of illuminated points; 4. Defective transparency; 5. Floating corpuscles, and 6. The "blind spot" with other gaps in the field of vision. "The eye has every possible defect that can be found in an optical instrument, and even some which are peculiar to itself." "It is not too much to say that if an optician wanted to sell me an instrument which had all these defects, I should think myself quite justified in blaming his carelessness in the strongest terms, and giving him back his instrument. Of course I shall not do this with my eyes, and shall be only too glad to keep them as long as I can—defects and all. Still, the fact that, however bad they may be, I can get no others, does not at all diminish their defects, so long as I maintain the narrow but indisputable position of a critic on purely optical grounds."

Helmholtz himself, however, points out that the defects of the eye are "all so counteracted, that the inexactness of the image which results from their presence very little exceeds, under ordinary conditions of illumination, the limits which are set to the delicacy of sensation by the dimensions of the retinal cones;" that "the adaptation of the eye to its function is most complete, and is seen in the very limits which are set to its defects." In fact, were the eye more perfect as an instrument of optical precision, it would be less perfect as an eye. Its absolute defects are practical merits. To be a useful eye it must be neither a perfect telescope nor a perfect microscope, but a something which can readily serve many purposes, and which can be supplemented by many instruments. The delicate finish of a razor renders it unfit for cutting wood. All man's senses and organs are inferior to those possessed by some of the lower animals, but the inferiority is of a kind which is a real and vast advantage. It is of a kind which allows them to be put to a greater variety of uses than could more perfect senses and organs. It is the very condition of their capacity to be utilised in manifold directions by an inventive and progressive reason. Further, no man can see at all merely with a so-called perfect optical

instrument. He must have in addition the imperfect instrument, composed of a soft, watery, animal substance, and designated the eye. There is that in the eye which immeasurably transcends all mere physics and chemistry, all human mechanism and contrivance; there is life; there is vision.

NOTE XXXIV., page [252](#).

EPICUREAN DILEMMA.

The Epicurean dilemma has been often dealt with. I shall content myself with quoting Mr Bowen's remarks on the subject: "*Omnipotence and benevolence* are apparently very simple and very comprehensive terms, though few are more vaguely used. The former means a power to do everything; but this does not include the ability to do two contradictory things at the same moment, or to accomplish any metaphysical impossibility. Thus, the Deity cannot cause two and two to make five, nor place two hills near each other without leaving a valley between them. The impossibility in such cases does not argue a defect of power, but an absurdity in the statement of the case to which the power is to be applied. A statement which involves a contradiction in terms does not express a limitation of ability, because in truth it expresses nothing at all; the affirmation and the denial, uttered in the same breath, cancel each other, and no meaning remains. All metaphysical impossibilities can be reduced to the formula, that it is impossible for the same thing to be and not to be at the same moment, as this would be an absurdity—that is, an absurd or meaningless statement. Thus, virtue cannot exist without free agency, because a free choice between good and evil is involved in the idea of *virtue*, so that the proposition means no more than this—that what contains freedom cannot be without freedom. We cannot choose between good and evil, unless good and evil are both placed before us—that is, unless we know what these words mean; and we cannot express our choice in action, unless we are able to act—that is, unless we have the power of doing either good or evil. In the dilemma quoted from Epicurus, a contradiction in terms is held to prove a defect of power, or to disprove omnipotence; the dilemma, therefore, is a mere logical puzzle, like the celebrated one of Achilles and the tortoise.

"The meaning of *benevolence* appears simple enough; but it is often difficult to tell whether a certain act was or was not prompted by kind intentions. Strictly speaking, of course, benevolence is a quality of mind—that is, of will (*bene volo*) or intention, not of outward conduct. An *action* is said to be benevolent only by metaphor; it is so called, because we infer from it, with great positiveness, that the agent must have had benevolent intentions. We think that the motives are indicated by the act; but we may be mistaken. He who gives food to the hungry poor would be esteemed benevolent; but he may do it with a view to poison them. To strike for the avowed purpose of causing pain usually argues ill-will or a malignant design; but the blow may come from the kindest heart in the world, for the express purpose of benefiting him who receives it. In the present argument, Epicurus assumes that the presence of evil—that is, the outward fact—is enough to prove a want of benevolence, or even a malignant design, on the part of him who might have prevented it. But if by evil is here meant mere pain or suffering, whether proceeding from bodily or mental causes, we may boldly deny the inference. If pleasure or mere enjoyment is not the greatest good, if sometimes it is even inconsistent with the possession of a higher blessing, then a denial of it may be a proof of goodness instead of malice."—Metaphysical and Ethical Science, pp. 362, 363.

