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By John Fiske

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LIFE EVERLASTING.

For complete list of Mr. Fiske's Historical and Philosophical Works, and Essays, see pages at the back of this work.

HOUGHTON MIFFLIN COMPANY BOSTON AND NEW YORK

LIFE EVERLASTING

[Pg 3]



JOHN FISKE



BOSTON AND NEW YORK HOUGHTON MIFFLIN COMPANY

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NOTE

On the evening of December 19, 1900, Mr. Fiske delivered in Sanders Theatre, Cambridge, the address here printed. It was given at the request of Harvard University, in accordance with the terms of the Ingersoll lectureship, but it stood clearly in Mr. Fiske's mind as a continuation, and in a sense the completion, of that series of philosophic studies successively issued under the titles, "The Destiny of Man viewed in the Light of his Origin," "The Idea of God as affected by Modern Knowledge," and "Through Nature to God." Mr. Fiske delayed the publication of "Life Everlasting," and it is possible that he designed amplifying it. Yet, as he stated in his Preface to "The Idea of God," that both that book and "The Destiny of Man" were printed exactly as delivered, "without the addition, or subtraction, or alteration of a single word," so he may have intended to print this study in the same way. At any rate it is now printed exactly as it was delivered, his perfectly clear manuscript being carefully followed.

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4 Park Street, Boston Autumn, 1901

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THE INGERSOLL LECTURESHIP

Extract from the will of Miss Caroline Haskell Ingersoll, who died in Keene, County of Cheshire, New Hampshire, Jan. 26, 1893.

First. In carrying out the wishes of my late beloved father, George Goldthwait Ingersoll, as declared by him in his last will and testament, I give and bequeath to Harvard University in Cambridge, Mass., where my late father was graduated, and which he always held in love and honor, the sum of Five thousand dollars (\$5,000) as a fund for the establishment of a Lectureship on a plan somewhat similar to that of the Dudleian lecture, that is—one lecture to be delivered each year, on any convenient day between the last day of May and the first day of December, on this subject, "the Immortality of Man," said lecture not to form a part of the usual college course, nor to be delivered by any Professor or Tutor as part of his usual routine of instruction, though

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any such Professor or Tutor may be appointed to such service. The choice of said lecturer is not to be limited to any one religious denomination, nor to any one profession, but may be that of either clergyman or layman, the appointment to take place at least six months before the delivery of said lecture. The above sum to be safely invested and three fourths of the annual interest thereof to be paid to the lecturer for his services and the remaining fourth to be expended in the publishment and gratuitous distribution of the lecture, a copy of which is always to be furnished by the lecturer for such purpose. The same lecture to be named and known as "the Ingersoll lecture on the Immortality of Man."

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Few incidents in ancient history are more tragic than the death of Pompey. The spectacle of the mighty warrior who had conquered the Orient and contended with Cæsar for the mastery of the world, a defeated and despairing fugitive, treacherously murdered and lying unburied on the Egyptian strand, was one that drew tears from Cæsar himself and from many another. Yet among the poets of the sixteenth century Renaissance there was one who took a different view of the matter. In an epigram of incomparable beauty Francesco Molsa exclaims:-

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Dux. Pharea quamvis jaceas inhumatus arena. Non ideo fati est sævior ira tui: Indignum fuerat tellus tibi victa sepulcrum; Non decuit cœlo, te, nisi, Magne, tegi!

It is almost impossible to preserve in a translation the peculiar charm of these lines, but a friend of mine in one of the pleasant student days of forty years ago produced this happy and fitting paraphrase:-

> We grieve not, Pompey, that to thee No earthly tomb was given; All lands subdued, nought else was free To shelter thee but Heaven!

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Here the art of the poet lies in the boldness with which he seizes upon one of the most subtle and startling effects of contrast. In the very circumstance which to the ancient mind was the acme of humiliation and horror his genius discerns the occasion for most exalted panegyric, the bitterness of death is lost in the abounding triumph of the soul enlarged and set free, the attributes of woe are transformed into crowning glories.

It is just in this spirit of the Modenese poet that mankind has sought to take away from death its sting, from the grave its victory. That solemn moment in which, for those who have gone before and for us who are to follow, the eye of sense beholds naught save the ending of the world, the entrance upon a black and silent eternity, the eye of faith declares to be the supreme moment of a new birth for the disenthralled soul, the introduction to a new era of life compared with which the present one is not worthy of the name. Tí $\zeta \delta'$ o $\dot{\delta}\delta\dot{\epsilon}\nu$, exclaims Euripides,

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Τίς δ' οἶδέν εἰ τὸ ζῆν μέν ἐστι κατθανεῖν, Τὸ κατθανεῖν δὲ ζῆν;

Who can tell but that this which we call life is really death, from which what we call death is an awakening? From this vantage ground of thought the human soul comes to look without dread upon the termination of this terrestrial existence. The failure of the bodily powers, the stoppage of the fluttering pulse, the cold stillness upon the features so lately wreathed in smiles of merriment, the corruption of the tomb, the breaking of the ties of love, the loss of all that has given value to existence, the dull blankness of irremediable sorrow, the knell of everlasting farewells,-all this is seized upon by the sovereign imagination of man and transformed into a scene of transcending glory, such as in all the vast career of the universe is reserved for humanity alone. In the highest of creatures the Divine immanence has acquired sufficient concentration and steadiness to survive the dissolution of the flesh and assert an individuality untrammelled by the limitations which in the present life everywhere persistently surround it. Upon this view death is not a calamity but a boon, not a punishment inflicted upon Man, but the [Pg 18] supreme manifestation of his exceptional prerogative as chief among God's creatures. Thus the

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faith in immortal life is the great poetic achievement of the human mind, it is all-pervasive, it is concerned with every moment and every aspect of our existence as moral individuals, and it is the one thing that makes this world inhabitable for beings constructed like ourselves. The destruction of this sublime poetic conception would be like depriving a planet of its atmosphere; it would leave nothing but a moral desert as cold and dead as the savage surface of the moon.

