

THE HISTORY OF THE EARTH IN LIBRARIES AND MUSEUMS.

BY GEORGE E. ELLIS.

THE human inhabitants of this globe have assumed the obligation, or engaged in the task of gathering and preserving its whole history in libraries and museums. Literature and Science share the work between them, each with its part well defined. The record is to gather both the physical history of the globe before men peopled it, and that of all that has been done, and of even all that has been thought upon it since our race has been represented here. This is stating in the fullest and most comprehensive terms the object and purpose of libraries and museums. This large statement is wholly consistent with the objects with which we are more familiar as designed to be secured by these collections; such as provisions, and helps for popular education, and for the preservation and increase of knowledge. If we make these noble ends subordinate to the more ambitious aim which has been set forth, it is enough to say that the latter includes the former. It is simply the relation of a whole to its parts. Whatever the size or the fulness of our collections of relics, specimens, books or manuscripts, their interest and value are to be estimated by the contribution which they make to our knowledge of the fortunes of this globe, in its physical constitution, and to the experience of the human beings upon it. Completeness and exactness are the desired objects sought in these collections.

We may regard the world's libraries and museums as a unit, into however many parts distributed. The formation and existence of these collections signify that men have

recognized the purpose that, through literature, monuments and relics, as certified and illustrated materials, the world shall gather in repositories, its own annals and history, and those of all life upon it, animal and human. This will include all that has occurred in it and upon it; all that has wrought in its own materials and contents; its elemental and physical activities; its origin and its composition; its farthest back developments; its first and its accumulated resources, and the forms of vegetative and of animated life that have succeeded here, with its eras of tranquillity in its order, and of convulsions and catastrophe. These subjects will largely make up that department of literature which we call Science, and will deal chiefly with specimens and relics in museums.

For the rest, it will be the history of humanity; the fortunes and doings of men; what human beings have been, have done and have striven for, have conceived, believed, said, sung, and even their thinkings and imaginings; man in his immature and savage state and in the stages of civilization; man in his roamings and his habitations, his tribes, his nationalities, his governments, his feuds and warfares; man in every stage and step of his advance and decline, in every art or skill, in knowledge, in progress, in struggle with truth and error, man in his besotted degradation and in the culminations of genius and grandeur. These themes make up the classifications of literature. Whatever apprehensions of the mass and bulk and cumbersomeness of that material may appall us, must be met with the reflection that they rightfully belong to the world's library, for that is to be the impartial repository of all that men have adventured, have failed in, or have accomplished.

I recall a pleasant fancy of a wise and honored man who had lived close on to a century of a useful and varied career. He expressed a wish that from the day of his birth thoughtful friends had begun for him, leaving him in his ripening years to continue it for himself, the careful

gathering and preserving, as in a roomy garret of his home, every article of apparel he had ever worn, every toy and plaything of his childhood, every book and picture from which he had learned anything, every scrap of his own writing with memories of his developing mind, the names of companions, and a full record of his discipline in reward and punishment. To this homely preface of his life he might by pen and memory add something of like sort for each day of his career. Then meditating in that garret he would have all the material for learning what life was and meant to him.

Some such a crowded garret, many of them, indeed, are presented to us in our libraries and museums, gathering the history of this earth and its inhabitants. There is, however, this emphatic distinction between the private and the public repository, in the multiplication by millions of the years to be recorded and of the lives and experiences of various races of men. The world's costumes, toys and tools may be disposed in museums; its school-books are for the libraries. Speaking in general terms, we may say—though not without large exceptions—these libraries show a steady advance in the curriculum. Of the world's scholars some few have been precocious beyond their fellows. The most of them have been but dull pupils—though some of these have made additions to the library. Growth and outgrowth in ignorance and knowledge, with all their blunders and tentative efforts for correction, have their places on the shelves. Partial and imperfect relations are over and over again exposed by other one-sided relations. There are at least two, and often many ways of reporting and story-telling. It might seem as if there were one story in the world's history that had only a single side to it, it is the story that Cain killed Abel. But Ritter tells us of a nation, called the Ishudes, inhabiting a metallic mountain in Eastern Asia, who tell the story about their ancestor Cain in exactly the other way, making Abel the

wrong-doer. So we wish our libraries to tell us both sides and, even the hundred sides, of every story, every opinion, incident, contention, strife, quarrel, controversy or war in the world's annals. We gather them all at the risk of contention and open blows on our impartial shelves. The books can stand peacefully side by side, though their writers could not.

Before taking note of the conditions, as desirable, possible, or practicable, of this full conception of the purpose and material of libraries and museums, let us pause a moment on the ideal view, simply as a conception. It is that, though certainly not in one, yet in many, gathered deposits in this world, should be collected, either as literature, or as communicative and intelligibly interpreted relics, all that makes up its history, physically and as the scene of human activity. Written and printed rolls and pages through the medium of language—itsself as yet of unexplained and mysterious origin, with due deference to Cadmus—are the vehicles of that history. Language is the one common medium, but it has many alphabets and many forms. For we have to deal with it after the Babel catastrophe had riven its unity and multiplied its tongues, the “confounding” of which we have to harmonize. All the inventions and devices of art are at our service, and they add almost daily some ingenious help. The sun makes exact transcripts for us. Paper and parchment, the pen and the press, are our chief but not our sole dependence. The tablet of clay, the fossil, the impressed brick, the tile, as well as the papyrus roll and the hieroglyph, have their speech and language. The relics of stone, iron, bronze and pottery testify to human hand and brain work.

We meet at once with the full force of its arrest upon our purpose, the question—if this, our intent, to gather for record the complete history of this globe and of man's activity upon it, is not, on the face of it, chimerical, visionary and therefore to be pronounced impracticable, impos-

sible? Let us look sharply at this objection and at the grounds of it. Reversing the poet's saying, that "Life is short and art is long," we remind ourselves that life, as existence, is long, and that art, whether knowledge or experience, is, for the individual, short. We shall be told that the vast reaches of unrecorded time are abysses that we cannot fathom or fill. What happened, occurred, or transpired in them is irrecoverably lost. Obscurity which we cannot hope to penetrate envelopes them. They are in depths which never had light and into which no light can be cast. The solemn, plaintive Psalm of Mortality (the 90th), ascribed to Moses, is the dirge of these uncounted generations, as if even in that far-off age, the earth itself was composed of the bones and dust of humanity. How can we hope to call up by retrospect, these vanished scenes, the incidents and actors in them, and make them as familiar and intelligible to us as if we had had part in them?

This objection may arrest us, but it need not confound us. The task assumed is not to be measured by the competence of a single man, or of many men. It is a work in which thousands of men in many generations are to take their helping parts, with all the resources of intelligence, energy, perseverance and wealth. Yet there have been single men, some of them wise and wide in their learning, whose names are to be read on the title-pages of books called, "A History of the World." This is in fact the underlying intent of those numerous and voluminous compends called encyclopædias. We trace such works in classic times and languages and in the Middle ages, as engaging the abilities and the varied culture of successive scholars. How such enterprises steadily expand in their aims, and their fulness may be noted in the case of the best among the many encyclopædias in our own language. The *Britannica* has appeared in nine editions through a complete century. The first edition was of 1788, in ten volumes; the last, begun in 1875, closed with its twenty-

fourth volume in 1888. And at once plans and materials are in hand for a tenth edition in due time. These are the embryos of our full ideal.

There are two suggestions, which may at least reduce the chimerical aspect of a scheme for the world's historical library. The first suggestion is encouraging so far as it goes. It is that whatever force the objection may offer to the aim of recovering the world's history of the past, it has no application whatever to the present, or the future. From this date onward, we may say, with all assurance, the history of this globe, and of all that occurs and is done upon it will have a daily and a complete record. With electricity for its pen and messages, and inquisitive correspondents and reporters in all lands, the bulletins come from sky, land and sea, and from all the doings of men, alike public and private. Modern resources, activity, ingenuity, enterprise and competition, are so full and varied in their industry, that even the most trivial events are insured a memory.