NOTE XXXV., page [263](#).

GOD AND DUTY.

"To such readers as have reflected on man's life; who understand that for man's wellbeing Faith is properly the one thing needful; how with it martyrs, otherwise weak, can cheerfully endure the shame and the cross—and without, worldlings puke up their sick existence by suicide in the midst of luxury: to such it will be clear that for a pure moral nature the loss of religious belief is the loss of everything.

"All wounds, the crush of long-continued destitution, the stab of false friendship and of false love, all wounds in thy so genial heart, would have healed again had not its life-warmth been withdrawn.

"Well mayest thou exclaim, 'Is there no God, then; but at best an absentee God, sitting idle, ever since the first Sabbath, at the outside of His universe and *seeing* it go?' 'Has the word Duty no meaning? is what we call Duty no Divine messenger and guide, but a false earthly phantasm made up of desire and fear?' 'Is the heroic inspiration we name Virtue but some passion; some bubble of the blood, bubbling in the direction others profit by?' I know not; only this I know, if what thou namest Happiness be our true aim, then are we all astray. 'Behold, thou art fatherless, outcast, and the universe is—the Devil's.'"—Carlyle.

NOTE XXXVI., page [268](#).

HISTORIES OF THE THEISTIC PROOFS.

There are several histories of the proofs for the Divine existence. One of the earliest is Ziegler's 'Beiträge zur Geschichte des Glaubens an das Dasein Gottes' (1792). The best known, and

perhaps the most interesting, is Bouchitté's 'Histoire des Preuves de l'Existence de Dieu' (Mémoires de l'Académie, Savants Étrangers, i.), written from the Krausean point of view. The 'Geschichte der Beweise für das Dasein Gottes bis zum 14 Jahrhundert' (1875), by Alfred Tyszka, and the 'Geschichte der Beweise für das Dasein Gottes von Cartesius bis Kant' (1876), by Albert Krebs, supplement each other. There are two very able articles—partly historical, but chiefly critical—on these proofs by Professor Köstlin in the 'Theol. Studien und Kritiken,' H. 4, 1875, and H. 1, 1876. The most conscientious, useful, and learned history of speculation regarding Deity is, so far as is known to me, the four-volumed work of Signor Bobba, 'Storia della Filosofia intorno all' Idea di Dio.'

On the history of the *a priori* proofs there may be consulted the treatise of Fischer, 'Der ontologische Beweis f. d. Dasein Gottes u. s. Geschichte,' 1852, and an article of Seydel, "Der gesch. Eintritt ontologischer Beweisführung," &c. (Tr. f. Ph. H. i. 1858). In Hase's 'Life of Anselm' (of which there is an English translation) there is a good account of Anselm's argument. There is also a translation of the 'Proslogion,' with Gaunilo's objections and Anselm's reply, in the 'Bibliotheca Sacra,' 1851. On the Cartesian proofs there is a special work by Huber, 'Die cartes. Beweise v. Dasein Gottes' (1854).

Hegel's 'Vorlesungen über d. Beweise f. d. Dasein Gottes' are of great interest and value in various respects; but his view of the historical succession of the proofs does not appear to me to be tenable.

NOTE XXXVII., page [269](#).

A PRIORI PROOF NOT PROOF FROM A CAUSE.

The philosophers and theologians who have supposed *A PRIORI* proof to be proof from a cause or antecedent existence, have, of course, denied that there can be any *a priori* proof of the Divine existence. Aristotle laid down as a rule that demonstration must proceed from things prior to and the causes of the things to be demonstrated, and those who assented to this rule necessarily denied the possibility of demonstrating the existence of God. The assertion of Clemens of Alexandria that "God cannot be apprehended by any demonstrative science" is indubitable, if the view of demonstration on which he rests it be correct; "for such science is from things prior and more knowable, whereas nothing can precede that which is uncreated." It is a manifest contradiction to imagine that an eternal being is subsequent to any other being, or a perfect being dependent on any other being. Even mathematical demonstration, however, is not from causes; nor is there any reason for supposing that the order of knowledge is necessarily and universally the same as the order of existence.

It is by confounding demonstration erroneously understood in the manner indicated with proof in general that not a few persons have arrived at the conclusion that the existence of God cannot be proved at all, and have deemed preposterous assertions like that of Jacobi, "A God who can be proved is no God, for the ground of proof is necessarily above the thing proved by it," both profound and pious.

NOTE XXXVIII., page [285](#).

SOME *A PRIORI* ARGUMENTS.

