ARTICLE V.

THE DIVINE IMMANENCY.

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The allegation is so often made, either that there is no distinction between the doctrine of the divine immanency and that of pantheism, or that the doctrine of the divine immanency tends to pantheism, that it seems necessary at the outset to state with some elaborateness the distinction that exists between them. The analysis of the words themselves, "pantheism" and "immanence," so different in their origin and significance, it might well seem should be sufficient. The unlikeness of these words is by no means to be accounted for on the ground that one is derived from the Greek and the other from the Latin. Their original signification is entirely different. One affirms that the totality of existence, not merely has its origin in God, but is itself God, and that the Deity has no separable existence apart from the material universe; that God and matter are one, inseparable and indivisible: the all is God.

The other affirms only a single quality or mode of the divine existence: not by any means limiting the divine existence to that mode or condition, but affirming the fact of such existence that God is immanent in nature or matter, as its inner energizing force—the life of all life, the force of all force—which is, as all scientists now affirm, the substratum of matter.

The doctrine of the divine immanency stands opposed to that of the existence of the material universe apart from God, although a doctrine calling itself Christian, and even orthodox, because held and transmitted to us by the early
Christian Fathers, whose conceptions of Deity were the result of the culture and training of the heathen religion in which they were reared. In fact, it is almost impossible for those who have not had a philosophic culture, and have not been accustomed to the conception of invisible forces as realities, to have a clear idea of the existence of omnipresent spirit, as a real although an invisible power, a veritable entity and true substance. For those who have always associated the idea of valid real existence with visible and tangible forms, it is difficult to gain the conception of an invisible, omnipresent spirit. In metaphysical exactness we correctly affirm that such a conception is impossible. We can only have the idea of such existence.

The doctrine of the divine immanency really affirms only one of the conditions of the existence of the Omnipresent Being. If He is not within as well as without the particles of matter, He is not omnipresent. Again, if He is not the force and the life within the cell building up all organisms; if He is not the force within the atom that gives it its power of attraction and repulsion,—then He is not omnipotent, as well as not omnipresent. The doctrine of the divine immanency does not limit God to this mode of existence: it does not by any means deny his transcendency, that God is "over all," but with the Apostle affirms, that He is also "through all and in all." It seems passing strange that this doctrine, so plainly apostolic and scriptural, could, even by fingers perfumed with mediæval lore, be manipulated into a theological bugbear, and arrayed in the garb of Pantheism, to frighten the would-be-orthodox from all approach to its examination and its reception. And yet it is often affirmed to be the very pantheism of Spinoza, because the doctrine of the divine immanency is involved in his doctrine of God as the Universal Substance. So also is that of the divine omnipresence and omnipotence.

A distinguished theologian once remarked, "There are some minds which seem to lack all power of discrimination, and so far from being able to split hairs they are not able to
split saw-logs." This remark might well apply to some theological criticisms that exhibit an incapacity to discriminate between this doctrine of the divine immanency and that of pantheism. The doctrine of the divine immanency recognizes Deity as the supernatural—yet not separated from the natural. It contradicts the doctrine that nature exists separate from God, and that its processes are independent of Him. It stands opposed to the old doctrine of second causes which science in our day has thoroughly exploded, and is no less opposed to that theory of creation which affirms that God created the universe of matter, as something distinct and separate from himself, incorporating into it certain inherent forces, such as gravity, chemical affinity, electricity, etc., and then left it to the action of these forces, only occasionally intervening in order to change or modify those processes by special acts,—a theory which Carlyle, with characteristic sarcasm, calls the "clock-maker theory of the universe."

The doctrine of the divine immanency is not a doctrine of negation, but of affirmation; not of limitation, but of extension. It does not deny the transcendency of God, but does affirm his immanency. It does not limit God to an interior or inner existence in the universe he has created, or in matter as its inner potency; but it does affirm such inner existence and energy. It does not deny his presence or existence above the stars; but it does affirm his presence and existence on this earth, and in the most interior organization of every form of life and of every molecule and atom of matter. It affirms the omnipotence of God as the immediate source of all power and energy. It affirms the omnipresence of God, in that there is no point in the infinite of space, no atom of matter, from which he is excluded. The doctrine of the divine immanency gives us the true doctrine of uniformity: not of mechanical uniformity as a fixed and unchangeable mode of action, but uniformity of cause as an inner, generating, formative power, working with all the freedom of the divine will. The principle upon which modern science has made its great-
est advances is not that of uniformity of action, but of causes. This is the principle upon which Lyell based his system of geology; the principle or, if you please, the assumption that the same causes are now in operation which were in former ages—the very same, notwithstanding the great seeming diversity in their modes of operation, as well as results.¹

This doctrine of the divine immanency stands opposed to dualism in all its forms, whether religious or philosophical. The doctrine of dualism, as it is or has been ordinarily held, partakes of both characteristics, and may be commonly regarded as a religio-philosophical system. There are very few religions that do not explicitly or implicitly contain it. We find it in all ancient and heathen religions that affirm the existence of a Good and Evil principle, as separate, antagonistic, and original powers in the universe. It appears in the recognition of mind and matter as two distinct and independent entities. It also reveals itself in not a few of those philosophic systems that assume, as their chief object, to prove the unity of the universe. A striking illustration of this fact is given us in the philosophic system of Hegel, commonly interpreted as absolute idealism. Although the philosophy of Hegel is a transformation and development of Schelling's System of Identity, affirming the unity of the subjective and objective, yet he introduces in his theory of Anderssein ("otherness"), in the form of nature as well as in the separation of pure thought from its empirical basis, the doctrine of dualism.²

The doctrine of the divine immanency also stands opposed to Gnosticism. The various theories and phases of Gnosticism had their most complete development in the Christian

¹ The term "immanent" is not to be construed rigidly as meaning "remaining in," as "a dead, or inbiding Cause," as is done by Professor Bowen in his work on "Modern Philosophy" (p. 30), but simply as a cause ever present within and acting within, yet "transcendent," going forth beyond its source.