The other reassuring suggestion is this: the complete history of the earth and of humanity, for our libraries and museums, is already planned and secured in its outlines. The needful task remaining, whatever it may exact, with help or obstacle, is to fill in gaps, to supply deficiencies, to revise and complete existing records. We have assured to ourselves well-tested means and methods for pursuing investigations, applying principles and processes of severe science, as a substitute for free imaginings and credulous fancies. We have theories, some of them good working theories, distinguishable from guesses. We require that these theories, as explanations, be proposed with something more than plausibility, with an antecedent reasonableness, and should be steadily confronted by a parallelism of tested facts. We are thus on our way to the object desired, and we are well furnished and equipped to advance in it. Vacancies in classified shelves, daily receive matter to fill

them. As the world grows older its inhabitants become increasingly inquisitive about its earlier years and epochs. We always better understand what is, when we have learned what went before it—the antecedents of the present. Another suggestion is pertinent here. The quickening and invigorating of the highest human faculties by the wonderful advances of science and positive knowledge, have had their most stirring effect upon the western peoples of the world. Their acknowledgment or assumption that the East was the cradle of the human race has made Oriental lands the most rich and promising fields for exploration and excavation, to bring to the light treasures which have passed into oblivion there. This energetic impulse of western inquisitiveness is thus brought into strong contrast with the mental apathy of Eastern peoples who have been unconsciously living over the entombed monuments of long-past generations, conquered, dispossessed and forgotten.

Some of you may recall a charming and piquant illustration of this apathy of Orientals when confronted by the teasing, ardent inquisitiveness of Western energy, in the pages of Layard. In his second expedition for discoveries among the ruins of Nineveh and Babylonia, forty years ago, he tells us of “the spirit in which Eastern philosophy and Mussulman resignation contemplate the evidences of ancient greatness and civilization, suddenly rising up in the midst of modern ignorance and decay.” He gives us a literal translation of a letter written by a Turkish Kadi in reply to some inquiries as to the commerce, population and remains of an ancient city where then lived “the head of the Law.”

I will copy and read that letter :

“My illustrious Friend and Joy of my Liver! The thing you ask of me is both difficult and useless. Although I have passed all my days in this place, I have neither counted the houses nor have I inquired into the number of the inhabitants; and as to what one person loads on his

mules, and the other stows away in the bottom of his ship, that is no business of mine. But above all, as to the previous history of this city, God only knows the amount of dirt and confusion that the infidels may have eaten before the coming of the sword of Islam. It were unprofitable for us to inquire into it.

“Oh, my soul! oh, my lamb! seek not after the things which concern thee not. Thou camest unto us, and we welcomed thee: go in peace.

“Of a truth, thou hast spoken many words; and there is no harm done, for the speaker is one and the listener is another. After the fashion of thy people thou hast wandered from one place to another until thou art happy and content in none. We (praise be to God) were born here, and never desire to quit it. Is it possible then that the idea of a general intercourse between mankind should make any impression on our understandings? God forbid!

“Listen, oh my son! There is no wisdom equal unto the belief in God! He created the world, and shall we liken ourselves unto him, in seeking to penetrate into the mysteries of his creation? Shall we say, behold this star spinneth round that star, and this other star with a tail goeth and cometh in so many years! Let it go! He from whose hand it came will guide and direct it.

“But thou wilt say unto me, Stand aside, oh man, for I am more learned than thou art, and have seen more things. If thou thinkest that thou art in this respect better than I am, thou art welcome. I praise God that I seek not that which I require not. Thou art learned in the things I care not for; and as for that which thou hast seen, I defile it. Will much knowledge create thee a double belly, or wilt thou seek Paradise with thine eyes?

“Oh, my friend! If thou wilt be happy, say, There is no God but God! Do no evil, and thus thou wilt fear neither man nor death; for surely thine hour will come!

“The meek in spirit (EL FAKIR).

“IMANN ALI ZADÉ.”

Having assured to ourselves the purpose of the combined intents and efforts of all inquirers and laborers, to gather in a fulness which shall be, as nearly as possible, exhaustive, the whole history of the earth in literature and relics,

we must face the conditions and exactions of the scheme. The mass of material, with its ever expanding bulk, we must contemplate as we do the ranges of deep rooted, wide spread and lofty mountains, while we shrink from an analysis detailed, or only general, of the contents. Two searching queries present themselves :

1. Is the scheme desirable on grounds of expediency, fitness, or wisdom?

2. Is the vast conception and design practically possible of being realized?

The first question is prompted by objections not only from the mass and bulk of the material to be gathered and preserved and the cost and care of collection, but also from the quality of very large portions of that material, saddening, humiliating, harrowing, unedifying as it is, in so much of its human elements. It may be asked, why should the world by preserved records and memories, carry on with it, as burdensome and unwholesome material, the relation of all the folly and error and crime, the ignorance, delusions and superstitions, the strifes and passions and enormities of cruelty that enter into its history? Why keep these sad and hateful memories alive? Why not allow each generation of pupils, readers and learners to start with fresh, fair pages, the best assured wisdom and knowledge of the present, as the deposit of experience and results, allowing all the error and wrong of a melancholy past to sink into oblivion?

From all the existing libraries of the world might be selected heaps of volumes which, if our minds could at once take in the impression of their spirit and contents, would oppress us with a pessimistic gloom. The mere waste of time and labor in them and on them, would make the lightest of the woful impressions from them. The inhumanity and cruelty, the dreary heart-weights of superstition and misery, the heavy fetters on mind and spirit to which they so plaintively testify, would overwhelm us with

the consciousness of the bootless struggles which have crushed so many myriads of our race. Why not give them all up to entombment and obliteration, with an inscription of a single word—Regret, or, Silence? Why should the earliest, and indeed some of the latest, in each classified series of volumes on our shelves, in the history of science, religion, and the healing art, record for us the driveling and fatuity of superstition and fable, and the tentative tricks of quackery and empiricism, being in the main experimentings in the ways of committing murder?

This is, indeed, a formidable challenge as to those animated mausoleums called libraries. We know well, even each of us in his own little range, with what impatience of complaint, protest and sarcasm the objection finds utterance from some who would claim intelligence, modified by economy, as to the contents of many existing libraries. A considerable portion of each of them is bluntly pronounced to be "trash," "rubbish," the worthless relics of decay. Doubtless in every prosperous and cultivated community, favored as so many are with large and growing public libraries, if an appeal was made for money to extend the crowded walls, a group of not wholly unintelligent persons might be found who would propose that a committee should go thoroughly through the existing collection, weeding out the antiquated trash and rubbish, if only to make room for fresh material of the same sort. Now most of us might not be indisposed at any moment to assent to an assertion, so often spoken, that there are large numbers of books in libraries which have become, if they were not always, worthless. Yet we should hesitate to put them in the fire. And if we pause to weigh the sentence of *worthlessness*, we should find it necessary to assure some certain standard for the judgment of worthlessness. It is not enough that such volumes should have in them outgrown errors, proved falsehoods, fraud, folly, nonsense, slander and impurity, in all their forms. The utilitarian,

the specialist, the sectarian, the bigot, the partisan, each applying his own standard and test might clean out the building.

Happily, those who are most concerned in gathering, extending and using libraries, heedless of these objections, have quite other tests by which they satisfy themselves, that every scrap and relic and oddity and folly of literature, has its worth, is to be secured and saved, all the world over, for all time. Their scruples are as strong as those of Moslems, against the destruction of the least fragment of inscribed paper, lest it should have on it something from the Koran. And it may be, that this Moslem scruple has, in the long run, compensated in the preservation of literature for the unmeasured loss caused by the Caliph Omar in burning the Alexandrian Library. His plea was, that if the books in their contents agreed with the Koran, they were unnecessary, and if at variance with it, were pernicious. Strangely enough by our collectors the highest value is set on the materials in libraries most exposed to a contemptuous judgment from the unskilled. The records and history of ignorance, with all its mistakes and follies, its bugbears and fallacies, are as instructive to them as the fairest pages of the newest wisdom. It is not only the richest imaginings of poets and sages that "the world will not willingly let die." Old dreams often out-value young visions. The "court fool" was anticipated in his useful functions before the days of kings, and is perpetuated in democracies. In fact, the history of ignorance is ever the best inquisition on uncertified knowledge. There was a grim earnestness, a sternness of conviction and an awful sincerity, in what we call the nursery days, the childhood, of humanity, in its beliefs about the old delusions of possessions, witchcrafts and exorcisms. These are wholly lacking in our modern similar fooleries and phantasies, which seem rather to mark the stage of ass-hood, or donkeydom in our development.