I have treated of Clarke's argument in the 'Encyc. Brit.' art. "Samuel Clarke."

The demonstration of Dr Fiddes is contained in his 'Theologia Speculativa, or a Body of Divinity,' 2 vols., 1718-20. It consists of six propositions: 1. Something does now exist; 2. Something has existed eternally; 3. Something has been eternally self-existent; 4. What is self-existent must have all the perfections that exist anywhere or in any subject; 5. What is self-existent must have all possible perfections, and every perfection, in an infinite measure; 6. What has all possible perfections in an infinite measure is God. He proves his fourth proposition thus: "Since nothing can arise out of nothing, and since there can be no perfection but what has some subject of inherence, every perfection must have been eternally somewhere or other, or in one subject or other, into which it must be ultimately resolved, or else it could never have been at all; without admitting, what of all things we are the best able to conceive, an infinite progression of efficient causes—that is, an infinite series of beings derived one from another, without a beginning or any original cause at the head of the series. So that whatever perfections we observe in any being must have been originally and eternally in the self-existent being." On behalf of his fifth proposition he advances two arguments: 1. "All properties essentially follow the nature and condition of the subject, and must be commensurate to it. For this reason we say that wisdom, power, and goodness being attributes of an infinite subject, or one which is the substratum of one *infinite* attribute, these and all the other perfections belonging to it must be infinite also. Otherwise the same subject, considered as a subject, would be infinite in one respect, and yet finite in another; which, if it be not a contradiction, seems to border so near upon one that we cannot comprehend the possibility of it." 2. "A self-existent being as the subject of any perfection cannot limit itself; because it must necessarily have existed from all eternity what it is, and have been the same in all properties essentially inherent in it, antecedently to any act or volition of its own. Nor can such a being be limited by anything external to it; for, besides that self-existence necessarily implies independence, properties which are essential to any subject can admit of no increase or diminution or the least imaginable change, without destroying the essence itself of

the subject. Nor yet can it be said that there is any impossibility in the nature of the thing that the perfections inhering in an *infinite* subject should be in the highest or even in an infinite degree. Indeed it is scarce possible for us (for the reasons already assigned) to conceive how they should be otherwise. Neither can any such impossibility arise from the nature of the perfections themselves. If, then, the perfections of a self-existent being cannot be limited by itself, nor by anything external to it, nor from any invincible repugnancy in the nature of the perfections themselves, I conclude that the self-existent being must not only have all possible perfections, but every perfection in an *infinite* degree."

The 'Demonstration of the Existence of God against Atheists,' by the Rev. Colin Campbell, Minister of the Parish of Ardchattan, 1667-1726, has been recently printed for private circulation from a MS. now deposited in the library of Edinburgh University. The editor has added to it a learned and admirable appendix. Mr Campbell's manner of proving that there is one, and but one, infinite Being, is as follows: "As everything which hath a beginning forces confession of one who hath none—because to produce is an action, and must presuppose an actor,—by the same force of reason, we must confess that whatever is limited, or made of such and such a limited nature, is limited by something which did limit it to be such a thing, and no other. For limit is an action, and confesseth an actor. So that there must be a being anterior to all limited beings, and, consequently, some being that is not at all limited, to evite the absurd progress of running infinitely upwards unlimited beings, without a single limiter. Now, an unlimited being is the same as to say an infinite being. And so, by the force of reason, we have a being which is eternal, which is infinite. There can be but one infinite, because, were there two or more, the one would limit the other; and so the infinite would be finite, the unlimited would be limited. Therefore, the unlimited, or infinite, must be one only; and that one purely single and uncompounded, else every part of the compound would limit the other parts, so that all the parts would be limited. And a whole whose parts are limited must be limited in the whole, it being impossible that a compound or conjunction of finites can, by addition, produce an infinite, unless you imagine this complex whole to consist partly of finites, and also of some infinite. But the one infinite part, if infinite, cannot leave place for any other finite to make it up, it being itself unlimited and infinite; and such an addition would speak it limited by the part which was added. And a thousand like absurdities would follow."

Wollaston's attempted demonstration is contained in the fifth section of his 'Religion of Nature Delineated' (1725). This is a common book, and the mere reference to it must suffice.