We have now to consider this supreme poetic achievement of man-his belief in his own Immortality—in the light of our modern studies of evolution; we must notice some distinctions between its earlier and later stages, and briefly examine some of the objections which have been alleged in the name of science against the validity of the belief.

Here, as in all departments of the efflorescence of the human mind, the beginnings were lowly, and necessarily so. Nothing very lofty or far-reaching could be expected from the kind of brain that was encased in the Neanderthal skull. Among existing savages there are tribes concerning which travellers have doubted whether they possess ideas that can properly be called religious. But wherever untutored humanity exists we find the conception of a world of ghosts more or less distinctly elaborated; the thronging simulacra of departed tribesmen linger near their accustomed haunts, keenly sensitive to favour or neglect, and quick to punish all infractions of the rules which the stern exigencies of life in the wilderness have prescribed for the conduct of the tribe. This crude primeval ghost-world is thus already closely associated with the ethical side of life, and out of this association have grown some of the most colossal governing agencies by which the development of human society has been influenced. It is therefore not without reason that modern students of anthropology devote so much time to animism and fetishism and other crude workings of that savage intelligence of which the primeval ghost-world is a product.

It is not at all unlikely that the savage's notion of ghosts may have originated chiefly in his experience of dreams, and this is the explanation at present most in favour. The sleeping warrior ranges far and wide over the country, while he chases the buffalo and joins in the medicine dance with comrades known to have died yet now as active and as voluble as himself, but suddenly the scene changes and he is back in his familiar hut surrounded by his people who can testify that he has not for a moment left them. It is not unlikely, I say, that the notion of one's conscious self as something which can quit the material body and return to it may have started in such often-repeated humble experiences. It can hardly be doubted, however, that this savage conception of the detachable conscious self is simply the primitive phase of the Christian conception of the conscious soul which dwells within the perishable body and quits it at death. Through many stages of elaboration and refinement the sequence between the two conceptions is unmistakable.

At this point the materialist interposes with an argument which he regards as crushing. He reminds us that if we would estimate the value of an idea, as of a race-horse or a mastiff, it is well to take a look at its pedigree. What, then, is to be said—he scornfully asks—of a doctrine of personal immortality which when reduced to its lowest terms is seen to have started in a savage's misinterpretation of his dreams? What more is needed to prove it unworthy of the serious attention of a scientific student of nature? On the other hand, the student whose mood is truly scientific will feel that one of mankind's cardinal beliefs must not be dismissed too lightly because of the crudeness and error in that primitive stratum of human thought in which it first took root. In his perceptions within certain limits the savage is eminently keen and accurate, but when it comes to intellectual judgments that go at all below the surface of things his mind is a mere farrago of grotesque fancies, wherein, nevertheless, some kernels of truth are here and there embedded. It is a long way from the dragon swallowing the sun to the interposition of the moon's dark body between us and that luminary. The dragon was a figment of fancy, but the eclipse was none the less a fact.

Now if we may take an illustration from the workings of an infant's mind, it is pretty clearly made out that as baby sits propped among his pillows and turns his eyes hither and thither in following his mother's movements to and fro in the room, she seems in coming toward him to enlarge and in going away to diminish in size, like Alice in Wonderland. It is only with the education of the eye and the small muscles which adjust it that the larger area subtended on the retina instantly means comparative nearness and the smaller area comparative remoteness. At first the sensations are interpreted directly, and the impression upon baby's nascent intelligence is a gross error. The mother is not waxing great and small by turns, but only approaching and receding. If, however, we consider that in baby's mind the enlarged retinal spot means more and the diminished spot less of the pleasurable feelings excited by a familiar and gracious presence, the approach of which is greeted with smiles and out-stretched arms, while its departure is bemoaned with cries and tears, we see that as to the essentials of the situation the dawning intelligence is entirely right, although its specific interpretation is quite wrong. Mamma has not really dwindled and vanished like the penny in a conjurer's palm, but has only flitted from the field of vision.

To come back now to our primeval savage, when he sees in a dream his deceased comrade and mistakes the vision for a reality, his error is not concerned with the most fundamental part of the matter. The all-important fact is that this dreaming savage has somehow acquired a mental attitude toward death which is totally different from that of all other animals, and is therefore peculiarly human. Throughout the half-dozen invertebrate branches or sub-kingdoms, where intelligence is manifested only in its lower forms of reflex action and instinct, we find no evidence that any creature has come to know of death. There is a sense, no doubt, in which we may say that the love of life is universal. As a rule, all animals shun danger, and natural selection [Pg 27]