The circumstances under which many notable literary works have been composed give an additional interest to them. The list is a long and an impressive one of books written within prison walls, under all the severities of restraint and loneliness, when the free spirit found its range and solace in large thoughts and lofty communings. The nobler victims suffering in the high service of political and religious enlargement, for free thought—soul-liberty—have beguiled their prison solitude with deep thought and rapt visions. Three notable examples come to the mind. That noble Roman senator, Boethius, marking the date of decay of the world's last empire, and of one of the transitions in great epochs, cheered the gloom of his spirit in prison by writing his *Consolation of Philosophy*. This is notable as being the last production in pure classic latinity, and as quickened by the gleams of the new life coming in with our religion and leaving us to weigh the query—whether, so Christian as he was in thought and spirit, he had knowledge of the new leaven then working in the world, and of any of its Apostles—because he makes no mention of them in words. Sir Walter Raleigh filled his twelve years in the Tower of London by writing in the noble English speech of his day, his *History of the World*. It is noteworthy, that on his pages he quotes, or cites six hundred and sixty printed authorities, to whose works he must have had access directly, or through references made to them by friends. And then come the dreams and visions of the prison life of glorious John Bunyan in his *Pilgrim's Progress*—for which he needed the illumination of but one Book.

Not to those who are concerned in the objects of this Society need argument be offered as to the pronounced worthlessness of any relic and gathering of science or literature. Each of them and all of them help to carry on the earth's history, the record of the birth of knowledge from ignorance, of wisdom from folly, of truth from error

through skilled obstetrics. Bearing in mind, also, that, as we are told, human nature is unchanged, it may be that old follies will reappear, not as ghosts, but as alive for mischief. Vain would be the project by selection, or discrimination, to clear the shelves of the world's library of what is called "trash," much more to apply the winnowing process to what might be pronounced antiquated and useless matter. Of course the limitations of economy and space, and an adaptation to local classes of readers, may well regulate the selections for the shelves of each new library, and the system of exchanges may be availed of to insure these selections. But in no case should there be discouragement or obstacle that somewhere, in some repository, everything of mental product in the whole development of humanity, should find a place. No person of competent judgment will question the doctrine of Panizzi of the British Museum, that everything that has ever been inscribed or printed, book, tract, pamphlet, circular, poster, broadside or flyleaf, may be of service to somebody, at sometime, for some conceivable use.

So much on the first question of our subject—the desirability, expediency, fitness and utility of completeness in the world's library. We come now to our second question—the practical possibility of the completeness of the record of the earth's history in libraries and museums.

Something has already been said as to facilities and progress in that stupendous project—its outlines are drawn, means and methods are indicated, and gaps need to be filled in—with thousands of co-operative workers engaged in it. Let us understand as clearly as possible what the project calls for.

The largest and the most comprehensive classification of the contents, literary and monumental, of our libraries and museums, would dispose them under three divisions of subjects:—

1. The history of this globe, physical, elemental and

phenomenal, antecedent to the appearance and activity of man in it.

2. The history of our own race, in all its stages—created or evolved—its doings and experiences and variations, in their largest compass and their smallest incidents.

3. The relations, actual, imagined or believed, between this globe and the physical universe to which it belongs: and those between its human inhabitants and supernal influences and powers for their help and guidance.

It may hardly be necessary, but I may as well say distinctly, at this point, that what I write and read, especially upon the first and third of these divisions of my subject, is in no sense, in acceptance, in advocacy, or as argument for the opinions and theories to be briefly noted. I recognize them with all that may be offered for and against them simply as they appear in books, making up the contents of our libraries and museums—the world's literature. These opinions and theories are all open and free. In these recent years, they are vitalised and vigorously dealt with. While boldly, perhaps rashly, handled, in their scientific and philosophical relations, they are burdened with most serious bearings on transcendent interests for men.

The writer of a work on either local or general history, is always moved to decide on a beginning from which he shall start. The excellent Thomas Prince, who undertook to write the "New England Chronology," might have greatly increased the value of what he did for us, if he had told us more about the people and events near his own time. But he felt bound to precede New England history with an account of the old Hebrew Patriarchs, and so died, his task unfinished. But those patriarchs were of a modern era compared with the beginnings which engage our curiosity in gathering the earth's history for its library. Slowly but steadily, and with a teasing earnestness, with the advance of the assured methods of science, has grown

the purpose to penetrate the secrets of unrecorded time, far back of the generations of men. Science assumes that whole portion of the great pupilage of learning which concerns the origin and the early eras of this globe, before man was here to leave some rude, prehistoric tokens of himself, and afterwards to begin historic records of his own. The fact being fully certified that the elements of the earth existed and that it rolled on and labored before man was upon it, the beginning for us precedes ourselves.

When a writer has the purpose of fitly preparing a memoir of the life, the career and service, of one who has been of eminent or only humble position upon it, he is reminded that whatever there may be on record by others, concerning his subject, some of the most important and interesting facts about him, as to his early years and his private experiences, anticipate all records, and were known only to himself. The biographer wishes he could have had speech with him, to question him. If happily the subject left an autobiography telling of his early years, the wish is gratified. So for all our prehistoric inquiries, most helpfully comes in what we fitly call the "Autobiography of the Earth." It is as if this globe, with a sort of mute cognizance of its far-off eras, when there was no human observer, scribe, or historian, very considerably left on its surface, or in its interior, some memorials of its early years and education. These memorials prove to be in ciphers, needing a key to interpret them. We gather such as these into museums, and bid science to deal with them. We find that we have here to dispense with chronology, except that of the succession of periods, each of immeasurable length and course. As to the more or the less of the millions of what we call years, that is of no account.

Those of us who are not full experts in this science, and who look up to its teachers, are left at this present date, to take our choice between these alternate origins: either an animated spirit-dove, brooding over the mists of chaos, or,

a marvellously-impregnated egg rolled from the fiery haze of vapor having in it the potency of producing all things. The spirit-dove, or the egg, which was first? Take your choice. It would seem to matter but little, as either could produce the other. The preference at present seems to be for the dove, as that may be infinitely productive, while the egg, however enriched, must be limited and exhaustible. Satisfied or not with that alternative for the origin of things, we must needs accept it till our choice is widened. So our libraries gather from science the material of literature on this subject, and our museums collect the monstrosities, the old clothes, and the discarded relics of the globe. And so it is that our newest books deal with the oldest themes. We can admit the potency within the vitalized elements of that marvellously-impregnated egg so far as material things are involved. We can conceive a mass of misty vapor, disengaged in the abysses of chaos, taking its own course in revolving, compressing, solidifying, heating and cooling, depositing its strata, cracking, blazing and vomiting from its digestive bowels, clothing itself with vegetation, and changing from era to era the relation of its solid and liquid elements. We can conceive of the earth having disposed of one series of its surface products, depositing their remains in strata to be fossilized. Potency is a large term as an energy in that impregnated egg when we think of what it is in a single grain of gunpowder, or in the reserved mystery of electricity. It may be that we would allow that potency to reach even to the generation of animal as well as of vegetable life. But when, within the potency of that egg, we seek, by the processes of evolution, for the generation of conscious human individuality, of intelligence, of conscience, of imagination, of reverential awe and fear, we may find ourselves looking back to the spirit-dove from which to take our start for the beginning and the continuance. Such chickens as Plato, Shakespeare and Newton do not seem to be accounted for. To be sure, books in our

great library tell us how all this was brought about. But of that matter farther on.

And now, having in view the theory, that the creature, or being, who, in due time, was to charge himself with the filial obligation of writing the history of this earth, was himself the product of this impregnated egg, a question of supreme interest to us is, to fix the period and the circumstances when he was himself hatched from it, and became the representative of his generations here. We have to learn how to identify the work of a human hand or brain, by distinguishing it from elemental products. Our scientific teachers remind us that we must be satisfied if we can find and identify relics, objects, tokens of man's presence and agency here, before any skeleton remains of man himself. As there may then have been no undertakers, our earliest human progenitors, like some of our contemporary Indian tribes, instead of committing their dead to burial in the earth, may have packed them on platforms in trees, and so the elements dissolved the remains. Literature waits to make up its books while science gathers human tokens in our museums, and interprets them.