² For the confirmation of this view, see Ueberweg's "History of Philosopy."
era, and were attempts, of a philosophical character, to explain the existence of good and evil in the world,—how a world so imperfect as this, could proceed from a supremely perfect God. The Oriental notion of matter as being utterly corrupt, prevades all the various systems of Gnosticism, and gives them a common character. They agree, also, in this respect, that this world of matter did not proceed immediately from the Supreme Being, but that a vast gulf intervenes, occupied by a series of emanations, through which the infinite passes into life and activity, and becomes capable of representation. All the various philosophical systems of Gnosticism unite in the doctrine of emanation. Their differences lie in the various modes in which the passage by emanations, called aeons and demiurges, is effected: some regarding the process as a mere continued degeneracy from the original Supreme Being by successive emanations; others making the dualistic theory prominent, corresponding to the ancient Zarathustrian doctrine of a good and evil principle. Manichanism, which held the doctrine that matter is essentially evil, although called by Kessler a gnosis, was thoroughly dualistic in its character, affirming the existence of two beings originally quite separate from each other,—light and darkness,—each to be thought of according to the analogy of a kingdom. Notwithstanding that this doctrine was pronounced a heresy by the Roman Catholic Church, its tenets have continued a modified existence in various theories and forms of asceticism, in which not merely the abuse or wrong use of worldly things is denounced and forbidden, but all earthly things are reprobated as essentially evil. Kindred to the Gnostic doctrine of emanation is Arianism, which holds that Christ was not co-eternal with the Father. Arius postulated a remote Deity, and saw in Christ merely a delegate or ambassador; however highly exalted in rank above human beings, yet still below God, and not of the same essence with the Father, but one that proceeded forth from the Father as an emanation of the Father.

It is the view of God as an extra-mundane Being that has
led to papal hierarchy, and developed the whole system of priestly ritualism. For if God be postulated in thought as at a distance from the world; and if Christ came into this world, and then departed to sit on his judgment throne,—it is not unreasonable to believe that some vicar is appointed to represent absent Deity or Christ the Mediator, himself a subordinate mediator, with delegated rights and authority, appointed to rule the church in His stead. Out of this idea of a distant God—whether held by pagans or those calling themselves Christians—a system of mediators is sure to arise, reaching down to the level of the lowliest humanity, giving us a series of priestly functionaries for the work of human redemption, whose sacraments are the conduits through which the divine gifts and graces are transmitted to men.

Gnosticism is commonly spoken of as an ancient and exploded heresy; but its essential ideas of a distant God, separated from matter, which contains an inherent principle of evil, still prevade some modern systems of theology.

Again, the doctrine of the divine immanency is also opposed to anthropomorphism. This doctrine of anthropomorphism—which is that the Creator of the universe possesses the form (morphos) of a man, or is in the likeness of a man; that he has created the universe of matter as a man constructs a machine,—has been the special object of assault and ridicule by the scientist. The relation which the creative power of the universe holds to the universe is necessarily so dissimilar from that which a man as artificer holds to a machine, as to lead not a few scientists to the sweeping denial of any resemblance even in the spiritual nature,—the denial that there is any element, even the mind-element, in common between them, by which man can know aught of God;—so that they have been led to postulate Him as the Unknown and Unknowable. Many also fail to discriminate between the knowledge of a thing as a fact of existence and a knowledge of the nature of the thing. By virtue of the intelligence man possesses, limited although it is, we may be able to know of God as cause, and yet do not and cannot know his nature as
cause. The finite cannot comprehend the infinite; and yet man as finite can know the fact that the infinite must be.

There are three phases of the doctrine of anthropomorphism, to two of which, especially, the doctrine of the divine immanency is opposed.

The first is that of materialistic anthropomorphism. It might not seem strange that heathen nations, through the influence of idolatry, should have the conception of the existence of God in a material human form; and yet, with all the teachings of the Bible, especially of the New Testament, we find such a conception of God existing to some extent among those who profess the Christian faith. It exists more especially in reference to the person of Christ himself. Our Christian psalmody makes reference to Christ as being "now clothed in a body like our own," in a manner which can hardly be regarded as simply meaning, in poetic figure, that he has sympathy with us in our human experiences,—so far have the materialistic conceptions of heathen idolatry reached down the centuries to corrupt the true spiritual worship of Christianity, though its founder taught that "God is spirit."

Another form of anthropomorphism in which science in former years participated, is that the Creator is separated from the universe which he has created and flung into existence, and which is carried on by the operation of what are called "second causes;" that He stands either as an idle spectator of its operations, or as an engineer with his hand on the throttle-valve or the lever, controlling and directing, more or less, at pleasure its operations.