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maintains this rule by the pitiless slaughter of all delinquents, of all in whom the needful inherited tendencies are too weak. But in the lower animal grades and in the vegetal world the courting of life and the shrinking from death go on without conscious intelligence, as the blades of grass in a meadow or the clustering leaves upon a tree compete with one another for the maximum of exposure to sunshine until perhaps stout boughs and stems are warped or twisted in the struggle. Among invertebrates, even when we get so high as lobsters and cuttlefish, the consciousness attendant upon the seizing of prey and the escape from enemies probably does not extend beyond the facts within the immediate sphere of vision. Even among those ants that have marshalled hosts and grand tactics there is doubtless no such thing as meditation of death. Passing to the vertebrates, it is not until we reach the warm-blooded birds and mammals that we find what we are seeking. Among sundry birds and mammals we see indications of a dawning recognition of the presence of death. An early manifestation is the sense of bereavement when the maternal instinct is rudely disturbed, as in the cow mourning for her calf. This feeling goes a little way, but not a great way, beyond the sense of physical discomfort, and is soon relieved by milking. Much more intense and abiding is the feeling of bereavement among birds that mate for life, and among the higher apes, and it reaches its culmination in the dog whose intelligence and affections have been so profoundly modified through his immensely long comradeship with man. Nowhere in literature do we strike upon a deeper note of pathos than in Scott's immortal lines on the dog who starved while watching his young master's lifeless body, alone upon a Highland moor:-

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"How long didst thou think that his silence was slumber? When the wind stirred his garment, how oft didst thou start!"

Yet even this devoted creature could have carried his thoughts but little way toward the point reached by our dreaming savage with his incipient ghost-world. More power of abstraction and generalization was needed. While the sight of the killing of a fellow-creature may arouse violent terror in the higher mammals below man, there is nothing to indicate that the sight of the dead body awakens in the dumb spectator any general conceptions in which his own ultimate doom is included. The only feeling aroused seems to vary between utter indifference and faint curiosity. Professor Shaler makes a statement of cardinal importance in this connection when he says: "If we should seek some one mark which, in the intellectual advance from the brutes to man, might denote the passage to the human side, we might well find it in the moment when it dawned on the nascent man that death was a mystery which he had in his turn to meet." [1]

It is therefore interesting to note that the first approaches, albeit remote ones, toward a realizing sense of death occur among those animals in which the beginnings of family life have been made, and the habitual exercise of altruistic emotions helps to widen the intelligence and facilitate the appropriation to one's self of the experiences of one's comrades and mates. Such is the case with permanently mated birds and with the higher apes, while the case of the dog, exceptional as it is through his acquired dependence upon man, has similar implications. Now I have elsewhere proved and repeatedly illustrated that the leading peculiarity which distinguished man's apelike progenitors from all other creatures was the progressive increase in the duration of infancy, which was a direct consequence of expanding intelligence, and was moreover the immediate cause of the genesis of the human family and of human society. It appears now that the realizing sense of death, such as we find it in untutored men of primitive habits of thought, has originated in the selfsame circumstances which have wrought the mighty change from gregariousness to sociality, from the general level of mammalian existence to the unique level of humanity. I have elsewhere called attention to the profoundly interesting fact that the notion of an Unseen World beyond that in which we lead our daily lives is coeval with the earliest beginnings of Humanity upon our planet. We may now observe that it adds greatly to the interest and to the significance of this fact, when we find that the very circumstances which tended to single out our progenitors, and raise them from the average mammalian level into Manhood, tended also to make them realize the problem of death and meet it with a solution. The grouping of facts now begins to make it appear that this primeval solution was but the natural outcome of the whole cosmic process that had gone before; that when nascent Humanity first eluded the burden of the problem by rising above it, this was but part and parcel of the unprecedented cosmic operation through which man's Humanity was developed and declared. The long and cumulative play of cause and effect which wrought the lengthening of the period of helpless babyhood and the correlative maternal care, and which thus differentiated the non-human horde of primates into a group of human clans, was attended by a strong development of the sympathetic feelings as it vastly increased the mutual dependence among individuals. During the same period the gradual acquirement of articulate speech was accompanied by a great increase in the powers of abstraction and generalization. These new capacities were applied to the interpretation of death, just as they were applied to all other things; and thus, in the very process of becoming human, our progenitors arose to the consciousness of death as something with which humanity has always and everywhere to reckon. From the earliest and most rudimentary stages of the process, however, the conception of death was not of an event which puts an end to human individuality, but of an event which human individuality survives. If we look at the circumstances of the genesis of mankind purely from the naturalist's point of view, it cannot fail to be highly significant that the mental attitude toward death should from the first have assumed this form, that the human soul should from the start have felt itself encompassed not only by the endless multitude of visible and tangible and audible things, but also by an Unseen World. In view of this striking fact it is of small moment that the earliest generalizations which in course of time developed into a

world of ghosts and demons were grotesquely erroneous. Primitive theorizing is sure to be faulty

and in the light of later knowledge comes to seem absurd and bizarre. Such has been in modern days the fate of the savage's ghost-world, along with the Ptolemaic astronomy, the doctrine of signatures, and many another sample of the "wisdom of the ancients." But the fact that primitive man mis-stated his relation to the Unseen World in no wise militates against the truth of his assumption that such a world exists for us.

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To this question as to the truth of the assumption I shall return in the sequel. We have very briefly sketched the manner of its origination, and here we may leave this part of our subject with the remark that the belief in a future life, in a world unseen to mortal eyes, is not only coeval with the beginnings of the human race but is also coextensive with it in all its subsequent stages of development. It is in short one of the differential attributes of humanity. Man is not only the primate who possesses articulate speech and the power of abstract reasoning, who is characterized by a long period of plastic infancy and a corresponding capacity for progress, who is grouped in societies of which the primordial units were clans; he is not only all this, but he is the creature who expects to survive the event of physical death. This expectation was one of his acquisitions gained while attaining to the human plane of existence, and the interesting question in the natural history of man is whether it is to be regarded as a permanent acquisition, or is rather analogous to the organ that subserves, perhaps through long ages, an important but temporary purpose, after the fulfilment of which it dwindles into a rudiment neglected and forgotten.