At present, our physicists halt in indecision as to whether man made his first appearance on this globe, in what they define as the Tertiary, or the Quarternary period. Between these two eras they tell us that in the northern hemisphere, islands were wrenched from continents by arms of the sea, and that two land bridges across the Mediterranean to Sicily and Gibraltar were destroyed. The chilling of the hazy atmosphere caused the glacial age, which brought down the northern reindeer as far as the Pyrenees, whose fossilized remains are found there with those of the mammoth, the auroch or bison, the woolly rhinoceros, etc. This reindeer period is pronounced by Cartailhac in his "Pre-historic France"—"the artistic period *par excellence* of all prehistoric times. For then, for the first time, man leaves evidence of himself by drawings, carvings, engravings

on those fossils of the once living creatures around him, with a sense of beauty which is astonishing, nor does he forget to draw his own image on them." If this evidence will stand a thorough cross-examination it furnishes a very promising start for man as an artist. Observe, too, how far back of previous knowledge modern science presses our human history. Lord Bacon, the highest of philosophic minds, wrote in his time that "there were only five-and-twenty centuries with which the memory of man is acquainted." We have more than doubled this number of centuries of our acquaintance with man on this earth, and are reading his writings, surveying his monuments, handling his household utensils, and his food, and the coins once in his pockets.

Having got a starting point for the coming of man, through his work on the earth, scientists and historians seemed to be in a fair way for hopefully pursuing the subject. But at this point we were abruptly arrested, startled, shocked, confounded. We had expected to trace our kin through all collateral branches, however mean and humble. We were reconciled to find many strange, eccentric and unrepresentable specimens, so long as they could be called in any sense men, human beings. Scientific archæologists believed they were making satisfactory progress toward dating man's coming and subsequent movements. But the astounding theory presented itself that our race was not begun here by beings known to us as men, in form and feature, hairless, tailless, erect in stature, with at least primary intelligence and endowments. We were to look far behind our human progenitors for our far-off ancestors, and to find no stopping-place in the line of our antecedents, till we come to protoplasm and a bunch of sensitive cellular tissues. Fortunately we have no concern here with that theory, except only to recognize that it compels us to add many new shelves to the world's library of history, to allow a most vigorous and vastly interesting department of literature,—for the trial, the discussion, by *pros* and *cons* of

that method of the production of man. But as we must draw the line somewhere, we insist that the *crania*, the skeletons and the fossils of these our dubious progenitors, apes, monkeys, gorillas and what not, shall be harbored in museums, as not seemly in a library. At present, the missing links in the chain of connection and proof outnumber the visible links, and leave fearful gaps in our history. The theory must have intense interest though bringing a sore perplexity to our genealogists. It may somewhat abate the zeal of some among us who, from pride or curiosity, have been set upon tracing their family trees to the tramps and vagabonds who came over with William the Conqueror, in hope to get to some nearer proximity to Adam.

Leaving the theory to be recognized in our libraries only by the discussions of it, we have enough with which to fill them in tracing the history, the doings and experiences of veritable men, of some sort, from a datable era when the earth had upon it beings whom we call human. We are gathering that library, well begun, and though with long-reaching gaps on its shelves, growing enriched, instructive and overwhelming in bulk and contents year by year. I must leave to your own thoughts and knowledge, without even a glance, survey or summary to call before you the contents of the world's library so far as it contains the history of man and his ways, his experience, achievements and work; his races and his migrations; his adventures and explorations; the tragic and the comic elements and incidents of his life; the dawnings and the effulgence of his genius; the soarings of the loftier minds, and the gropings of dread and superstition; man in his debasement and his glory, in his ambitions and his humiliations; the rise and the fall of empires; the desolations and carnage of war; the gentle heroisms and the fiendish cruelty and torturings for heart and nerve. There is not an adjective used as an epithet in all languages, from the sweetest, liveliest and

most exalting in its import, to the most agonizing and appalling in its horror, that is not applicable to actors and incidents in that burdened history of man.

It might not be easy to assign a precise date when archaeologists, explorers and historians recognized in full the purpose of gathering and preserving the acts and experiences of men on this globe. The purpose was one that might naturally suggest itself unconsciously to curious and inquisitive minds. Then once entertained, even with vague and indefinite outlines, it would as naturally expand, develop and extend itself to meet the conditions and methods for realizing it. One of the relieving and cheering facts revealing themselves to us from the far-back activities and cravings of enlightened minds in Assyria, Egypt, Greece and Rome, is the mention of the private and public libraries, of philosophers, poets, statesmen and monarchs. We are well-nigh incredulous of the numbers assigned to some of them, considering the labor and the cost of material and producing books. Every effort and enterprise for gathering the world's history has been richly rewarded. No obstacle or difficulty has been met by persevering workers, from what might have been apprehended as a sullen unwillingness of the earth to have its secrets penetrated and exposed to the light, and to confuse and baffle the inquirer. On the contrary, so far as dead and silent records can aid, they seem to volunteer what testimony they can give. The circumstances attending the decay and oblivion of the relics of the past have facilitated the work of exhumation and restoration. It might seem as if with a view to aiding us in our search into the ancient annals of the earth, that it had simply covered from the elements many of its monumental and historical treasures, not that they might decay as if buried in graves, but that they might be kindly preserved, ready to welcome an intelligent and trained curiosity when turned upon them. Below the fields and homes of living generations, we have learned to open, not to

graves, but temples, altars, sculptures and paintings, monuments, habitable dwellings, classic and luxurious, even if barbaric in some of their features. If the city of Pompeii, instead of being deeply covered from the air by light ashes and pumice, had been encased, like Herculaneum, with molten lava, we should not have had, from the veiling of two thousand years, those delicate frescos, instruments and implements, artistic and domestic, now gathered in the museum at Naples. For these are as instructive in their suggestions as are the ruts of the chariot wheels in the old pavements, the loaves of bread in the ovens, and the stained rings on the marble counters of the saloons of those days. These are all tokens of an arrested rush of life in play and work, long centuries ago. A somewhat more difficult, but still a richly rewarded task, was that of Layard in the under strata of Assyria and Babylonia. He has reproduced for us the stately palace of Sennacherib. Egypt, and other oldtime lands have illustrated to us the half-credited relations of Herodotus. We are left to infer what sort of men the representatives of our race then were, in thought and in imagination, in fancies and grandeur of conceptions, which expressed themselves in the mythology and symbolism of those massive monoliths and blocks, those temples and columns, those grotesque monsters winged on shoulders and sides, the human-headed bulls and lions, and the garniture of mausoleums and mummy chests. Schliemann, working in the more intellectual and poetic fields of Greece, under a fifth buried stratum, has wrought out for us the richest romance of the past, and has given to the Homeric poems an historical instead of a mythical and legendary import. Each decade of recent years has roused the enthusiasm of scholars by the disclosure on papyrus-roll or parchment-sheets of some precious message of far-away times, as in the signal instance of the Teaching of the Twelve, and Aristotle's essay on the Constitution of Athens. Of books regarded as lost, we know the names

of many, and we know where to look for and how to find and identify them. Accident or search will yet restore some of them.

We are reminded that the thoughtful inspection in a vast museum, of the heterogeneous and miscellaneous collection of relics—the spoils of wide areas of the earth and the races and generations of men, though an instructive, is not an attractive spectacle to all. In some persons it stirs a profound melancholy. The processes of half-decay and of half-defiance of the teeth of time, on the mocking *crania* of barbaric races; the stains and pitchy odor of mummies and their cerements, the wrecks of ancient habitations; the skeletons of monsters, once visible in their devouring tramp and their fierce encounters on the deep-furrowed earth; the humiliated fragments of old regal glory; the trophies of savage warfare, and the mute witnesses to cruelty and agony—these must work deeply on our sensibilities. Nor is the impression wholly relieved by the mingling in of the recovered busts of the old philosophers, sages, poets, orators and emperors, the statues of gods and men and women, the architraves and columns and altars of temples, and the tracings of the exquisite imaginings of mythology. It is the massing and mixing of such incongruous and confusing relics, in repositories like the British Museum, which bewilders and often pains an inspector. It might be better in many cases, to leave such disinterred relics as near as possible to the spots identified with their belongings. Seven of the Egyptian Monoliths were transported and set up in Rome. The Gothic raiders overturned all but two of them. When the Tiber is effectually dredged the spoils will be rich. We can but sympathize with the wish of the rulers of restored Greece that the frieze of the Parthenon may be replaced.