Another phase of anthropomorphism is that God acts under the control and influence of feelings similar to those possessed by man. While there is somewhat that is true in this view of God, because of likeness of spiritual nature, there are mingled with it the gravest and most debasing errors. These are especially, but not alone, the errors of heathenism.

The materialistic anthropomorphism of heathenism which invests their deities, whatever may be their grade or relation,—whether the superior or inferior gods,—with human
passions, appetites, and desires, as well as with human forms, gives rise to a worship in which the main object is to propitiate their good will, by ministering in some way to the gratification or satisfaction of these animal appetites and malignant passions. In this principle we find the origin of abominable rites, bloody and cruel sacrifices, and costly offerings. Revenge, bloodthirstiness, lust, sensuality, and avarice are all to be placated and appeased. The gods are to them what they conceive men would be, if endowed with like power, and with no authority over them to restrain their malignant and undisciplined passions. Hence it is we are not to search among the religions of the heathen, least of all among the rites of their worship, to learn their ideas of morality. Their worship had nothing to do with such ideas. It had for its sole object the propitiation of gods whom they believed possessed of human passions. To believe in their gods was to believe them possessed of such human passions, because of their likeness to men. And this it is that explains the mystery so often referred to by the classic scholar—that a chaste Lucretia should worship an unchaste Venus. The religious duty of the worshipper consisted in winning the favor of the gods, or deprecating their resentment. Whatever, therefore, was done in the service of religion lay outside the sphere of morality. The ethical principles which they applied to their daily lives, to regulate their relations and intercourse with each other, ceased to exist in the temple, in the worship of its gods.

The more the idea of God is separated from anthropomorphism, or the conception of Him as possessing likeness to a human being, and the purer our idea of God as spirit, the higher and purer is our conception of his moral attributes, righteousness, truth, and justice; and the clearer our apprehension of his immanency in nature and humanity, the profounder is our view of his mercy, compassion, and love.

The teachings of Christ, that God is spirit, present us with a spiritual philosophy of God which frees the Creator from
the degradation of anthropomorphism, and also delivers us from a mechanical theory of the universe. And yet, despite the theological antagonism to materialism and naturalism, the recent attempt to explain spirit by matter, reversing their true relations, has met with no little popular applause from the superficial class of thinkers; but in the last resort, as the profoundest scientists now affirm, nature is only to be explained by spirit.

RELATION TO PROVIDENCES.

As the doctrine of the divine immanency dispels the falsity and confusion that exists in the theory of second causes as related to a first cause, so it also rectifies the error that exists in the doctrine of a universal and special Providence,—a doctrine which represents God as a person standing aloof from the creation he has made, overseeing its operations, and occasionally interrupting its regular or ordinary operations by special acts of divine interference.

In contrast with this anthropomorphic theory of a distant God occasionally drawing near and intervening in the regular flow of events, like a human finger stopping for a moment the swing of the pendulum, or giving for a moment accelerated motion,—opposed to this, stands the doctrine of divine providence, of an ever-present, ever-acting deity, given us by Christ himself, that not a sparrow falls to the ground without our Father (Matt. x. 29).

RELATIONS TO TELEOLOGY.

This doctrine of the divine immanency also gives us the true theory of teleology, or final cause,—cause acting for an end. The erroneous theory of teleology which has provoked the criticisms of scientists is that which presents the Creator as an external architect, forming contingently determined designs, with an external composition of parts instead of an inner formative power and development; and instead of recognizing an inner capacity of adaptation to varying
external circumstances as an original endowment, gives us these adaptive results of changes and modifications of structures as something designed by an external power that has wrought out these modifications by special acts. It is this original capacity or power of adaptation to different environments that constitutes that "wider teleology" of which Huxley speaks and which he recognizes.

True efficient cause, as distinguished from what are called "second causes," can be predicated only of will, the only conceivable source of force or energy; so that true efficient cause and final cause must always go together, for both originate in mind.

REATION TO THE DIVINE INCARNATION.

Again, the doctrine of the divine immanence gives a philosophical basis for that of the divine incarnation. Once admit the fact that the divine is in the human,—not only as the power of life or existence, but also as the spiritual or moral life of the human,—and there must also be admitted the possibility of such indwelling in all the fulness of the divine moral perfections. This principle corresponds to the explicit statement in the inspired record concerning Christ (Col. ii. 9), "for in him dwelleth all the fulness [πᾶν τὸ πλήρωμα] of the Godhead bodily," or "really," as Grotius, Schöttgen, and Wolf translated it.

This doctrine of the divine immanence also gives the true and evident solution of that long- vexed question concerning the nature of Christ which divided the early creed-makers into "homoousians" and "homoiousians," that is, those who believed that Christ possessed the same nature as God, and those who believed he possessed a like nature as God. This doctrine of the divine immanence, in accordance with the Nicene Creed, affirms Christ to be "God of very God," possessing the same essential nature. The divine immanence in humanity is also the ground and pledge of the fulfilment of that transcendent promise that we shall be "filled with all the fulness of God" (Eph. iii. 19).
Let us consider, as first and most important of all, the Bible teaching of the doctrine of the divine immanence, beginning with the Old Testament.