Moses Lowman's 'Argument to prove the Unity and Perfection of God *a priori*' was published in 1735, and reprinted, with a preface by Dr Pye Smith, containing an account of the author and his works, in the Cabinet Library of Scarce and Celebrated Tracts (1836). I reproduce the abstract which Dr Smith gave of this ingenious argument in his 'First Lines of Christian Theology:' "1. Positive existence is possible, for it involves no contradiction. 2. All possible existence is either *necessary*, which must be, and in its own nature cannot but be; or *contingent*, which may be or not be, for in neither case is a contradiction involved. 3. *Some* existence is *necessary*: for, if all existence were contingent, all existence might not be as well as might be; and that thing which might not be never could be without some other thing as the prior cause of its existence, since every effect must have a cause. If, therefore, all possible existence were contingent, all existence would be impossible; because the idea or conception of it would be that of an effect without a cause, which involves a contradiction. 4. Necessary existence must be *actual* existence: for necessary existence is that which must be and cannot but be—that is, it is such existence as arises from the nature of the thing in itself; and it is an evident contradiction to affirm that necessary existence might not be. 5. Necessary existence being such as must be and cannot but be, it must be *always* and cannot but be always; for to suppose that necessary existence could begin to be, or could cease to be—that is, that a time might be in which necessary existence would not be—involves a contradiction. Therefore, necessary existence is without beginning and without end—that is, it is eternal. 6. Necessary existence must be *wherever* any existence is possible: for all existence is either contingent or necessary; all contingent existence is impossible without necessary existence being previously as its cause, and wherever existence is possible it must be either of a necessary or a contingent being. Therefore, necessary existence must be wherever existence is possible—that is, it must be *infinite*. 7. There can be but *one* necessarily existent being; for two necessarily existent beings could in no respect whatever differ from each other—that is, they would be one and the same being. 8. The one necessarily existent being must have *all possible perfections*: for all possible perfections must be the perfections of some existence; all existence is either necessary or contingent; all contingent existence is dependent upon necessary existence; consequently, all possible perfections must belong either to necessary existence or to contingent existence—that is, to contingent beings, which are caused by and are dependent upon necessary being. Therefore, since there can be but one necessarily existent being, that being must have all possible perfections. 9. The one necessarily existent being must be a *free agent*; for contingent existence is possible, as the conception of it involves no contradiction; but necessary existence must be the cause or producing agent of contingent existence, otherwise contingent existence would be impossible, as an effect without a cause; and necessary existence as the cause of contingent existence does not act necessarily, for then contingent existence would itself be necessary, which is absurd as involving a contradiction. Therefore necessary existence, as the cause of contingent existence, acts *not necessarily* but *freely*—that is, is a free agent, which is the same thing as being an *intelligent agent*. 10. Therefore, there is one necessarily existent being, the cause of all contingent existence—that is, of all other existences besides himself; and this being is eternal, infinite, possessed of all possible perfections, and is an intelligent free agent—that is, *this Being is God*."

The demonstration of the Divine existence given by the Chevalier Ramsay is contained in the First Book of his 'Philosophical Principles of Natural and Revealed Religion' (1748). It is as elaborately mathematical in form as the reasoning in Spinoza's 'Ethics,' and has continuous reference to that reasoning. It is impossible to give any distinct conception of its nature by a brief description.

The argument of Dr Hamilton, Dean of Armagh, is fully set forth in his 'Attempt to prove the Existence and Absolute Perfection of the Supreme Unoriginated Being, in a Demonstrative Manner' (1785). It assumes the "axiom" that "whatever is contingent, or might possibly have been otherwise than it is, had some cause which determined it to be what it is. Or in other words: if two different or contrary things were each of them possible, whichever of them took place, or came to pass, it must have done so in consequence of some cause which determined that *it*, and not *the other*, should take the place." The propositions which he endeavours to demonstrate are these: I. There must be in the universe some one being, at least, whose non-existence is impossible—whose existence had no cause, no beginning, and can have no end. II. The whole nature of the unoriginated being, or the aggregate of his attribute, is uncaused, and must be necessarily and immutably what it is; so that he cannot have any attribute or modification of his attributes but such as were the eternal and necessary concomitants of his existence. III. Whatever are the attributes of the unoriginated being, he must possess each of them unlimitedly, or in its whole extent, such as it is when considered in the abstract. IV. In whatever *manner* the unoriginated being exists or is present anywhere, he must in the *like manner* exist or be present everywhere. V. The unoriginated being is one individual uncompounded substance identically the same everywhere, and to which our ideas of *whole* and *parts*, *magnitude* or *quantity*, are not applicable. VI. The unoriginated being must necessarily possess intelligence and power unlimited, and all other natural attributes that are in themselves absolute perfections. VII. There is in the universe but one unoriginated being, who must therefore be the original fountain of all existence, and the first cause of all things. VIII. All things owe their existence ultimately to the power of the first cause operating according to his free will. IX. Almighty God, the first cause and author of all things, must be a Being of infinite goodness, wisdom, mercy, justice, and truth, and all other moral perfections, such as become the supreme author and governor of the universe.