Doubtless it would be feasible, by the means and methods of familiar statistical processes, to learn, approximately, the number of volumes in the world's library,—scattered

in all repositories, public and private. And then a curious calculator might tell us what proportion the number of these volumes bears to the number of the present population of the globe. But a more pertinent inquiry for us is, how far the world's existing library avails toward presenting to us the world's history. Of course, the huge gaps in the collection, answering to periods; incidents, regions, actors and events, causes or consequences, of which we are ignorant, would at once suggest serious limitations, *lacunæ* and deficiencies. Yet this suggestion would soon find partial relief. The elements of likeness or sameness in human nature running with common experiences through the ages, the repetitions and recurrences of causes and events, would allow us to a large extent to draw inferences and generalizations from what is known to us, to indicate probabilities in the unknown. Help and facilities for filling in some gaps are furnished to us in the system of special libraries, classified by subjects. When we speak of the earth's history as gathered in libraries and museums, it is simply our ideal of both repositories as representing a unit in their joint purpose. We cannot, however, imagine that it would be possible, even if it were desirable, that all the materials of such a stupendous collection, should be gathered in one cosmopolitan institution. We are content if, somewhere in the world everything requisite may be found. Recourse, therefore, is wisely had to special collections, each devoted by easy classification to each of the subjects entering into the whole curriculum of knowledge. So we have law, medical and theological libraries; libraries of archaeologists, geographers, and explorers by land and sea; mathematical, astronomical, physiological and botanical libraries, historical and biographical, of each of the arts and sciences, of the drama, of music, of sculpture, of works of the imagination, of fiction and poetry; each sect in religion, each party in politics, may represent its history and distinctive principles on guarded shelves; mechanics,

architecture, chemistry, electricity, optics, steam, may each have an alcove, or an edifice; constitutional, State, diplomatic, international and patent records will have generous provision. In one or more of these hospitable houses, we may expect to find and be able to trace the alphabet, the starting point, the elements, the *origenes*, the progress and development of each of these departments of knowledge, as it has rolled up its lore. By our present standard of professional qualification it is expected of the foremost men in each specialty, that each shall not only be the master of the present status of his Guild, but also be able to trace its whole development and acquisition. The zeal and information of such specialists will help vastly to completing the record by filling in the gaps in the world's annals. The living astronomer can calculate for us eclipses and transits of all the past eras of the present solar system, and so date the dynasties and battles identified with them.

Parallel with these specialties in the contents of libraries, is the marvellous idiosyncrasy and diversity in predilections and tastes, among collectors and virtuosi, shown in gathering the variety of contents in special museums and cabinets. One has a passion for skulls and skeletons of men and brutes, and fishes and birds; another is content with spines, teeth or claws; another gathers historical armor and implements of war, or the chase, or the fishery; another, tools, implements, and old apparel; still another, the series of mechanical and surgical instruments. Other and finer tastes are spent on coins, seals and medals, on gems and jewels, on pipes and snuff-boxes, on shells, beetles, butterflies and other insects.

The exuberant fertility of our modern libraries is largely to be accounted to a fact which presses itself most forcibly upon every wide and full reader. This fact is the most strikingly characteristic one among the many differences between the ancient and the modern writers. The ancients worked on original materials, with their own brains, giving

us their thoughts, observings, reflections, freshly minted. All themes were to them new, even if only on the surface, not as yet to be mined. They give us themselves in their writings. Our modern literature is largely a working, over and over, of old material, criticisms, comments, expositions—*re-views*, of previously gathered reflection and experience. We write repeatedly the lives of the elders, the pioneers, in wisdom, learning, enterprise and effort. We interpret the old and revise it for the use of new pupils. Scaliger, Stevens, Casaubon, Lepsius, and their compeers, have in themselves been whole libraries. As Father Chaucer sung :

“For out of the old fieldes, as men saithe,
Cometh al this new corne fro yere to yere;
And out of old bookes, in good faithe,
Cometh al this new science that men lere.”

Shakespeare, in mind and pen, comes to us in a single volume. His commentators and expositors fill another library for us. Curious are the fruits of the industry of mousing critics trying to convict plunderers and plagiarists, when the critics trace a proverb, a witticism, an oracle, or a conceit, back in our literature to the original sayers. And it is the like with the plots in works of fiction, tragedies, etc. The term *duplicates* is much more extensively applicable than merely to two or more copies of the same book in a library. These contested points, this re-thrashed straw, this half-telling, wrong-telling and re-telling of the same story, make the burdens for our shelves. The best motto to be put over them as classified, would be the sentence of Solomon: “He that is first in his own cause seemeth just, but his neighbor cometh and searcheth him.” Such are some of the contents of libraries and museums, concerning man, his experiences and doings on the earth.

We come now to the third division of the contents of the earth's historical library—its own relations, actual, imagined or believed, and those of its human inhabitants, to supernal influences and powers.

It might seem to be enough, alike for curiosity and modesty, that men should limit their inquisition for knowledge within their own sphere of earth, its history, and their own history upon it. This might have satisfied, but that there being the heavens over us there is and always has been a science called Astronomy. And ever since at least man, standing with only two of his limbs on the earth, has learned to look upward, he has thought of and listened to those heavens. Those who have pursued this science have not only contributed to the earth's history, but they have also extended the bounds and contents of that history. It was soon learned that this globe does not roll on in its free, individual course, or was dependent solely upon its own resources, physical and elemental. It is lighted, and warmed, and watered, and swayed, by supernal agencies. This fact of eyesight-knowledge has always prompted the question asserting itself as the most serious and momentous above all other themes for men, as to influences, intercourse, messages, reinforcing revealings from the higher sphere to those who live on the earth.

I will venture upon an assertion which may cause surprise, perhaps a doubt, in some who hear it. It is, that the largest section of the whole world's literature in all times, as preserved in libraries—not to speak of the untold amount of it which has perished—is concerned, neither with the physical history of this earth, nor with the merely mundane affairs, works, fortunes and experiences of its human inhabitants, but with a vastly greater theme. That is the relations between this earth with its human stock, and other worlds, other beings, powers and influences in this universe. While the term philosophy may more fitly apply to large portions of this theme—in its many bearings and relations, and to the speculative method of dealing with it, the whole matter is generally classified as concerning religion. As religion—using the word in its most comprehensive sense—it includes all the

thinkings, guessings and believings that enter into it; all mythologies, superstitions, fancies, rites and practices and institutions attaching to it, all discussions and controversies about it. And the matter gathered in the world's historical library on this full theme, as it exceeds, in simple bulk, that on any other subject, has a continuous development and expansion, starting from the earliest ages, engaging all humanity in its interest, and certainly in these, our years, making up the most living and vigorous element of literature for the best furnished minds. The theme embraces a vast extent of subjects on which we neither have nor can expect to attain, any positive, certified knowledge, with tests and confirmations available for the satisfaction of the average convictions of men. It engages, however, as it always has engaged, the profoundest thoughts and feelings of men, often absorbing and prevailing above all their engrossing anxieties about the actualities of their passing lives. It is the field of aspirings, guessings, opinions, fancies, imaginings and believings. From it have come the inspirations for all heroic achievements and enterprises, and the zeal and power of endurance under all tests of torture and martyrdom. The visions of prophet, seer and poet, the wealth of art, the skill of sculptor and painter and of the masters of architecture in fane and temple and cathedral, of symphony and harmony, of lyric and chant, all minister to it. Homer, Virgil, Dante, and Milton engage the unseen powers and mysteries to impart sanctity to their sublimities. Shakespeare, alone, of the peerage of the world's mightiest, though by no means dull to supernal agencies, and playing freely with sprites and spectres, is more content to deal with the human and the earthly in character and action.

Well it would be if the super-earthly, and the so-called, religious element in all literature taught us only of what ministers to inspiration and edification. But in it we find the sources and materials of humiliation and debasement, of

the most bitter animosities and strifes, which have engaged the most malignant and diabolical passions of men. Disputations in words, polemics and controversies on subjects wholly beyond the range of certified knowledge, have wrought themselves into wars more devastating and bloody than those waged for empire. The material of all this conflict still exists, and the sparks are still beneath the banked fires in our libraries. But the modern additions to that portion of our literature are animated by a spirit milder than that of former times. The change is wrought mainly by the influence of what is so vaguely and confusedly known as Agnosticism, which bids us not to quarrel or fight about matters of which we have no knowledge. But of that more, farther on.