This doctrine of the divine immanence was the distinctive and peculiar teaching of Mosaism which both distinguished and separated it from the teachings of all other religions concerning the being and nature of God. While some of these taught the doctrine of the existence of a Supreme Deity, superior to all others, they yet taught the independent existence of other divine beings, holding the same relation to the superior Deity which a subject holds to his sovereign,—sometimes obedient and sometimes rebellious,—such relation as one man holds to another who is superior in strength,—overcome by the stronger when conflict ensues, but still and ever capable of an independent existence and action.

In one view these systems of religions may be regarded as monotheistic so far as they taught the supremacy of One Being, but polytheistic so far as they taught the existence of other divine beings. They were all essentially anthropomorphic, with the exception of the pantheistic speculations of Brahmanism, which practically is one of the grossest of all the polytheistic systems of religion. For if nature is God, then every object of nature may be regarded as God and all its forces; so that pantheism becomes a most prolific source of polytheism.

But the Hebrew Yahwe was not a local Deity, but "the God of the heavens and the earth," "the creator of all things," "upholding all things by the word of his power"—that is, the outcome of his power. In the very construction of the tabernacle and the temple, the divine immanency was symbolized by the Holy of Holies; the special place of the divine revelation being located in the most interior portion of the temple. It was always and everywhere taught in the Old Testament that He was an invisible power of existence, the life of all life, the inner sustaining power of all being, as
described by the Apostle with his Old Testament culture and Jewish training, the Being "in whom we live and have our being," the God who is not only "over all," but "through all and in all," "the indwelling life." It is in this view of God as the indwelling power of life that we have the explanation not only of the teaching of the Old Testament that all the phenomena of nature were the direct resultant or outcome of the divine energy or power, but also the thoughts, purposes, and actions of men,—hardening Pharaoh's heart and putting a lying spirit in the mouth of the prophets (2 Chron. xviii. 22). He is also, for the same reason, spoken of as a present power of reward and punishment. It is the comparative exclusiveness of this teaching of Mosaism, of a present God in nature and in Providence, which distinguished it from other religions that inculcated belief in a God sometimes distant and inattentive, yet one who at some time in the future would judge and award, which has been construed by not a few critics into an ignoring yet not a denial of future existence, rewards, and punishments. It was not necessary to enforce the truths already inculcated and universally believed. It was necessary to teach that ancient people the doctrine of an ever-present God, because denied by the nations around them. The recent investigations of such archaeologists as Professor Sayce should set forever at rest the long-controverted question concerning the belief of the ancient Hebrews in a future state of existence. The cuneiform inscriptions have given us detailed information as to what the Accadians, instructors of the Semites, of the Assyrians, and Phœnicians, thought of the world to come. As in the Old Testament, so too among the Accadians, the realm of death was a Sheol or Sual, the land from which there was no return; but beyond Sheol there lay another world, "the land of the silver sky," where the accepted and justified, received to the company of the gods, feasted with them at banquets that knew no end, and under the light of everlasting sunshine. But Mosaism had a higher mission than to repeat these dreams of the future; rather to inspire belief in
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a God who was with Jacob in the solitary wilderness, with Joseph in the pit and the prison, with the Israelites in their desert wanderings, dwelling in the humble and contrite spirit, and "a present help in every time of trouble."

It is this doctrine of the divine immanence in man, as well as in nature, that explains the mode or manner in which the Old Testament represents God as speaking to men: not by material or human organs of speech, in words audible to the ear of sense, but as a voice within, in the spiritual consciousness, by inspiration, by conscience, by utterance and voices audible to the soul, as we are ourselves accustomed to speak of conscience as "the voice of God within us." Thus all revelations of God to the soul of what was felt, known, and recognized by the spiritual nature to be true—true beyond all question or doubt—was also recognized as divine truth, a revelation from God. The affirmation of Christ that "every one that is of the truth heareth my voice," applies to all ages, as well as to the brief period of the divine incarnation; to Christ in the spirit, as well as to Christ in the flesh.

This phase of the doctrine of the divine immanency which relates to inward teaching and spiritual communication is most distinctly and emphatically affirmed by the apostle Paul in his Epistle to the Romans, "because that which may be known of God is manifest in them, for God hath shewed it unto them."

In fact, throughout the New Testament, the doctrine of the divine immanency is of such frequency of repetition, either direct or implied, as well as so plain in statement, as not to need citation of proof-texts even to the ordinary reader, were it not for the fact that there are so many educated in the idea that existence in form or shape is necessary to personality, a term never applied to the brute—but a condition that can be predicated only of spiritual intelligence and free-will. It is to be feared not a few, even in Christian lands, have not attained to the high conception, or rather idea, of God as spirit. For to-day we have the melancholy spectacle of a great religious controversy concerning the
necessity of a second probation, in order to vindicate the justice and love of God, because they fail to recognize the truth that the incarnate Christ and the spiritual Christ, "the light that lighteth every man that cometh into the world," are one; that wherever there is spiritual light there is Christ revealed; and the rejection of the spiritual Christ carries with it the same significance and guilt as the rejection of the incarnate Christ,—in fact it is only the acceptance of the spiritual Christ that fulfils the conditions of salvation.