THE END.

PRINTED BY WILLIAM BLACKWOOD AND SONS

FOOTNOTES:

- [1] See Appendix [I](#).
- [2] See Appendix [II](#).
- [3] By J. S. Mill, in the very essay in which he assailed religion by trying to show that the world had outgrown the need of it.
- [4] See Appendix [III](#).
- [5] See Appendix [IV](#).
- [6] See Appendix [V](#).
- [7] See Appendix [VI](#).
- [8] See Appendix [VII](#).
- [9] E. Naville, 'The Heavenly Father,' pp. 283, 284.
- [10] See Appendix [VIII](#).
- [11] Ulrici, Gott und die Natur, i.
- [12] See Appendix [IX](#).
- [13] See Appendix [X](#).
- [14] Barrett's Physical Ethics, p. 225.
- [15] Three Essays on Religion, pp. 142, 143.
- [16] President's Address in Transactions of the British Association for the Advancement of Science, 1870.
- [17] See W. S. Jevons, Principles of Science, ii. 452, 453.
- [18] Jevons, Principles of Science, ii. 438.
- [19] See Appendix [XI](#).
- [20] See Appendix [XII](#).
- [21] See Appendix [XIII](#).
- [22] See Appendix [XIV](#).
- [23] See Appendix [XV](#).
- [24] See Appendix [XVI](#).
- [25] See Appendix [XVII](#).

- [26] See Appendix [XVIII](#).
- [27] See Appendix [XIX](#).
- [28] See Appendix [XX](#).
- [29] See Appendix [XXI](#).
- [30] Three Essays on Religion, pp. 176, 177.
- [31] See Appendix [XXII](#).
- [32] See Appendix [XXIII](#).
- [33] Lay Sermons, pp. 330, 331.
- [34] See Appendix [XXIV](#).
- [35] See Appendix [XXV](#).
- [36] See Appendix [XXVI](#).
- [37] See Appendix [XXVII](#).
- [38] Grammar of Assent, pp. 106, 107.
- [39] See Appendix [XXVIII](#).
- [40] See Appendix [XXIX](#).
- [41] See Appendix [XXX](#).
- [42] See Appendix [XXXI](#).
- [43] See Appendix [XXXII](#).
- [44] See Appendix [XXXIII](#).
- [45] See Appendix [XXXIV](#).
- [46] See Appendix [XXXV](#).
- [47] See Appendix [XXXVI](#).
- [48] See Appendix [XXXVII](#).
- [49] See Appendix [XXXVIII](#).
- [50] Canon Mosley, On Miracles, Lect. IV.

Transcriber's Notes

Variations in spelling, punctuation and hyphenation have been retained except in obvious cases of typographical errors. The repetition of the title on the first two pages has been removed.

*** END OF THE PROJECT GUTENBERG EBOOK THEISM; BEING THE BAIRD LECTURE OF
1876 ***

Updated editions will replace the previous one—the old editions will be renamed.

Creating the works from print editions not protected by U.S. copyright law means that no one owns a United States copyright in these works, so the Foundation (and you!) can copy and distribute it in the United States without permission and without paying copyright royalties. Special rules, set forth in the General Terms of Use part of this license, apply to copying and distributing Project Gutenberg™ electronic works to protect the PROJECT GUTENBERG™ concept and trademark. Project Gutenberg is a registered trademark, and may not be used if you charge for an eBook, except by following the terms of the trademark license, including paying royalties for use of the Project Gutenberg trademark. If you do not charge anything for copies of this eBook, complying with the trademark license is very easy. You may use this eBook for nearly any purpose such as creation of derivative works, reports, performances and research. Project Gutenberg eBooks may be modified and printed and given away—you may do practically ANYTHING in the United States with eBooks not protected by U.S. copyright law. Redistribution is subject to the trademark license, especially commercial redistribution.

START: FULL LICENSE
THE FULL PROJECT GUTENBERG LICENSE
PLEASE READ THIS BEFORE YOU DISTRIBUTE OR USE THIS WORK

To protect the Project Gutenberg™ mission of promoting the free distribution of electronic works, by using or distributing this work (or any other work associated in any way with the phrase “Project Gutenberg”), you agree to comply with all the terms of the Full Project Gutenberg™ License available with this file or online at www.gutenberg.org/license.

