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Author: Sherwood Sweet Knight

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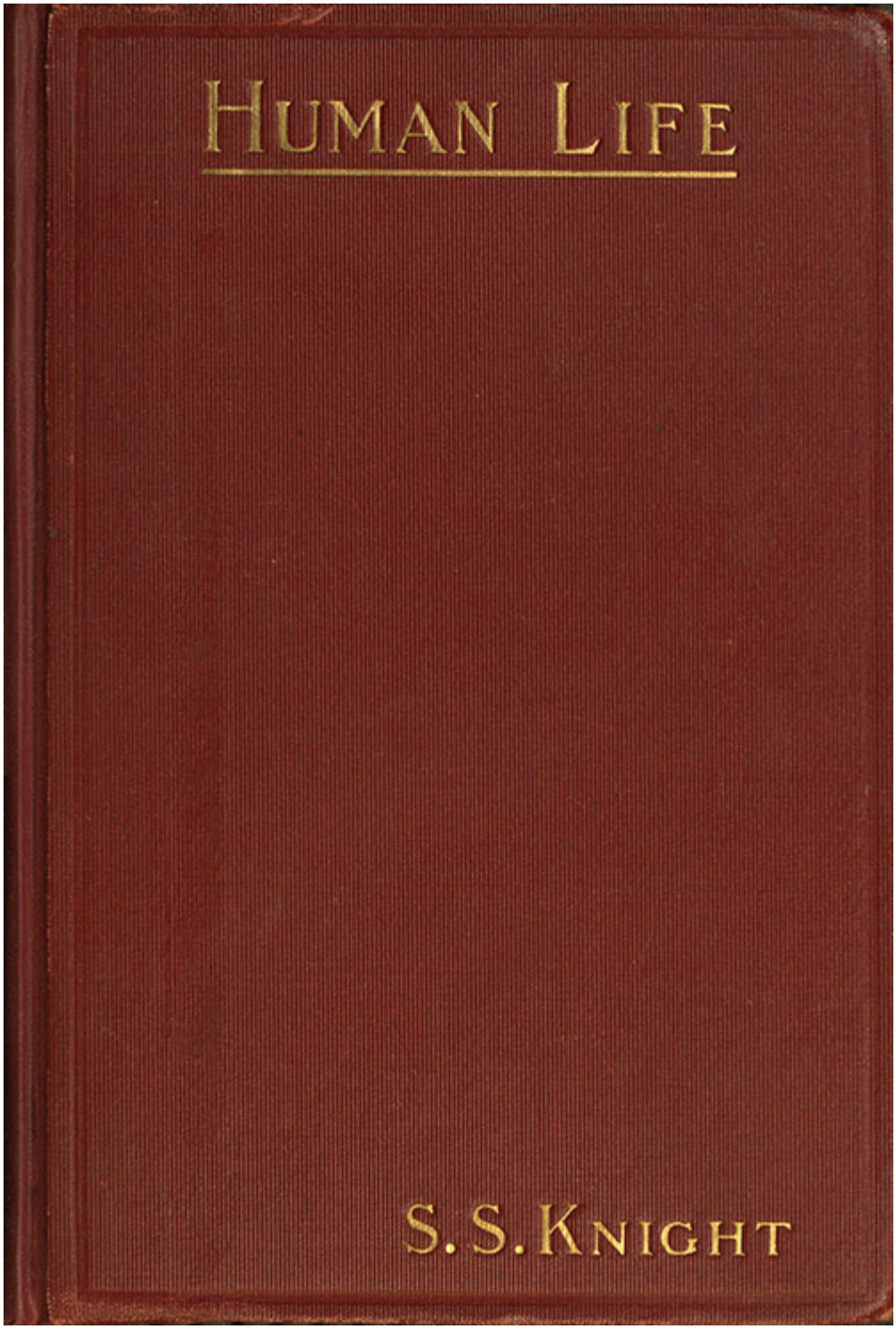

HUMAN LIFE

By
S. S. KNIGHT

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DEDICATION

THIS volume is dedicated to my Mother and my Wife—the two women whose influence has most largely shaped my life, and whose companionship has afforded me so much happiness. It was written with the hope that it might be of value to my two children, and may they find as much happiness in life as has the author.

HUMAN LIFE

[9]

CHAPTER I

THE HABITAT OF MAN

IN reviewing the facts concerning humanity, which are well authenticated at the present date, with the object of getting a composite view of the greatest of all "world riddles"—"Life"—possibly nothing tends so largely to expand our mental horizon as a study of the earth itself or man's place of abode. The ideas of the educated and cultured mind, at the beginning of the twentieth century, upon cosmogony, are necessarily of such a character that man's heretofore undisputed boast of being the objective and acme of creation or evolution is forced into that great mass of theories which science has proven to be absolutely untenable. Since the relative importance of the factors of heredity and adaptation has become known, the environment, or conditions surrounding man's existence in times [10] past, is of exceptional importance, as, from an understanding of these prehistoric limitations, we are better able to judge what must have been the achievement of the individual and the race than we could be when in ignorance of these facts.

The length of prehistoric time (so far as our earth is concerned) has been the subject of much intelligent labor and thought, as well as the occasion for much dissenting of opinion and more or less designed misstatement. Until very recently, it has been difficult to reconcile the theories, as promulgated by the authorities in the various departments of science; but, notwithstanding this, some light may be obtained by the summarization of the most plausible hypotheses now advocated. We cannot take the space to go into detail concerning these, but will merely touch upon the most salient points.

The constancy of the supply of heat furnished by the sun and the division of the year into definite seasons was one of the first phenomena which attracted the attention of man at the dawn of history, and in the many accounts of the creation which we find in literature we see [11] the feeble attempts of man to account for what he observed. Although the knowledge which we have at the present time is not complete enough to warrant any feeling of pride, yet we do know enough to say, with certainty, some things concerning the solar system. We know that our sun cannot forever radiate away its heat into space without sometime becoming as cold or colder than we are, unless the energy which it is losing in the form of heat be restored to it by some means not at this time known. Sir William Thomson (Lord Kelvin) has calculated that at the present rate of solar radiation, which amounts to about twenty-eight calories per minute, per square centimeter, at the distance of the mean radius of the earth's orbit, it would have taken somewhat more than fifteen million years for the heat generated by the contraction of the sun's mass from the orbit of the outer planet, Neptune, to its present size, to have been radiated away into space. This means that gravity, as a source of heat development, at the rate of solar radiation now known, would account for, perhaps, [12]

twenty million years' expenditure of energy in reducing the sun's diameter to but one-thirteen-thousandth part of what it once was. Not only does the nebular hypothesis fall short of accounting for the facts, as will subsequently be shown in this one particular of the length of time during which our solar system has existed, but it does not account for the variation in the obliquity of the poles of the planets, which are the attendants upon the sun; nor does gravitative attraction alone enable us to account for the tremendous velocities of some of the stars through space, such as Arcturus,—so that it may be safely assumed that we shall be forced to modify our ideas as to the value of the nebular hypothesis as a working basis, before we can harmonize our deductions from astronomical and geological grounds. Fortunately, the study of the spiral nebulæ has done much to elucidate our conceptions of the formation of the planetary systems, and from the discoveries made concerning these highly attenuated bodies of matter, a new hypothesis has been formed which will completely harmonize, perhaps, with these above stated facts, which could not be made to [13] accord with the nebular theory as previously held.

One source of the continued acquisition of energy by our sun, whose value is hard to estimate, is the shooting stars, or meteors, which constantly fall into it. Astronomical records show that, from the earth alone, no less than twenty million shooting stars are daily within the limits of vision, and inasmuch as the solar system is moving with a velocity of some twenty miles per second through space, it will be seen that the number of meteors which would come within the influence of the sun, being as it is about one and one-third million times the volume of the earth, would be practically infinite. What then must be said of the amount of energy acquired by the sun from these, although each meteor may have a mass of but a few grams, and perhaps may be only several hundred miles away from its successor? It is clearly demonstrated that, if no such additions of energy were received by our sun, in about ten million years its diameter would be reduced to one-half of what it is [14] now, and its mass, where now it exists as a gas, would then become a solid, at least upon the surface, and the quantity of heat received by the earth would become so small that life here, as we know of it, would be an impossibility. But if it be granted that the sun annually gathers, by its gravitative attraction, a combined mass of matter equal to the one-hundredth part of our earth, at a distance away from its center equal to the main radius of the earth's orbit, the energy dissipated by its radiation of heat at its present rate would be accounted for, while the sensible heat of the sun would not diminish, and the supply would be kept up indefinitely. That such additions of mass are made, there can be no doubt, but as to their quantity, we cannot, with our present knowledge, even hazard a guess.

In speaking of the solar heat and man's dependence upon it in a constant definite quantity, as one of the conditions of his existence, perhaps it will give us some just appreciation of his place in nature when we consider that the earth receives somewhat less than one two-billionth part of the heat radiated away by the sun, and while this expression makes the [15] quantity which we receive seem rather small, it is, nevertheless, large enough annually to melt a layer of ice one hundred and seventy-five feet thick—all over the surface of the earth, and is a little more than one six-thousandth part of the quantity of heat which would be generated by the burning of a mass of coal as large as the sun.

The researches of Halley and Adams have shown that from some cause, probably the result of gravity acting in conjunction with the varying eccentricity of the earth's orbit, the motion of the moon has been slightly accelerated as time went on, while the diurnal motion of the earth has been reduced by the action of the tides, and that the amount of this loss, in time, is equal to about one second in the length of our day, in 168,000 years. Now, this retardation in the earth's motion has not taken place at a uniform rate if caused by the reaction of the tides, as the nearer to the earth the moon was, the greater would be the tides, and, consequently, the greater would be the reaction; *i. e.*, the retardation. But assuming that [16] this retardation took place, on the whole, at twice the rate now prevailing, we would still have a period of six million years since the moon was thrown off by the earth, when our days were but three hours long.

Turning from the theories of astronomy, which are obviously more or less inaccurate, owing to their very nature and the character and duration of the observations upon which they are based, we come to the nearer and more certain deductions of geology. Here we have the phenomena of denudation and deposition with which to deal, and inasmuch as these are measurable at many places, and under many conditions upon the earth to-day, it is safe to assume that computations made from these measurements cannot be far from the truth. We know that practically all of the great formations of the earth were depositions of material from water which contained them, and that, in many cases, heat caused these strata to be metamorphosed or crystallized ages after they were deposited, and that in this crystallization many of the fossils remaining imbedded in the deposited matter were [17] destroyed. Concerning this deposition we know that it is going on to-day in the Atlantic and Pacific Oceans, where, in the deeper portions the Globigerina ooze is filling in these depressions with a deposit, resembling chalk, at the rate of perhaps an inch per century. We know that the Gulf of Mexico and several other ocean areas are being filled in with silt at the rate of as high as three inches per century. This silt is brought down in the tributary rivers and emptied into the gulfs. We also know that large areas in the Indian Ocean are being covered with coral and the débris from the coral reefs. We are absolutely certain that every geological period has had its characteristic fauna and flora, and that, in both the animal and vegetable kingdoms, some persistent types have connected it with both the past and the future, so that the fossils have become the “open sesame” to the geological records. We further know that the strata composing the earth’s surface are subject to elevation and subsidence, such as is now going on in the delta of the Nile, on the coast of the Netherlands, [18] and in many other places, and that such movement is a measurable quantity, given only the necessary time.

The total thickness of known strata measures but about one-three hundred and twentieth part of the earth’s diameter, or, in round numbers, twenty-five miles. Thirty thousand feet of this is quite readily identified as belonging to the old Archaic or Laurentian period, and constitutes the oldest stratified deposit known. Even in this, we find the remains of the Eozoon Canadense, which is now universally acknowledged to be the petrifaction of a foraminiferous living organism with a chambered shell. This means that, at this time, the earth’s atmosphere must have been very similar to what it is at the present, and that the temperature of the sea was somewhere between the boiling and the freezing points of water. What time had elapsed since the earth was thrown off by the sun in an incandescent state can only be faintly imagined. At the rate of deposition given for the deepest of ocean [19] deposits, this Archaic period would have taken perhaps thirty-six million years; but inasmuch as the water may have been far warmer then than now, and the rainfall more abundant, and the forces of denudation in all respects more active, this figure may be excessive. The next eighteen thousand feet of strata are easily identified as Lower Silurian, by the Diatoms which occur imbedded in them, and these formations include some of the largest deposits of limestone known. At our rate of calculation, this deposit would require no less than nine and one-half million years, and, in assuming this figure, no account is made of the intervals of time during which no deposit took place, although such periods of inactivity must necessarily have been. The Upper Silurian strata consists of twenty thousand feet, the fossils of which are the lower fishes, and for which we must assign a period of time equal to no less than twenty-five million years, inasmuch as these deposits are limestones and sandstones, or the remains of water-living animals and plants.

Coming now to the Devonian and Carboniferous periods, the strata of the former, which [20] is filled with fossils of the dipnoi, and the latter with those of the amphibia; we have deposits aggregating about forty thousand feet, and inasmuch as long intervals of time must have existed during the subsidence and elevation, and *vice versa*, of the land, while the process of coal-forming was going on, it is certain that our rate of deposition as heretofore used, is entirely too high. Dawson and Huxley have estimated, after most careful investigation, that the period of time consumed in laying down the coal measures, could not be less than six million years, and upon this basis it is safe to assume that between seventy-

five and eighty million years were consumed in laying down the Devonian and Carboniferous deposits. This makes Paleozoic time occupy about one hundred and fifty million years, which is probably under- rather than over-estimated. The flora of the Carboniferous period was composed of tree ferns of the Sagillaria and Lepidodendron species which have since become extinct; but the Lingula, a shell in the Cambrian and Upper Silurian formations, and the Terbratula, another shell, is found in the Devonian rocks. [21] Both of these are found living to-day, of the same identical genus and species.

In the Silurian rocks, we find the remains of an air-breathing scorpion, very similar to that found to-day, which shows that the atmosphere at that remote period was practically the same as we have at the present time.

In the Mesozoic time, we find deposits aggregating some fifteen thousand feet, and inasmuch as the Triassic sandstones were formations of slow deposition, our heretofore established rate will not answer the conditions. It has been estimated, after the most careful study of the Triassic and Jurassic measures, that probably no less than thirty million years were occupied by these periods, and that the chalk deposits of the Cretaceous must have taken at the present known rate, in like formations, somewhat over six million years of ceaseless activity. This gives to Mesozoic time a period of thirty-six million years, as a [22] minimum, and, from what we know of the rate of biological evolution, this figure is conservative. The first period of the Mesozoic time was characterized by monotremes, the Jurassic by marsupials, and the latter by the first of man's direct progenitors, the placentals. The flora of this period consisted almost entirely of gymnosperms, or naked seed plants, and, as far as we know, at the close of this second great division of geological time, conditions on the earth were, in all respects, very much as they are to-day.

Concerning the climatic conditions at the beginning of the Cenozoic time, we have every reason to believe that from the commencement of the Lower Silurian epoch, until then, there were no climatic zones upon the earth. Not only have coral formations been found in what are now Arctic waters, when we know that such reefs are formed only in waters where a moderately warm temperature is constantly maintained, but the cephalipods of the genus Ammonitoidea are found in what is now the Antarctic zone, and in the torrid. While, at the [23] present time, we cannot see how the obliquity of the earth's poles to the plane of the ecliptic could have been changed after the earth began its career as an independent planet, yet the facts above stated show that the climatic zones must have been unknown during the Tertiary period. Our common cypress, which is now so plentiful in Florida and California, had very close relatives living as far north as Spitzbergen, as lately as Miocene time. Magnolias, which are now so abundant in all of the Gulf States, are plentifully found in the Miocene strata of Greenland.

Returning to the length of the Tertiary period, it is well to note that, covering Wyoming and Nebraska, there was an immense lake, at least as large as Lake Superior is to-day, and into which several quite large rivers emptied, whose head waters were in the surrounding mountain ranges. This lake was at one time at least five thousand feet deep, and was completely filled up by the fine mud and silt, as the formation now shows, although at the known rate of filling in of smaller modern lakes, into which rivers, which originate in [24] glaciers, empty, this would have taken the better part of fifty thousand years. This figure is particularly conservative, as during the Eocene period, there could have been neither glaciers nor melting snowfields to assist in the denudation at the head waters of the tributary rivers. During the Miocene period, many of the best geologists hold that America and Europe were connected, and there are certain similarities in their fauna and flora which make this very probable. Supposing that this depression which constitutes the bed of the North Atlantic Ocean, took place at the highest known rate of subsidence, as measured upon the coast of Sweden to-day, it is almost impossible to state the amount of time that necessarily elapsed from the beginning of the sinking of this strip until it finally went below the surface of the water. That such changes in level did take place in the Tertiary period, no one can doubt, as chalk deposits in England, which must have been laid down in the deep oceans, have now an elevation of thousands of feet. The Nummulite limestone of this same [25]

period is found in both the Alps and the Himalayas, at an elevation as great as ten thousand feet. The consideration of the fact that the greatest known rate of elevation or subsidence is, perhaps, scarcely more than two feet per century makes the figure of five hundred thousand years, as a minimum for Pliocene time, seem rather conservative.

Toward the close of the Tertiary era the finishing touches were placed upon some of the greatest of the geological works. The folding of the strata, which had been going on for a long period in Eastern New York, was brought to an end by a violent rupture therein, and the out-rushing igneous rock, which was subsequently cooled rapidly by the floods of water flowing over it, gave us the beautiful palisades of the Hudson River. In the west, this folding resulted in the Rocky Mountains and the Coast Range, with their attendant high plateaux. In Europe, the Alps and the Pyrenees Mountains both belong to this period, while the grandest and highest of all mountain chains, the Himalayas, of Asia, were the culminating effect of [26] the gigantic foldings of the earth's crust.

The deposits of the Tertiary period will aggregate somewhat more than three thousand feet, and, inasmuch as this entire time was one of continued change in level, or the fluctuation between the subsidence of the earth's strata on the one hand and the elevation on the other (particularly in the Pliocene period), it is very hard to form any conjecture as to the actual amount of time required to do this work. Certainly, from what we know of the rate at which like phenomena are taking place at the present time in Northeastern North America, in Northwestern Europe, and Western Asia, the figure, as sometimes given, of ten million years seems very conservative.

In the brief review which we have just given, of what can be conservatively considered the minimum limits of geological time, we have taken into account generally only periods of activity, and in but a few cases has any estimation been hazarded as to the proportion which this was of the whole time consumed in bringing about the changes which the fossils [27] show so clearly to have taken place during the various epochs. But one thing should be kept clearly in mind, and that is, that no matter how long geological time may seem, it is but an infinitely small fraction of the period which must have elapsed since the world came into existence, as this globe had to cool down to below the boiling point of water before any geological records could be made. When thought of in this way, the Laurentian period becomes as but yesterday, and even man's dwelling place, which seems relatively so large, dwindles into nothingness, when compared with the vastness of the interstellar spaces or the size of the larger stars. Whoever conscientiously endeavors to form any idea of the teachings of astronomy and geology, must necessarily feel any prejudice which he had for man as the object and culmination of either the evolutionary or creative power, shrink at a tremendous rate, while over his mentality comes the sense of his diminutiveness, which awakens in him a brotherly feeling for even the primitive single-celled Laurentian Eozoon Canadensis, or the unnucleated monera of the present time. It must have been this same [28] sense-perception in the Hindoos which made them worship and revere life wherever they found it, and which inspired them with so active a sympathy toward all living things.