We find in the New Testament that Christ constantly speaks of himself as being the inner, immanent life of his disciples, "I in them." He illustrates and enforces this relation by analogies and similes taken from nature and its processes—"I am the vine, ye are the branches;" "without me," or severed from me, "ye can do nothing;" "I am the living bread;" "he that eateth me, even he shall live by me;" "he that eateth my flesh, and drinketh my blood, dwelleth in me, and I in him;" "it is the Spirit that quickeneth, the flesh profiteth nothing." The spiritual, indwelling, quickening, and consciously divine life which he imparts to his disciples is something more than the immanent, sustaining, substantive life of Yahweh, the source of all being, but superinduced upon this, a quickening, indwelling, conscious life in his disciples—"At that day ye shall know that I am in my Father, and ye in me, and I in you." Of the Comforter, the Spirit, Christ affirms, "He dwelleth with you, and shall be in you." And the apostle Paul constantly speaks of God as working "all in all," of "filling all in all," of working "in us to will and to do," as the "one God who is above all, and through all, and in all," as properly given by the revised version.

**THE TEACHINGS OF SCIENCE.**

Says Fairbairn, in his discussion on "Theism and Scientific Speculation," "He who can evolve a conception of the universe that shall satisfy both science and religion will be the greatest prophet of the Eternal, modern times has
known." This antagonism that has so long existed between science and religion can be reconciled only by the theologian discarding the dualism that places matter over against mind in unreconcilable antithesis, and adopting the doctrine of the divine immanence, which perfectly harmonizes the conflict and restores unity to the universe. No other theory of theism but that which involves the recognition of the divine immanence can be accepted by the scientist as satisfying the conditions which modern investigations into the nature of matter reveal to him. Let us briefly consider this fact as exhibited in the modern, as contrasted with the ancient, theory or theories of atoms. Of the older theories there are two of great antiquity: one is that of Democritus, the other that of Aristotle. The theory of Democritus is the materialistic theory, that atoms are the ultimate material of all things, uncaused, having existed from all eternity, invisible but extended, heavy and impenetrable. Their motion, like the atoms themselves, Democritus held to be eternal and vortical. Kindred to this, but of a far more modern date, was the theory of Sir Isaac Newton, who held matter to be inert, and that force lies outside of the atoms of which matter is composed, and acts upon them externally, and that this force exists in an ether which surrounds matter. When this force is active and communicates its action to bodies, it is vis viva, "living force;" but when passive, it is "dead force," vis mortua. According to his theory, matter is itself inert, yet has a positive power of being, and so is vis insita, and the power of resisting action is its vis inertia, which he defined to be "that innate force of matter by which it resists any change, and endeavors to preserve its present state of motion." Observe even here we have the recognition of an inherent force corresponding to what scientists now call the "power of repulsion," as they now postulate two forces in the atom—the power of attraction and also the power of repulsion. Of late years, although the term inertia of matter is still used, yet it may be regarded as a relic of a period of philosophical speculation when scholars were ignorant of the
true nature and relations of matter and force. It is now conceded that no such dead thing or principle as inert vis exists in matter. No molecule or atom of any element exists without force in itself, or so interwoven with its minutest imaginable essence as not only to enable, but also to compel it to exert action and be acted upon by the internal forces of other particles or masses of particles. Says Winslow, an eminent writer on "Force and Nature," "In the present state of physical knowledge, matter cannot be demonstrated nor imagined to exist independent of immanent active force." Again, he says, "We cannot even conjecture any thing or principle in nature to be devoid of positive innate energy."

This modern scientific view of the nature of the atom, partly at least, conforms to the theory of Aristotle, who affirmed that in every particle of matter there is inherent a sort of mind—the φύσις and ἀτομον φυσι, the "nature" and "as it were the soul" of matter, which he called a sort of elemental mind—which is the cause of all its motions and changes. Leibnitz accepted this doctrine, and extended it systematically, supposing every particle of matter, not only to be active, but also "to have individuality, and a sort of perception of its situation in the universe and its relations to every part of the universe." This atom thus endowed he called a monad. He affirmed that particles of matter are continually active, and continually changing their situation in virtue of this principle of innate indefinable perception.

This theory of atoms applies to crystallography and also to chemical affinity.

The very fact that crystals spontaneously take on geometrical forms, is suggestive and significant of the truth that some intelligent power is immanent in the atom of which these crystals are composed, being built up in accordance with some preconceived mental conception, as the architect forms and shapes the material of which the edifice is composed, in accordance with a plan mentally elaborated and defined. Says Clerk Maxwell, an elaborate writer on Atoms and Molecules, "Atoms have the appearance of being manu-
The very term universally used by scientists, that of "Elective Affinity," to denote the mysterious force that unites atoms together, and invariably, in definite, mathematical proportions, into molecules, and in the same manner combines molecules together to form still larger masses of matter, implies a choice, election, the action of the will; so that the scientist, even though he may deny the presence and agency of mind, still uses and accepts of terms which necessarily involve the action and presence of mind.

This final principle, the *vis formatrix*, being demonstratively co-extensive with matter and force, and still more subtle, is in every sense universal and infinite. This principle being universal, which must be regarded as a power of intelligence, embraces, controls, and pervades all matter and force, so far as they are traceable, and is admitted by the profoundest thinkers among scientists to exhibit in this manner the highest type of mind and thought. Says Romanes, a distinguished evolutionist, in his Rede Lecture, 1885, "The advance of natural science is now steadily leading us to the conclusion that there is no motion without mind, and that there is no being without knowing"—so that "with Bruno we may infer that it is in the medium of mind and in the medium of knowledge we live, and move, and have our being."