Section 1. General Terms of Use and Redistributing Project Gutenberg™

electronic works

1.A. By reading or using any part of this Project Gutenberg™ electronic work, you indicate that you have read, understand, agree to and accept all the terms of this license and intellectual property (trademark/copyright) agreement. If you do not agree to abide by all the terms of this agreement, you must cease using and return or destroy all copies of Project Gutenberg™ electronic works in your possession. If you paid a fee for obtaining a copy of or access to a Project Gutenberg™ electronic work and you do not agree to be bound by the terms of this agreement, you may obtain a refund from the person or entity to whom you paid the fee as set forth in paragraph 1.E.8.

1.B. “Project Gutenberg” is a registered trademark. It may only be used on or associated in any way with an electronic work by people who agree to be bound by the terms of this agreement. There are a few things that you can do with most Project Gutenberg™ electronic works even without complying with the full terms of this agreement. See paragraph 1.C below. There are a lot of things you can do with Project Gutenberg™ electronic works if you follow the terms of this agreement and help preserve free future access to Project Gutenberg™ electronic works. See paragraph 1.E below.

1.C. The Project Gutenberg Literary Archive Foundation (“the Foundation” or PGLAF), owns a compilation copyright in the collection of Project Gutenberg™ electronic works. Nearly all the individual works in the collection are in the public domain in the United States. If an individual work is unprotected by copyright law in the United States and you are located in the United States, we do not claim a right to prevent you from copying, distributing, performing, displaying or creating derivative works based on the work as long as all references to Project Gutenberg are removed. Of course, we hope that you will support the Project Gutenberg™ mission of promoting free access to electronic works by freely sharing Project Gutenberg™ works in compliance with the terms of this agreement for keeping the Project Gutenberg™ name associated with the work. You can easily comply with the terms of this agreement by keeping this work in the same format with its attached full Project Gutenberg™ License when you share it without charge with others.

1.D. The copyright laws of the place where you are located also govern what you can do with this work. Copyright laws in most countries are in a constant state of change. If you are outside the United States, check the laws of your country in addition to the terms of this agreement before downloading, copying, displaying, performing, distributing or creating derivative works based on this work or any other Project Gutenberg™ work. The Foundation makes no representations concerning the copyright status of any work in any country other than the United States.

1.E. Unless you have removed all references to Project Gutenberg:

1.E.1. The following sentence, with active links to, or other immediate access to, the full Project Gutenberg™ License must appear prominently whenever any copy of a Project Gutenberg™ work (any work on which the phrase “Project Gutenberg” appears, or with which the phrase “Project Gutenberg” is associated) is accessed, displayed, performed, viewed, copied or distributed:

This eBook is for the use of anyone anywhere in the United States and most other parts of the world at no cost and with almost no restrictions whatsoever. You may copy it, give it away or re-use it under the terms of the Project Gutenberg License included with this eBook or online at www.gutenberg.org. If you are not located in the United States, you will have to check the laws of the country where you are located before using this eBook.

1.E.2. If an individual Project Gutenberg™ electronic work is derived from texts not protected by U.S. copyright law (does not contain a notice indicating that it is posted with permission of the copyright holder), the work can be copied and distributed to anyone in the United States without paying any fees or charges. If you are redistributing or providing access to a work with the phrase “Project Gutenberg” associated with or appearing on the work, you must comply either with the requirements of paragraphs 1.E.1 through 1.E.7 or obtain permission for the use of the work and the Project Gutenberg™ trademark as set forth in paragraphs 1.E.8 or 1.E.9.

1.E.3. If an individual Project Gutenberg™ electronic work is posted with the permission of the copyright holder, your use and distribution must comply with both paragraphs 1.E.1 through 1.E.7 and any additional terms imposed by the copyright holder. Additional terms will be linked to the Project Gutenberg™ License for all works posted with the permission of the copyright holder found at the beginning of this work.

1.E.4. Do not unlink or detach or remove the full Project Gutenberg™ License terms from this work, or any files containing a part of this work or any other work associated with Project Gutenberg™.

1.E.5. Do not copy, display, perform, distribute or redistribute this electronic work, or any part of this electronic work, without prominently displaying the sentence set forth in

paragraph 1.E.1 with active links or immediate access to the full terms of the Project Gutenberg™ License.

1.E.6. You may convert to and distribute this work in any binary, compressed, marked up, nonproprietary or proprietary form, including any word processing or hypertext form. However, if you provide access to or distribute copies of a Project Gutenberg™ work in a format other than “Plain Vanilla ASCII” or other format used in the official version posted on the official Project Gutenberg™ website (www.gutenberg.org), you must, at no additional cost, fee or expense to the user, provide a copy, a means of exporting a copy, or a means of obtaining a copy upon request, of the work in its original “Plain Vanilla ASCII” or other form. Any alternate format must include the full Project Gutenberg™ License as specified in paragraph 1.E.1.