[29]

CHAPTER II

The Length of Time during which Man has Existed

In the preceding chapter, no mention has been made of the length of the Quaternary subdivision of Cenozoic time, and it will now be our aim to briefly review this period and then investigate the evidence which we have as to how much of this time man has been a portion of its fauna.

With the opening of the Quaternary Period, we come to what is undoubtedly the most remarkable era in all geological time. From a climate which had been, heretofore, uniformly, warmly temperate, with but few exceptions, we come to a period known as the Glacial, in which, by a depression in the temperature, all vegetation and animals in high latitudes were killed; *viz.*: in the central west—almost to the Ohio River; in Europe—to the northern part of Italy—while the addition of vast quantities of ice to the oceans, destroyed [30] all life in them to about the latitude of the northern portion of the Gulf of Mexico. Nor was this period of cold confined to the northern hemisphere, as the southern part of South America and Africa show. Concerning the cause of the Glacial Period, but little is positively known. Of the theories which have been advanced, it seems very plausible that perhaps two more clearly account for the conditions which must have then existed, if we consider them together, than all the rest.

The geological record teaches us that in the so-called Glacial Period, at least two distinct epochs of low temperature, and the consequential accumulation of ice, are to be definitely discerned. Still further back, we see evidence of glacial action in the Permian Strata, and possibly as far back as the Cambrian formations, although these eras of cold are not comparable with the period at the beginning of the Quaternary time. Croll, the Scottish physicist, first called attention to the fact that at certain regular intervals of time, the precession of the equinoxes, and the eccentricity of the earth's orbit, would so act in [31] conjunction as to render favorable a great many conditions which would certainly all point toward a period of extreme cold. He calculated that the earth was traveling around the sun in an ellipse of maximum eccentricity, and that winter was occurring in the northern hemisphere when the earth was furthest from the sun, for the last time some quarter of a million years ago. About eighty thousand years after this date, the coincidence of the two phenomena reached a maximum effect, and about eighty thousand years later, climatic conditions were again about as we have them to-day. Upon this hypothesis, another period of extreme cold must have existed some one-half million years earlier, as calculations upon the same premises as were used in the last computation will show. It is likewise true that, according to this theory, there must have been at least one other such period further back in geological time, and it is now to be seen whether our records, as shown by the strata, establish these facts.

Prior to the enunciation of this theory by Croll, the famous English geologist, Sir Charles [32] Lyell, from measurements of the strata, had calculated that the last period of glaciation occurred about as Croll stated, and that a period of cold and ice far more intense and extensive occurred some four or five hundred thousand years earlier. Mr. Laing has shown that, in order to make such conditions as must have existed at this time, not only is a low temperature necessary, but a certain amount of land must have an elevation sufficient to give the required initial fall to the ice river, so that it may move over the obstacles in its way, and that the higher such elevations in the Arctic zones, and the greater the humidity of the air when it strikes such elevated polar plateaux, the more augmented will be the probability of glacial activity. The rapidity of the glacier's movement can have no bearing upon the duration of the glacial period, inasmuch as a certain length of time may have been required for the ice-cap to form and push forward to a certain place, and it may have remained there for an indeterminate period, governed only by the amount of snow deposited [33] upon the original source, and the rapidity of melting at the moraine. In Eastern England, no less than four distinct boulder clays have been found separated by the débris deposited from the moraines of each ice sheet, and a few hundred miles away in France, the record is so certain that we know that the Arctic fauna and flora gave away twice for that of the warmer parts of the Temperate zones.

We are certain that both that portion of Scandinavia and Canada, which were the centers of the great European and American ice-caps, had an elevation greatly in excess of what it is to-day, at the time of the glacial epoch. During the first glaciation, Eastern Canada, or that part south of Hudson's Bay, was certainly twenty-five hundred feet higher than it is now, and the area covered by ocean formations or marine beds to the southward, show that at the

same time these sections were very much lower than they are at the present day. On the other side of the Atlantic Ocean, the elevation in Norway was at least a couple of thousand [34] feet more than at present; while both England and Ireland have risen a considerable amount since this period.

There are other ways by which we may form some estimate of the time which has elapsed since the melting away of the great glaciers, besides that given by Croll. From measurements taken on Table Rock, at Niagara Falls, which we know has receded in post-glacial times from Lewiston to the place which it occupies at present, we are certain that Lyell was not far wrong when he estimated this to have taken at least sixty thousand years. Shaler, on entirely different grounds,—mainly the redistribution of certain angiosperms—has arrived at figures in excess of these. Calculations made upon the canyons of the Columbia, San Joaquin, and Colorado Rivers, all show the estimations previously given to be conservative. Of course, the figures given will apply only to the time which has elapsed since the melting of the American ice-cap, as we have no means of knowing that the American and European glaciers acted at all in unison in their retreat to the northward. The [35] manner in which we can get some idea of the length of time required to account for the enormous quantity of work done in the Champlain period, is by taking into account the deposits which lie in almost all of the great river valleys which were covered by the glaciers, or whose watersheds were made into lakes by the subsidence of the land to the north, and the rapid melting of that portion of the ice-cap which contained stones, dirt, and other material picked up in the travels of the glacier across the country. The Rhine, the Rhone, and the Danube in Europe, and the St. Lawrence, the Connecticut, and the Mississippi in America, all flow through valleys lined with cliffs of loess. These accumulations overlying the coarser sands and gravels, and conforming to the river valleys, have been measured in the case of the Rhine, and were found to be about eight hundred feet in depth. It is unreasonable to suppose that these deposits being, as they are, material thrown down out of the water after the rivers had lost their transporting power, could have [36] accumulated at a greater rate than that now going on in the rivers, such as the Mississippi and the Nile, to-day, and if this was the case, these deposits must have taken no less than three hundred and twenty-five thousand years to form. Inasmuch as this work was all done during the Champlain period, this figure can be safely taken as the minimum for the measure of the duration of that time.

Arriving now at the recent period of Quaternary time, we find in Europe evidences of a very short and less intense period of cold; in the remains of the reindeer and other Arctic animals in southern France. Associated with these, although of a later period, we find the bones of the cave bear, hyena, and lion, and in many of the localities intimately associated with these are the bones of man. In fact, since the first discovery of the paleolithic implements in the gravels of the Somme, there have been almost countless finds of human remains in England, France, Belgium, Spain, Italy, and Greece, in Europe; Algiers, Morocco, Egypt, and Natal, in Africa; in China, Japan, India, Syria, and Palestine, in Asia; [37] in Brazil and Argentina in South America, and in no less than ten States of this country, associated with stone implements or paleoliths, and all of which, dating from the beginning of the Quaternary period, have established the certainty of human existence during the entire Quaternary era, beyond the possibility of doubt.

The evidences of the existence of the human species during Tertiary time are many, and hardly a year goes by without adding another discovery of human remains in the deposits belonging to this period. To begin with, the existence of man so generally and widely distributed as we find him to be at the beginning of the Quaternary period, is almost *prima facie* evidence of his occupation of the earth for some time previous. With the means of communication and the motives for it, such as they must have been at this remote period, we know that thousands of years would have been required to scatter any species all over the earth, as we have seen that man was from the locations of the remains found. Further [38] than this, there are three well-authenticated cases where the bones of Tertiary animals have been found, upon which there were cuts made by edged tools, which could have been made

only by human agency. Since these have been discovered, crude implements as well as human bones have been found in no less than a dozen places in both the Eastern and Western Hemispheres, which attest, beyond doubt, to man's having existed since the Middle Miocene or early Pliocene time. We not only have the opinions of such authorities as Rames, Hamy, Mortillet, Quatrefages, and Delauney, to accept in this matter, but the more recent thorough investigations of Laing and Haeckel.

Turning now from geological evidence to that founded upon other observations, as to the length of time man has been an inhabitant of the earth, perhaps one of the most interesting discoveries was that of the Tumuli or mounds of shells of such animals as the oyster, cockle, limpet, etc., and, along with this, the bones of birds, wild animals, and fish, together with stone implements and rude pottery. These kitchen-middens were first discovered in [39]
Denmark, but they have since been found in many countries where savages have lived along the coast. In many of the Swiss lakes, such as Zurich and Neufchatel, there have been found piles driven into the ground, around which, in dredging, human bones, as well as stone implements, have been brought up, and which are now known to have been the dwelling-places and remains of prehistoric peoples, who located in this manner so as to protect themselves from prowling wild animals and from their savage neighbors. From the amount and character of these deposits, we are forced to assume that the habitations were used for a long period, and from geological computation of the time required to deposit the silt around these piles in the Swiss Lake-villages, and from the similarity of the remains in the Danish peat-mosses and the kitchen-middens no period could be assigned to their antiquity of less than seven thousand years.

Our earliest record of historic man is found in the Valley of the Nile, where we can say [40]
with certainty that, over seven thousand years ago, there existed a high state of civilization under the old Egyptian Empire. Menes was the first recorded king who sat on the throne, and during the six dynasties of kings which composed this period, we see the rise to supremacy of Memphis, the building of the pyramids, the accumulation of a varied and extensive literature, and the perfection of the industrial and fine arts. In fact, so faithfully and indestructibly were the lines of human faces reproduced upon stone and other materials, that, at this day, we have no difficulty in identifying the different races of men from their resemblance at the present time. Menes, himself, carried to completion the great engineering feat of turning the course of the Nile so as to obtain a site for his capital, at Memphis. His successor was not only a patron but a practitioner of the art of medicine. From the monuments and papyri of the great tombs of Ghizeh and Sakkara, we have learned so much of the social and political life of Egypt at this period through the deciphering of the Rosetta stone by Champollion, that we may be said to have a very accurate knowledge of [41]
mankind, as his existence was conditioned in Egypt from four to five thousand years before the beginning of our present era. From Memphis, the seat of the government first shifts to Heracleopolis, and then to Thebes, and, during these changes, we see Egypt go back into the night of semi-barbarism (comparatively speaking), and after a long period of time to again develop a high state of civilization, under a new language and a new religion, in the eleventh dynasty. Egyptian influence extended from the equator on the south, to southern Syria on the north, and Isis and Osiris were the deities that commanded the veneration of the then civilized world. The kings of this dynasty built the famous labyrinth of Fayoum, where in the desert was formed a large artificial lake with tunnels and sluices so arranged that the annual inundations of the Nile were partially controlled by allowing the surplus water to fill this lake, and in the time of a drouth, letting it out to irrigate the valley as needed. Many temples, obelisks, and statues were erected, and the period was one of social [42]
and literary activity. About two thousand years before Christ, the seat of the government was transferred from Thebes to the Delta, and, shortly after this, the Hyksos dynasty began with a conquest by these invaders, who laid all Egypt under tribute. The conquerors adopted both the civilization and the religion of their subjects, and reigned over Egypt somewhat more than five hundred years. Their expulsion marks the beginning of the new empire, which extended the Egyptian influence from the Persian Gulf to the Mediterranean, and

subjugated both Babylon and Nineveh. From this time on, we are on certain and firm historical grounds, and with the founding of the great library at Alexandria, by Ptolemy Philadelphus, Egypt received her last great literary impulse, and since the fourth century of this era the part which she has played in the struggle of humanity has been inconsiderable. From other data gathered by Horner, who sunk numerous shafts across the Nile Valley at Memphis, and who brought up copper knives and pottery from depths approximately of [43] sixty feet, it has been calculated, from the rate of deposition in that valley to-day, that these remains are upward of twenty-five thousand years old. In other places, Paleoliths have been found that are undoubtedly very much older than the oldest temples and tombs. Furthermore, we know that in all the traditions of this country, the first inhabitants are represented as being autochthonous, which, if correct, must mean a very great state of antiquity, so far as man is concerned; if it be granted that this Egyptian civilization, which is known to have existed at Memphis, had to develop of its own accord in the Valley of the Nile, abundantly fertile though it always has been.

In the valleys of the Euphrates and Tigris Rivers, we have further evidence of the existence of a high state of civilization, as taken from the cylinder of Sargon I, which reads, "Sharrukin the mighty king am I, who knew not his father, but whose mother was a royal princess, who, to conceal my birth, placed me in a basket of rushes closed with pitch, and [44] cast me into the river, from which I was saved by Akki, the water-carrier, who brought me up as his own child." The date of this king is generally accepted as about four thousand years before Christ, and his exploits have been found pictured and described on the relics taken from Cyprus, Syria, and Babylonia. He did for Mesopotamia what Menes did for Egypt, and the prestige of his arms, and the renown of his civilization, spread over all Asia Minor. As a patron of literature, he founded some of the most famous libraries in Babylonia, and compiled a work of seventy-two volumes on Astronomy and Astrology, which was even translated into Greek. From recent researches, which have resulted in the finding of a great many clay tablets from the libraries of Mesopotamia, it seems certain that this Sargon I, upon his ascension to the throne, found the Accadian people (he was a Semite) already enjoying a high civilization, with sacred temples, a sacred and profane literature, and one who had a large and well-ordered knowledge of astronomy, as well as of agriculture and the [45] industrial arts. From the archæological remains which have been discovered, and, in particular, the marble statue of a king by the name of David, which was recently found at Bisinya, and whose antiquity is probably greater than 4,500 B. C., it is entirely conservative to assume that Chaldean civilization was as old, if not older, than that of Egypt; while no figure can be set upon the length of time which was required in these fertile valleys for this state of affairs to develop from a condition of barbarism.

In China, strangely enough, where the oldest historical records would be expected, we can find nothing to compare with the Egyptian papyri or the Chaldean clay-cylinders, and competent authorities are well agreed that there is great reason to suppose that much of the early civilization was brought from Accadia. In any case, at the dawn of history, we find China just as she is to-day:—an overpopulated, agricultural country, where blind imitation of predecessors ruled, and, consequently, progress, unless brought in by conquest, is extremely slow. If the empire was founded, as has been supposed, by an Accadian invasion [46] or immigration, which must have occurred about 5,000 B. C., or at least before the time of Sargon I, then these wanderers drove out the aboriginal inhabitants, the Mioutse, who have been crowded at last into the mountains of the western provinces. Certain it is that no greater date can be assigned to the civilization of this country, at the beginning of its historical record, than about 2,750 B. C., which time is known in Chinese tradition as the "Age of the Five Rulers."

Perhaps next in order of antiquity, comes the small country known as Elam, lying between the Tigris River and the Lagros Mountains, and extending to the south along the eastern shore of the Persian Gulf to the Arabian Sea. As in both Egypt and Chaldea, this country was brought into prominence by an aggressive and warlike king,—the famous Cyrus of history,—and, fortunately, his clay-cylinder; from one of the magnificent libraries

of Susa, or Shushan; was recently found by Mr. Rassam, amid the débris composing the [47] mound, which is now the only mark left to show where these great centers of population once were, in the fertile valleys and coast plains of this part of Asia; and this cylinder is now kept, with hundreds from like sources, in the British Museum at London. On this memorial cylinder, Cyrus gives his genealogy and an account of his exploits, and we find that he came from a line of kings, and held to the popular faith of his country, thanking and petitioning the whole Elamite Hierarchy of gods. Cyrus carried the Elamite arms into southern Syria and Palestine, and overthrew Mesopotamia about 2,300 B. C. It was the reaction from this conquest that caused some of the most gigantic struggles of antiquity.

Of the Phœnician cities of Tyre and Sidon, no definite historical record can be found earlier than from fifteen hundred to two thousand years before Christ. The Hittite civilization and influence we find at their height at about the same time, but here we can get no inkling of a greater antiquity for man than that given in the Middle Egyptian Empire. In [48] the cities of Troy and Mycenæ, we find civilization at its crest some five hundred years later, and it is not until we come to Arabia that we again find evidence of such high antiquity as we find in Chaldea and Egypt. The old kingdom of Saba was built upon the ruins of a still older, known as Ma'in, and the former was in its decline as an empire at the beginning of the eighth century, B. C. Now, contemporary history shows that this country has gone through all the transformations which Egypt and Chaldea had, and if this is also true of the Ma'in kingdom, then a date of great antiquity must be given to it. But these are not certainties, while in the cases of Chaldea and Egypt there can be no mistake. The Israelite civilization was at its height under David and Solomon, about contemporaneously with that of Troy and Mycenæ, and even the Hebrew tradition does not attempt to antedate the year 2,000 B. C., so that we can obtain no information from this source. Greece flourished but five hundred years before the present era, and even if we regard Homer as [49] authentic, no more remote date can be given to their earliest civilization than that of the attack by the Hellenes upon Troy, which was about 1,000 B. C.

In the Western Hemisphere archeologists are every year making valuable discoveries in Mexico and Peru which will probably give a remote date for the civilizations which flourished in these countries long before the conquests of the Spaniards. The great pyramids of the Sun and Moon on the Mexican plateau and the similarity of their design and orientation with the Egyptian all point to an interchange of ideas between the East and the West in prehistoric time.

The geological table given at the close of this chapter may be of interest, as a careful consideration of it, and the foregoing facts, will show the real value of man in nature. That man is ascendent now, does not, in the light of experience, mean necessarily that he will by any means remain so. In the warm Champlain period, we know that brute mammals thrived and attained gigantic size, and, as Dana aptly remarks, "the great abundance of their remains and their conditions show that the climate and food were all that could have been [50] desired." Yet the mastodon and the cave-bear have gone, together with countless other species which have become extinct, and, if science teaches anything at all, it tells us that nature delights in fostering one species at the expense of another. In the case of man, we most clearly see this. "For the historical succession of vertebrate fossils corresponds completely with the morphological scale which is revealed to us by comparative anatomy and ontology. After the Silurian fishes come the dipnoi of the Devonian period,—the Carboniferous amphibia, the Permian reptilia and the Mesozoic Mammals. Of these again, the lowest forms, the monotremes, appear first in the Triassic period; the marsupials in the Jurassic, and then the oldest placentals in the Cretaceous. Of the placentals, in turn, the first to appear in the oldest Tertiary period are the lowest primates, the prosimiæ, which are followed by the simiæ, in the Miocene. Of the carrhinæ, the cynopitheci precede the anthropomorpha; from one branch of the latter, during the Pliocene period, arises the [51] apeman, without speech, and from him descends finally the speaking man.

"Since the germ of the human embryo passes through the same chordula-stages as the germ of all other vertebrates; since it evolves, similarly, out of the two germinal layers of a

gastrula, we infer by virtue of the biogenetic law, the early existence of corresponding ancestral forms. Most important of all is the fact that the human embryo, like that of all other animals, arises, originally, from a single cell, for this stem-cell—the impregnated egg cell—points, indubitably, to a corresponding unicellular ancestor, a primitive Laurentian protozoon."