The fundamental relation of matter to force, so that matter is only a manifestation of force,—a truth universally accepted by that class of scientists now specially called "physicists,"—is asserted in the very definition given by Bosovich and Faraday to atoms, that "an atom is a mere centre of force." Says Winslow, in his large and elaborate treatise on "Nature and Force," "The fundamental nature of atoms is, to possess and hold forces. By their dynamical collisions, combinations, and disintegrations, they impress sense and consciousness by their multifarious capabilities and developments, and connect finite mind, the crowning elaboration, with the eternal principle which originated, exists in,
and controls all things, and which is indeed Absolute mind itself, filling space and eternity, and in comparison with the vastness of which all else is nothing."

Says Leibnitz, "Everything in the phenomenal world takes place at the same time mechanically and metaphysically, but the source of the mechanical is the metaphysical." How evidently the "beautiful contrivances," as Mr. Darwin calls them in his book on the "Fertilization of Orchids," indicate, as his own words imply, purpose and design! They involve what Huxley calls that "wider teleology" which, he says, "is not touched by the doctrine of evolution, but is actually based upon its fundamental proposition."

"The 'marvellous adjustments,' as Darwin calls them, between the plants and their environments, speak to me," says Lilly, an eminent evolutionist, "of a cause inherent in them which is one of the attributes of life itself. Nor when I rise from its perusal is there room left in me for doubt of the intelligence of these wonderful plant-organisms, of their consciousness, however dim, of their surroundings, of their possession in their measure of the self-same endowment which in man we call mind. Mr. Darwin's facts point us clearly to a psychic basis of life as to directive intelligence, and so they lend themselves to the deepest spiritual teaching, and receive from it their only legitimate explanation. They lead us to think, with Wordsworth, 'of life and soul to every mode of being inseparably linked,' to conceive of matter not as the base thing of sensualistic philosophy, but as substance in its dynamic condition, pregnant with the potentiality of personality; to regard its laws as modes of the divine agency, its properties as effects of the divine indwelling."

Descartes represents creation, not as one act begun and ended at a definite time, but as a continuous putting forth of energy, a constant manifestation of divine power, so that, if it should cease for a moment its energizings, the universe would lapse instantly back into the nothingness whence it was drawn.
Sir Isaac Newton writes, in his "Principia," that "gravity must be caused by an agent acting constantly according to certain laws." "That one body may act upon another, at a distance, through a vacuum, without the mediation of anything else by and through which their power and force may be conveyed from one to another, is to me so great an absurdity that I believe no man who has in philosophical matters a competent faculty of thinking can ever fall into it."

Says Sir William Hamilton, in his "Lectures on Metaphysics" (Appendix): "Creation is the existing subsequently in act of what previously existed in power; annihilation, on the contrary, is the subsequent existence in power of what previously existed in act. Every other agency is only an effect." Similar in philosophical view is this, which Professor Bowen writes: "Second causes are no causes at all, and exist only in thought. A cause in the proper sense of the word, that is, an efficient cause, as original and direct in its action, must be a first cause: that through which its action is transmitted is not a cause, but a portion of the effect, since it does not act, but is only acted upon. At most it is only the instrumental cause."

Says Mr. Grove, in his celebrated Essay on "Correlation of Physical Forces," "Light, heat, electricity, magnetism, and chemical affinity are all convertible material affections. Cause and effect, therefore, in their abstract relation to these forces, are words simply of convenience, and we most humbly refer their causation to one omnipresent influence." Again, he says, "Causation is the will creation of the act of God."

Says Agassiz, the renowned opponent of the doctrine of evolution, "I regard the divine power not only as the source of creation, but the working force in nature herself."

Thus it is we have all classes of scientists—physical and metaphysical, evolutionists and opponents of evolution—uniting in the acceptance, if not formally yet really, of the doctrine of the divine immanence as the only principle that can explain the existence of matter as the manifestation of

force, that can account for motion, or constitute efficient cause.

RELATION TO BIOLOGY.

But it is in the investigations of the science of biology that the doctrine of the divine immanency receives its strongest confirmation. Those who call themselves evolutionists, and yet possess true scientific culture, are well acquainted with the fact, that the theory of evolution is wholly discarded by biologists in our day, and the antagonistic theory of epigenesis is universally accepted, and yet they persist in the use of the word "evolution," and seek to combine these irreconcilable terms by using the phrase "evolution by epigenesis." But by the theory of epigenesis, a higher organization is superinduced upon a lower, not evolved or developed from it.

It is a remarkable fact that the theory of evolution was almost universally accepted by physiologists previous to the nineteenth century, and was especially acceptable to a large class of theologians, both because it seemed to favor the doctrine that—

In Adam's fall
We sinned all,

as the whole human race according to this theory were "in the loins of Adam," and also because it confirmed the doctrine that the Divine Creator had fully completed the work of creation, and as an active force had retired from Nature, and left it to the action of what were called either "Second Causes" or "Natural Causes," excluding what were called supernatural causes, except as they appeared in miracles and special providences. The theory of evolution affirms that no really new formation takes place in the evolution of each individual organism of plant or animal, including man, that there is only a growth or an unfolding of parts, all of which have been present and preformed and complete, though only very minute and wrapped together. Every organic germ, therefore, contains all the parts and organs of the body preformed and represented in their subsequent form, position,
and connection, and the entire course of the evolution of the individual, or the ontogenetic process, is nothing but an evolution in the most exact meaning of the word, that is, an unwrapping, or evolving, of wrapped-up parts already formed.