1.E.7. Do not charge a fee for access to, viewing, displaying, performing, copying or distributing any Project Gutenberg™ works unless you comply with paragraph 1.E.8 or 1.E.9.

1.E.8. You may charge a reasonable fee for copies of or providing access to or distributing Project Gutenberg™ electronic works provided that:

- You pay a royalty fee of 20% of the gross profits you derive from the use of Project Gutenberg™ works calculated using the method you already use to calculate your applicable taxes. The fee is owed to the owner of the Project Gutenberg™ trademark, but he has agreed to donate royalties under this paragraph to the Project Gutenberg Literary Archive Foundation. Royalty payments must be paid within 60 days following each date on which you prepare (or are legally required to prepare) your periodic tax returns. Royalty payments should be clearly marked as such and sent to the Project Gutenberg Literary Archive Foundation at the address specified in Section 4, “Information about donations to the Project Gutenberg Literary Archive Foundation.”
- You provide a full refund of any money paid by a user who notifies you in writing (or by e-mail) within 30 days of receipt that s/he does not agree to the terms of the full Project Gutenberg™ License. You must require such a user to return or destroy all copies of the works possessed in a physical medium and discontinue all use of and all access to other copies of Project Gutenberg™ works.
- You provide, in accordance with paragraph 1.F.3, a full refund of any money paid for a work or a replacement copy, if a defect in the electronic work is discovered and reported to you within 90 days of receipt of the work.
- You comply with all other terms of this agreement for free distribution of Project Gutenberg™ works.

1.E.9. If you wish to charge a fee or distribute a Project Gutenberg™ electronic work or group of works on different terms than are set forth in this agreement, you must obtain permission in writing from the Project Gutenberg Literary Archive Foundation, the manager of the Project Gutenberg™ trademark. Contact the Foundation as set forth in Section 3 below.

1.F.

1.F.1. Project Gutenberg volunteers and employees expend considerable effort to identify, do copyright research on, transcribe and proofread works not protected by U.S. copyright law in creating the Project Gutenberg™ collection. Despite these efforts, Project Gutenberg™ electronic works, and the medium on which they may be stored, may contain “Defects,” such as, but not limited to, incomplete, inaccurate or corrupt data, transcription errors, a copyright or other intellectual property infringement, a defective or damaged disk or other medium, a computer virus, or computer codes that damage or cannot be read by your equipment.

1.F.2. LIMITED WARRANTY, DISCLAIMER OF DAMAGES - Except for the “Right of Replacement or Refund” described in paragraph 1.F.3, the Project Gutenberg Literary Archive Foundation, the owner of the Project Gutenberg™ trademark, and any other party distributing a Project Gutenberg™ electronic work under this agreement, disclaim all liability to you for damages, costs and expenses, including legal fees. YOU AGREE THAT YOU HAVE NO REMEDIES FOR NEGLIGENCE, STRICT LIABILITY, BREACH OF WARRANTY OR BREACH OF CONTRACT EXCEPT THOSE PROVIDED IN PARAGRAPH 1.F.3. YOU AGREE THAT THE FOUNDATION, THE TRADEMARK OWNER, AND ANY DISTRIBUTOR UNDER THIS AGREEMENT WILL NOT BE LIABLE TO YOU FOR ACTUAL, DIRECT, INDIRECT, CONSEQUENTIAL, PUNITIVE OR INCIDENTAL DAMAGES EVEN IF YOU GIVE NOTICE OF THE POSSIBILITY OF SUCH DAMAGE.

1.F.3. LIMITED RIGHT OF REPLACEMENT OR REFUND - If you discover a defect in this electronic work within 90 days of receiving it, you can receive a refund of the money (if any) you paid for it by sending a written explanation to the person you received the work from. If you received the work on a physical medium, you must return the medium with your written explanation. The person or entity that provided you with the defective work may elect to

provide a replacement copy in lieu of a refund. If you received the work electronically, the person or entity providing it to you may choose to give you a second opportunity to receive the work electronically in lieu of a refund. If the second copy is also defective, you may demand a refund in writing without further opportunities to fix the problem.

1.F.4. Except for the limited right of replacement or refund set forth in paragraph 1.F.3, this work is provided to you 'AS-IS', WITH NO OTHER WARRANTIES OF ANY KIND, EXPRESS OR IMPLIED, INCLUDING BUT NOT LIMITED TO WARRANTIES OF MERCHANTABILITY OR FITNESS FOR ANY PURPOSE.