In the foregoing quotation, Haeckel clearly states what every geologist and embryologist plainly knows to be the truth, and in this case, as in all others, does it hold good:

"Because truth is truth, to follow truth
Were wisdom, in the scorn of consequence."

[52] For any human being, endowed with reason, to wilfully deceive himself could be nothing less than the height of folly. There is nothing more pitiful in all literature than Cicero, at the close of his "De Senectute," bowed down with years, and crushed with grief over the loss of his son and intimate friends, saying that if his belief in personal immortality be illogical and untrue, as he almost intimates that he thinks it more than likely to be, then he wishes to willingly delude himself for the satisfaction which he will get therefrom. How different from the man who, in his impeachment of Verres, or his defense of Archias, runs the chance of public disfavor,—always little less than death to the politician,—or even to that staunch patriot, who, with almost his last breath, defied the powerful Antony, although it cost him his life! How strange it is that Tully did not realize that allegiance to the truth, regardless of whether it be for or against us, carries with it, *per se*, the greatest of all virtues,—the virtue of sincerity. Polonius' death demonstrated the truth of his philosophy:

"This above all: to thine own self be true,
And it must follow as the night the day,
Thou canst not then be false to any man."

[53] In considering this problem of the origin and destiny of man, which, axiomatically, includes ourselves, let us remember that it matters not what we may wish, for we have no choice in the matter,—the truth is inexorable, and, consequently, cannot be influenced. It is directly up to each human being to work out this problem for himself, and this can only be done by the fearless recognition of the truth, wherever found. It is in this spirit that the preceding and the succeeding chapters are written, and if they contain misstatements and errors, the author will not only most cheerfully acknowledge the same, when proven to him, but will accept the logical conclusions drawn therefrom, although they may completely revolutionize the philosophy of life as he now sees it, and is trying to live it.

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[55] Geological Table, showing Approximate Minimum Duration in Time. Comparative Duration of Periods: Paleozoic, 12⁄16ths; Mesozoic, 3⁄16ths; Cenozoic, 1⁄16th. Geological Time, at least 200,000,000 years.

Geological Epoch	Sub-Division of G. E.	Petrographic Formation	Ascendant Form of Life	Thickness of Deposits
Paleozoic	Laurentian	Archaic Igneous Rocks	Eozoon Canadense	30,000 ft.
	Cambrian or L. Silurian	Potsdam Sandstone Magnesian Limestone Trenton Limestone	} Diatoms	18,000 ft.
	Upper Silurian	Niagara Limestone Medina Sandstone Saline Formations	} Lower Fishes	22,000 ft.

		Lower Helderberg		
		Oriskany Sandstone		
	Devonian	Corniferous or Upper Helderberg Limestone, Hamilton, Portage and Chemung Shales	} Dipnoi	
	Carboniferous	Crinoidal Limestone		
		Lower Coal Measures		
		Mill Stone Grit	} Amphibia and Sagillaria	42,000 ft.
		Upper Coal Measures		
		Permian Sandstone		
Mesozoic	Triassic	Sandstones	Monotremes and Gymnosperms	
	Jurassic	Wassatch Mountains	Marsupials	15,000 ft.
	Cretaceous	Sandstone and Chalk	Placentals	
Cenozoic	Tertiary—Eocene		Lowest Primates and Angiosperms	3,000 ft.
	Miocene		Simiæ	
	Pliocene		Catarrhinæ	
	Quaternary—Glacial			
	Champlain			
	Recent			

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CHAPTER III

The Physical Limitations of Existence

The tremendous strides made in the sciences of biology, histology, physiology, and psychology in the latter part of the last century, in connection with the development of the science of organic chemistry, have done much to unravel the life-mystery from a physical point of view. One by one the determining characteristics of the mentality of the *genus homo* have dwindled down until to-day even reason in its broadest sense is granted by the most conservative to some of the vegetable forms of life, and any unbiased mind will have hard work to determine the difference between the so-called "Brownian" movement of particles of gamboge when macerated in a little water, or even of bits of camphor when dropped upon the surface of water, and the movements of the particles of a protoplasmic mass; although one is caused by temperature changes, and the other by chemism. The [57] selectative growth of a vertex of a crystal in a saturated solution, and the claw of a crab, both of which have previously suffered the loss of their respective parts, are perhaps not so different as the words "organic" or "inorganic" would lead us to believe when applied as a classification to their principals. We know that in the life-process, as everywhere else, the law of substance and the law of the conservation of energy are held inviolate, and the theory which treats of life as a characteristic entity apart from the condition which makes it possible, is certainly false. The matter which composes the living body is chemically the same as that which we find everywhere. The fact that some living bodies have the power to form protoplasm out of its chemical elements or simple combinations of them, or only

assimilate such protoplasm after it has been formed from inorganic matter, constitutes, in the broadest sense, the difference between the vegetable and the animal life, as we now know it. But, whether living or dead, the protoplasm has about the same composition, and, [58] therefore, it must be that life *per se* is in reality only the manifestation of a form of motion. Science, by deduction, teaches us to look upon the living body very much as a theoretically perfect motor-generator set, the line terminals of the dynamo being the feed wires of the motor. Such a machine, standing still, would be "dead" in all senses of the word, although, potentially, its integrity would be the same as when in operation. But, once put in motion, this machine would directly come up to speed, and maintain itself at its normal rate of rotation until something interfered with it, or set up resistance within its circuit. From this time on, its rate of rotation would diminish until it stopped. If its integrity were suddenly violated, this stop would come at once.

Fifty years ago, heat, light, and electricity were all talked of, and believed to be forces whose existence was in no way dependent upon matter. Since the investigations of Thomson and Helmholtz, there is no unbiased scientist who can for a minute think that the [59] manifestation of any of these could possibly exist without material of some sort, such as in a general way we call matter. Even chemism, the most obscure of all physical forces, we know to be very closely allied to gravitative attraction, and to be so powerful since it operates through such short distances. In fact, if we adopt the only known feasible hypothesis to account for the formation of matter, we must, in the end, admit that motion, and not matter, is the most potent of all the primal causes which we can imagine to-day. If we could eliminate motion entirely from the universe, we do not know of a single characteristic which would be left, by which we could identify existence as we know it, certainly not even matter itself. Every investigation or experiment which has been made in the domain of the natural sciences has only amassed additional evidence to the tremendous amount already gathered; all going certainly to prove that at least the former two of the old three universally accepted postulates were false, *viz.*: the free moral agency of man, the immortality of the soul, and the existence of a personal God, or a power outside of and [60] superior to nature. The latter will in no wise interest us, inasmuch as experience has taught us that, in general as well as in particular, the universe is governed by law; all honor to Humboldt and Descartes for so clearly demonstrating this.

We are quite sure to-day that, roughly estimated, each pound of human flesh represents an amount of potential energy equal to about sixteen million foot-pounds, and that all of the life-processes are, in the last analysis, purely physical, and that they follow physical laws. Any exertion, either muscular or nervous, which we make, over and above that supplied by the energy in our assimilated food, will have to be taken from the stock as represented in the tissue,—consequently, continued work means hunger; if continued longer without food, it means exhaustion, and if continued longer without food and rest intervening, it means the deterioration of the tissues. The recent investigations of Matthews upon the manner of nerve action, and the fact that the same is due to substances known as reversible gelatines, as well [61] as to the cause of the negative variation of nerves exposed to exciting stimuli, all show that these most complex of life's processes are as purely physical, in the largest sense, as the most simple ones. The artificial fertilization of sterile eggs by the use of dilute solutions, whose actions might almost be called catalytic, still further emphasizes the fact that life's processes, even in the embryo, are essentially physical. Take, for instance, the sterile egg of the sea-urchin; the two per cent. solution of potassium cyanide; the continued constant temperature for a definite time, and all of the other conditions which enter into the development of this crude protoplasmic mass, are all physical factors, regardless of the fact that the result is a living organism, where we would, according to our old ideas, certainly expect an undeveloped sterile egg, or a potentially dead body. As with this ovum, so with the vegetable protoplasmic mass in the germinal radical of a seed: if its development is once started, it must continue its natural course without interference, upon pain of speedy [62] degeneration upon interruption, and, in this light, both the egg and the grain of seed are

places where life can be started (or motion on a larger scale begun) rather than living things before their development began, or while they were lying in their dormant state.

The death-knell to the theory of the personal immortality of the human soul, as ordinarily enunciated, was rung in 1875 by the German biologist, Hertzig, when he succeeded in bringing the living ovum into the presence of the ciliated sperm-cells under the microscope, while in the field of a lens of sufficient power to enable him to see clearly what took place. It is sufficient for our purpose to state that the minute the spermatozoon had pierced the cell wall of the egg-cell, the new individual of that species came into existence, and had, potentially, all of the life-possibilities, or was, in fact, as much alive as it would have been if this had happened under conditions which would have been favorable to its further development. The fact that the fertilized egg-cell immediately forms a mucous sheath the [63]
moment that its nucleus coalesces with that of the spermatozoon to prevent the further entrance of other spermatozoa, has done much to give rise and impetus to the theory that each cell has a soul, and that when these two nuclei completely fuse together, the resulting cytula, or fertilized ovum or stem-cell, has a soul peculiarly its own; which is made up in much the same way as two corresponding magnetic fields which are blended when two magnets are brought within the territory of each other's influence and unite to form a resultant field. That each of the sexual una-cells is distinguished by a form of sensation and motion of its own, and that this is true throughout the whole animal world, has given peculiar significance to these empirical facts of conception; as these will at once offer an explanation of the mysterious influence of heredity, such as was never possible heretofore. That each human individual has a beginning of existence with the coalescing of the nuclei of the parent cells, just as he has an end of existence with the violation of the integrity of his [64]
physical body, whether after the lapsing of one second or one century, must, to anyone who has observed biological phenomena like the above, be perfectly clear.

With the recent development of the science of embryology, there is no longer any ground upon which man can lay claim, in the largest sense, to free moral agency. Conditioned as he is, even before birth, by the influence of heredity, which science has now localized to the inner nucleus of the cytula, not only are his natural tastes and temperament quite largely determined for him, but often, in at least as large a sense, his mental and physical possibilities. It was our genial Dr. Holmes, who, some years ago, said, "If you would make a man, you must begin at least four generations before he is born," and, as embryology has since proven, he spoke more truth than he thought. Any person possessing a normally trained observation cannot help but note in their aptitude, or in their manner of doing certain things, their debt to their ancestors. How seldom (we might say, never) do we find in our [65]
friends what we had pictured and hoped for, owing, perhaps more than anything else, to the baneful influence of heredity. Degenerate features, scrofula, epilepsy, melancholia, etc., are all practically in every case the gift of some progenitor. Tendencies to insanity and crime are clearly recognized to-day by the administrators of the law, in every civilized country, as possible a legacy as coin, real estate, or chattels were a few centuries ago.

Whatever influence can be ascribed to heredity, as a positive limitation to human existence, we know absolutely that in a much larger sense is man a victim of his environment, particularly during the period of his childhood and adolescence. Professor Loeb has shown that at least as large proportion (possibly one-half) of the influence of heredity may be eliminated by the artificial fertilization of the ovum of many species, but embryology tells us that it is beyond the possibilities of science to ever render impotent the adaptive tendency of the individual. With human beings, the importance of environment is much greater under a high state of civilization than in the condition of savagery or [66]
barbarism, since the possibilities of achievement are infinitely greater in the individual well-educated than in a condition of illiteracy. What would the mathematical genius of Newton or Leibnitz accomplish in developing the calculus, had they been born among the Patagonians or the bushmen of Australia? Would Napoleon's military talent have availed him anything if he had been placed by birth among the cliff-dwellers of Arizona instead of the fomenting political corruption of overpopulated France? Even in a much more restricted

sense, Austerlitz, Marengo, and Lodi could not have become noted as the stepping-stones toward his imperialism, had he not attended the military school at Brienne.

In the discussion of this question, of the freedom of the will, or the free moral agency of man, it seems almost preposterous that educated people still cling to a theory so at variance with all known facts. That all men are created free and equal is not only relatively but absolutely untrue in the largest sense, but that they are all entitled to, and have equal [67] possibilities, so far as is within their power, is not only the meaning which the writer of the "Declaration" intended to convey, but is what every fair-minded man must necessarily accord to all of his fellow-men, even regardless of sex. In Jefferson's time, the last clause could not have been inserted, but at the beginning of the twentieth century, at least in four of the States of this country, woman has been given her full property rights, and in one she has full and complete citizenship on an equal basis with man. It cannot be many years until culture and a sense of equity will have been so disseminated that, at least under democratic forms of government, woman will be given her full civil and political rights, and regarded, as she justly should be, as no longer a forced parasite of man, but as potentially his equal in every respect.

While considering this matter, it is worthy of note that no less an authority than Havelock Ellis has conclusively shown that, not only in the moral world, where woman is and has [68] been the acknowledged superior of man, is she at least his peer, but also in her intellectual power and physical development as concerns the evolution of the race when surrounded by equally advantageous conditions has she occupied the very van. The chivalrous and insane worship which man has bestowed upon her as an exchange for her condoning his moral crimes, has tended both to make him lax in his morality, by reason of her readily granted forgiveness, and to rob her of her rights as his equal, by keeping her in seclusion and incapacitated for self-support. Probably no one thing has worked more harm to the race as a whole than this, and it is perhaps the crowning glory of the age in which we are living that woman, in America, no longer has to accept the physical and moral derelict which the average man is when he comes to the age at which he has finished "sowing his wild oats," and wishes to settle down to a domestic existence, as a candidate for reform under the tutelage of a pure and virtuous woman; or by refusing his proffer of marriage, become the laughing-stock of not only her suitor, but of her own sex as well, under the name of "an old [69] maid." As woman has become capable of self-support, man has lost his power over her, and his accountability for his actions has directly increased, just as woman has gone from under his power. That woman can have an honorable destiny to fulfill other than as a convenience or source of amusement for man is, at last, after countless ages of darkness, beginning to dawn upon the world of culture and intelligence.

Perhaps the greatest of all human limitations arises from the fact that after the gratification of physical desire, of whatsoever kind, comes satiety. The food which, to the starving man, was priceless, and which afforded him keen delight as he ate it, but nauseates him when temporarily his appetite is satisfied and try, as hard as he may, he can contain no more. How many a man has failed to realize this, and, after a youth of penury has, by the closest application, obtained a competence, and by its use, a gratification of his desires, but without consideration kept up his earning power, and hoarded his wealth, only to find, to his [70] sorrow, that it was impossible to furnish gratifications when he no longer had the shadow of a desire! No matter how much of a gormand a man is he can eat but a certain small quantity of food per day, the amount of which varies directly with the manual labor which he does, and, as a usual thing, the more he is able to purchase, the less likely he is to do that labor which alone will make his money of value to him from a gastronomic standpoint. Should his desire be to pale "the lilies of the field" with his raiment, he is still limited to a certain quantity and character of vesture, so that in comparison with "unreasoning" vegetable life, his pride will not be greatly gratified should he possess any sense of humor at all. If prestige and prowess resulting as the outcome of any physical endeavor be his ambition, he must realize that whatever pinnacle of popularity he may attain to, it will be only a few years until he must acknowledge a successful rival.

In the constant mutation of all the conditions which surround human existence, we find another most potent limitation to life. How few of these vital conditions, from a physical standpoint, are under our control? And yet how important some of the even trivial ones really are? The extent to which we are dependent upon health, comeliness, wealth, location, the physical aspects in the lives of our friends, and all of those complex details which go to make up our routine of life, can hardly be over-estimated. Starting, as the individual does, with a complete lack of experience from which to judge, and without even the power to exercise his reason, as this develops within him after years of mistakes, until his fund of recollection of these errors constitutes a basis of experimental knowledge, he is at best upon most dangerous ground in early life. He is handicapped just in proportion as he has not some guardian who pilots him until he is able to judge for himself of the character of his actions. It is the most pathetic thought which the human mind is capable of comprehending, that nature cannot be imprecated, bribed, or frightened out of her relentless rule of exacting full and complete consequence of our every action. Ignorance is no plea for mercy before her court, and her penalties are exacted without either fear or favor. Nor is her tribunal cognizant of any plan of vicarious atonement, but in many cases partially are we visited with the penalties of our progenitors' disobedience to her immutable laws. In view of these truths, let us not falsely be inflated with pride, because of any ephemeral successes. Let us in the moments of aggrandizement remember Massillon, as he stood at the bier of "Le Grand Monarch," and when we consider the truth in his opening statement, in that magnificent funeral oration, "God only is Great," we must feel our sense of importance leave us. Whoever stood erect with egotism over the corpse of a friend, even though he be as mad as Lear, raving, "O that a horse, a dog, a rat hath life, and thou no breath!"? Our control over our physical condition is worthy of mention only on account of its paucity, and we can never appreciate our true position on earth, until at times we are filled with the sentiment, so well expressed by Bryant:

[71] [72] [73]

> "In sadness then I ponder, how quickly fleets the hour,
> Of human strength and action, man's courage and his power."

It is not for us to be crushed with the appreciation of our real lack of importance, from a physical and moral viewpoint, but no scheme of life can be built upon a sure foundation without an understanding of what in the case of Schopenhauer, and some other brilliant intellects, formed the basis of their pessimistic philosophy. That we are not absolutely free, morally, to select our course, does not keep us from being relatively so, and, after all, the destiny of the individual is very largely within his power to shape. It is only through incessant and vigorous struggle that anything worth while is accomplished, and nature, in this and many other instances, is with us, since we become capacitated for greater endeavor through practice, and the habit, once formed, makes the effort for advancement become almost an instinct within us, so that our mental activity does not have to be continually consumed in holding our will to the course, but can be applied to fighting our way upward along it. Just as fresh recruits are unable to render the efficient service of veterans in actual warfare, so our capabilities, morally and intellectually, become augmented by constant practice. In the succeeding chapters, we shall attempt to show what is possible to be got from life by the use of all of the advantages which we have, and, in doing this, we shall elucidate a philosophy which is as consistent with the facts of life as known to us as we can make it.

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In the days of the decadence of the Roman Empire, when perhaps life was as uncertain as it ever was in the history of the world, the walls of the banquet halls of a certain clique were always adorned with skulls and other tokens of death, and according to all accounts, the mirth was more furious, and the licentiousness greater, as the guests were brought to realize the shortness of the time during which they had to live. We moderns may well get an idea from these feasts, in which the sentiment of Solomon, as voiced a thousand years earlier—than the instance cited, and under similar conditions, "let us eat, drink, and be merry, for to-

[75]

morrow we die," is the dominating one, and, in considering the shortness of life, realize that every minute should be filled with effort, as time which is passed is gone forever. Even at the best, whatever we may elect to accomplish, should take all of our attention, and, although we may give it this, we will still be able to find moments in which we did not live up to our possibilities.