This theory, applied to the human race, maintained that as an infant resembles an adult in most respects, save that of size, the original germ of the infant must also be a minute copy of the infant itself; that from the germ to the adult man there was no increase of complexity, only an increase in dimensions. As a necessary consequence, the germs of each generation were contained within the germs of the preceding generations; so that in mother Eve, according to the evolutionists called "Ovuлистs," were contained the miniature originals of the entire human race, completely shaped in every feature, and shut up one within another like a series of Chinese boxes. This was called the theory of encasement, that is, that every species of animal or plant... contained encased within itself the germs of all the other individuals of its species which have ever lived or will live."

Leibnitz, who adopted the ancient theory of evolution, applied it to the formation and development of souls, as well as of bodies. In one of his works entitled "Theodicée" he says: "I think that souls which will some day be human souls, as in the case of those of other species, preexisted... in our ancestors as far back as Adam, therefore since the beginning of things, always in the form of organized bodies."

The theory of epigenesis first advocated by Aristotle, but not generally accepted by physiologists until our own time, affirms that every new organism is an entirely new formation, beginning in a simple cell; that all the tissues and parts of all living organisms, plants and animals, are composed or built up by cells; that nowhere do we find in the egg or cell any preformed parts, but that every living organism, both plant and animal, is an entirely new formation; by this pro-

* Haeckel, Evolution of Man, Vol. i. p. 35.
cess of cell-building, new cells being formed by the segmentation or division of other cells. According to this theory, now universally accepted by all physiologists, the cell is the beginning of the formation of every organism, however complex it may be, or however much its various parts may differ in chemical constitution. But in every fully developed organism, both of the plant and the animal, we have a work of complexity, both of structural arrangement and of chemical ingredients and combinations, for which no power or skill but that of a divine artificer and chemist is adequate. Describing the simplest part of this work, that of segmentation or the multiplication of cells by the dividing of simple cells, says Huxley, "The plastic matter of the cell undergoes changes so rapid, and yet so steady and purpose-like in their succession, that one can compare them only to those operated by a skilful modeller upon a formless lump of clay. As with an invisible trowel the mass is divided."

Going on to describe the formation of the embryo, he adds, "And then it is as if a delicate finger traced out the line to be occupied by the spinal column, and moulded the contour of the body."

The illustration here given by Huxley of the process of segmentation and cell-multiplication, beautiful and impressive as it is, in some respects fails to accurately represent the inner workings of that mysterious power which builds up cell by cell the wonderfully complex structure of organisms, both in the animal and vegetable kingdom. It is within the very centre of the cell, although sometimes so minute as to elude the search of the most powerful microscope, that this invisible hand and trowel does its work of division and cell-multiplication. Within the cell is first formed a nucleus, and within that nucleus a nucleolus, or still smaller and more minute nucleus; and it is here the work of division begins that extends outward until the complete work by the formation of new cells is consummated. And what is still more mysterious and wonderful in this process of cell-multiplication is, that it is not merely two new cells that are formed
by such division; but that within the nucleus arise sometimes numerous points which separate from each other and become, by this same process of segmentation, new cells, thus multiplying growth in a quadruple and even higher ratio of cell-multiplication.

Superadded to this, is another process, to which divine creative as well as formative power is alone adequate, which is thus described by Herbert Spencer in what he calls the differentiation of the homogeneous germ. He first describes it as it relates to plants: "In plants the albuminous and amylaceous matters, which form the substance of the embryo, give origin in one place to chlorophyl, and in another place to a preponderance of cellulose, constituting the woody tissue of plants. Over the parts that are becoming leaf surfaces certain of the materials are metamorphosed into wax. In this place starch passes into one of its isomeric equivalents, sugar, and in that place into another of its isomeric equivalents, gum. By secondary change some of the cellulose is modified into wood, while some of it is modified into the allied substance which in large masses we distinguish as cork. And the most numerous compounds thus gradually arising initiate further unlikenesses by mingling in unlike ratios."

