ARTICLE II.

SCIENCE AND PRAYER.

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II.

But, query our doubting Thomases, suppose you can thus show that scientific discoveries warrant a belief in the possibility of God's effectively interfering in the course of nature and in the affairs of men, have they not also suggested and finally confirmed the opinion that, in point of fact, he never has; that, from the very first, matter contained the promise and the potency of all life; that the world is simply an immense organism which has reached its present complex perfectness through inherent forces working under fixed laws of evolution; that the stages of its growth have been as regular and predetermined as those of a tree; that its social amenities, its arts and literatures, its ripened civilizations, have finally evolved out of the original amorphic fire-mist through precisely the same regular gradations of growth as those out of which the rich grape-cluster or the golden-sphered russet has come to crown the long energizings of the germ-force that at the first lay hidden within the walls of the seed? We return to this query a most decided negative answer, and will endeavor to establish, as the second point in our present argument, that God has actually interfered again and again; that his interferences have not been confined to any one age, but been present in all ages; that his will, by its creating and modifying power, has extended to all classes of phenomena; that his mandates are still being
issued; and that their results, as asserted by recognized leaders in philosophy and in science, are present with us to-day.

At the first, matter was formless, motionless, forceless, structureless, rayless. On this there is now no controversy among the different schools of thought. Moses and Herbert Spencer, the creationist and the evolutionist, the dates of whose writing are separated by three thousand years, on this point clasp hands.

The belief is also as universal that this absolute simplicity of form and of nature has, after the lapse of ages, been converted into an almost infinite complexity, and that the cardinal changes have occurred in a certain order of sequence; but in answering the question as to how these changes have been effected, these schools of thought at once part company.

Those who affirm that in this unfolding there are no evidences of the active presence of an intelligent personal will-power are confronted by seemingly insuperable objections which science itself has furnished. Science discloses a law of inertia so far-reaching that not a single particle of matter in all the wide universe can set itself in motion. It also discloses that there is not a single particle that is now at rest. Whence that mighty initial impulse that thrilled through space and is still felt after the lapse of untold ages peopling the heavens with whirling worlds? Science also discloses that matter is made up of sixty-four or more different kinds of atoms, each enclosing within its walls, as we have already remarked, a force peculiar to itself, working under absolutely fixed conditions which no skilled chemist has ever succeeded in dislodging, or destroying, or changing in the minutest particular; each having all the characteristics of a manufactured article as affirmed by Herschel, Faraday, and
combinations, the whole inorganic world has been built. If there was once a time, as every evolutionist not only concedes, but stoutly contends, when every atom was precisely like every other, and not a single one had the faintest touch of attractive or repellant or affinitive force, through what instrumentality in some far past did these elemental forces, these individualized somethings, find birth and an abiding place within infinitesimal and indestructible walls of matter? We find on them no traces of development and no marks of decay. They are none other than God's immortals. Over the nature of their being, as well as over the cradle of their birth, there has been thrown a veil of mystery through whose closely woven meshes there comes no ray of revealing light to the anxiously peering eyes of science, and whose hiding folds no hand on earth has power to lift, except the reverent hand of faith.

Skilled specialists, after repeated trials to demonstrate that vitality may spring through spontaneous generation from dead matter, now candidly confess that all their efforts have thus far proved unavailing. Dr. Bastian with tireless zeal has worked to this end, and thought he reached it, but in every one of his experiments there has been detected some fatal flaw. The declaration that no life springs except from some living germ has stood the crucial test of the science of this nineteenth century. The lamented Agassiz affirmed this in his last lecture. Carpenter, Huxley, Tyn dall, all the leading scientists, with refreshing candor, reaffirm it to-day.