1.F.5. Some states do not allow disclaimers of certain implied warranties or the exclusion or limitation of certain types of damages. If any disclaimer or limitation set forth in this agreement violates the law of the state applicable to this agreement, the agreement shall be interpreted to make the maximum disclaimer or limitation permitted by the applicable state law. The invalidity or unenforceability of any provision of this agreement shall not void the remaining provisions.

1.F.6. INDEMNITY - You agree to indemnify and hold the Foundation, the trademark owner, any agent or employee of the Foundation, anyone providing copies of Project Gutenberg™ electronic works in accordance with this agreement, and any volunteers associated with the production, promotion and distribution of Project Gutenberg™ electronic works, harmless from all liability, costs and expenses, including legal fees, that arise directly or indirectly from any of the following which you do or cause to occur: (a) distribution of this or any Project Gutenberg™ work, (b) alteration, modification, or additions or deletions to any Project Gutenberg™ work, and (c) any Defect you cause.

Section 2. Information about the Mission of Project Gutenberg™

Project Gutenberg™ is synonymous with the free distribution of electronic works in formats readable by the widest variety of computers including obsolete, old, middle-aged and new computers. It exists because of the efforts of hundreds of volunteers and donations from people in all walks of life.

Volunteers and financial support to provide volunteers with the assistance they need are critical to reaching Project Gutenberg™'s goals and ensuring that the Project Gutenberg™ collection will remain freely available for generations to come. In 2001, the Project Gutenberg Literary Archive Foundation was created to provide a secure and permanent future for Project Gutenberg™ and future generations. To learn more about the Project Gutenberg Literary Archive Foundation and how your efforts and donations can help, see Sections 3 and 4 and the Foundation information page at www.gutenberg.org.

Section 3. Information about the Project Gutenberg Literary Archive Foundation

The Project Gutenberg Literary Archive Foundation is a non-profit 501(c)(3) educational corporation organized under the laws of the state of Mississippi and granted tax exempt status by the Internal Revenue Service. The Foundation's EIN or federal tax identification number is 64-6221541. Contributions to the Project Gutenberg Literary Archive Foundation are tax deductible to the full extent permitted by U.S. federal laws and your state's laws.

The Foundation's business office is located at 809 North 1500 West, Salt Lake City, UT 84116, (801) 596-1887. Email contact links and up to date contact information can be found at the Foundation's website and official page at www.gutenberg.org/contact

Section 4. Information about Donations to the Project Gutenberg Literary Archive Foundation

Project Gutenberg™ depends upon and cannot survive without widespread public support and donations to carry out its mission of increasing the number of public domain and licensed works that can be freely distributed in machine-readable form accessible by the widest array of equipment including outdated equipment. Many small donations (\$1 to \$5,000) are particularly important to maintaining tax exempt status with the IRS.

The Foundation is committed to complying with the laws regulating charities and charitable donations in all 50 states of the United States. Compliance requirements are not uniform and it takes a considerable effort, much paperwork and many fees to meet and keep up with these requirements. We do not solicit donations in locations where we have not received written confirmation of compliance. To SEND DONATIONS or determine the status of compliance for any particular state visit www.gutenberg.org/donate.

While we cannot and do not solicit contributions from states where we have not met the solicitation requirements, we know of no prohibition against accepting unsolicited donations from donors in such states who approach us with offers to donate.

International donations are gratefully accepted, but we cannot make any statements

concerning tax treatment of donations received from outside the United States. U.S. laws alone swamp our small staff.

Please check the Project Gutenberg web pages for current donation methods and addresses. Donations are accepted in a number of other ways including checks, online payments and credit card donations. To donate, please visit: www.gutenberg.org/donate

Section 5. General Information About Project Gutenberg™ electronic works

Professor Michael S. Hart was the originator of the Project Gutenberg™ concept of a library of electronic works that could be freely shared with anyone. For forty years, he produced and distributed Project Gutenberg™ eBooks with only a loose network of volunteer support.

Project Gutenberg™ eBooks are often created from several printed editions, all of which are confirmed as not protected by copyright in the U.S. unless a copyright notice is included. Thus, we do not necessarily keep eBooks in compliance with any particular paper edition.

Most people start at our website which has the main PG search facility: www.gutenberg.org.

This website includes information about Project Gutenberg™, including how to make donations to the Project Gutenberg Literary Archive Foundation, how to help produce our new eBooks, and how to subscribe to our email newsletter to hear about new eBooks.