"So also the animal ovum or egg, the components of which, being at first evenly diffused among one another, are chemically transformed in like manner. Its protein, its fats, its salts become dissimilarly proportioned in different localities, and multiplication of isomeric forms leads to further mixtures and combinations, that constitute many minor distinctions of parts. Here, a mass, darkening by accumulation of hæmatine, presently dissolves into blood. There, fatty and albuminous matter, uniting, compose nerve-tissue. At this spot, the nitrogeneous substance takes on the character of cartilage, and at that, calcareous salts, gathering together in the cartilage, lay the foundation of bone. All these chemical changes slowly and insensibly become more marked and multiplied, forming the process known among scientists as that of differentiation."
Now observe that all these processes so complicated, both chemical and structural, take place within the body in its formation and growth. In the first place is a process of secretion and transformation within each cell, which no laboratory of chemist can in any respect equal. Out of the nutrient material presented to the cell, it selects those chemical ingredients which are needed for its purpose: here, to form bone, there, to construct tissue—here, again, to organize brain, there to build up muscle, each part and organ thus formed having its own peculiar chemical constitution, as well as mechanical construction. And what is still more mysterious in the power that works these transformations, no chemist is able to detect in the nutrient material those chemical constituents which he finds in the formed material or complete organism. Within each cell is an alembic, a transmuting power which scientists call bioplasm, that more than fulfils the dream of the ancient alchemist, for he sought only to transmute one metal into another, but this mysterious power transmutes dead matter into living matter, the inorganic into the organic. Take up a clod of earth in one hand and the simplest flower in the other, and ask the chemist to transmute the lifeless clod into the living flower, with its reticulated tissue, so minute, so complex, which no loom of human skill can weave; ask him to evolve the chlorophyl of the green leaf,—where by the action of the sunbeam is developed a chemical process in the separation of carbonic acid gas into its original elements, carbon and oxygen, setting free pure oxygen,—and he will tell you, that even this comparatively simple process, the setting free pure oxygen, no laboratory of earth can achieve—no human skill can form or tint those delicate petals. He confesses all this to be the work of superhuman skill, a work begun and extending outward from the very centre of each minutest cell.

If all these wonderful organisms that abound in such varieties of manifestation and structure in the animal and vegetable kingdoms, do not reveal the presence of a divine power working within, then nowhere is that power and pres-
ence manifested or required in the vast universe. And when the theologian tells the scientist, that God is *not* the immanent formative power within that vegetable and animal organism, that it is the work of nature and its forces, or that it is natural law, the scientist can but reply, Then is nature and natural law the only God which is required to explain the mysteries of the universe. If God is not there, in the very centre of that cell, doing that work of superhuman skill and power, then is He nowhere in all the realms of matter—either near or far away in infinite space.

But, again, there is another department in biology, that of embryology, in which the workings of a power within, in the process called embryological development, but which is not development, nor is it the evolution, or unfolding, or enlargement of a preformed germ, but is an *epigenetic formation*, the superinducing or building up of a higher and more complex organism upon a simpler or lower one.

All embryonic growth begins in a simple cell, and is continued or carried on by a process of cell-division and multiplication which we have already described. The human embryo, in an early period of its growth, cannot be distinguished from that of a fish, the lowest organism in that class of the vertebrates to which they both belong. As an embryo it passes up through the whole series of organisms that belong to this class until it reaches that highest complexity which is to be found in the human organism. This transformation is effected by the process of *epigenetic formation*, in which the higher is superinduced upon a lower organism. It is as if a cottage were transformed into a mansion, and the mansion then transformed into a palace, without any disintegration of the original structure, a transformation not only impossible to human power, but almost inconceivable to the human imagination.

It is here, in this process of embryonic growth, or, more properly, of epigenetic formation, that the mystery of new varieties among species and the origin of species is resolved.
Here is the cell forming new cells, and adding cell to cell, in such new forms as may be pleasing to itself. The divine power working within creates new organisms and fashions new forms, not limited to any precise pattern, for every new individual in every genus or species is an entirely new formation and more or less dissimilar to every previous formation, for no two blades of grass even are precisely alike. The power that works within, in the formation of each new organism, constructs, differentiates, and shapes according to its own pleasure. "For his pleasure they are and were created." This divine power working within prescribes its own limitations, chooses its own patterns, moulds its own forms. The law of uniformity is to be found in its own wisdom and will, which are divine.

Now let it be remembered that this mysterious transformation is wrought in the secret recesses of each minutest cell. Here, within, is the place where the invisible chemist and architect does his work. If the power that does this work is not a divine power, then is the scientist, who knows the facts of these inner workings, justifiable in affirming that there is no divine power anywhere in the universe of matter and of life, that there is no God.

Professor Tyndall was right in affirming that the potency of matter is inherent or within. The theologians that made haste to charge him with atheism revealed their own real disbelief in the omnipresence and omnipotence of God. If God is not present in matter, then He is not an omnipresent God. If the divine energy is not the potency of the atom, neither is He the omnipotent One. Modern historians have expressed the opinion, which has been repeated until it has become as familiar as a truism, that French infidelity, culminating in the terrors and chaos of the French Revolution, had its origin in the popular revolt against the superstitions and corruptions of the Romish Church. No less true is it that the atheism, if such it is, of the scientific class, has its origin in the expositions of those theologians who hold to the idea, derived from Greek and Roman mythology and
from mediæval theology, of a distant God dwelling aloft in some Olympian heaven. Under such teaching the Christian religion is in danger of being scornfully pushed aside into the common receptacle of oblivion, where other religions of superstition and materialism are fast being consigned. What we most need to arrest the progress of infidelity, is such enlightened expositions of the Bible as will reveal the harmony that really exists between the Book of Nature and the Book of Inspiration, both, alike, revelations of that Divine Being who is the author of both. The interpretation of the one in the hands of the ignorant and bigoted theologian is quite as liable to be false, as the interpretation of the other in the hands of the crude and conceited scientist. The harmony of these books lies in their correct interpretation. A knowledge of both is needful for the full and correct comprehension of the nature, being, and modes of the divine existence. And such comprehension includes the recognition of the divine immanency, as well as transcendency, not merely that God is "over all," but also "through all and in all."

This subject of the divine immanency will be further considered, in another article, in its relations to materialism, to miracles, to inspiration, to regeneration, and to prayer.

[To be continued.]