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I do not overlook the existence of divers theological systems in which the attitude toward a future life is very different from that with which our Christian education has made us familiar. We sometimes hear such systems cited as exceptions to the alleged universality of the human belief in immortality. The Buddhist looks forward through myriads of successive sentient existences to a

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culminating state of Nirwana, which if not actual extinction is at least complete quiescence, the absolute zero of being. It hardly needs saying, however, that Buddhistic theology, though it may have arrived at such a zero through long flights of metaphysical reasoning, is nevertheless based in all its foundations upon the primitive belief in man's survival of death. Sometimes it is said that the Jews of the Old Testament times had no proper conception of immortality. It can hardly be maintained, however, that such stories as that of the conversation at Endor between the living

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Saul and the dead Samuel could emanate from a people destitute of belief in a life after death. In point of fact ancient Jewish thought abounds in traces of the primitive ghost-world. It is only by contrast with the glorious and inspiring Christian development of the belief in immortality that the earlier dispensation seems so jejune and meagre in its faith. There was little to arouse religious emotion in the dismal world of flitting shadows, the Sheol or Hades from which the Greek hero would so gladly have escaped, even to take the most menial position in all the sunlit

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religious revival. The mythic lore of the Greek mind had flowered luxuriantly in æsthetic fancies, while the spiritual life of Judaism languished amid strict obedience to forms and precepts. The far-reaching thoughts of Greek philosophers and the lofty ethics of Hebrew preachers were divorced from the primitive ghost-world, even as the mental processes of the modern scholar are separated by a great gulf from those of the woman who comes to scrub the floor. The advent of

world. Greek and Hebrew thought, in what we call the classic ages, stood alike in need of

Christianity fused together the various elements. The doctrine of a future life was endowed with all the moral significance that Jewish thought could give to it, and with all the mystic glory that Hellenic speculation could contribute, so that the effect upon men was that of a fresh revelation of life and immortality through the gospel. Grotesque and hideous features also were brought in from the ghost-worlds of the classic ages, as well as from that of the Teutonic barbarians, and the

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result is seen in mediæval Christianity. At no other time, perhaps, has the Unseen World played such a leading part in men's minds as in the twelfth and thirteenth centuries of our Christian era, in the age that witnessed the culmination of sublimity in church architecture, in the society whose thought found comprehensive expression in the "Summa" of St. Thomas, as the thought of our times is expressed in Spencer's "First Principles," in an intellectual atmosphere, which just as

it was about passing away was depicted for all coming time in the poem of Dante. It was a time of

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spiritual awakening such as mankind had never before witnessed, but it was also an age of new problems, an age wherein the seeds of revolt were thickly germinating. The nature and constitution of the Unseen World had been too rashly and too elaborately set forth in theorems born of the slender knowledge of primitive times, and the growing tendency to interrogate Nature soon led to conclusions which broke down the old edifice of thought. In the sixteenth century came Copernicus and administered such a shock to the mind as even Luther's defiance of

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the papacy scarcely equalled. In recent days, when Bishop Wilberforce reckoned without his host in trying to twit Huxley with his monkey ancestry, our minds were getting inured to all sorts of audacious innovations, so that they did not greatly disturb us. For its unsettling effects upon time-honoured beliefs and mental habits the Darwinian theory is no more to be compared to the Copernican than the invention of the steamboat is to be compared to the voyages of Columbus.

We are in no danger of overrating the bewilderment that was wrought by the discovery that our earth is not the physical centre of things, and that the sun apparently does not exist for the sole purpose of giving light and warmth to man's terrestrial habitat. We need not wonder that in conservative Spain scarcely a century ago the University of Salamanca prohibited the teaching of the Newtonian astronomy. We need not wonder that Galileo should have been commanded to hold his tongue on a topic that seemed to cast discredit upon the whole theology that assumes

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This unsettling of men's minds was of course indefinitely increased by the revolt of Descartes against the scholastic philosophy, by Newton's immense contributions to physics, and by such discoveries as those of Harvey, Black, and Lavoisier, which showed by what methods truth could

man to be the central object of the Divine care.