Physical science has been steadily making known to us the reality, and some of the laws, methods and conditions of the relation between this globe and the universe to which it belongs. This physical teaching is positive, demonstrated, assured; it engages discussion and theorizing, but not ill-temper, or passion. But the matter of religion penetrates to deeper mysteries. The instruments and processes which have served us so well in material things here fail us. The root question, taken with all that sprouts and grows from it, is this: Starting with the endowments, capacities and resources of human beings, strictly within the range of what we call Nature, with its known conditions and limitations, the question always was, and is, now,—has the space, the chasm between man and his sphere of earth and nature, and other worlds and their possible intelligences, ever been spanned, crossed with reinforcements, new supplies, communications, messages and revealings, adding to human resources of wisdom and truth? It is to the literature on that whole theme, positive and negative, in the world's library, that I now refer. The reason why we prize most the ancient literature of the world is because we naturally believe that the farther back

we can reach in time toward the nursery of our race, the more communicative will be the oracles. If, as the poet tells us, "Heaven lies about us in our infancy," the first generations of our human race should have received the first teachings. Of course, it would be out of place here to meddle with the profundities of that thought. We are concerned with it simply as entering into the mass of literature in our libraries. The mystic rites and oracles of civilized peoples and the barbarous incantations and practices of savage peoples, alike enter into that theme. Precious to us are the speculations of the old sages, our first intelligible teachers, whose brows were furrowed by the working of their brains. Lord Bacon says that "Plato adulterated Nature as much with theology as Aristotle did with logic." Socrates and Cicero plaintively express the human longing for light and reinforcing wisdom from a sphere beyond the earth, while still they confess that for them the oracles were silent and heaven was dumb. But in his discourse on "The nature of the gods." Cicero utters the emphatic sentence, "No man was ever great without an afflation from God."

In our literature we used to draw a deep distinction between the sacred and the profane. The distinction is alike impertinent and untrue. We class all ancient guessings, speculations and bewildered believings under the leadings of the light of Nature, and those who lived by it, as heathen, or pagan. And then there enter into the mountain masses of the world's literature on this theme, of the relations other than physical, between the earth's human inhabitants and higher intelligences, volumes easily distinguishable on all our shelves. These assure us that the silence of Nature has been broken, that the chasm between earth and heaven has been crossed and spanned with bridge and ladder, with inspirations, revealings, reinforcements and messengers. If we could regard the quickening and reanimating influence which the firm *belief*

in this renovating interposition for our race has wrought and still is working in the regeneration of humanity,—as a perfect and positive *demonstration of its truth*; one element of the earth's most bitter conflicts and strifes would have been quieted. The message from heaven should have the ear, the reverence, the obedience of all men. We are dealing with this august subject simply as it fills a department of literature. So in the volumes on our shelves, we read of many, diverse, inconsistent and rival claimants and mediums of the divine message to tribes and nations, of sacred books variously reporting and interpreting the message, and of dull and unbelieving listeners who say that not having heard it themselves, they discredit its reality, or the testimonies to it.

Doubtless it would be in this department of literature—contentious, overladen and cumbersome to our shelves—that the verdict already referred to, of “worthless rubbish” to be thoroughly weeded out, would be most emphatically pronounced. The theological and religious shelves seem most to invite and provoke that process. But no! The protest against such a weeding out would be most earnest from very many voices, discordant on other matters, but in accord on this. The intention was significant, but the judgment was fallacious—as already noted—of classifying literature as sacred, or profane. Enormous as is the mass of what we call religious literature, with its mythologies, superstitions and legends, with its bodies of divinity without souls, and its souls of divinity without bodies, with all the heaps of polemics, for whose bitter and rancorous temper, we have an emphatic use of the word *Odium*, we intend to preserve it all. There is teaching—help to wisdom, or warning—in it. Indeed, if any impartially selected commission was set to search the shelves, with the agreement that only a unanimous vote should condemn a volume or a pamphlet to destruction, not a single one of them would be sacrificed. The experiment tried by

the Kaliph at Alexandria has ever since served as a warning.

If it were in our way to draw comparisons, or contrasts, between the tone and substance of the most marked productions of ancient and modern literature, the most striking of the contrasts would be in this. The ancient poets, at least, if not the sages, were most free and familiar with the divine powers, alike humanizing the deities and deifying the men. Indeed, their gods had once been men. These gods made armor for their earthly champions, arrayed them with it, and took part on their battlefields. Some of those deities, of both sexes, were so immodest and misbehaving in their own morals, as to countenance the frailties of their human subjects. Through signs and prodigies and oracles they made known their wishes to men, and their statues, features and characters were too familiar to leave any room for reverence. Our sky and earth are rid of them. Our freest modern literature regards any divine personality as undefinable. The divine right of kings—*Rex Dei Gratia*—is a lingering survival of the belief of the sway of gods over human affairs—and for this is now substituted the divine right of democracy. We still allow the names of those heathen deities to attach to planets, stars and constellations, because we have not yet discovered what sort of folks live upon them.

The literature of the religion of Christendom concerning the relations of the inhabitants of this earth to a higher power, needs not to be characterized here. It starts from an accepted and assured belief in a reinforcing of the natural limitations of humanity in the knowledge of divine things by a revelation of truth by supernatural methods and sanctions. It might be difficult among the infinite and distracting divergences of opinion and interpretation gathering around these alleged revelations, to define what is common and effectual as accepted truth. But the general and potent sway of that

belief, whether in its fulness or in fragments, is attested by well-nigh universal credence. This belief in a Divine interposition, dated in the world's calendar of time, as held by millions in their generations, has been the quickening and constraining force in the world's life in its fairest and noblest development. It is wrought in with institutions and constitutions; with legislation, treaties and statutes; with the laws and customs of all civilized peoples; with all covenants, and contracts; with daily speech and observance; with hierarchies, temples, cathedrals and worship; with the glories and harmonies of poetry and music, and all the symbolism of art; it gives the date of our era and years; it has inspired zeal and benevolent enterprise in missions circling the globe; it enters into the most fondly-cherished personal experience, and untold millions have found in it everything of conviction and comfort short of direct vision and verbal converse with the Supreme. It is not strange, therefore, that a shock and panic should have run through Christendom when scientists and philosophers were understood as proposing a return to the oracles of Nature. For within recent years the largest and most vitalized addition which has been made to the department of what we call the religious literature of the world, is popularly viewed as dealing with this theme. It is the literature of the theory of Evolution. In part it is purely speculative, for the rest it engages strictly with facts and actual, observed phenomena, offering from them demonstrations and evidences. Incidentally, apart from its full and ultimate aim, it has made marvellously rich additions to natural science and history. It has proved exciting to the highest of the human faculties, quickening and daring in its affirmings and its generalizations. Because of its direct connection with religious conceptions and beliefs, it has stirred challenge, protest and embittered denial. The alarm and panic, not to say indignant passions aroused by the first announcement of this theory having calmed, it is

left free to the trial of testimony and self-vindication. The shock caused by the theory provoked from the zeal of those who were first moved to denounce it, the assertion that the theory of Evolution was a daring attempt "to dispense with God," with creative processes, and with all religious belief, and as blankly irreligious in its spirit and aim. In attempting to state and define the theory, I must act as interpreter, not as umpire, advocate or opponent.

Having been a diligent reader of the animated and vigorous volumes of the literature of this subject, I find them generally pervaded by an impartial spirit, seeking to treat its subjects within the strict limitations and processes of science, with reticence or silence as to religious elements. It is but clamor, ignorance or prejudice that pronounces the theory hostile to religious belief and sentiment, as it leaves these to a distinctive exercise of a class of human faculties within their own province of method and sanction. Doubtless this theory must inevitably come into open and sharp antagonism with many opinions, beliefs and notions incidentally associated with the vitalities of religion. But the boldest and most daring thinker or theorist cannot free himself, much less others, from the solemnities of that mystery which broods over the universe and human life. Nor can he penetrate it. Of that august truth we may feel assured. And that truth is the hiding place of religion for men. If we could be persuaded that, by any process of argument or demonstration which would bring evidence or conviction with prevailing weight for the ordinary intelligence of men, religious beliefs and sanctions could be utterly discredited, then human life would be intolerable on this earth, the earth would be uninhabitable, except for a generation of Satyrs, infanticide, suicide and homicide would prevail over all the methods of disease for terminating existence, and the qualities in which humanity surpasses the brutes would be the means of degrading men below them.

What then is the animus, the prompting idea, the quickening spirit of this theory of Evolution? If I apprehend it aright, it is a championship of that original, primeval, marvellously impregnated egg, and its unexhausted potency. Evolutionists tell us that we ought to credit that egg with having produced from its own potency much that has been credited to other agencies, and that we ought not to seek outside it, or beyond it, or above it, for the explanation of any known phenomena, till we have exhausted its own fecundity. Indeed, it might be fitting for the convenience of classifying books in a library, that all the volumes dealing with the Evolution theory, should have stamped upon their back, side or title-page, the device of an egg, to take the place of the old devices of the eagle and the tortoise, as pillars of the earth.