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CHAPTER IV

The Purpose of Life

In the preceding chapters, we have attempted to get a view of life from a purely physical standpoint, and to show in what ways our race is connected with the terrestrial past, and how much the individual is dependent upon physical conditions, beyond his control, which constitute both the background and the framework of his existence. But as great as are these limitations, they are still not so important as they at first sight would seem, since at least a portion of each person's environment is of his own choosing, and both his body and his mind are, to a greater or lesser degree, what he may elect to make them. Diligence and pertinacity have accomplished wonders along this line, and the poor struggling manual laborer very frequently turns out to be the great discoverer, not only in the province of geography, perhaps on the "Dark Continent," but along all the lines of truth. Nor is even age [77] a bar to achievement, as our own bard tells us:

"Cato learned Greek at eighty; Sophocles
Wrote his grand Œdipus, and Simonides
Bore off the prize of verse from his compeers
When each had numbered more than fourscore years;
And Theophrastus, at fourscore and ten,
Had but begun his 'Characters of Men.'
Chaucer at Woodstock, with his nightingales,
At sixty, wrote the Canterbury Tales.
Goethe, at Weimar, toiling to the last,
Completed Faust, when eighty years were past."

However, it is far more safe to assume that, whatever we have to do, should be started early in life, for, if we are to carve out our own destinies, we shall need all the time which we have at our disposal. While fully realizing the limiting conditions of heredity and environment, it is difficult to disprove the statement of Cassius, when he says:

"Men, at some time, are masters of their fates;
The fault, dear Brutus, is not in our stars
But in ourselves; that we are underlings."

Perhaps Bulwer-Lytton has, in other words, more forcibly expressed a similar idea when [78] he says:

"We are our own fates. Our own deeds
Are our own doomsmen."

Let us not shift the responsibility of our being other than we desire upon the shoulders of either our progenitors or circumstances, but, taking what is, as a fact, we should try to so regulate our conduct that what we wish may come to pass. It is not he who mourns the power which he has not—who becomes either the master of himself or of others, as the

parable of the talents tells us, but it is he who, with a strong heart, dares and does, that achieves the great things on this earth. Perhaps as close an analogy as we can get to the real life-condition, is to represent the individual's power over himself and his destiny, by one line, and the power of heredity and forced environment by one of equal length; then his power of accomplishment will be the *vector sum* of these two lines. The line representing the uncontrollable condition will necessarily be longer (as the influence is more powerful) [79] in youth, while, during the life period, it gradually shortens up until it reaches its minimum at the physical and mental culmination of life, or when the individual is at his best, and lengthens again as old age comes on, and the physical and mental forces decline, and habit and environment become the prevailing factors. With our responsibility clearly before us, then, let us investigate what is worth having.

At this particular time, when all of the Occidental world is hopelessly insane with its Machiavelian money greed, it would seem that one of Horace's sentiments, uttered satirically, had become the slogan of the battle:

"Get place and wealth, if possible, with grace;
If not, by any means, get wealth and place."

Everything is thrown away by the average individual to-day, in his haste to satisfy his desire for inordinate wealth;—friendship, liberty, decency, humanity, honor, and even life itself, is hurled into the maw of this Mammon, which is not satisfied with such sacrifices, [80] and gives only hard, cold gold as a return for the priceless jewels of the human soul, and even this usually at a time in life when the little value which the mental ever possessed has gone, since there are no longer desires to gratify by it, with the one exception of that calling constantly for more of the counters which have lost their purchasing power. Our forefathers thought of wealth as worth having only because with it came leisure, and with leisure came culture through application. Sir John Lubbock has well said, "If wealth is to be valued because it gives leisure, clearly it would be a mistake to sacrifice leisure in the struggle for wealth."

Unfortunately, our country is going through that period which all other nations that have risen to "world power" have had to pass through, only, in our case, we have reached this period much earlier in point of time, owing to our vast natural resources, the activity of scientific research, and the multitude of inventions resulting therefrom within the last century. But, with the enormous increase in our national wealth, the legislative branch of [81] our Government neglected to pass such restraining measures as would insure that no gigantic individual fortunes were amassed, or, in case that they were to have such wealth, bear its proportion of the tax; and, consequently, we are confronting a condition of both anarchy and socialism, inasmuch as, to-day, our law-making and higher judiciary branches of Government both have a decided leaning toward whatever is favorable to capital, as against the interests of the laboring people. Our lower judicial and executive officials, however, are in this country and in England, owing to rank partisan political influence, almost hopelessly under the domination of organized labor, whose leaders (necessarily demagogues) use all the means within their power to corrupt our system of jurisprudence to further their own ends. It remains to be seen whether our Government, owing to its democratic form, will be able to right these evils and withstand the stress and strain which such a changed social system must necessarily involve. Remembering our experience at the [82] time of the Civil War, which was brought about by very similar causes, we have every reason to be hopeful of the outcome. Our vast alien population is the only factor which would be decidedly against us at a time such as this, since these foreigners have not had the privileges of citizenship where they were born, and into them has been instilled the blind hatred of all who possess wealth, owing to the monarchical feudal oppression of the poorer laboring classes, by the titled and plutocratic nobility of Europe. The most crying need of our time is a law equitable for poor and rich alike, and a judicial and executive system which will see that this law is enforced and its penalties are imposed impartially.

Perhaps the worst feature about the possession of wealth, is that it tends to dwarf and belittle the finer sensibilities of man. Its acquisition becomes a passion of such violence that, in the majority of cases, its possessor no longer cares for anything but the few paltry pleasures which it will buy. And as few as these apparently are, they are even less upon [83] closer examination, since only the counterfeits of anything of real moral value can be purchased for money. Purity, sincerity, culture, or love, owing to their nature, never could be bought for gold. Yet many an individual has acquired the opposite of the four "pearls of great price" just mentioned, by having too much money at his disposal; and most truly has it been said that "poverty is one of the greatest teachers of virtue." In fact, if it were not for the truth of our American aphorism, that "three generations cover the time it takes one of our wealthy families to go from shirt-sleeves to shirt-sleeves," our wealthy aristocracy would be much more profligate. There can be no heritage of equal value to children, so long as their poverty does not interfere with their fundamental education, comparable to their being born in straitened, rather than in opulent, circumstances. Consequently, we must accept the fact that beyond a small competence set aside against age, money has no value of moment, nor is it worthy of greater than a reasonable effort being spent to acquire it.

In this age of bustle and hurry, the nervous system is operated at a very high tension, and [84] as a result often refuses to do the work demanded of it. As a consequence, artificial stimulants are resorted to, with the most baneful effects upon our citizen body. Caffine, thermo-bromine, nicotine, narcine, alcohol, and, frequently, chloral, cocaine, morphine, and hyoscine, are used in some quantity, and often under several forms, for this purpose by over seventy-five per cent. of our population; and we have seen the statement that over ninety per cent. of the males, over the age of twenty-one, are addicted to some narcotic habit in this country. As a result of this, the vitality of the individual, suffering from these habits, is eventually lowered, owing to the effect which such stimulants have upon the involuntary muscular fibre; while the over-wrought nervous system, sooner or later, collapses, and we become, both mentally and physically, human wrecks. Particularly is the taking of the weaker stimulants, such as are more commonly used, harmful to children, inasmuch as, at this period of development, nature has about all that she can well care for, without [85] interference from the outside, and abnormal activity of the imagination at this time is not to be desired; since, under these circumstances with the majority of human beings, the imaginative impulse runs more to sensual than to æsthetic things.

The demands of our present civilization upon the individual, especially if he belongs to the coterie constituting the so-called social set, is so great for both time and effort, that the use of narcotic stimulants with this class is even greater than with the majority. Hence, it happens in America, where wealth is often acquired very quickly, that instead of bringing with it leisure, health, education, and refinement, as it should, we see very frequently the opposite result. On this account, in our country, we have no aristocracy, in any real sense of the word, and, in general we are forced to believe that real culture and refinement are becoming all the time more rare. The late Mark Twain has well illustrated this tendency in his trite character sketch, "The Man who Corrupted Hadleyburg." If our age tends toward [86] degeneration ethically from this cause, it does so even more from a physiological point of view. It is becoming more imperative all the while that we ascertain, for certain, that those with whom we must enter upon intimate relationship, should be able to show a clean bill of health, not only in a strictly physical sense, but in a moral sense as well. To-day, luxury and vice in our centers of population are corrupting and ruining a far larger proportion of our young and middle-aged men than ever before. Since all branches of our Government are influenced by plutocratic power, we are at a loss immediately to rectify these evils by closing up the dens of vice, and raising the age of consent, to stem the tide of infamy.

Any system of ethics is valuable as a guide for conduct just to that extent to which our interest is aroused. Inasmuch as with us all, self is always the paramount consideration, the safest and surest basis upon which we can build an ethical system is self-interest. Every human being of intelligence must sooner or later realize that he is on earth primarily by no [87] choice of his own, and, since he is here, it is of the first importance to him that he should

know, early in life, in just what way he will be able to secure the most out of his terrestrial existence. Now, as we take it, happiness, in its broadest and best sense, is alone the desideratum which is *per se* worth the individual's effort, and, in the aggregate, is worth the pains, both as an end to be attained, and through the effects of the struggle of obtaining it upon others. By happiness, we mean that feeling of contentment and satisfaction which should, at all times, be with the conscientious and sincere being, whether he is expecting to live a few more decades, or if he has arrived at that inevitable hour which must sometime come to all. In other words, let his end come when it will, if he has happiness, in our sense, he feels and knows that he has had all that he could get out of life, and, if he had to live it over again, he would wish to operate upon only those principles which he had used to guide his existence. In this sense, then, should happiness be the purpose of life, we will now [88] attempt to show what conditions must, of necessity, be fulfilled in order to attain it.

Happiness, for the individual, is but slightly dependent upon circumstances outside of his control, and, in general, is the result of living up to the highest moral possibility, which means the development of self in the highest conception. Since any environment can be made to serve the purpose, we are always so conditioned that some degree of happiness may be ours. The presence of the objects of our affection, in the form of human beings, is perhaps an actual necessary detail of our environment, without which we cannot experience that feeling of satisfaction and contentment which we call "happiness."

The matter of the greatest importance is so ordering your life that, in all your actions, you may be equitable in the most amplified sense of the word. This has, at all times, been understood by those teachers of humanity who have been reformers or saviors, from the priests of Osiris in Egypt and Zoroaster in Bactria, more than five thousand years ago, to [89] Abbas Effendi in Palestine, within the last century. And, strange as it may seem, the world has advanced perhaps less in the understanding and practice of this, than in any of the truths of lesser importance. The exposition of the Decalogue of the Pentateuch is less refined and more constricted in meaning and application than the Negative Confession in the Egyptian Book of the Dead, or the Vedantic philosophy, as given in the older Hindoo writings, or in the more modern Upanishads. From this point of view, the ethics of the Zend or of the Chinese sages are infinitely beyond the best modern practice of a majority of the people in any part of the earth. But all conscientious and fearless thinkers, regardless of the date or locality in which they existed, have realized that in every sense the "Golden Rule" is the only safe guide for conduct, if contentment and real happiness were the end sought. And if we once get thoroughly fixed in the individual's mind that this is certain, and that, no matter what the intention, if our acts are not ordered in accordance with this fundamental principle [90] of equity, we cannot be happy; we can rest assured that the individual would no sooner pursue a line of action which he absolutely knows will end in his own misery, than he would wilfully take a dose of poison. It is the putting of ethical matters upon a plain commonsense basis that will greatly assist, socially and morally, in revolutionizing the world. We have too long deformed and twisted facts to fit our fancies and prejudices, and we, as well as the rest of the human race, have paid "a pretty penny" for our delusion. The prevalence in all of the Western countries since Constantine raised Christianity to the prominence of a State religion, of a belief in a scheme of vicarious atonement, has worked inestimable harm to the human race. Certainly, in one particular, the doctrine taught by the gospel of Gautama Buddha is immeasurably further advanced ethically than that of his subsequent rival, Jesus of Nazareth, if we accept their gospels as correct reports of their teachings. Our blood, to-day, is tainted with venereal diseases, and our minds with a predisposition to infamy, [91] because our ancestors were not taught, and did not know, that from the consequence of their actions, both physically and mentally, they could not escape. How many men would work day and night to accumulate wealth, at the expense of their fellows, through unfair advantage and unjust means, if they only knew that this could not, on account of immutable law, add one iota to their happiness after they had secured possession of their so much coveted gold? How many women, for the consideration of a home of leisure and luxury, would rush into a marriage "of convenience" with a man for whom they knew they had no

semblance of an affection, if they felt, with certainty, that nature does not discriminate, even for a marriage license and a religious ceremony, between prostitution within the bonds of wedlock, and without, and that the horrors of remorse and disappointment are just as frightful in one case as in the other? How many young men would go out into the world [92] with a Satanic sneer upon their faces, a cigarette between their lips, and a glass of champagne in their hands, to sow their wild oats under the tutelage of their older degenerate friends, if they fully realized that, in this one act, they were forever incapacitating themselves for the highest pleasure of life, and that no matter what their lives might be thereafter, that nature would ruthlessly hold them to the strictest accountability for their actions, and that ignorance would be no plea for mercy before her bar? This inexorable impartiality of nature is at once the saddest and the sublimest matter of contemplation, depending entirely upon whether we are considering the awful weight of her penalties or the magnificence of her rewards. The old axiom of prudery that "knowledge often comes hard," is, in the cold light of fact and reason, a most palpable absurdity. It is to-day, the man and woman who *knows*; not necessarily from his or her own experience, but from the authentic records of the results of the actions of others, whose motives of narration cannot be questioned, who are well-equipped to fight the battles of life, and get from terrestrial [93] existence all the real pleasure which is to be obtained. It is from such simple yet grand souls that we have inspirations, and fortunate is that individual who can call himself a friend to a man or woman whose life has, from the earliest childhood, been so ordered that purity and sincerity have been kept inviolate, and all of the fundamental conditions of equity, as applicable to our fellow human beings, have been observed. A friendship with this character of human being is one of the few unalloyed pleasures of life, inasmuch as their company, when present, or their memory, when absent, is equally delightful. But to get the highest enjoyment from such a person, we must not only strive to reach his or her level, but, just in proportion as we do attain their moral altitude, we will have our capacity for enjoyment augmented.

Perhaps in nothing more than in our moments of relaxation and amusement should we be careful that we make our actions accord with this law of equity. How many a careless thing [94] we do without thinking what the result will be upon someone else! While the indulging in some amusements, such as a game of chance, for an insignificant stake, in order to maintain the interest, may be done with impunity by parties whose financial condition is such that the counters involved are of no moment to them, and the stability of their temperament is sedate enough so that the excitement of the game will not fascinate them with a snake's charm; yet are these particular participants sure that this is true of all of the company at such times? If not—and in no gathering of this kind can we be sure—there is a possibility of great harm being done. The same is also true of an occasional glass of stimulant, so much in vogue on all social occasions; of the occasional cigar or cigarette; of a little gossip or scandalous small-talk, which we all enjoy so much; and of a thousand and one other things which, in themselves, are almost positively not so harmful when properly conditioned, but which may, and frequently do, become the means of a fellow mortal's ruin. It is the lack of [95] discerning and realizing our responsibility in these matters of conduct that causes almost all of the misery of the world. It is not, however, enough that we act equitably only toward our friends and strangers, but we must, within reasonable limits, follow the injunction which the Chinese philosopher has so well enunciated twenty-five hundred years ago: "Requite hatred with goodness." In this particular instance, Lao-Tse's philosophy is more sensible than Christ's, who commanded us to turn the other cheek. It is not the part of good judgment that we should throw ourselves open to the ravages of our enemies, but it is essential that we do not wilfully harm or wrong even the least of human beings. It has been the most unfortunate thing for the Occidental world that those in high authority in the Christian movement should have so belittled their physical self in comparison with their spiritual natures, that anything pertaining to the flesh was thought unclean and worthy of no consideration. Everything which tends toward real beauty and sincerity, and helps to make us learned, just, and [96] charitable, must necessarily be worth striving for; and the possession of this should be

counted above all other things. At the same time, we must appreciate the awfulness of our responsibility, and continually test our actions in the light of their equity toward others, if we would be following the safe line of conduct. On the other hand, we should not be blind to the evil in others, and we should be willing to go to any reasonable self-sacrifice to better terrestrial conditions.

The philosophy, as enunciated in the foregoing, is not at all altruistic; it is, on the contrary, very selfish, and as such it has its chief value. If we teach our children that they must be good, not for the sake of doing the right thing, but for the purpose of increasing their happiness, it would seem but reasonable that such incentive in the latter case would be more potent than that given in the former one. Above all, the idea of vicarious atonement must be abhorred as a false conceit, and human beings should be taught that, in the moral as in the physical world, consequences are always absolutely true to their antecedents. As [97] Orlando J. Smith so forcefully and tritely says, "Know that the consequences of your every act and thought are registered instantly in your character. This day, this hour, this moment, is your time of judgment. He who deceives, betrays, kills—he who entertains malice, treachery, or other vileness, secretly in his heart—takes the penalty instantly in the debasement of his character. And so, also, for every good thought or act, be it open or secret, he shall receive an instant reward in the improvement of his character.

"Every night as you lie down to sleep, you are a little better or a little worse, a little richer or a little poorer, than you were in the morning. You have nothing that is substantial, nothing that is truly your own, but your character. You shall lose your money and your property; your home shall be your home no longer; the scenes which know you now shall know you no more; your flesh shall be food for worms; the earth upon which you tread shall be cinders and cosmic dust. Your character alone shall stay with you, surviving all [98] wreckage, decay, and death; your character is you, it shall be you forever. Your character is the perfect register of your progress or of your degradation, of your victory or of your defeat; it shall be your glory or your shame, your blessing or your curse, your heaven or your hell."

Truly has Plato said: "Character is man's destiny." "Whatsoever a man soweth, that shall he also reap."

[99]

CHAPTER V

Knowledge and Education

In entering upon the consideration of the part which knowledge plays in the making of human happiness, it seems impossible to secure a view of satisfactory breadth. What we, as children, knew as recently established facts was with our fathers, in many instances, entirely undreamed-of, so rapidly has the fund of knowledge grown within the last century. With us now, more than at any other time, is correctness of judgment advantageous, since, with increased learning, has come a fiercer competition in all the affairs of life, and more dependent than ever before is the individual now, upon his intelligence for his livelihood, as well as for his happiness. In this day, as never previously, are the words of Bacon true: "Crafty men contemn studies; simple men admire them, and wise men use them."

At the present time, also, as at no time in the historic past, is experience gained at the [100] hands of others or through them; so that the youth of to-day does not have to suffer the consequences of getting experience "first hand" on account of the lack of books, or of the prejudice or ignorance of his parents and teachers, as was so often the case in the not remote past. Furthermore, intelligent parents are taking their children into their confidence, and informing them upon all subjects with perfect freedom, since, inasmuch as knowledge must

come to children at some time, it is vastly preferable that it should come through those who have the interest of the inexperienced at heart, so that the proper color and perspective may be given to each and every fact. It is almost an axiom of pedagogics to-day that "ignorance is the most potent cause of crime." With the unprecedented dissemination of knowledge which has taken place during the past few decades, there has necessarily been a proportionate advancement in the culture of the masses, and, with culture, comes refinement and conscience.