be obtained concerning Nature's operations, and how different such methods were from those by which the accepted systems of theology had been built up. The result has been wholesale [Pg 46] skepticism directed against everything whatever that now exists or has ever existed in the shape of an ancient belief. This result was first reached in France about the middle of the eighteenth century, when the thoughts of Locke and Newton were eagerly absorbed in a community irritated beyond endurance by social injustice, and in which the church had done much to forfeit respect. Thus came about that violent outbreak of materialistic atheism which, in spite of its generous aims and many admirable achievements, is surely one of the most mournful episodes in the history of human thought. The French philosophers set an example to three generations; the note struck by Diderot and Buffon and D'Alembert continued to resound until the scientific horizon [Pg 47] had become radiant in every quarter with the promise of a brighter day, and its echoes have not yet died. It was but lately that the voice of Lamettrie was heard again from the lips of Strauss and Buechner, and even to-day we may sometimes be entertained by a belated eighteenth century naturalist who is fully persuaded that his denial of human immortality is an inevitable corollary from the doctrine of evolution. Indeed the progress of scientific discovery has been so rapid since the time of Diderot, its achievements have been so vast, its results so multifarious and so dazzling, that it has well-nigh absorbed the attention of the foremost minds. The dogmas of [Pg 48] theology seem stale and empty, the speculations of metaphysics vain and unprofitable, in comparison with the fascinating marvels of chemistry and astronomy, of palæontology and spectrum analysis; and it is natural that we should rejoice over the methods of research that are enabling us thus to wrest from Nature a few of her long guarded secrets, and to make up our minds to have nothing to do with conclusions that are not obtained or at least verified by such scientific methods. Daily we hear sounded the praises of observation, of experiment, of comparison; we are warned against long deductions, since the strength of any chain of arguments is measured by that of its weakest link, and experience is perpetually teaching us, to [Pg 49] our vexation and chagrin, that what reason says must be so is not so, that facts will not fit hypothesis. The more things we try to explain, the better we realize that we live in a world of unexplained residua. Away, then, with all so-called truths that cannot be tested by weights and measures, or other direct appeals to the senses! Your modern philosopher will have nothing of them. His system is composed, from start to finish, of scientific theorems. As for the higher speculations, the deeper generalizations, in which philosophy has been wont to indulge concerning the aim and meaning of existence, he waves them away as profitless or even mischievous. The world is full of questions as pressing as they are baffling. As I once heard [Pg 50] Herbert Spencer say, "You cannot take up any problem in physics without being quickly led to some metaphysical problem which you can neither solve nor evade." It was in order to secure philosophic peace of mind that Auguste Comte undertook to build up what he called Positive Philosophy, in which the existence of all such problems was to be complacently ignored,—much as the ostrich seeks escape from a dilemma by burying its head in the sand. In a far more reverent and justifiable spirit the agnostic like Huxley or Spencer acknowledges the limitations of the human mind and builds as far as he may, leaving the rest to God.

In the fervour of this modern reliance upon scientific methods, we are warned with especial emphasis against all humours and predilections which we may be in danger of cherishing as human beings. In a new sense of the words we are reminded that "the heart of man is deceitful and desperately wicked," and if any belief is especially pleasant or consoling to us, forthwith does Science lay upon us her austere command to mortify the flesh and treat the belief in question with exceptional disfavour and suspicion. Thus there has grown up a kind of Puritanism in the scientific temper which, while announcing its unalterable purpose to follow Truth though she lead us to Hades, takes a kind of grim satisfaction in emphasizing the place of destination.

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Now there can be no sort of doubt that this rigid and vigorous scientific temper is in the main eminently wholesome and commendable. In the interests of intellectual honesty there is nothing which we need more than to be put on our guard against allowing our reasoning processes to be warped by our feelings. Nevertheless in steering clear of Scylla it would be a pity to tumble straight into the maw of Charybdis, and it behooves us to ask just how far the canons of scientific method are competent to quide us in dealing with ultimate questions. Science has given us so many surprises that our capacity for being shocked or astounded is well-nigh exhausted, and our old unregenerate human nature has been bullied and badgered into something like humility; so that now, at the end of the greatest and most bewildering of centuries, we may fitly pause for a moment and ask how fares it, in these exacting days, with that Unseen World which man brought with him when he was first making his appearance on our planet? And what has science to say about that time-honoured belief that the human soul survives the death of the human body?

The position that science irrevocably condemns such a belief seems at first sight a very strong one and has unquestionably had a good deal of weight with many minds of the present generation. Throughout the animal kingdom we never see sensation, perception, instinct, volition, reasoning, or any of the phenomena which we distinguish as mental, manifested except [Pg 54] in connection with nerve-matter arranged in systems of various degrees of complexity. We can trace sundry relations of general correspondence between the increasing manifestations of intelligence and the increasing complications of the nervous system. Injuries to the nervous structure entail failures of function, either in the mental operations themselves or in the control which they exercise over the actions of the body; there is either psychical aberration, or loss of consciousness, or muscular paralysis. At the moment of death, as soon as the current of arterial blood ceases to flow through the cerebral vessels, all signs of consciousness cease for the lookeron; and after the nervous system has been resolved into its elements, what reason have we to suppose that consciousness survives, any more than that the wetness of water should survive its

So far as our terrestrial experience goes there can be but one answer to such a question. We have no more warrant in experience for supposing consciousness to exist without a nervous system than we have for supposing the properties of water to exist in a world destitute of hydrogen and oxygen. Our power of framing conceptions is narrowly limited by experience, and when we try to figure to ourselves the conditions of a future life we are either hopelessly baffled at the start or else we fall back upon grossly materialistic imagery. The savage's ghost-world is a mere repetition of the fights and hunts with which he is familiar. The early Christians looked forward to a speedy resurrection from Sheol, followed by an endless bodily existence upon a renovated earth. Dante's pictures of the Unseen World are often so intensely materialistic as to seem grotesque in our more truly spiritual age. Popular conceptions of heaven to-day abound in symbolism that is confessedly a mere reflection from the world of matter; insomuch that persons of sufficient culture to realize the inadequacy of these popular images are wont to avoid the difficulty by refraining from putting their hopes and beliefs into any definite or describable form. Among such minds there is a tacit agreement that the unseen world must be purely spiritual in constitution, yet no mental image of such a world can be formed. We are all agreed that life beyond the grave would be a delusion and a cruel mockery without the continuance of the tender household affections which alone make the present life worth living; but to imagine the recognition of soul by soul apart from the material structure in which we have known soul to be manifested, apart from the look of the loved face, the tones of the loved voice, or the renewed touch of the long vanished hand, is something guite beyond our power. Even if you try to imagine your own psychical activity as continuing without the aid of the physical machinery of sensation, you soon get into unmanageable difficulties. The furniture of your mind consists in great part of sensuous images, chiefly visual, and you cannot in thought follow yourself into a world that does not announce itself to you through sense impressions. From all this it plainly appears that our notion of the survival of conscious activity apart from material conditions is not only unsupported by any evidence that can be gathered from the world of which we have experience but is utterly and hopelessly inconceivable.