If we seek to penetrate to the root and source of the vitality of those volumes of our literature, speculative and scientific, on this theory—which has been pronounced as “dispensing with God and creation,” we find it to involve an issue between what is called a rational or scientific interpretation of Nature, and the calling in of extra-natural, supernatural, or divine interventions to account for certain facts and phenomena. And this, too, is assured; that it is not from the lack of the religious element, devotional and reverential in the scientists of Evolution, still less from the conceit of self-sufficiency that they adopt and maintain their theory. It is from their insisting that the material and physical resources of nature, within itself, the potency of the original egg—whencesoever that was derived, should be relied upon for all observed facts and phenomena, before calling in the *Deus ex machina*. They claim that that egg in its elements and forces, has not exhausted its fecundity. The ages that have passed since that fecundity began its development have steadily drawn from it germs, capacities and mysterious energies, rich and fruitful enough to warrant us in looking for new and further surprises in ages to come.

That egg seems never likely to become addled. Its latest products are the richest. Essences, virtues, chemical, electric and explosive forces, oil and gas wells, bacilli, and what not, come like the opening of caskets within caskets in their disclosures. From the pressure of the newer strata upon the older, from the *débris* of nature, we pick out the diamond, the ruby, the garnet, the topaz, the sapphire and the amethyst. May it not have been that this original egg contained in itself the core and stock of humanity? Has it not yielded to the masses of its progeny the progressive averages of intelligence, while to special and signal individualities it has given genius, in all its ranges of brain-power in science, art, imagination and fancy? If this potency in the elements of this primal egg of humanity has limitations, it has not yet been proved to have reached them, and the look onward shadows possibilities, as yet inconceivable. Every grain of earth and every drop of water has in it as yet unrevealed secrets.

The poet Dryden, in some famous lines, seeking to exalt the genius of Homer, Virgil and Milton, wrote thus :

“Three poets in three distant ages born,
Greece, Italy and England did adorn :
The first in loftiness of thought surpassed,
The next in majesty, in both the last.
The force of Nature could no farther go,
To make a third she joined the other two.”

Now not to pause upon the question as to what is the distinction between “loftiness of thought” and “majesty,” we do pause upon the sentence, “The force of Nature could no farther go.” A protest may be put in in behalf of the Egg. It could generate two poets, but when prompted to make a third was so exhausted as to be compelled to blend the two. If the force of Nature in this sort of product is already spent, where shall we look for a fourth and a greater poet?

“Follow the capacities and outworkings of Nature in all its directions of reality and possibility—at least till you

have reached its limitations," says the scientist. So when it is claimed or asserted that there has been a later reinforcement from outside and above the range of Nature, of man's original resources, by messages and revealings of divine knowledge, we are bidden by the doubters, or the sages of these days, to pause. They ask us before looking outside and above man, to look more keenly into him; to learn of what he may himself be capable. As to whence he derived his capacities, of course there is silence—it is merely to ask, how the Egg was impregnated. The question thus opened in so much of the fresh literature on our shelves, is, whether since man's first appearance on this globe with his original furniture of being, he has been left to his own inherent resources, or has received reinforcements to them from outside and above. So the sturdiest champions of Evolution, jealous of Nature's powers and functions, insist upon referring to mundane agencies, all phenomena and effects which have been credited to occult and supernal influences. They boldly affirm that there has been nothing in human nature of feeling or experience, of belief or trust which has been referred to prodigy that they cannot account to natural agencies, the coming into action of latent forces. They take in hand the sacred books of the world's great religions, in which God presents himself in speech and action, and they tell us that they have learned to put to themselves the question—"Does God say this himself, or do men think it and say it of him and for him?" And they decide that these sacred books instead of being efforts of God to disclose himself to men, are the efforts of men to find their way to God, to reason, speak and act as representing Him, through the instincts, longings, promptings and inspirings of their own wealth of nature, however these may be accounted for. They take as literal prose what Emerson sung in poetry—

"Out of the heart of Nature rolled,
The burdens of the Bible old."

The champions of this theory avow themselves ready and able to defend it against all complaints of its irreligious spirit. They insist that its grounds and methods are impartial and legitimate, and that its processes are severely scientific. They tell us that nature and experience have always been the wisest and the safest teachers of men, and that when we leave them we are lost in the mists and fog-banks of uncertainty. We leave the positive guide-marks of nature, with their sure guidance, and commit ourselves to the individual workings of thought, emotion and sensibility, for which there are no common, still less universal, criteria of truth. They remind us that the distinction is not an artificial, nor an invented one, but draws itself, between the scientific and the religious methods. The enormous increase of positive knowledge in material things, has come by means which utterly fail us, and are wholly useless when employed on spiritual things. The emphasis on this distinction enforces the reminder that wholly another set of faculties, capacities and endowments, than the scientific, is required for use in religion, thus confirming a statement made once for all on high authority, not to be improved upon, that "spiritual things can only be spiritually discerned." And more than this: the champions of the scientific processes do not fail in their turn to point to the variances and discords on all the material subjects and sanctions of religion, and to the haze of uncertainty investing all common believings. They boast of the world's indebtedness to the master-spirits of true philosophy in the dreary conflict with superstitious dreads. They remind us that every successive step in the steady and triumphant advance of science in enfranchising, enlightening and enlarging man's range of view and action, has been made by men of free and bold minds, against protests, warnings and cruel penalties in the defence of bugbears and credulities representing sacerdotal authority. They point to the number and the once dread sway of superstitions and terrors

now turned to ridicule in the lingering survivals of them among the still benighted. They tell us that the Roman Church *Index Librorum Prohibitorum* is in itself a comprehensive catalogue of the works of human genius in the enlightenment and true advancement of our race.

Some of the alleged boastfulness of the scientists may be charged to the decay of the old reverence and devoutness which found its material in ignorance and torpidity of thought, and in acquiescence with ghostly teachings. Some of it, too, may be referred to the puffing of conceit and an assumption of oracular wisdom in the scientists. But for the rest, the scientists find justification, not only in the enlarged fields and the splendid triumphs of natural knowledge, but they rightfully point to marked modifications and reductions in the expression of religious and theological beliefs. These certainly are held and spoken with more hesitancy and modesty than when a Divine personality was so familiarly addressed and so boldly interpreted in attribute and action, as if in the words of Matthew Arnold, "a man had just been talking with the Supreme around the street corner." Very impressive and significant are some of the tokens which will come to our minds of the repressiveness, the reticence which science has quietly induced in the familiarity and boldness of address and interpretation of the Supreme. When our weather bureaus are calculating mathematically, from climatic phenomena and the crossing of atmospheric currents, the signs of coming rain-storms, tempests, droughts and cold-waves; and when, in pestilential epidemics sanitary appliances are advised—it seems incongruous to the scientist—though he may not pronounce it vain—to have recourse to devotional exercises, with defined petitions for direct intervention. Very observable, too, is the prevalence of this modern tendency to refer everything to nature, to elemental and physical law, and to rest there, with reticence, at least, as to the intervention of a special agency. The Royal Society of London, now

well advanced on its third century, recognized for its design to advance "the Glory of God, and the welfare of man's estate." But from the first the members in their wisdom avowed "we barred all discourses of divinity." "The Glory of God" may be at heart the aim of all its members, but rhetorical speech on the theme would be held to be unseemly, and out of taste. Whatever may be the mind of the members, here or there, the fellowship is non-committal. The caution seems to be, "Keep to what you know, and can prove." So we might trace the manifestation of the modern spirit in the meetings, publications and discussions of the academies and learned fellowships, in all the sciences and economics. They are uniformly reticent of all the devout references of the old faith, to the providence, wisdom and goodness of the Supreme.