[101] The cheapness and attractiveness of current literature, before the decline in culture which engulfed this country with the rise of commercialism and imperialism, was a thing of which America had every reason to be proud; and while we are now in the trough of the wave of progress, and will continue to be until money and commercial influence lose their present prestige, yet it does not take an optimist to see that, sooner or later, and somewhere, humanity will take advantage of its hard-won victories of the past and commence again its march toward better conditions.

Here, again, as with the individual, so with the entire race. As we outgrow the things of our childhood at the arrival of mature years, so has and will the human family as a whole. Who cannot remember the marvelous width and depth of the vistas of youth, as looked back at in the transmuting light of memory; and yet, when, after years of toil, we look at the same scenes again in reality, how disappointing and dwarfed they are! It is not the actual physical distance which has been altered, but we, ourselves. Our horizons have unconsciously [102] widened every day; our standards of comparison have been insidiously raised. Just as an inch, when compared with a foot, seems relatively small, with a yard, smaller, and so on until we reach the "light year," the value of the fraction is reduced to almost an inappreciable sum; so, as we progress through life, the momentous events of our youth lose their importance, and we look at our past through the minifying glass of experience, until at last we can hardly believe that the person whose life we have been reviewing is, in reality, one with our present self. Furthermore, events seen at a distance assume their true proportions, and we are less influenced by passions and prejudices after the lapse of time; hence it is only in retrospection that we are able to secure a view of anything which we have experienced without distortion. All normal human beings are so constituted that their psychic activity runs through a long series of periods of evolution during each individual life. As Haeckel has shown, five of these, at least, can be clearly defined:

[103] 1st—The Infantile Stage—from birth to the beginning of self-consciousness.

2nd—The adolescent stage—from self-consciousness to puberty.

3rd—The idealistic stage—from puberty to the period of sexual intercourse.

4th—The mature stage—from the time of sexual intercourse to the beginning of degeneration with age.

5th—The senile stage—from the commencement of degeneration with age until death.

The investigation of a human life, according to this outline, will prove, quite readily, the psychic possibilities of mundane existence.

As is well known, the child enters life with its cerebellum almost devoid of functions. The vital processes are carried on through the cerebrum and the medulla oblongata, purely by virtue of the stamp of heredity, and it is only after some days that the outside stimuli, such as light, heat, pressure or contact, etc., of the most elementary and primitive sort, are responded to by the infant. Its life is a matter of little or no individual interest to it, and it is [104] usually only after many months, and, in some cases, years, before the child has any conception of its own existence. Previous to the comprehension of its existence, the infant has to learn to see and judge something of the distance and size of objects by the use of its eyes, if not to invert the retina image. In a non-monistic sense, the child, during this period, has no soul, and its life or death is of absolutely no moment to it.

In the second, or adolescent stage, the most important of the individual's concrete knowledge is obtained—that upon which the basis of judgment rests in after-years. The developing mentality seizes new facts with avidity, and the memory is more keen,

potentially, at this stage than at any other. The value of correct associations at this era cannot be over-estimated, as ideas and habits formed in this period cling tenaciously to the individual. So deeply seated do they become that they form a part of what we call, in after-years, our instinct, and upon these memories and the foundation of habits we build our later [105] intuition. Voltaire has somewhere remarked that "Mankind is led more by instinct than by reason," and his observation is a just one. The acquisition of concrete facts or knowledge, in a specialized form, takes place at a very much more rapid rate at this period than during any other one, and the child's mind is very plastic, and absorbs information greedily. Nature has so arranged it that at this time, when most is to be learned, learning comes more easily than before or afterwards. In the normal child, the sense of duty begins to make itself felt at this juncture, and while this may be entirely an objective idea, nevertheless, it clearly shows an appreciation of justice in a regard for the rights of others. Coupled with this, there is a satisfaction which comes both from a sense of our knowledge—little though it be—and the feeling that this is being used as a guide to our conduct; a sentiment which Bacon eloquently expresses in his aphorism: "No pleasure is comparable with the standing upon the vantage ground of Truth." With this realization, life for the first time becomes worth [106] living, and our desire for more knowledge follows directly upon our appreciation of the power which truth gives over our destiny. The grasping and comprehension of this idea by the child is one of the greatest, if not the most important, points to be attained in any educational system. The absorption of abstract facts does not constitute, primarily, any part of an education, as Spencer has so clearly shown; but the implanting of the desire for truth, and the manner in which we should assimilate and use it, does attain the highest aim of any scheme of erudition. It is in this second stage of development that this must be done rudimentally; consequently, compulsory education must be carried at least through this period.

At the beginning of the third subdivision in the life of the individual, we find a peculiar nervous tension, which is invariably an accompaniment of this stage of physical development. The imaginative faculties are enormously stimulated, and, unless directed into the right channels, are sure to work to the eternal harm of both male and female children. [107] They should have been given a general knowledge of their physical peculiarities, previous to this time, by their parents, and should be allowed the companionship of playmates of the opposite sex so long as their characters are not objectionable. These close acquaintances between girls and boys should be fostered and allowed to become friendship, rather than be discouraged and ridiculed, by the parents and guardians, as is so often the case. The polarity of sex will assert itself at this early age, and the boys will strive to appear manly, strong and noble, while the girls, in a less positive sense, perhaps, but in an equally beneficial manner, will attempt to assume the womanly peculiarities of reserved kindliness and sympathy, which has made the female character so lovable and universally admired through all the ages. In this matter of the intersexual association of children, our public school system is usually in error, since, in most towns, the playgrounds of the boys and girls are separated by high fences, and communication is entirely cut off during play times. The association with a [108] large number of individuals of the opposite sex gives the child a broader basis upon which to form a judgment concerning any one, and if taught at the same time to use his mind analytically, will mean a correspondingly high ideal of his own. The ideal of the child is but the selected striking characteristics of his own acquaintances, coalesced into an imaginative being. This ideal is high or low, just as he has been taught to reverence and worship beautiful or unlovely and vile things; but, all conditions being equal, there is no other time in life when the human mind will so readily respond to the pure and noble stimulation of æstheticism as against the baseness and depravity of unbridled sensuality.

Much has been said concerning the difference in the systems of education and the class of facts to be presented to the male, as distinguished from the female, mind. There can be no doubt that the desired result of education in either case is broadly similar—the fitting of the individual for a useful and happy life. But it does not follow that, because in our present [109] civilization, the woman is necessarily the guardian of the æsthetic, while the man is

engrossed with the practical, that the same set of facts and power of investigation and reason are not just as good a preparation with which to meet the identical world-problems in the one life as in the other. Truth is the same to the boy as to the girl, and the material facts do not change whether faced by one sex or its opposite. Since in our industrial life, we have allowed woman to assume already no mean part, we have more than ever a valid reason for giving her the same course of training in general which we prescribe for her brother. Nor are we speaking of intellectual and moral education alone—but the physical as well—and this in its broadest sense. If we can but stamp indelibly upon the minds of our children that the natural consequences of their actions are the punishments, *per se*, which they must suffer in person, we have done about all possible toward making their pathways through the world lead at least through negative enjoyment, in place of absolute grief. There must be [110] inculcated a frankness and sincerity into the processes of their mentality, before correct judgment can exist, and, without this, no scheme of education can fulfill its mission. This honesty of character or intro-active integrity is a hard matter to instill into the child, since our methods and actions are very rarely consistent, as Richter, Rousseau, Spencer, and others—in truth, all of our great educational thinkers—have so well realized. The indispensability of this candor and fervor is none the less appreciated, however, owing to the almost insurmountable difficulties attending its procuration. It is just in this connection that intimate friendships with members of both sexes so nicely supplement the work accomplished by parental association, since the restraint certain to come from the authority of the parent or guardian, is unknown as an influence between those equal in age and station in life.

In the use of the beginning of sexual intercourse, as a line of demarcation between [111] periods of human existence, it would seem that a most natural and rational selection were made. As a proof of this, it is but necessary to call to mind the large number of barbaric and semi-civilized peoples who observe some initiatory rites or mysteries connected with the arrival of the individual at puberty or nubility, which with them is, to all intents and purposes, the same as, if not absolutely identical with, the beginning of sexual indulgence. Under our civic law, it is at this time that, through marriage, the human being assumes his full responsibilities, and, by the beginning of an independent family relation, becomes an integral, co-ordinate member of the state. It is at this "stress and storm" period that the real work of life—the fruition of existence—takes place. Beginning with the intimate association with another human being, whose rights and privileges are so interwoven with our own that it is frequently a hard matter to respect them without becoming distant, tolerating the idiosyncrasies, and lauding the virtues, in such a way that the former are diminished, while the latter are increased; trying to anticipate the wants and wishes of the [112] other so that they may be gratified—not for their own satisfaction, primarily, but for our own; seeing the pleasures of sensuality transmuted in the crucible of pain into the gold of a new existence; feeling the supplementary affection and interest, which, for the want of a better name, we call parental love, and, as the offspring grow older, the pride and elation which comes with their achievements; standing at last beside the grave, crushed with grief, raving like Macbeth in despair, or inspired with a transcendental insanity like Richter's—these all are the vicissitudes of mature human life, when at its best.

But, great and varied as they are, we find them, in fact, very closely fused together; and like all life-processes, they take place at a comparatively slow rate, so that before we are aware, we have arrived at the beginning of senile degeneration.

Prior to the ending of this fourth stage, the education of the individual has been finished, and it depends largely upon the previous mode of living, and the manner of thinking [113] whether he may not remain at his best for a while, or must at once begin the descent, from which there is no return. Fortunate, indeed, is he whose "star remains long bright at the zenith." Considering now what constitutes an education and the best means of obtaining it, we can profitably review the principles involved. As Spencer has shown, intellectual, moral, and even physical development for the human being must proceed in one direction—call it what we will. There can be no question that the infant, as an individuality, is homogeneous

in its ignorance and positive influence; that the first facts which dawn upon its germinating intelligence are concrete and empirical, and that all of its acts are simple, resulting from comparatively simple stimuli. Education, in its broadest sense, is the development, cultivation, and direction of all the natural powers of man, and its purpose should be to fit the individual for a useful and happy life. Education can come only through the acquisition of knowledge, but knowledge can be obtained in two ways. By knowledge, we mean [114] assurance born of conviction, based upon sufficient evidence, that a mental conception corresponds with that which it represents. The primal way of gaining knowledge is by experience, and undoubtedly this is the most satisfactory and thorough in all cases, where the result of such experience is not of such a nature as to potentially lessen the possibilities of the individual for future usefulness and happiness. Where this would occur, or where, for any reason, such as lack of time or opportunity, it cannot be resorted to, the accurately recorded experience of others can be assimilated through the memory and reasoning faculties, and added to the store of knowledge for the mind's use. In using the second method of acquiring knowledge, we should not only exercise the utmost care in selecting authorities who have a reputation for keenness of perception and truthfulness of narration, but we should not accept their dictum for what seems to be to us contrary to our previous experience, and unsound to our reason and judgment. Unless we are able to follow with our [115] reason their narration of the causes of events, it is of but little avail that we reach their conclusion.

The adoption of the scientific as distinguished from the Aristotelian system of education by the leading teachers of all the Occidental countries within the last century, has been of enormous benefit to the human race. We know now that the first thing to be learned is to maintain the body in as nearly perfect physical condition as possible—since the mind, to a marked degree, reflects the pathological state of the flesh. Consequently, hygiene becomes the fundamental science in the education of the human being, and facts relating thereto should take precedence generally over all others in the priority of time in a youth's education.

With the habit of health once established, the next matter is to see that those studies which will place the individual in possession of the greatest numbers of facts concerning his physical and mental environments, and which will give him the best training in observation [116] and reasoning, are pursued.

For this, natural science and its accompanying mathematics, are supreme, although enough manual training and domestic science should be included in the curriculum to insure an acquaintance with the matters of everyday life. Human physiology and anatomy, as well as the subject of parenthood, should also have a share of attention commensurate with their importance—and this has long been denied them. Elementary psychology must also have a place even in that course of education which should be made compulsory in every State. A knowledge of the elementary Latin and Greek is also to be desired in those countries whose vernaculars are largely made up from word-roots to be found in these dead languages.

As a matter of amusement and erudition every individual should have some line of work other than that of his daily routine, upon which to devote his spare time, regardless of the educational advantages which he may have had before assuming his responsibilities in the [117] world's work. This is equally true of woman. However, this should not be done with the intention of winning fame—although that is not impossible, since Newton developed his Calculus in his spare time after hours, while working as a clerk upon a very moderate salary —or attracting the attention of others, but as a means of self-development. Either some particular unsolved problem may be taken hold of, such as the sciences of chemistry, physics, or biology are so replete with, or the subject of literature and *belles lettres* may be studied most entertainingly and profitably. This class of workers were very much more numerous formerly than at present, owing to the rise of commercialism recently over the whole world, and it is among these that labor for love, rather than for profit, that much of the real accomplishment occurs. From our standpoint, no plan of human existence can be complete, in the highest and best sense of the word, which does not include this phase of

life, nor can any scheme of education be comprehensive which does not lead up to it. There [118]
is probably no natural law, the knowledge of which is of so much importance to the human race at large, as that commonly known as the law of compensation. How many of the thinking vulgar have for ages repeated the ancient adage: "You cannot have your pie and eat it." But it has remained for modern science to demonstrate how absolutely true this is, and Emerson only partly stated his case in one of his best essays: "Tit for tat; an eye for an eye; a tooth for a tooth; blood for blood; measure for measure, love for love. Give and it shall be given to you. Nothing venture, nothing have. Thou shalt be paid exactly for what thou hast done, no more, no less. Who doth not work, shall not eat. Harm watch, harm catch. Curses always recoil on the head of him who imprecates them. If you put a chain around the neck of a slave, the other end fastens itself around your own. Bad council confounds the adviser. 'What will you have?' quoth God; 'pay for it and take it.'" It is one of the largest parts of
any education, yea, it is the major, to know that you must pay for what you get in life [119]
whether you will or no, and that you are forced constantly to bargain and barter what you have for what you have not, and it is imperative that you see that you get something which you really want, and which will add to your happiness. And, in spite of yourself, you will get what you really want, for you can't help it; but for it you will have to pay out something, as you are doing all the time. Be sure to get something back of value, let your ideals be high, choose the thing which will give you the most happiness, but, remember, that you must pay its price. It is the sudden realization of the law of compensation, held possibly to an untenable extreme, that accounts for the recent rapid proselyting of the Christian Science cult.

[120]

CHAPTER VI

Religion and Ethics

Those who have noticed little children playing contentedly in the early evening, when one of their number suggested the change of amusement to the game of bugoo-bear, could not have failed to see the almost immediate alteration in the infantile mind from the most happy placidity to the most tense apprehension. Although the lights still burned at their utmost brilliancy and the game was entered into with perfect good faith by the children, nevertheless it was a matter of but a short while until all were thoroughly scared and expected the bugoo-bear to appear in any dark or shadowed place. This phenomenon has always seemed to be a very close analogy to just what happens with grown persons who are working up a religious fervor. Just as the darker the room is, the more apprehensive the
children become, so the deeper the ignorance of natural science is which engulfs the mature [121]
human individuals, directly in that proportion will be their capacity for religious fanaticism. The consciousness of man that he is dependent upon some supernatural being, has been and always will be the only basis upon which religious belief can be postulated. If we insert the idea of natural causes in place of the supernatural being in the foregoing sentence, then instead of a religious belief, we have the foundation for a system of ethics.

The dissemination of scientific knowledge in the last century has done more to break down religious caste and hatred than all other influences combined previous to that time. The authority of age has been appreciably lessened, the significance of miracles as certain proofs of divinity on the part of religious teachers has changed, the reasonableness or expediency of any system of vicarious atonement as a means of attaining either spiritual or moral "grace," and the realization of humanity in general that the individual expiates his
physical crimes by bodily suffering, and his moral sins by the tortures of a guilty [122]
conscience, are all verifications of what has occurred in the spiritual and moral world recently. The enormous strides made in proselyting by monism within the last few decades,

speak volumes upon this topic. The statement has recently been made, as the result of an ecclesiastical census conducted by one of the largest Christian denominations, that less than twenty-five per cent. of our people in this country regularly attend church service. The demand of the age for demonstration does not well accord with the credulity insisted upon by the powerful religious organizations of to-day. Religious beliefs are of necessity mere matters of superstition, and are based very largely upon the tendency of the human mind to bow down before authority, particularly, if it is insolent, and the power of a falsehood to put on the appearance of a truth, if it can but gain sufficient repetition. “Credidi propter quod, locutus sum.” The brazenness of this in much of the literature of religious revelation, particularly in the Hebrew, Christian, and Mohammedan collections, is most readily [123] apparent to the most cursory critic. In fact, no strictly religious literature at the time of the supremacy of the belief is free from it.

It is true of all religions that into the warp of superstition the woof of a code of ethics is interwoven. In the earlier stages of culture it has long been one of the accepted criteria of any faith whether its accompanying science of duty, as developed in it, was relatively good or bad. That there is a logical connection between these two elements no one can doubt, but this inter-relation is more frequently accidental than it is essential. Facts show that the instituters and early promulgators of all of the great religions of which we have knowledge, have seized with avidity upon any moral stipulations which were necessary for their locality or condition of life, and that if capital could be made out of these peculiar provincial circumstances, they were not slow in coining them to their advantage. An instance of this will be readily recognized in the inculcating within their tenets such doctrines as the [124] existence of an omnipresent and omniscient deity, whose favor may be won by supplication, humility, or sacrifice, or that of a personal immortality for each individual in a pleasurable condition as one of the rewards for belief and an endless existence of pain for its lack. As the number of converts increased, there has, in almost every case, grown up a powerful and wealthy sacerdotal class having special privileges. This cult of priesthood is soon corrupted by idleness and luxury, and the great influence which is attached to it by virtue of its vocation, has sooner or later been largely exerted to keep its parishioners under its control by means of ignorance and superstition. No matter how pure and sincere may have been its founder, or how elevating or altruistic its doctrines might be, practically all religions have suffered from the infamy and gross selfishness of their priesthoods, who by their short-sighted policies of opposing all adjustment of its dogma to newly-discovered facts, or their advancement along with contemporary civilizations, have but precipitated their downfall. [125] From one to another of the gods of heaven has the “sceptre of power and the purple of authority” passed with advancing ages, until it is no wonder that thinking people are asking, “Who will next occupy the old throne?”