The argument here summarized is in no way profound or abstruse; it is extremely obvious, and as its propositions cannot well be controverted, it has had great weight with many people. I dare say it may be held responsible for the larger part of contemporary skepticism as to the future life. People have grown accustomed to demanding scientific support for doctrines, whereas this doctrine is not only destitute of scientific support but lands us in inconceivabilities; is it not, then, untenable and absurd? Such is the common argument. There are those who seek to meet it with inductive evidence of the presence of disembodied spirits or ghosts which hold direct communication only with certain specially endowed persons known as mediums. Concerning such inductive evidence it may be said that very little has as yet been brought forward which is likely to make much impression upon minds trained in investigation. If its value as evidence were to be conceded, it would seem to point to the conclusion that the grade of intelligence which survives the grave is about on a par with that which in the present life we are accustomed to shut up in asylums for idiots. On the whole the mediumistic ideas and methods are frankly materialistic, their alleged communications with the other world are through sights and sounds, and if their pretensions could be sustained the result would be simply the rehabilitation of the primitive ghost-world. Their theory of things moves on so low a plane as hardly to merit notice in a serious philosophic discussion.

To return to the argument that the doctrine of the survival of conscious activity apart from material conditions is unsupported by experience and is inconceivable, we may observe that it is inconceivable just because it is entirely without foundation in experience. Our powers of conception are narrowly determined by the limits of our experience, and when that experience has never furnished us with the materials for framing a conception we simply cannot frame it. Hence we cannot conceive of the conscious soul as entirely dissociated from any material vehicle.

Now we are prepared to ask, How much does this famous argument amount to, as against the belief that the soul survives the body? The answer is, Nothing! absolutely nothing. It not only fails to disprove the validity of the belief, but it does not raise even the slightest *prima facie* presumption against it. This will at once become apparent if we remember that human experience is very far indeed from being infinite, and that there are in all probability immense regions of existence in every way as real as the region which we know, yet concerning which we cannot form the faintest rudiment of a conception. Within the past century the study of light and other radiant forces has furnished us with a suggestive object-lesson. The luminiferous ether combines properties which are inconceivable in connection. How curious to think that we live and move in an ocean of ether in which the particles of all material things are floating like islands! But how amazing to learn that this ocean of ether is also an adamantine firmament! Is not this sheer nonsense? an ocean firmament of ether-adamant! Yet such seems to be the fact, and our philosophy must make the best of it. Now suppose that all this world were crowded with disembodied souls, an infinite throng most aptly called "the majority," a thousand or more on every spot in space as broad as the point of a cambric needle, in what way could we become aware of their existence? Clearly in no way, since we have no organ or faculty for the perception of soul apart from the material structure and activities in which it has been manifested throughout the whole course of our experience. There we will suppose are the countless millions, the existence of any one of whom, could we detect it, would suffice to demonstrate the doctrine of a future life, and yet, for lack of the requisite means of communication, all this evidence is inaccessible. Such an illustration shows that "the entire absence of testimony does not even raise

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a negative presumption except in cases where testimony is accessible." The reason is obvious. Until we can go wherever the testimony may be, we are not entitled to affirm that there is an absence of testimony. So long as our knowledge is restricted by the conditions of this terrestrial life, we are not in a position to make negative assertions as to regions of existence outside of these conditions. We may feel quite free, therefore, to give due weight to any considerations which make it probable that consciousness survives the wreck of the material body.

We are now in a position to see the fallacy of Moleschott's often-quoted aphorism, "No thought without phosphorus!" When this saying was a new one, there were worthy people who felt that somehow it was all over with man's immortal soul. With phosphorus you light your candle, and with phosphorus you discover Neptune and write the Fifth Symphony; how charmingly simple and convincing! And yet was anything save a bit of rhetoric really gained by singling out phosphorus among the chemical constituents of brain tissue rather than nitrogen or carbon? Suppose the dictum had been, "No thought without a brain." The obvious answer would have been, "If you refer to the present life, most erudite professor, your remark is true, but hardly novel or startling; if you refer to any condition of things subsequent to death, pray where did you obtain your knowledge?"