With equal unanimity the world's savants point us to a
The secret of the egg, its nature and its origin, quite as seriously puzzles and confounds the evolutionist as does that of the elemental atom. Within its walls there hides a wonder-working fairy. Though not secure from intrusion, as is the oxygen or the carbon force, she as successfully eludes the prying eyes of mortals and is wrapped in as deep a mystery as to what she is or whence she came. With the lenses and mirrors of his microscope, the scientist tries to look through the curtained windows of her palace. Baffled in that, he presumes with subtile chemistry to bolt unbidden into her very presence, but the sprite, warned by the first foot-fall of the intruder, passes with viewless feet through some secret postern gate out into the unknown beyond, and never comes back again. After this he compounds in his laboratory the like chemical ingredients of which he has found the egg composed, and in precisely the same proportions, and then exposes this, his skilfully built protoplasm, to a carefully adjusted heat. Weeks pass, but no life. For a third time he finds himself facing failure. At last, with humbled pride, he accepts the truth that germinal force is not some property inherent in matter, but rather an organizing impulse introduced from without, separable at any time from the mass over which for a season it is made dominant, the product of a personal creative will whose impalpable thought it is commissioned to incarnate into living form.

Again, between not only the four priordial divisions of the animal kingdom and also the classes, orders, and genera, but even the one hundred and thirty thousand different species, it has been demonstrated, after a century of most
species can be modified into varieties through climatic or diatetic influences or cross-breeding, but changes thus effected are found quite unstable, the parental types reappearing through the law of atavism when in new surroundings or removed from the culturing care of man. But, however, when an attempt is made to develop absolutely new, distinct species out of old ones, naturalists encounter in the law of the sterility of hybrids an uplifted iron hand, and hear a stern voice, saying, "Thus far, but no farther." That voice they are rapidly learning to recognize as the commanding voice of God.

The origin of bodily organs is another of nature's many secrets to which evolution theories furnish no key. These organs are found on examination to be contrivances of the most complicated character, combining often into a single group hundreds of closely correlated parts so nicely adjusted, so absolutely interdependent in many instances, that the absence of any one would not only seriously cripple the others, but render them totally inoperative, hopelessly defeating the purpose of the mechanism. These parts being thus unquestionably complemental one to the other and incapable of performing any useful office unless combined, their origin and present combination can be accounted for only as a projection into physical fact of an ideal previously conceived and matured by some organizing mind. It seems absurd to suppose that each part could have been originated independently, without any reference to the others, and slowly developed, in its own time and way, out of some
Exploring parties of geologists, naturalists, and anatomists, after having with inexhaustible patience, with trained powers of observation, with most ingenious instruments of research, ransacked the rock record of earth's crust down through even the Silurian strata to the very dawn of being, and having examined the present occupants of every continent and sea, now testify in the name of science that nowhere among extinct species or living ones have there come to light any facts proving that there ever were any such processes as evolutionists so boldly announce to have taken place in introducing the different gradations of sentient life on this planet.

The same is true of the many curious instances of mimeticies in nature, and indeed of all phenomena of correlated growth.

Materialistic expounders of the universe also find themselves confronted on every side by the ever recurring phenomena of instinct and are at their wits' end to account for that perfect poise and mastery of body exhibited by some animals directly after birth, for that accurate intuitive knowledge of perspective, that minute familiarity with first witnessed scenes, that unrivalled ingenuity of design and flawless finish in mechanical execution of works performed without experience or a guiding model or the aid of instruction, that instantaneous grasp of the most occult principles in natural philosophy and profound acquaintance with the laws of chemical and vital action, and especially that far glance of prophecy on the accuracy of which depend the lives not only of individuals, but even of entire species. Theorists who cling to a naturalistic explanation denominate instinct a lapsed intelligence, affirming that it is the accumulated wisdom of past generations acquired through painful and protracted experience and handed down under the laws of heredity in the form of fixed habits and of constitutional mental bent. But scientific investigations in natural history
have brought to light thousands of facts to which such an explanation is wholly inapplicable, which fairly laugh these theorists down.

The spider that builds its tiny diving-bell, anchors it with strong cable to the river bottom, and distends its walls with air pressed from entangling meshes of web on its abdomen, and then, with this, its royal pavilion, that shines through the water like a globe of woven silver, rears with watchful wisdom, amid seemingly most hostile surroundings, its brood of hungry children, is one out of a vast multitude of living witnesses that testify to a direct divine informing of the mental life below the human, the impulsive promptings of instinct being followed blindly by those creatures which stand thus in imperative need of its guiding wisdom. As well accredit an intelligent self-conscious purpose to those particles of matter which, when the time is ripe, arrange themselves with such promptness and precision along the lines of symmetry which form the faces of crystals or the exquisite patterns of flowers, as to ascribe to these lower orders of sentient being the knowledge, the invention, and the prescience which their works display.