The earliest religion of which we have any knowledge was that prevailing in the Valley of the Nile over seven, and perhaps as long as ten, thousand years ago. The origin of these Egyptian Aborigines we do not know—some have supposed that they came from a mixture of conquering Lybians, with the early dwellers along the lower courses of the river. Time has effaced all record of any religious texts which they may have possessed, yet we can tell from the manner in which they buried their dead, when not dismembered, with their faces always to the south, and lying upon their left side, while the corpse was wrapped in the skins of gazelles or in grass mats—that their ideas of a future life were tolerably well-defined. The civilization of this people was modified by the arrival of the conquering [126] immigrants who probably came from Asia, either by way of Arabia or across the Red Sea, and who, in turn, engrafted upon the religion of the conquered certain tenets of their own, and in this way formed a new system, the records of which we find in “The Book of the Dead,” which is not only the oldest book extant, but also the most antiquated collection of sacred literature of which we have knowledge. Exploration in Egyptian burying-grounds plainly shows that between the time of the disposition of the dead, as first noted, and the date of the supremacy of the “Book of the Dead,” that there existed civilizations in this valley who no longer buried their dead whole, with crude attempts at embalming with

bitumen, but who burned their corpses more or less completely, and threw the remaining bones into a shallow pit. After this came a race who dismembered the bodies of their dead, burying the hands and feet in one place, while the trunk and the rest of the arms and legs were placed in a grave, separate again from the head. It is impossible, of course, to even guess at the length of time necessary to effect such changes in the customs of people, but we [127] do know that at least seventy centuries ago the ritual contained in the "Book of the Dead" was generally accepted. And from this remote pre-dynastic time down to the seventh century after Christ, mummifying was, in some form or other, continually practiced in the Valley of the Nile. At the earliest time of which we have record, we find the Egyptians worshiping a number of autochthonic gods, of whom Osiris and his sister Isis were the chief. Their ideas of the deities were entirely anthropomorphic. Osiris having lived and suffered death and mutilation, and having been embalmed, was by his sisters, Isis and Nephthys, provided with a series of charms, by which he was protected from all evil and harm in the future life, and who had recited certain magical formulæ which had, in the world to come, given him everlasting life. It is certain that the practice of this belief changed in minor details many times as the semi-barbarous and sensual North Africans were subjected to the influence of their more highly moral and spiritual Asiatic conquerors. [128] Their tombs changed from shallow pits to brick sepulchres, and these were in turn replaced, by those who could afford it, by pyramids—the most substantial form of human architecture left by historic races. As showing the height of the civilization reached by the ancient Egyptians, it is worthy of note that the great Pyramid of Cheops is not only the most gigantic tomb ever built, but that it was designed to serve also as an astronomical observatory, and that its Orientation for this purpose is very accurate, when we consider that the Egyptians had no transits or other instruments such as we have now. Consequently, in the location of this work, they were forced to either use the shadow or polar method, and the latter being the most accurate was, in fact, selected by them. Had they known anything of the refraction of light as it passes from space into our atmosphere, and been able to make the correction for horizontal parallax, their location would have been accurate. The purposes of their astronomical observations, as made from this pyramid, were astrological [129] undoubtedly, as the completion of the tomb shut off the galleries which had been so carefully located.

According to the "Book of the Dead," the human economy was composed of nine different integral parts, all of which, except the "ren" or name, are comprised broadly within our idea of *body* and *soul*. The judgment of each individual took place after death, before the tribunal of Osiris, and in his Hall of Judgment. Here the soul, stripped of all chance of deceit or subterfuge, was forced to make, as his address to Osiris, the justly famous "Negative Confession," and the truth being apparent to Osiris and his forty-two associates, judgment was given impartially and upon an absolute basis of fact. The standard of ethics demanded of the individual can be realized from the fragments quoted from this address: —"In truth I have come to thee and I have brought right and truth to thee, and I have destroyed wickedness for thee. I have not brought forward my name for exaltation to honors. I have had no association with worthless men. I have not uttered evil words against [130] any man. I have not stirred up strife. I have not judged hastily. I have not made haughty my voice, nor behaved with insolence. I have not ill-treated servants. I have not caused harm to be done to the servant by his master. I have not made to be the first consideration of each day that excessive labor should be performed for me. I have not oppressed the members of my family. I have not defrauded the oppressed one of his property. I have neither filched away land, nor have I encroached upon the fields of others. I have not diminished from the bushel, nor have I misread the pointer of the scales nor added to the weights. I have not carried away the milk from the mouths of children. I have caused no man to suffer hunger. I have made no one to weep. I have not acted deceitfully. I have not uttered falsehood. I have not wrought evil in the place of right and truth. I have not committed theft. I have not done violence to any man. I have done no murder. I have ordered no murder done for me. I have [131] not caused pain. I have not done iniquity. I have not defiled the wife of any man. I have not

committed fornication, nor have I lain with any man. I have not done evil to mankind. I have not committed any sin against purity. I am pure. I am pure. I am pure." Those who were condemned before this tribunal were instantly devoured by the "Eater of the Dead," while the good were admitted into the realm of Osiris to enjoy everlasting happiness and life.

We turn now from the Valley of the Nile to that of the Tigris and Euphrates, lying about one thousand miles eastward. Here we find the home of the Assyrian and Babylonian empires, and interwoven with their religion we find many of the old myths which, in a corrupted form, occur in our own Bible. As the papyri of Egypt have been forced to give up their secrets, so have the clay cylinders of Mesopotamia. These, now lying in the British and Berlin Museums, tell in a purer and more primitive form than that found in the Old Testament, the story of the fall of man, and upon an old cylinder seal we have it illustrated, apple tree, woman, serpent, and all. The story of the deluge is also there taken from the [132]
library of Sardanapalus at Nineveh, just as it was written upon the cylinder more than two thousand years before Christ. All that is required to duplicate this deluge as far as the valley of Mesopotamia is concerned, is a tremendous downpour of water, coincident with a tornado blowing up the Persian Gulf, just as some thirty years ago, in the delta of the Ganges, nearly a quarter of a million persons perished during a like phenomenon in the Bay of Bengal. Here also we find the creation myth, and how after a terrible struggle with the engulfing waters, Marduk finally cut them in twain, and out of one-half made the roof of heaven, while out of the other half he made the earth. Then, too, out of mingled clay and celestial blood, he made the first two human beings, man and woman. The Babylonians and Assyrians believed in the immortality of the soul, dependent, of course, upon the mode in which it lived here. Thus, we find the fifth, sixth, and seventh commandments just as we have them in the Pentateuch, together with injunctions of humanity, charity, mercy, and love [133]
on the part of the follower of Babel. Speaking the truth and keeping one's word, as well as freedom from deceit, are also commanded, and infringements of these were regarded as sins punishable by human afflictions and ailments of all sorts, including death. Their idea of heaven was fairly well-developed, very greatly in excess of that of the Hebrews. Their heaven was a place of delight and ease, while Sheol was a place full of thirst and discomfort. It is also interesting to know that the Jews got their ideas of angels from the Babylonians, with whom, as far as we know, this idea was original, inasmuch as we find no mention of them in the Egyptian religious system.

Considering now the civilization which existed in the valleys of Mesopotamia from five to six thousand years ago, the first thing which arrests our attention is their knowledge of astronomy. In place of the Egyptian pyramid, with its sides Oriented toward the cardinal points, we find the ziggurat pointing the angles instead. This one fact shows that Chaldea [134]
did not borrow from Egypt, but developed her science independently of her western neighbor. The planets were all known and named, eclipses were foretold with accuracy, and to Accadia we owe not only our observance of Sunday, but our angular duodecimal scale. What length of time must have been required to admit of such a highly-developed civilization as this, with such advanced religious and ethical ideas, is beyond the faintest conjecture. Far more remote than that time, however, were the first settlements on the alluvial plains by the rude aborigines of the highlands.

On the plateau of Iran, in Central Asia, we find the location of the oldest known habitation of the Aryan race. Here, in the earliest twilight of our history, we find tribes of human beings who possessed well-developed religious and ethical ideas, and whose descendants, moving toward the southeast and into the valleys of the Himalayas, formulated the hymns which, when compiled, constitute the Vedas or the sacred literature of the Aryan Indians, while the portion who remained behind, became the progenitors of the Aryan [135]
Iranians whose religious lore we find in that wonderful collection known as the Avesta. In these two literatures, both of which are worthy of the deepest investigation and maturest deliberation, we have, so far as is known, the oldest idea of a non-anthropomorphic deity. His attributes with the Indian were so subdivided and abstracted as to allow this one god

essence to almost fill a panthenon. Their worship took the form of adoration for the striking grandeurs of nature, each of whom they regarded as a separate personal consciousness possessed of superhuman powers. Their religion seems to the superficial investigator to be but an exceptionally pure form of pantheism, but this is not, in fact, the case, since philologists to-day recognize that the overwhelming spontaneous impulse which forces the barbaric human mentality to give utterance to its deepest emotions, is a certain index of a crude monotheistic conception. It is Brahma who is the universal self-existent soul, and who comprises, in his infinity, both the god and the adorer. Of course, as time went on, these [136] ideas became more gross, until, with the introduction of caste, the ancient Vedic religion had lost much of its beauty and purity. The religious system had become both dogmatic and pretentious, and particularly insolent in its authority with the rise in power of the sacerdotal class, the Brahmans. While the Vedic religion is imbued with a spirit of strong belief in the efficacy of sacrifice and prayer, we find that this steadily increases in domination as we approach modern times. To all, except the Sudras or Serfs, a course of life conduct is prescribed consisting of four stages, *viz.*: as a religious student, as a householder, as an anchorite, and last, as a religious mendicant. Corresponding to these, there were four sacred debts, *viz.*: that due to the gods and paid by worship; that due to the ancient sages and discharged by Vedic study; that which he owes to his manes, and which he relieves himself of by the perpetuation of his name in a son; and last, that which he owes to mankind, and which demands his incessantly practicing kindness and hospitality. They believed in the [137] immortality of the soul and through metempsychosis, in its reward or punishment, according to its existence here.

In the sixth century before Christ, there lived in India a member of the Brahman class who was destined to more than restore Brahmanism to its pristine purity. Gautama Buddha was born as the son of a local ruler and his wife, whose conception was accomplished by her falling into a trance and dreaming that the future Buddha had become a superb white elephant, who, walking around her and striking her upon the right side with a lotus flower, entered her womb. Such is the Hindoo myth. This reformer altogether denied the existence of the soul, as an entity or substance possessing immortality in the individual sense, and he taught that the soul's future happiness in the abstract was entirely dependent upon its performance while here, as distinguished from any recollection or effect of its previous existences. He denied the authority of the Veda and the efficacy of prayer—in fact, his creed is best shown by a quotation from his gospel: "Rituals have no efficacy, prayers are but vain [138] repetitions, and incantations have no saving power. But to abandon covetousness and lust, to become free from all evil passions, and to give up all hatred and ill-will; that is the right sacrifice and the true worship." This is the kernel of the pure Buddhistic belief, and this declaration at once reduces his system from a religious to a purely ethical one. Excepting the myth of his conception, his life was a perfectly natural one. Nothing could be more real than his discovery of sorrow and misery, and his inquiry after its cause; nothing can be more touching than his parting from his wife and son, whom he loved so much that he could not hazard the pleasure of a last farewell. And under the stress of this situation, we are particularly told that he was human enough to give way to tears. No ethics could be higher in the aggregate than his—not once, but time and again, does he speak thus: "Indulge in lust but little, and lust, like a child, will grow. Charity is rich in returns; charity is the greatest [139] wealth, for though it scatters, it brings no repentance. Better than sovereignty over the earth, better than living in heaven, better than lordship over all the worlds, is the fruit of holiness. For seeking true religion, there is never a time that can be inopportune. The present reaps what the past has sown, and the future is the product of the present. Far better is it to revere the truth than try to appease the gods by the shedding of blood. What love can a man possess who believes that the destruction of life will atone for evil deeds? Can a new wrong expiate old wrongs? And can the slaughter of an innocent victim take away the sins of mankind? This is practicing religion by the neglect of moral conduct. The sensual man is the slave of his passions, and pleasure-seeking is degrading and vulgar. But to satisfy the necessities of life is not evil. To keep the body in good health is a duty, for otherwise we

shall not be able to trim the lamp of wisdom, and keep our mind strong and clear. There is no savior in the world except in truth; there is no immortality except in truth. The truth is [140] best as it is, have faith in the truth and live it. Not by birth does one become an outcast; not by birth does one become a Brahman; by deeds one becomes an outcast and by deeds one becomes a Brahman." What could more strongly emphasize the position of Buddha in regard to the infamy of the caste system, as it has been developed in India, than the parable of the low-caste girl at the well who had been asked by the disciple Ananda for a drink. This girl, seeing that he was a Brahman, or member of the highest caste, replied that she could not give him even a drink of water without contaminating his holiness. To this, Ananda promptly replied: "I ask not for caste, but for water." And when she came to Buddha with her heart full of gratitude and love for Ananda, he spoke to her in the following language: "Verily, there is great merit in the generosity of a king when he is kind to a slave, but there is greater merit in the slave when, ignoring the wrongs which he suffers, he cherishes kindness and good-will to all mankind. He will cease to hate his oppressors, and even when [141] powerless to resist their usurpation will, with compassion, pity their arrogance and supercilious demeanor. Blessed are thou, Prakrita, for although you are of low caste, you will be a model for noblemen and noblewomen. You are of low caste, but Brahmans will learn a lesson from you. Swerve not from the path of justice and righteousness, and you will outshine the royal glory of queens."

Very little wonder is it that, from North Hindustan, the doctrines of Buddha soon largely prevailed over Central, Southern, and Eastern Asia. Of the almost numberless sects into which Buddhism is divided, all go back for their inspiration to his teachings. In fact, he left little for his disciples to do in the matter of enunciating a pure and virtuous system of ethics, so thoroughly did he cover the ground himself. When we remember that Confucius was living in China at almost the identical time that Buddha was preaching in Hindustan, we cannot help but wonder at the strangeness of the occurrence—both enunciating a philosophy or system of ethics which was destined to affect the conduct of so large a portion of the [142] human race. As we read Lao-Tse's injunction to "requite hatred with goodness," it seems that he must have drawn his inspiration from an Indian source.

We return now to the location in Central Asia, and to the remote antiquity from which we digressed. At the same time the Indians in the southeast have been developing their religion, the Iranians have not remained quiescent. Their great sage, Zarathustra, or Zoroaster, had been teaching his dualism—in many respects the most subtle religious philosophy ever promulgated. From what little of the Zend lore that has escaped the ravages of time, we are able to-day to trace the outlines of a religion and philosophy based upon primal polarities. Ahura is to Zoroaster the great Life-Spirit-Lord, the Great Creator, the Great Wise One. His six characteristics are the fundamental laws of a righteous universe; simple, clear, and pure. Ahura creates the world during six periods: in the first, heaven; in the second, water; in the third, earth; in the fourth, plants; in the fifth, animals; and in the sixth, man. All of the [143] human race is descended from a primitive pair. There is a deluge, and one man is selected to save and protect representatives of each species so that the earth may be repeopled with a better race. Zoroaster questions Ahura on the Mount of Holy Conversations, and receives from him answers. So far, the parallel between Zoroastrianism and Judaism is complete. The difference now appears, for the former held that the world was to last four periods—during the first two, Ahura has complete authority. Then comes Ahriman, the self-existent evil-principle, and their conflict fills the third period. The fourth period, which opens with the advent of Zoroaster, ends with the downfall of Ahriman, and the resurrection of the soul for a future life. It is entirely within the power of the individual as to whether he wishes to come under the power of the Good or Evil Spirit, and with whom he chooses to ally himself. But the struggle is incessant, and watchfulness must always be maintained. So much for the religion—now for the ethics. To the Zoroastrian, the natural and normal in life [144] is not derided and scorned, nor is woman looked upon as "a necessary evil," as is the case in Buddhism, Christianity, and Mohammedanism. Here is a quotation from the Zend Avesta from the mouth of Ahura himself: "Verily, I say unto you, the man who has a wife is far

above him who lives in continence; he who keeps a house is far above him who has none; he who has children is far above him who is childless; he who has riches is far above him who has none." If we can use the moral code of the only remaining Zoroastrians in the world to-day, the Parsees, as a criterion to judge by, we must acknowledge that no religion enjoys a purer and more perfect course of conduct. Dr. Haug tells us that the following are strictly denounced by its code: Murder, infanticide, poisoning, adultery on the part of men as well as of women, sorcery, sodomy, cheating in weight and measure, breach of promise, regardless of to whom made, deception of any kind, false covenants, slander and calumny, perjury, dishonest appropriation of wealth, taking bribes, keeping back the wages of [145] laborers, misappropriation of religious property, removal of a boundary stone, turning people out of their property, maladministration and defrauding, apostasy, heresy, and rebellion. Besides these, there are a number of special precepts relating to the enforcement of sanitary regulations, kindness to animals, hospitality to strangers, respect to superiors, and help to the poor and needy. The following are especially condemned—abandoning the husband, not acknowledging the children on the part of the father, cruelty toward subjects on the part of a ruler, avarice, laziness, illiberality, egotism, and envy. Here we find a system of religion whose predominating symbolism was the worship of fire as the nearest human concept of Ahura, and well it might be, for those primitive people who had so sacredly to cherish it. In the Greek mythology, Prometheus was inconceivably tortured for filching from heaven the divine fire and carrying it to mortals. But according to the Zoroastrian philosophy, Ahura has placed all good within the reach of man, and it is for him to choose [146] whether he will avail himself of this or become a slave of Ahriman. It seems strange that from Bactria, either from the old Mazdaism or through Zoroaster, the world should have conceived its only monotheistic conception reasonably free from anthropomorphism, and whose associated code of ethics was so reasonable, firm and pure. There is in Zoroastrianism no thought of dogmatic bigotry any more than there is in ancient Buddhism, and its philosophy of primitive polarity well corresponds with what modern science has taught us within the last five decades. Both of these systems are meditative rather than militant, and, consequently, have not exercised the influence over the destiny of the human race which Judaism has.

In the consideration of the Jewish religion and its descendants, Christianity and Mohammedanism, we are face to face with the most warlike and combative monotheism which history has recorded. In the earlier form, and as in the Hebrew worship of to-day, Jehovah shares his authority with no one—in the Christian system, God and Christ are [147] equally powerful, while with Islam it would seem that Mahomet had slightly the balance of power, notwithstanding the oft-repeated declaration that "there is no God but Allah." Here we have the idea of a chosen people of God carried to its logical conclusion; the jealousy of Jehovah being in no wise an efficient operative cause for the terrible butcheries of men, women, and children, such as we have described in the Old Testament, as having befallen the enemies of the Hebrews when they were victorious. This wild and fanatical worship of a suspicious and revengeful God, although it called for the waging of countless wars upon his supposed orders, and even for the immolation upon the sacrificial altar of one's own children; yet it did not promise, until the rise of the Pharisees into potent influence; the pleasure of a personal immortality for his followers, or the punishment by endless torture for his non-adherents. The effect of the selfish idea of God-ownership we see inherited by Christianity with the ancient heredity qualification changed to one of faith. There can be no [148] question that the historical Christ was, perhaps, next to Buddha, the greatest religious reformer whom the world has known, if we accept as a criterion the number of individuals affected, and the nature of their work. As the enunciator of a system of ethics, it is impossible to see how the Jew could be regarded as the equal of the Indian; although no estimate of Christ can be consistently formed from the St. James version of the Bible, owing to the many and important interpolations of recent church enthusiasts. The plan of vicarious atonement is one of the most immoral doctrines of which the world has a record, and the contempt for woman which the Hebrew shows is not equalled by Buddha, although he, too,

was filled with that eastern asceticism which looked with disdain upon intersexual affection. The narrowness and bigotry which can regard an omnipresent and omniscient deity as working for the benefit of but a few followers as against the great proportion of human beings who have passed through an earthly existence entirely in ignorance of Him, and who, [149] on account of this, have to suffer eternal torture, has been responsible for no less than ten million murders in the name of Christ alone, to say nothing of the numberless victims of war and famine who have perished as a result of the insatiable thirst of Jehovah, Christ, and Mahomet for more influence in terrestrial affairs and an augmentation of adherents. The code of ethics prescribed by the Jewish régime was good—far in advance of that of the greater portion of their neighbors. But Egypt and Chaldea both played a very important part in this matter, as we must remember that Hebrew chronology only places the creation some four thousand years ago, and we now know that at least three and perhaps five thousand years previous to the possession of the Garden of Eden by Adam and Eve, the Valley of the Nile was teeming with a well-developed civilization. Christianity in the Egyptian City of the Greeks, through Philo, became deeply imbued with the spirit of Zoroaster, and the aid thus derived has been of incalculable value to it. The religion of Islam remains much as [150] Mahomet left it, and it has been, and now is, well suited for much of the territory over which it has dominion. While its code of ethics is reasonably high, its conceptions are usually grossly sensual, and, unfortunately, since shortly after the death of its founder, the institution of the church and the political organization of the various countries where it prevails, have both been under the same head, and are both, consequently, full of corruption.