Nevertheless this point cannot be disposed of simply by exhibiting the flaw in Moleschott's rhetoric. His remark rests upon the assumption that conscious mental phenomena are products of the organic tissues with which they are associated. This is of course the central stronghold of materialism. A century ago the case was very boldly put when we were asked to believe that the

brain secretes thought as the liver secretes bile. Nobody to-day would think of making such a comparison, but it is more cautiously stated that consciousness is a "function" of the brain, or at all events of the nervous system, even as bile-making is a function of the liver. Before we yield any modicum of assent to this statement we may observe that "function" is a word with a wide range of meaning, and we must insist upon some closer definition. Here materialism calls to its aid the discovery of the correlation and equivalence of forces, one of the most stupendous

achievements of our century. We now know that heat and light and electricity and actinism are not forces generically distinct and isolated each from the others. All are specific modes of molecular motion, transformable one into another at any moment as naturally as a cloud condenses into raindrops. Any such molecular motion, moreover, may come from the arrested visible motion of a mass, and may in turn be liberated so as to resume the form of visible motion, as when an electric current is transformed into the onward movement of the trolley car. The change in our conception of Nature that has been wrought by this wonderful discovery is more profound than all changes that went before. The balance in the hands of the chemist had already proved that no matter is ever lost but only transformed, and that every material form at any

moment visible owes its existence to the metamorphosis of some previous form. So now it was further shown that the myriad properties or qualities of matter are simply the expression of myriads of activities which are all in a final analysis motions; that no motion is ever lost but only transformed, and that every kind of motion at any moment perceptible—whether in the form of movement through space, or of light, or heat, or electricity, or the actinism that builds up the green stuff in the leaves of plants—owes its existence to the metamorphosis of some previous kind of motion. Every living organism is a marvellous aggregate of divers forms of matter performing divers characteristic motions, and the sum total of these motions is the whole of life,

as regarded purely on its physical side. When we take food we bring into the system sundry

capacities for certain kinds of motion. The oxygen of the air, especially in its unstable form of ozone, is a powerful inciter of chemical motions, and when we breathe it in, the little latent capacities presently become actual motions. Some of them are realized in the rhythmical movements of heart and lungs, some in the undulations that sustain the animal temperature, some in the formation of the tiny drops that collect in a secreting gland, some in the repair of tissue by the substitution of new complex molecules for old ones that are broken down, some in

the contraction of a group of muscles, some in the changes within the substance of nerve that accompany conscious thought, sensation, and volition. Ah, yes, here we come to it at last! We do not doubt that all these myriad motions are members in a series of transformations, wherein the appearance of each results from the disappearance of its predecessors. We have neither the instruments nor the calculus to prove this in the infinite multitude of details, but the general theory has been so completely established wherever it is accessible to instruments and calculus that we can have no hesitation in granting its universality wherever matter and motion are

concerned in any shape or amount. No scientific man will for a moment doubt that the little vibratory discharge between cerebral ganglia which accompanies a thought is one member in a series of molecular motions that might be measured and expressed in terms of quantity if we only

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nitrogenous and hydrocarbon compounds, each of which is alive with little energies or latent

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Now if such is the case with the little physical motion within the brain, how is it with the accompanying thought? Does the correlation obtain between physical motions and conscious feelings? Are states of consciousness links in the Protean series of motions, in such wise that the vibration within the brain produces the thought or feeling? In other words is the thought or feeling merely a transformed vibration? Does a certain amount of vibration perish to be replaced by an exact equivalent in the shape of thought? and then does the thought perish in the act of giving place to other vibrations which end in a visible motion of muscles? as when, for example,

possessed an apparatus sufficiently delicate and subtle.

you hear the sound of a bell and start toward the door.

On this point there has been much confusion of ideas. When I put the question to Tyndall in conversation, nearly thirty years ago, he seemed to think that there must be some such

completeness of correlation between the physical and the psychical; but his mind was not at ease on the subject. Herbert Spencer, in his "First Principles," rather cautiously took the same direction and tried to show how a certain amount of motion might be transformable into a certain amount of feeling. He observed that the consciousness of effort or muscular strain in lifting a heavy weight is more intense than in lifting a light weight, and that when a loud sound sets up atmospheric vibrations of great amplitude the shock to our auditory consciousness is correspondingly greater than in the case of a gentle sound which sets up vibrations of small amplitude. But when he comes to the inner regions of thought and emotion which are not reached by percussion and strain, he is less successful in finding illustrations. It is especially worthy of note that in the final edition of "First Principles," published in this year 1900 and in [Pg 75] Spencer's eighty-first, he goes very far toward withdrawing from his original position, while in his Preface he calls attention to this change as one of the most important in the book. In my "Cosmic Philosophy," published in 1874, I maintained that to prove the transformation of motion into feeling or of feeling into motion is in the very nature of things impossible. In order to be convinced of this, let us go back a few years and ask how the great doctrine of the correlation of forces became established. Its first absolute verification occurred about 1846, when Dr. Joule showed "that the fall of 772 lbs. through one foot will raise the temperature of a pound of water one degree of Fahrenheit."[2] When this was proved it gave us the mechanical equivalent of heat, and the theory acquired a truly scientific character. Similar quantitative correlations were established in the case of heat and chemical action by Dulong and Petit, and in the case of chemical action and electricity by Faraday. The truth of the theory is wholly a question of quantitative measurement. Now you can measure heat, you can measure electricity, and since the action of nerves in all probability consists of undulatory motions it is to some extent measurable, and doubtless would be completely measurable had we the means. But when you come to thoughts and emotions, I beg to know how you are going to work to give an account of them in foot-pounds! It is not simply that we have no means at hand, no calculus equal to the occasion; the thing is absurd on its face. It is as true to-day as it was in the time of Descartes that thought is devoid of extension and cannot be submitted to mechanical measurement.