But over the question of the advent and distinctive attributes of man the battle of the schools has been most hotly contested, calling into action on both sides every reserved force of scholarship and mental acumen, as the issues at stake transcend every other, involving not only the foundations of theistic faith, but even the very evidences of an endless life.

The extensive scientific investigations which have grown out of this heated controversy have brought to light a vast
bears many very striking resemblances to the brute tribes, suggesting some closer tie than the strict creationist is yet ready to admit; although out of the lines of affinity with the numerous ape and lemuroid species that are by scientists classed with man in the sub-orders of primates, there could be constructed, as a distinguished writer has remarked, "only a net-work and not a ladder." There have also been found in man equally marked differences, suggesting, on the other hand, that in effecting the changes there were actively present higher forces than mechanical or chemical or even vital, and that there was introduced, as in the case of the atom and the egg, an absolutely new ingredient, of which there was no germ even, anywhere existing.

In man we miss the brute's great teeth and claws, we note fewer instincts, a lessened speed, a weakened muscle, a blunted sense, a back laid bare, a skin left tender; divergencies which would denote marked degeneracy were they not most strangely accompanied by a vastly increased mass and multiplied convolution of brain. Here appears that same deep correlation on which the parts of a bodily organ are built, bearing the same emphatic testimony to the prior existence, the personal presence, and the plastic power of some intelligent, organizing will. To be sure, there is here no change in the material ingredients. Neither is there any, when out of the soil a flower unfolds its tinted petals and fills the air with its fragrance; but as the soil, the moisture, and the sunlight have no power to thus combine into this marvel of grace and color and sweetness until the directive force of some buried germ thrills them with its talismanic touch, so neither in the body of the brute nor in the nature of its environment dwells there any power known to science capable of producing such a circle of complemental changes, physical and vital, as mark the advent of man.

Furthermore, science in its explorations in the higher realm of thought has brought to light a class of phenom-
ena so entirely novel as to indicate that there has taken place something more than a mere modification of the four forces, mechanic, atomic, vital, and instinctive, which have been successively set at work in the world, that an absolutely new force has been ushered in, a force possessing characteristics so fundamentally different from all others that they can in no sense be regarded as its progenitors, and a force not only of a uniqueness so complete as to thus preclude any suggestion of kinship, but of a uniqueness so peculiar that it becomes a travesty on scientific interpretation to explain it simply as an unfolding under the universal law of evolution of another one of the hidden, inherent properties of matter. And this new force, known as a self-conscious and a responsibly sovereign ego, is apparently the exclusive inheritance of man, is his distinctive feature, lifts him completely up out of the low plane of brute being.

In the mental life below the human there are semblances of self-conscious, deliberative thought, of moral discernment and of responsible free-will; and instances of this nature are so many and so striking the belief is prevalent, not only in scientific but even in religious circles, that we differ from the brutes only in having a clearer thought, a deeper discernment, a wider freedom; but there are now advanced investigators of the highest attainments and of international celebrity who believe that those semblances are wholly delusive, and that in this mysterious pantomimic life below us there are no really reliable evidences of the presence of a distinctive, self-conscious spiritual force constituting true personality. Animals unquestionably possess in common with us blind instinct, sensation, direct perception, associa-
and do not necessarily imply that they ever get beyond the
domain of the senses, that they have any abstract, deliber­
ative, introspective thought, that their consciousness ever
reaches up into consciousness of self. Their mental states
may be, and probably are simply passive; their memories
and imaginations but prolonging and multiplying their
sense-perception through laws of association and sugges­
tion.