Before taking up the possibility of a religious conception based upon the best knowledge we have, there is an interesting point to be considered. Between the two dates of 650 B. C., and 650 A. D., we have the work of Buddha, Confucius, Mencius, Christ, Philo, and Mahomet, as well as a score of lesser lights; in fact, all the great religious reformers who have been instrumental in shaping the beliefs of the majority of mankind since their time. And, stranger still, that since Mahomet, the world has seen no reformer who could wrest a following of any note from the established religions, although now, with modern facilities [151] for publication, it would seem to be a much easier task than formerly. And so it would be, were it not for the dissemination of knowledge, and the influence of the scientific system which has come about during the last century, so that now there is not that fanaticism prevalent concerning religious matters which was so rife at almost all stages of the world's history until recently. More and more are people beginning to realize the truth which Pope so well expressed in his Alexandrine:

> "For modes of faith, let graceless zealots fight,
> His can't be wrong, whose life is in the right."

About 1850 A. D., there began to be felt among scientific men a possibility that perhaps all of the natural phenomena of which we have knowledge are so inter-related that all of our observations are but different views of a few fundamental primary laws. These so-called laws or statements of facts in their natural order of sequence were always, and under all conditions, operative in natural affairs, had been quite thoroughly understood since [152] Humboldt's time. But it remained for Herbert Spencer in England, and Ernest Haeckel in Germany, to correlate the vast quantity of facts gained from experiment and observation along the various lines of scientific research. Particularly has the latter been a most potent factor in formulating the new and necessarily predominating theology of the future—a system of belief which is in accordance with everything which the individual knows, and which is always ready to accept a new fact upon demonstration, although its reception may revolutionize even its fundamental concepts. This doctrine, which has been most aptly termed "monism," stands squarely upon its basis of "empirical investigation of facts, and the rational study of their efficient causes." In place of worshiping the trinities of the old superstitions, it holds for reverence the "good, the true, and the beautiful" wherever found, and in antithesis to the sacredness of Sabbath and the church, it holds that for the

contemplation of the objects of its trinity, "all seasons to be summer and all climates June." [153] While denying the existence of a God outside of Nature, the freedom of the human will and the possibility of an immortality for the individual human soul, as usually understood, it does insist upon the sequence of effect upon cause, and shows that here, in this earthly existence, we are forced to be virtuous if we would be happy, and that although we are not completely masters of our fates, yet it fundamentally lies with us, in the vast majority of cases, to so conduct our lives that either misery or happiness will result therefrom.

Monistic ethics differ from those of any religious system, from the fact that the good of all is selected and digested into a code which looks toward the "greatest good to the greatest number." In doing this, individual effort is lauded and not proscribed, and altruism and egotism are developed with equal emphasis. The pleasures of this life are not forfeited to gain delectation in another, nor is the "illitative sense" considered a safe guide for conduct. Woman is not looked upon as fundamentally "unclean," nor is she denied any right or any [154] privilege which man enjoys. The righteousness of intersexual love and association is maintained, when in operation within a proper constraint, and the family is not only the social and political unit, but the religious as well. Love is held to be more potent than hate, and justice more beneficial than charity. There is no such thing as either the forgiveness or remission of sins—the responsibility of our actions is ours, and ours alone, and can be assumed by no other. The result is the same whether our acts come through ignorance or intention—it is for the individual to know before doing.

In the foregoing, a very brief outline of the progress which humanity has made in historic times in religion and ethics has been attempted, and, if an interest has been aroused in this subject, its purpose will have been fulfilled. No matter what creed we hold, we cannot afford to be bigoted, as simple investigation will show that in many ways we are but little in advance of our progenitors of seven thousand years ago. Only in the matter that we have a scientific basis to work upon, and a vast accumulation of observed facts, have we any [155] reason for pride. And this has been gained, at almost all times, against every obstacle which the church, as established at the moment, could bring into potency.

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CHAPTER VII

Love

Without doubt, the greatest source of happiness, as known to human beings, is love. Scott voiced the sentiment of all rational and normal persons when he said:

> "Love rules the court, the camp, the grove,
> And men below and saints above,
> For love is Heaven, and Heaven is love."

It is owing to the fact that we cannot enjoy anything to the fullest extent alone, since our nature is so constituted that we must have company in our pleasures, that friends are indispensable. Cicero realized this over two thousand years ago when he said that, "The fruit of talent, and worth, and every excellence, is gathered most fully when it is bestowed upon every one most nearly connected with us." Appreciating this, nature has given us the love and friendship of parents in our childhood; of the companions of our youth as we grow [157] older; of our life-partner at a later period, and last, the love of our children and grandchildren, so that, by an interest in their lives, we may become ourselves rejuvenated. In this, as in everything else of a physical or mental character, we start at the bottom, and, by a crescendo movement, reach the acme of the condition which with age diminishes, but in this instance the quality does not deteriorate. Our likelihood of forming acquaintances

and friends in later years is very much less than in youth, and, certainly, with our habits and idiosyncrasies established, as they are after middle age, the possibility of forming intimate friendships is very much decreased. In childhood and youth, we are more imaginative and less practical, and, consequently, our inclinations in the line of friendships will be more natural and less influenced by considerations alien to friendship itself. Nothing can be more true than the axiom of Cicero, "Friendship does not follow upon advantage, but advantage upon friendship." Clearly demonstrated as this is, but few people seem to realize it. For the [158] fundamental truth at the bottom of this matter is, as he further states, "the basis of that steadfastness and constancy which we seek in friendship is sincerity. For nothing is enduring which is insincere."

Of all virtues, sincerity is the greatest, yet, broadly speaking, how extremely rare! There is almost no trouble and pains which people will not take to make the world think that they are something other than they really are, when but a fraction of the cost might make them what they are trying to seem to be. The reciprocal relation of friendship demands sincerity, just in proportion as it becomes intimate, and this applies to all friendships, of whatsoever character.

The love of children is perhaps the greatest of all affections in the aggregate, because experience has not taught them to doubt and impugn the motives of others, since everything to them is just what it superficially appears to be. Our most violent heartaches come through dissimulation toward others, and nothing tends to make so callous and blunt our finer sensibilities as this. But just in proportion as we are sincere, must we be careful as to who [159] arouses an interest of more than passing moment within us, as after affection is once started and nurtured into luxuriance, it is not within our power to control it. While love, when reciprocated, can afford an ecstasy and happiness, otherwise unknown, it can, also, when not returned by the object of our affection, become the most potent cause of superlative pain and anguish. The expression of this truth by the greatest of all English poets, would, in itself, make his name forever immortal had he never written another line, and constitutes not only the soundest philosophy, but the most sublime of all sentiments evolved from the human mind:

"Love is not love
That alters when it alteration finds,
Or bends with the remover to remove.
Oh no! It is an ever-fixed mark
That looks on tempests, and is never shaken;
It is the star to every wandering bark
Whose worth's unknown, altho' his height is taken.
Love's not Time's fool; though rosy lips and cheeks
Within his bending sickle's compass come.
Love alters not with his brief hours and weeks,
But bears it out e'en to the edge of doom."

If all the race thoroughly understood the truth of these words, how much more happiness [160] there would be in the world! It is our trifling with our affections, or the reckless manner in which we bestow them upon others, which causes us our deepest sorrows. In childhood, with ordinarily kind parents, we have such experiences as afford us pleasant memories throughout life, simply because we lived in accordance with nature's law, which she makes easy for us at this age to follow, when we have no experience or reason by which we may be guided; but as we grow older, we form those habits of dissimulation which lead us into all sorts of trouble; simply because we can do certain things without our friends and acquaintances becoming cognizant of our actions, we are foolish enough to think that no harm can be done. If we would use our intelligence at all, we would see at once, that while it may be possible to deceive others in the matter of our thoughts and actions, we cannot delude ourselves. We would also realize that our actions and our thoughts are efficient causes in the making of our own characters. We would further see that in order to get any [161]

real enjoyment out of a friendship, of even the most Platonic kind, we must be able to play our part sincerely; in other words, we must be all that we attempt to make our friends think we are. The old proverb which tells us that we should go courting in our old clothes, is true in the largest sense in which we can apply it.

When we consider how much we are dependent upon our after-affections and their outcome for our happiness, we see that Coleridge resorted to no hyperbole when he wrote:

> "All thoughts, all passions, all delights,
> Whatever stirs this mortal frame,
> Are but the ministers of Love
> And feed his sacred flame."

Nor did he overestimate the bearing which each and every act of our life has upon our ability to either love or to be loved, since it is only when we are capable of returning affection as pure and unsullied as is given us, that we achieve the acme of delight. It is on [162] account of the necessity of the possession of these qualities which we have found to constitute the only possible basis for really lasting love, that we are so much interested in those of great affection. Emerson truly said that "all mankind loves a lover," and equally valid is his observation that "Love is not for levity, but for the total worth of man." It is the affection of any human being which constitutes his life and his friendships, both as living and when coming into his companionship, and when dead, as forming the memories upon which the imagination will fondly dwell, and that bring into his life whatever real satisfaction he may have. As a means of æsthetic development, nothing is of higher value than the affections, and, as a stimulant for action along this line, they are without an equal. We have only to remember the story of Damon and Pythias, to see that the ancients fully realized the power of affection; or to read what Plato puts into the mouth of Phœdrus, when he has him say, "Love will make men dare to die for their beloved, and women as well as [163] men."

What we have noted, heretofore, refers to all affections. Now we come to the culmination of all affairs of friendship,—that relationship which is known as marriage. Upon the immensity of the importance of this ceremony have almost all of the religious ideas of man been built, and in many cases, if not in all, to the utter profanation of the thing itself.

In the old tribal civilization which prevailed, the idea of marriage was ill-defined, and it was only as the desire for the ownership of children grew that moral ideas in this relation became at all definite. The fact that men wished to leave to their children property and chattels, which they might not have the opportunity of disposing of satisfactorily before their death, brought about a desire for marriage upon the monogamous and monandrous basis; and the fact that man was the owner of the property, and that the wife, until recently, had no inherent right therein, made the matter of the ownership of the children of primal [164] importance, so that the wishes of the father in regard to the inheritance might be fulfilled. It was on account of the supremacy of man in his own home that the family became the unit upon which the State is built, just as the male individual was the unit upon which the family was built, and citizenship was primarily evolved and applicable only to the male portion of the population, inasmuch as they were necessary to the State both as tax-payers and as warriors. This idea of the ownership of children enforced upon woman the moral code under which she lives in Occidental countries to-day; and, at the same time, and for the reasons above stated, kept man immune from it.

The significance attached to the sexual desire in this relationship is and has been greatly overestimated, to the greatest disadvantage of mankind at large. The most distinguishing feature about connubial affection as compared with Platonic friendship, is that in matrimony there is the added unification of the parties thereto, owing to the community of interest [165] between them. Their individualities are merged into one another; their development must be along similar or parallel lines. Richter has given us a good account of what a man should select in the character of his wife "to whom he may be able to give readings concerning the

more essential principles of psychology and astronomy without her bringing up the subject of his stockings in the middle of his loftiest and fullest flights of enthusiasm; yet he will be well content should one possessed of moderate excellencies fall to his lot—one who shall be capable of accompanying him, side by side, in his flights so far as they extend—whose eyes and heart may be able to take in the blooming earth and the shining heavens, in great, grand masses at a time, and not in mere infinitesimal particles; one for whom this universe may be something higher than a nursery or ball-room, and one who, with feelings delicate and tender, both pious and wide, will be continually making her husband better and holier."

[166] Since the time of Jean Paul Richter, woman has been allowed educational advantages more nearly equal to those of her brothers than heretofore; and, as a consequence, in many instances and quite often, do we find the lady not only the better but the larger half of the home, intellectually.

As Geoffrey Mortimer has well shown, love among cultured people is largely dependent upon the imagination. In savages and in the human race, primarily, when at this period of their existence, it took the form of hedonism, or even the more gross sex-worship, and it was not until mankind was removed far from the brute that his imagination developed, and his mind was capable of abstract thought, that his æsthetic nature began to develop. As his intellect became more profound, and his mental range wider, his power of abstract thinking was accordingly augmented, until to-day, with the average human being, love is only, in a restricted sense, dependent upon physical gratification. Herbert Spencer has given a very sure test of love, based upon its dependence upon the imaginative faculty. According to

[167] him, when we are absent from the one we love, the mental picture which we form of her, and the attributes which we at that time give her, are all found in her when in her actual presence. Then, we are really in love with the person whose faults we cannot see. The truth of the old adage, "Absence makes the heart grow fonder," still further shows the part which the imagination plays in love. There is no human being who has been so fortunate as to marry the first object upon which his affections settled, providing, of course, that his previous life has been spent so that he can enter into this relationship equitably, who did not find that if his love was reciprocated, life possessed a transcendent charm which words cannot express. Such an affection is necessarily based upon a most profound respect, and can only continue when this deferential regard exists. While feeling a security in its sense of ownership of the one loved, yet it asks and demands nothing, and can only bud, blossom, and ripen into its fullness in the atmosphere of kindness and absolute liberty. While sensual

[168] gratification, in the earlier stages, has been the means of nature in perpetuating the species, it is also the most powerful factor in the evolution of that community of interest which is the very soul of this attachment. The infinite number of little incidents which are never to be forgotten by any real lover, are all of a purely physical nature, but, in the aggregate, they form the nucleus of that "amazement of love and friendship and intimacy" which is like the melodious harmony of the sweetest sounds, which lead us into an ecstasy in every way supersensual. It is in the realization of such delight that Gay remarks, "Not to know love, is not to live."

We can best understand the real potency of sensual gratification in love, if we consider that those moments which are the subject of our most pleasant memories, are not those in which our desires were gratified, but those in which we ourselves practiced the most ascetic self-denial. Well has Schlegel expressed this sentiment when he says, in his essay upon the Limits of the Beautiful:—"Those who yield their souls captive to the brief intoxication of

[169] (sensual) love, if no higher and holier feeling mingle with and consecrate their dreams of bliss, will shrink tremblingly from the pangs which attend their awakening." But nature has here so arranged her course, that after marriage, our children's, or, in their absence, our lovers' affairs, become a part and parcel of our lives, and thus, what began as selfish interest, from the pleasure which we obtain from the presence of our loved one, is transmuted into altruism of the highest type. To those who love, there is nothing of the spirit of boasting in the words of "Valentine," when he says:

"She is mine own,
And I as rich in having such a jewel
As twenty seas, if all their sands were pearls,
The water nectar, and the rocks pure gold";

but rather of a pious appreciation of the being who has brought him such great happiness. There is something unaccountable about this passion called love, and anyone who has experienced it does not wonder at the words of Madame de Stael, "Love is the emblem of eternity; it confounds all notions of time, effaces all memory of a beginning, all fear of an end." [170]

In speaking of the happiness which is to be attained by means of love, we should not fail to note the fact that in order to secure the most enjoyment from it, we must be able to satisfy the conditions for which such a close and reciprocal relationship calls. It is here that the philosophy of living, based upon self-interest, is by far the safest guide of conduct known, since once the fact that we must be able to give to the ones whom we love all that we ask of them is instilled in our minds, we will have a most powerful stimulant to virtuous living. And in this matter, there is no chance for misunderstanding. If we would get all the happiness out of love, we must go into it according to the old injunction given to clients who were both about to try their case before a court in equity: "You must enter with clean hands." It is strange, that even in the affairs of a Platonic friendship, a citizen of morally rotten Rome at the time of the decadence of the consulate, should realize that "Nothing is more amiable than virtue; nothing which more strongly allures us to love it," and yet, two thousand years later, so few people are practicing this truth, and many, who, in their ignorance, will utterly deny it. This has largely come about from the fact that, in times past, man has been able to mold the opinions of his sisters, and, consequently, virtue was not demanded from him. But if we will teach our children that it is essential to their happiness that they should be virtuous, so that they may enter into an *affair d'amour* with equity, and obtain from it the happiness which it only can bring, we would sweep from their paths, with one stroke, the temptations of licentiousness which are to-day proving to be the ruin of the majority of the young men of this country. We should teach our boys that they must be able to give to their wives a mind and body as unpolluted by debauchery as they expect and insist upon receiving, and that unless they are able to do this, the pleasures of love, as it affects the marriage relationship, are forever beyond their power to experience. We should teach our girls that they should demand, from the man who asks for their hand, as clean and as spotless a past as they are able to give him, and that, unless they insist upon this, matrimony will not turn out to be the "grand, sweet song" which they have been told about, but will be more like an "armed truce." Connubial love is of such a nature that it will not find happiness in the contemplation of the possibility of a rival, and of all of the exacting passions with which humanity has to deal, undoubtedly this of love is the strongest. The old saying that "familiarity breeds contempt," is based upon this fact—that unless we are able to maintain, in the one we love, the esteem for us, which under a smaller knowledge of our individuality, we have excited, the sentiment of attraction soon turns to one of repulsion even more potent than its opposite, and even as great a source of misery as is the repulsion of hatred; not even being secondary when compared with jealousy, which "mocks the meat it feeds upon." What possibility of happiness is there in marriage where there is constantly running through the mind a comparison of the partner which you have, and a possibility of what you have given up? How much happiness is possible when you are always comparing yourself with some rival, and wondering what your lover sees in him which you do not possess? It is the strongest argument in favor of monogamy and monandry, that only under this condition can the marriage relationship be equitably fulfilled, even more potent than the necessity of parental guidance in directing the development of the growing mind. [171] [172] [173]

Man is, by nature, socially inclined, and it is only in the society of his fellow-men that he really matures intellectually and morally. Under the influence of love, in the most intimate association with a limited number of others, preferably of his own kin, who will reprove his

faults gently and reasonably laud his courage and achievements—he finds the perfect element for inspiration and development. Holmes has expressed this sentiment beautifully in his lines:

[174]

"Soft as the breath of a maiden's 'yes';
Not the light gossamer stirs with less;
But never a cable holds so fast
Through all the battles of wave and blast."