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It appears to me, therefore, that what we should really find, if we could trace in detail the metamorphosis of motions within the body, from the sense-organs to the brain, and thence outward to the muscular system, would be somewhat as follows: the inward motion, carrying the message into the brain, would perish in giving place to the vibration which accompanies the conscious state; and this vibration in turn would perish in giving place to the outward motion, carrying the mandate out to the muscles. If we had the means of measurement we could prove the equivalence from step to step. But where would the conscious state, the thought or feeling, come into this circuit? Why, nowhere. The physical circuit of motions is complete in itself; the state of consciousness is accessible only to its possessor. To him it is the subjective equivalent of the vibration within the brain, whereof it is neither the cause nor the effect, neither the producer nor the offspring, but simply the concomitant. In other words the natural history of the mass of activities that are perpetually being concentrated within our bodies, to be presently once more disintegrated and diffused, shows us a closed circle which is entirely physical, and in which one segment belongs to the nervous system. As for our conscious life, that forms no part of the closed circle but stands entirely outside of it, concentric with the segment which belongs to the nervous system.

These conclusions are not at all in harmony with the materialistic view of the case. If consciousness is a product of molecular motion, it is a natural inference that it must lapse when the motion ceases. But if consciousness is a kind of existence which within our experience accompanies a certain phase of molecular motion, then the case is entirely altered, and the possibility or probability of the continuance of the one without the other becomes a subject for further inquiry. Materialists sometimes declare that the relation of conscious intelligence to the brain is like that of music to the harp, and when the harp is broken there can be no more music. An opposite view, long familiar to us, is that the conscious soul is an emanation from the Divine Intelligence that shapes and sustains the world, and during its temporary imprisonment in material forms the brain is its instrument of expression. Thus the soul is not the music, but the harper; and obviously this view is in harmony with the conclusions which I have deduced from the correlation of forces.

Upon these conclusions we cannot directly base an argument sustaining man's immortality, but we certainly remove the only serious objection that has ever been alleged against it. We leave the field clear for those general considerations of philosophic analogy and moral probability which are all the guides upon which we can call for help in this arduous inquiry. But it may be suggested at this point that perhaps our argument has acquired a wider scope than was at first contemplated. Consciousness is not peculiar to man, but is possessed in some degree by the greater portion of the animal kingdom. Among the higher birds and mammals the amount of conscious life is very considerable, and here too it must be argued that consciousness is not a product of molecular motion in the nervous system but its concomitant. The same argument which removes the objection to immortality for man removes it also for an indefinite number of animal species. What, then, is to be said of the reasonableness of supposing a future life for sundry lower animals? and if we were to reach a negative conclusion in their case, while reaching a positive conclusion in the case of man, on what principle are we to draw the line? Sometimes we hear this question propounded as a difficulty in the Darwinian theory of man's origin. How could immortal man have been produced through heredity from an ephemeral brute?

The difficulty is one of the sort which we are apt to encounter when we try to designate absolute [Pg 83]

beginnings and to mark off hard and fast lines, for in Nature there are no such things. Voltaire asked the same kind of question more than a hundred years before Darwinism had been heard of. When does the immortal soul of the human individual come into existence? Is it at the moment of conception, or when the new-born babe begins to breathe, or at some moment between, or even perhaps at some era of early childhood when moral responsibility can be said to have begun? Some of the answers to these questions would transform an ephemeral creature into an immortal one in the same person. The most proper answer is a frank confession of ignorance. Whether it be in the individual or in the race, we cannot tell just where the soul comes in. A due heed to Nature's analogies, however, is helpful in this connection. The maxim that Nature makes no leaps is far from true. Nature's habit is to make prodigious leaps, but only after long preparation. Slowly rises the water in the tank, inch by inch through many a weary hour, until at length it over-flows and straightway vast systems of machinery are awakened into rumbling life. Slowly grows the eccentricity of the ellipse as you shift its position in the cone, and still the nature of the curve is not essentially varied, when suddenly, presto! one more little shift, and the finite ellipse becomes an infinite hyperbola mocking our feeble powers of conception as it speeds away on its everlasting career. Perhaps in our ignorance such analogies may help us to realize the possibility that steadily developing ephemeral conscious life may reach a critical point where it suddenly puts on immortality.

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If this suggestion is a sound one, we must probably regard the conscious life of animals as only the ephemeral adumbration of that which comes to maturity in man. The considerations adduced this evening must convince us that we are at perfect liberty to treat the question of man's immortality in the disinterested spirit of the naturalist. In the course of evolution there is no more philosophical difficulty in man's acquiring immortal life than in his acquiring the erect posture and articulate speech. In my little book "The Destiny of Man" I insisted upon the dramatic tendency or divine purpose indicated in the long cosmic process which has manifestly from the outset aimed at the production and perfection of the higher spiritual attributes of humanity. In another little book, "Through Nature to God," I called attention to the fact that belief in an Unseen World, especially associated with the moral significance of life, was coeval with the genesis of Man, and had played a predominating part in his development ever since, and I argued that under such circumstances the belief must be based upon an eternal reality, since a contrary supposition is negatived by all that we know of the habits and methods of the cosmic process of Evolution. No time is left here to repeat these arguments, but I hope enough has been said to indicate the probability that the patient study of evolution is likely soon to supply the basis for a Natural Theology more comprehensive, more profound, and more hopeful than could formerly have been imagined. The Nineteenth Century has borne the brunt, the Twentieth will reap the fruition.

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FOOTNOTES:

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- [1] Shaler, The Individual, p. 194.
- [2] Herbert Spencer, First Principles (final ed.), p. 185.

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