It is true there are some few phenomena that do not seem
susceptible of this explanation, but as we find clearly within
the charmed circle of instinct where there is uniformly noth­
ing but blind obedience to a God-given impulse, acts which
to ordinary observers show deliberation, design, profound
reasoning, even moral purpose on the part of the animal, we
naturally feel warranted in assuming that these occasional
instances met with apparently outside of this circle, and
indicating that animals at times really enter within the vesti­
bule, at least, of self-conscious life, are delusive, that the
real mental background to these unvoiced acts may after all
be God's, and not theirs.

The belief that thus with the advent of man there was
introduced an entirely new force, a spiritual, self-conscious,
personal entity, seems to find further warrant in the fact that
he alone has ever manifested a desire or shown a capacity
for progress, intentionally improving on the past. Did ani­
mals really have souls in them, did they possess truly
reflective faculties like our own, the developing influences of
the tens of thousands of years, that have one by one rolled
round since their life began, would have wrought in them an
advancement so marked that their mental status would long
since have been placed beyond all controversy.

That this non-progressiveness is not rightly chargeable to
bodily imperfections is clearly evinced in the wonder-work­
ings of the ant, the spider, and the bee. Apes have hands
but they have never yet built a fire or replenished one, or
shaped a tool.
This belief finds still further warrant in the fact that with brutes instinct reigns; with man, reason; that they have their thinking done for them, he is forced to do his himself; that they reach perfection, without effort, at a single bound; he, if at all, only after repeated and disheartening failure; that with them the final purpose seems to be simply to conserve the body, with him to improve the mind; that with them the supplying of physical wants brings unbroken peace, a deep content, the horizon of their thought shutting closely down about the now and the near; with him there is ever a vague unrest, an unsatisfied longing, an indefinable dread, angel-winged expectancies.

How can we account for God's pouring out such wealth of inventive thought in care for brutes' bodies and showing not the least concern, so far as we can see, for preserving and developing anything nobler, except on the ground that he has planted in them no germs of anything nobler to be developed, that he has never given them any real, personal self to be conscious of, that with them body is absolutely the very top of being?

While then there are strong suggestions, if not positive evidences in nature of some mysterious relationship between men and brutes, that relationship is certainly, as I have already suggested, as remote as that existing between the flower and the soil out of which it springs. The dull clod has no magic gift of self-transfiguration but displays merely a capacity for a passive yielding to the plastic touch of some newly arrived vital force, when out of its well-nigh shapeless, scentless, colorless dust are wrought the queenly robes and peerless perfume and richly crimson blush of roses.

The investigations of science bring the certain knowledge of the direct action of the Divine will still closer to us, even within the circle of our own individual experiences. Sir George Mivart, Fellow of the Royal Academy, who stands in the fore-front of science, and Professor Rudolf Schmid,
President of the Theological Seminary at Schonthal, Württemburg, who stands in the fore-front of philosophy, claim that self-conscious and responsibly free spirits must be new and independent existences transcending nature, they going so far as to state outright that each human soul is the result of a separate creative fiat of the Almighty.

We might enforce this their position by remarking that out of the old nothing new can come except new combinations, and the soul is believed to be an absolutely new element and not simply a new form of an old one. This our self-consciousness positively affirms, and we must implicitly rely on its testimony or our whole foundation for any belief is hopelessly swept away. It also says that each soul is an indivisible unit, that there cannot be transmitted from parent to child any portion of the ego. Resemblances may be, but nothing of the child's spiritual entity has been or can be derived from his progenitors. Human souls are God's direct gift. To the fashioning of each one he has given his personal attention. It is only its fleshly covering and its other material environment he has entrusted to the care of secondary causes.

Facts brought to light by modern scientific investigations and closely analyzed by modern scientific methods, are thus daily diffusing and deepening the belief among the candid and thoughtful that the progress through the ages from the simple to the complex, from amorphic matter to a peopled world, has been something more than a methodic, self-originated and self-sustained evolution of elements held hidden in matter from all eternity, that absolutely new forces have from time to time been introduced from without through direct creative fiats of a personal will, the old forces, inside their limitations being, as the work progressed, utilized, when found available, simply as avenues for ushering in the new.

[To be continued.]