Of course there is nothing novel, nothing original for our day in this theory of the Evolution of Nature, as chargeable with "dispensing with God and Creation." What conceit, suggestion or imagination of human brains and fancies can to-day be new? Philosophers and poets of the old classic days revelled in the solemnities and the fancies of this ever fresh theme. The wonderful poem of Lucretius, of the century preceding our era, has left nothing in thought or imagination untried in his conception of a universe which was not the result of creative energy by a Supreme, but that all its contents and products were from the union of elemental particles existing from all eternity, working by simple laws. I have sought to explain the shock of the theory, as if it were novel in our day, by the boldness and thoroughness of its exposition, its logical and experimental defence, the apparent plausibility of its evidence, and the calm assurance of its champions, safe from the pains and penalties of heresy, that the world is free to make the worst or the best of it. Its collision with the popular religion of our day has deepened the shock of its defiant claims. The literature of these momentous themes has

concerned us here, only as matter for the shelves of the world's library of its history. Henceforward we may be sure that this class of our literature will run on in parallel lines of the scientific and religious interpretation of man and nature. By the truce of tolerance the volumes will stand peacefully, side by side on our shelves, though it might not be so with their authors.

So far has progress, or at least a beginning, been assured in gathering the history of the earth into libraries and museums. The collection is but fragmentary, with staring gaps unfilled, in long reaches, and, on many subjects, all mute and uncommunicative. As in the doctrine of Evolution, the missing links outnumber the connecting links. Were there no other reasons to arrest our natural prompting to follow with musings, reflections and moralizings, the historical vision which we have called before us, we should find enough to deter us in the overwhelming multitude, the suggestiveness, and, indeed, in the confusing bewilderment of the theme. It is inexhaustible in the matters which it offers for questions and answers, and all the more so because these common questions would receive such diverse answers, from the largest and fullest survey. Suppose a man gifted with the loftiest and most comprehensive intellectual power to engage in the interpretation of the sum and moral of the teachings of that library, it would deeply interest us to listen to him if we could regard him as a trustworthy oracle. Yet we are every day hearing or reading from those of every degree in depth or shallowness of judgment, such interpretations of the summary of the earth's history. Can we, after the fashion of the time, apply the theory of Evolution, in any of its phases—the struggle for life, the survival of the fittest, the cheering belief in a steady progress and betterment of things—to this tangled record of time and man? It tells us of the rise, disruption and fall of empires; of the culmination of ancient civilizations, shifting their scenes in continents and islands,

with all their splendor and glory, and then their humiliation ; of the renewal of these civilizations in virgin regions vivified with new elements from warnings from the past, or inspirations, while still finding ideals in art or culture in ancient types and models, and seeking to excel the great illuminators of the ages in intellect, taste and skill. If we sadly yield to the sentence, that humanity repeats its experience in recurring circles, we are reassured that those circles are in spirals, on an ever rising plane.

An almost prevailing judgment on the review of human history on the earth pronounces it appalling in its sadness, a course of strifes, sorrows and disappointments, a process of disillusioning, the shores of time being strewn with wrecks. But we remind ourselves that the living of each generation have never so regarded their experience. Even from all the conflicts and wounds of the past we cannot draw the pessimistic conclusion that life is not worth the living. If those of the great and wise, the heroic and the wronged, whose struggles and woes in life and death were the most cruel and tragic, could have had the prescience— which was indeed the glorified vision of some of them— of our own acknowledged debt to them in benefit and guidance, they would have gladly accepted their lot. Each generation of men, however low in the scale, has found a satisfaction in existence, and has shrunk from parting with it. We can trace no people on the earth, even in rudest barbarity, that has been without games and festivities. There are springs in the human heart that yield a perpetual flow of humor, fun and gayety. Tragedy and comedy divide the thought, the experience and the literature of the world in all its ages. Running through all this literature we find the two streams of the grave and the frivolous, the serious and the ludicrous, the *allegro* and the *penseroso* of life, the lugubrious sermons and the satirical caricatures. Caricatures are found even on the solemn tombs of old Egypt. The masterpieces of both ancient and modern

literature thus divide themselves into tragedies and comedies, the monarch of all literature, Shakespeare, holding either wand. Those superb busts of Democritus and Heraclitus, the laughing and the crying philosopher—which one may see in Naples—might stand, respectively, over two divided sections of the earth's full library. Light and cheer, even if sometimes only in grim mockery, will streak the gloom. Even among animals, there is but one alone that does not frisk and gambol in its youth, and that is the camel, saddened, it may be, as if in foresight of its dry and sandy pilgrimage.

A more searching question asked of the earth's library is this: with the word Progress in our minds, whether there is traceable through its volumes a steady increase in the whole capital stock of the world's wisdom, virtue and happiness, or content? Taking the estimated number of living human beings in its hundreds of millions, do each and all share, though in infinitely varied measurements and proportions in the whole sum of accumulated good? As to physical means and resources, at least, this question must have a positive affirmative answer. Using the word Science to express the knowledge of the elements and workings of material things, progress through it has been grand and stupendous. The triumph has been fullest in this, more than in any present gain or achievement, that every certified scientific fact or principle is a sure promise of the revealing of another, the next in the endless line. And yet with all this we are confronted with the undeniable fact, that the relations of proportion between the known and the unknown, keep an equilibrium, and have never been one whit changed since men began to search and question. The surest part of our knowledge is that which discloses to us the depths and abysses of our ignorance in the unexplored field ever opening onward. Our sum of knowledge, as related to the blanks of our ignorance may be compared to the measurement of the illumi-

nation cast at night by the lighthouses on coasts and islands, upon the dark reaches of the ocean. Still those illuminated points are welcome guides to the world's navigators. Our most positive scientists are also the most frank of our agnostics. And at this point is again raised that often, but needlessly, ill-tempered debate as to whether the world owes more of its enlightenment, gain and progress to scepticism or to faith, to inquiring or to believing. In the terms on which that debate is usually conducted, the scientist has the vast advantage. He tells us that the whole realm of the unknown on every subject, alike human or divine, was once guarded and frightened by superstition. Theology warned off inquiry, or prejudiced and forestalled its results. Science has won for us the freedom of the mind, the right of thought, of opinion and of utterance on all subjects of high concern to men, with full and entire immunity and security, without dread or harm from civil or sacerdotal penalties—the supreme assurance of a truce among all the seekers of truth. In the interest of faith, theologians and priests denied and withstood this freedom of mind, thought and inquiry. In the world's library every step in that hard-won freedom may be clearly traced in the conflict of bold and resolute spirits in endurance and self-sacrifice. Astronomy, geology, anatomy, surgery, chemistry are the winnings of scepticism defying the bans of theology, which taught that there was a grace in exercising a blindly confiding spirit, leaving the realm of the unknown to mystery and awe. Yet while the world's great library, in the latest volumes added to it, abundantly illustrates the triumphs won by the inquisitive spirit on subjects guarded by the warnings of mystery, this fact by no means settles the great debate as to humanity's larger indebtedness to inquiring or to believing. That word faith has come to be used with such vagueness and comprehensiveness as to cover many meanings. No word needs more to have assigned to it a definite and clear signification. In some of

its uses it is not distinguishable from blind credulity, asking us to accept through it what we know, or strongly suspect is not true. But there are subjects of faith and exercises of faith, as the world's library attests, to which men have been indebted for their loftiest aims and inspirations, as to the Promethean fire in their clay. These are for motives and objects transcendently lofty above all the appliances and means and facilities of practical use. That kind of faith must always cover the whole realm of the still impenetrable mystery of the unknown, veiling the great solution. We may pause over the puzzle presented by one of the Fathers of the Church, in the bold challenge: "I believe, because it is impossible!" But none the less, we know, that through the inspiring vision and the heroic constancy of some august beliefs, the "impossible" has so often moved its stake as to have become but a vanishing-point.

We ask a closing question as we stand before the world's library gathering in its history. The world has carried on with it, for thought and search, and discussion and trial by experience, many great problems concerning the interest and welfare of humanity. The aim has been to dispose of as many as possible of these debated problems by certified truths, or fixed principles lifted above all further discussion and variance. Have any of these great problems been thus finally disposed of, settled for all time; or is the world still to carry them on for generations to come, as still debated? As it would be idle to attempt an enumeration or statement of these problems, we are all free to sum them, or to specify them. There will be the widest difference of judgment as to which, if any of them, have been settled. That fact leaves these problems just where, and as we find them. And what shall we say as to any and all merely mundane problems, settled or unsettled, when we know that the most earnest and intelligent of living men are divided in opinion on this, the highest of all questions—Can all the essential

motives, rules, principles and beliefs for the individual in all his social, political and religious relations, be drawn from time and the earth, from nature and human reason, or are they absolutely dependent upon a divine guidance, certified and demonstrated, or to be accepted through belief?

Meanwhile we can but gather in for the world's library all that makes up its history. Our hope must be of making it complete before the general consummation of all things. But that will depend upon which event comes first.

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