The enthusiasm which comes from the struggle of maintaining a home for your loved ones, where privacy and comfort may be found; a retreat from the cares and trifling annoyances of the work-a-day world, makes the place of abode a shrine where all of our interests are centered. Most truly has Longfellow said:

"Each man's chimney is his golden milestone;
Is the central point from which he measures
Every distance, through the gateways of the world around him."

Without having experienced a real and genuine affection, no man can realize the highest possibility. Edwin Markham has most truly said that the love adventure is the episode of every human life, and, without it, no existence is complete. There is no other earthly possession with which it can be compared; consequently, we cannot be too careful in seeing that our lives conform to the necessary demands of the nature of this passion. The effect of [175] love upon human ethics cannot be doubted. The finest faculty which we have is that by means of which we are able to judge right from wrong, and is what we call conscience. With this truth in mind, we have only to remember a portion of an incomplete sonnet of Shakespeare's, saying, "Conscience is born of love."

In this observation, as in many of his others, the bard of Avon has reached the heart of the matter at once. Without love, we would have, and could have, no conscience, as we are only considerate of others when we have much at stake ourselves, and wish this consideration for reciprocal reasons. Had we no affection, we would have but little incentive to moral discrimination. In this sense, as well as for its happy memories,

"It is better to have loved and lost
Than never to have loved at all."

In considering the advantages of real love, it is also important that the disadvantages of [176] its counterfeits should be made clear. In the first place, many of the noted teachers during the last decade have called attention to the frightful reduction in our marriage and birth rates; and this, notwithstanding the fact that we feel that we are progressing upward in the scale of civilization. Now, while many of our political economists believe that the increased cost of living has been largely responsible for this, it seems that we should not, however, attach too great importance to the claim. There has been a growing of the moral sense among women of the Western nations, and particularly in America, during the last few years, which has tremendously influenced the foundations of our civilization. The Women's Christian Temperance movement, under the guiding hand of Miss Willard, not only advocated the prohibition of the sale of alcoholic stimulants, but also became a tremendous power in the social purity crusade, which began to sweep over this country some twenty-five years ago. The agitation, which resulted from this reform movement, developed facts [177] which were previously unknown to the general public, and in every way caused people to begin to think about subjects which had previously never been brought to their attention in a specific way. When the statistics were published that, in this country of eighty million people, we were having one divorce for every twelve marriages, and that every year showed a decrease in the marriage and birth rate, thinking people of all classes began to seek to find the cause for such facts.

It would seem that one of the primal causes for the decrease in the marriage rate is the ease with which vice has been allowed to become organized in this country into a regular system, which is conducted upon a basis of cold-blooded business calculation. The fact that we have between six hundred thousand and three-quarters of a million of prostitutes in America, and that this class of people is being recruited at the rate of over fifteen thousand per annum from foreign countries and about seventy-five thousand per annum from our own [178] country, is certainly highly significant. Furthermore, the fact that probably three-quarters of the women in America who marry are forced to undergo major operations within the first five years of their married life, on account of the moral delinquency of their husbands, has certainly not given any impetus to marriage in our own country. We have also to remember that over one-third of all the blindness in this country is traceable to a like cause, and that this occurs in innocent children, who usually are less than a week old when their sight is lost, as the result of venereal infection. Furthermore, in many of the homes which we all have an opportunity to observe, there is not that happiness existing which would lead thinking people to rush ruthlessly into matrimony, and the necessity for making divorce easy and the marriage relationship hard to enter into was never as imperative as it is to-day. The majority of the children being born, and in whose hands the entire welfare of this state in the future will rest, are usually those of parents who are either unfitted or unable, [179] physically, intellectually, and morally, to give them such character and education as will make them good citizens; in other words, vice and crime are breeding faster by far than moral restraint and virtue. Whenever we are able to have our young men understand that self-control on their part is a matter of first importance in the requirements of good citizenship, and a prime requisite if individual happiness is desired, then and only then will we begin to find marriage becoming more popular and divorce less to be desired by those who have entered into this relationship.

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CHAPTER VIII

Problems of the Future

The close of the last century found humanity under a different aspect than ever before. Westward and ever westward had swept the course of empire until the early years of this decade found the Mongolian again demonstrating his superiority over the Slavonic people of Eastern Europe. For centuries the battles for individual freedom of body and mind had been fought in torture chambers, at heresy trials, at the stake of every auto-da-fé, as well as in the legislative halls of insular and continental Europe, and finally this struggle has culminated in the greatest, fiercest and most devastating war of modern times, which was America's tribute to the cause of democracy and freedom. The nations of Europe have looked with wonder upon the growth and sudden rise into importance of the American Confederacy of States, and crowned and titled tyrants, ruling by the "divine right," have [181] long dreaded the absorption of American ideas by their subjects or American interference with the course of governmental procedure. With the advancement and dissemination of learning, democratic government has got to come, and woe to those who oppose it when the time is ripe. Poor, bleeding, ignorant Russia is at this minute in the throes of internecine strife, and no one realizes better than those of the autocracy who by their selfishness and sloth have brought upon themselves the engulfing tide of revolution, what was meant by the dissolute associates of the French Court directly before the horrors of the Commune when they used to say "After us the deluge." And little as they expected it, this deluge did not wait for them to leave, but in many instances helped to usher them from the field of human activity, upon the block, before the guillotine. It is not at this time even improbable that the great Siberian prisons may soon be filled with the bluest blood of royalty, and perhaps the [182]

Kara mines will yet be worked in by their owners, for the benefit of the revolutionists. But whether this comes to pass or not, we know that we have seen absolutism gradually give way to constitutional forms of government, and these in turn become metamorphosed into republics. And in these democracies we see a tendency to return to a centralized form of government, particularly when the chief executive is an individual whose judgment, although it is in error, has been actuated by motives which no one can impugn. What then is the meaning of this—is humanity traveling in cycles? Politically, we can answer emphatically, NO. The ease with which knowledge is communicated among people to-day and the unimpeachable integrity of the great middle classes are the surest guarantee that never will we return to the degrading darkness and servility of the past, while the trenchant manner in which our press uses the weapons of ridicule and cartoon insures for our posterity an even better and more active public conscience, which will demand duty performed [183] commensurate with privileges granted. Municipalities and commonwealths may be full of political rottenness and corruption, senates may be filled by the paid agents of capital, representative halls may be packed by demagogues elected by the most radical element of organized labor, but regardless of temporary mistakes, just as long as we maintain an efficient public school system and make education compulsory and leave the press unshackled, we cannot under a democratic form of government, where tenure of office is for a short period only, ever permanently retrograde.

Students of contemporaneous American history who have followed closely the exposure of municipal officials guilty of the worst forms of malfeasance, will probably be led to believe that we are going from bad to worse politically in our larger cities. Owing to the publicity, however, which such matters get, and the fact that our citizen body in the aggregate respect honesty and integrity, we have nothing to fear. The reform wave which oftentimes sweeps with violence over our cities, to be checked only when persons of much [184] influence have their liberty jeopardized, will inevitably bring about an understanding on the part of the majority of the citizens that politics must not be corrupted by people who make a business of seducing the electorate of our cities. The commission form of government has already done much to lead the way to a better state of affairs, and even if it had not, it would be only a question of but a short time until publicity itself would bring about a better, purer, and more economic administration of government.

As a nation, we are more seriously menaced by the accumulation of gigantic individual fortunes than from any other one and perhaps from all other sources combined, as in but very few cases does a competency mean the use of time for a leisure of culture and ennoblement, but rather for the development of selfishness, avarice, cruelty, and immorality. Christ certainly did not overrate the awful disadvantage of riches, particularly if considered in relation to the recent developments of our criminal trials in our great cities, when He said [185] that “It is easier for a camel to pass through the eye of a needle than for a rich man to enter Heaven.” Wealth in the hands of the young is the worst condition with which they can be surrounded—it almost forces them into the company of irresponsible and immoral persons who lead them into vice, thus sapping their vitality, as well as engrossing them in habits of infamy, which their weakened mentality can usually never shake off. The direst poverty, on the other hand, pinches and confines both the body and mind through lack of proper nutrition and time for rest and recreation, so that it is of double importance to the State to see that enormous private accumulations of wealth do not exist, and more especially that they cannot be inherited. A reasonable sum should be fixed upon by our lawmakers as the maximum amount which could be inherited by any one individual, and any part of an estate which was not legally disposed of under this act, by will or otherwise, should pass into the undisputed possession of the State and should be spent, not for the ordinary administration [186] of the law, but for the building of schools, hospitals, parks, museums, and the purchase of public utilities, such as water, lighting, power and transportation companies. Should the means above suggested prove too slow in operation or inadequate to meet present emergencies, an income-tax might, for a decade or two, be a necessity—the returns from which should be expended as suggested above. Unless something of this character is done

within the next century, it would seem that our country cannot continue to advance in civilization, although she might in political prestige and commercial importance, but would follow in the steps of so many other great states, and sooner or later arrive at a time where her present would be but a meagre shadow of her majestic past.

If we would have the most that is to be got out of life, we should see to it that more time and attention is paid to the development of the æsthetic side of our natures. Our public buildings are to-day usually designed upon grand and majestic lines; some of our public [187] parks are laid out with the idea of showing the beauty of simplicity and harmony; a few of our private mansions are architecturally works of art; we have in our large cities a few museums which are kept open a few hours to the public upon days when it has leisure, but, further than this, how little are we taught, or do we see, the beautiful aside from its arrangement in nature in the ordinary routine of life? With all but the wealthier class, the getting of a livelihood and the attention to other material things, consumes all the time and energy available under the present régime so that no leisure is left to cultivate an appreciation or desire for the beautiful. It is the amount of development of the æsthetic nature of the masses which is the surest and most certain index of any civilization. Schlegel has most justly observed that "when men are left to the sole guidance of artificial law, they become reduced to mere empty shadows and soulless forms; while the undivided sway of nature leaves them savage and loveless." It is therefore in this middle ground that we should [188] provide stimuli for the growth of this cult of the beautiful, and to do this we must begin with the children. It should be the care of the state to see that our streets are kept clean, that grass plots and flower beds are harmoniously and tastily arranged at the intersection of the highways, wherever possible, and that all houses intended for tenement purposes be so built that plenty of light and air can be always available. Powerful and elevating music should be performed in public parks at frequent intervals, whenever the weather will permit of general gatherings in the open air. The best talent should be secured to address the people upon subjects of a general nature, such as topics of the day, political economy, popular science, etc. Our school rooms should not only be clean and well ventilated, but their walls should be hung with interesting and beautiful pictures, and our school libraries, as well as our public libraries, should be numerous, and filled with the best literature that money can buy. In our homes, we should see that every refining influence possible is thrown around the [189] children, and, above all, they should be taught the beauty of self-sacrifice and heroism. Particularly should they be taught the value and beauty of affection, and they should be both told and shown that the pleasure derived therefrom, and its value to the human species, depends almost wholly upon the self-restraint and self-sacrifice which is exercised in connection with the intimate relations arising from it. Schlegel again speaks right to the point, "Every inordinate indulgence involves a corresponding amount of suffering.... Others, on the contrary, who devote themselves to glorious deeds and seek enjoyment only in the intervals of more serious exertion, will have their best reward in the pure, unchanging happiness purchased by such self-denial. Pleasure, indeed, has a higher zest when spontaneous and self-created; and it rises in value in proportion to its affinity with that perfection of beauty in which moral excellence is allied to external charms."

Our attention as a nation to the acquisition of material wealth to the utter disregard of our [190] æsthetic natures may very largely account for the fact that America has produced but few of those literary and artistic stars which are almost always coincident with commercial prosperity. We seem to have neither passed the Elizabethan nor the Victorian age in literature upon this side of the water—not because we have not produced talent along these lines, but because the quantity has been so small and seems to be growing less every year. Since the opening of the present century, there has practically been nothing produced which will demand recognition among literary and artistic people after our own generation.

There seems to be only one other great problem before humanity to-day. Next to the distribution of wealth, it, however, is undoubtedly the most perplexing question with which every democratic country will sooner or later have to deal. In its two forms—as prostitution and the restriction of birth—it constitutes what for a better name is commonly called "the

social evil." Under our civilization and in our system of social caste we have no class of serfs; but as low, if not lower, than these we have those women who sell their favors for money to anyone who will pay the price. Unfortunately, we have not yet reached the place where the majority of our male population decry moral looseness on the part of women with whom they are not connected by blood or matrimony; although this may or may not have been done for profit, as the case may be. It is still largely a matter as to how general the knowledge is, as to how great is the crime. Nevertheless, with those unfortunates whose character is generally known, our modern society has no place—they are outcasts in the true sense of the word. Worse than all, is the fact that society refuses to proscribe immorality of this nature in man as it does in woman—consequently, she alone before the world is made to suffer for what he is as much to blame for as she is, and very frequently more so. The incongruity of this, under a democratic form of government, is readily apparent to anyone and that such a condition of affairs may not exist permanently under our civilization cannot be doubted. It would therefore seem that either one of two things will have to come to pass in the future; either we shall have to regard our prostitutes as a class, as they were probably esteemed in ancient Greece, or we shall have to attach an equal calumny to man as we now attach to woman in these relations. In the first instance, we tacitly admit that the nature of man differs from that of woman, in that continence and monogamy are not fitted for him but are for her, which every fair-minded person knows to be a falsehood; or else in the other alternative we have the entire sentiment of this country upon this whole matter to make over and that against those who are in power. Mrs. Parsons, in her carefully prepared and comprehensive study, entitled "The Family," does not, it would seem, speak other than satirically when she proposes that the same license be allowed woman before she bears children as society now allows man. This would seem to be a step backward, inasmuch as there is to-day, with no small percentage of the people in this country, a decided stigma attached to promiscuity on the part of man, and this should be fostered and encouraged, at any expense. Her recommendation of early trial marriage also smacks of the satirical, while her propositions "to make the transmission of venereal diseases in marriage a penal offense, to render identical the age of consent with the legal age of marriage, and to abolish all laws requiring parental consent to marriage, to consider parental duties the same in the case of an illegitimate as in that of a legitimate child, and to abolish legal separation and divorce law provisions prohibiting the defendant to remarry," must appeal to all fair-minded persons as exactly what is needed. With sentiment once well started in this direction, we can hope that the next two or three decades will accomplish much—more particularly if we lose our money madness and return from "the flesh-pots" to things that are of real value. The happiness and virtue of our children will never be secure until society is founded upon a basis of real monogamy, and male as well as female continence before marriage, and the sooner this fact is admitted and enforced the better will it be for the human race. In this molding of sentiment, woman can be and is an important factor, and her position becomes the more commanding as she becomes more independent financially. If she demands purity on the part of her male friends—sooner or later it will be accorded to her—if she insists upon it in her lover, her Prince Charming will come forth with the quality.

[191] [192] [193] [194]

Concerning that part of this question which deals with the restriction of birth, it has always seemed that outside of voluntary childless marriages the importance of "race suicide" was over-estimated. Where there is no pathological reason why children should not be born, there can be no question but that voluntary childless marriage is what has been well termed "a progressive substitute for prostitution." But where not used to consummate this end, but to keep within the limits of the proper education and the bringing up of the progeny of a human pair, such practice as does not involve infanticide cannot be against the best interests of the race. Consequently, it would seem that, before marriage, young men and women should become acquainted with the fundamental phenomena of conception, with the purpose in view of regulating the number of children which they bring into the world to such a number as they can properly educate and equip for the struggle of existence. Such biological knowledge as is necessary to attain this should become the common property of

[195]

humanity, and the state should not restrict the sale of such articles as would further this end. On the other hand, young men and women should be taught that it is their duty to have what children they can care for, and at such times and under such conditions during wedlock as will insure their descendants the best physical and mental equipment. Infanticide in any form and at any time, except when performed under the jurisdiction of a reputable physician, should be made a crime and proper punishment provided therefor. In this phase [196] of the question, there is also a place for the fostering of proper sentiment. Parents should show their children that they constitute a very large proportion of their happiness, and that child-bearing, within the limits above set forth, is a privilege and not a burden. Under these conditions, voluntary childless marriage will become less frequent and the family will occupy the position of primary importance in the state to which it is entitled.

It is impossible to estimate the far-reaching influence of the Woman's Rights movement. The agitation to-day extends completely around the world, and even such Oriental countries as Turkey, Japan, and China are being forced to realize that they have it to face in the near future. Politically, there can be no question but that the movement will tend more towards the purity of the administration of justice and the elimination of corruption in politics than any movement which has been started within the history of man; and, as examples of this, we have only to look for ample proof in countries where women have been given full rights [197] of citizenship, such as New Zealand, and in Colorado, Idaho, Wyoming, and Nevada States in this country. Socially, we have already noticed the effect which this movement will have as tending towards the purity of masculine morals. Economically, however, it presents a far different aspect, since every woman who enters commercial life, whether in the office or factory, diminishes the child-bearing population of the earth, and with the greater sense of justice and equity which comes from the higher education, the demands of woman will not only become more and more exacting, but she will be becoming constantly more potent in their enforcement. The economic phase of this problem is so great that it is impossible to state at this time what the outcome will be, but a still further tremendous decrease in the birth rate is absolutely sure to come about; and it would seem that possibly those evils which will, in the long run, be most largely rectified by this movement will be augmented in the immediate future, as a result of this agitation, until such a time as the majority of our [198] citizens may be given such education as will enable them to reason more logically about the fundamental propositions of life.

We have looked at a few of the phases of human existence; what shall be said of the value of life? Modern science has forever taken from us the comforting delusions of a personal Deity, an immortality for the soul in a personal sense, and the idea of our possessing a will, free to force our direction whithersoever we elect. It has left, in place of these, the idea of duty—individual and personal responsibility—which cannot be shirked. George Eliot, in the epilogue of Romola, preaches as strong a sermon as she ever could to Mr. Meyers, when she talked to him upon that now famous evening in May at Cambridge. Carlyle, no less than his countrywoman, realized, not only the importance of living up to individual responsibility, but also understood how hard it often was to know just what should be done. His rule, which is most worthy of emulation, was: "Do the nearest duty that lies to your hand, and [199] already the next duty will have become plainer." In order that we may be the better prepared to fulfill our responsibilities, we should obtain all the knowledge possible, even although it may cause us lack of insight temporarily, and much mental agony. Faith is not comparable to knowledge, any more than wishing is equal to the obtaining of results. We should therefore be aggressive in the discharge of our duty—liberal and tolerant, pure and upright, loving and unselfish, virtuous and truly religious, so that it may be said of us, when we have finished, that the world is a little better, and life has been, for as many as possible, a little happier for our having lived.

THE END

Transcriber's note

The headers of the first two chapters have been changed to small capitals, like the headers of the later chapters and in the Table of Contents. Also the following corrections were made, on page
91 "posession" changed to "possession" (after they had secured possession of their)
127 "formluæ" changed to "formulæ" (had recited certain magical formulæ which had)
175 ' changed to " (never to have loved at all.")
200 " added ("The information given is clear).

Otherwise the original has been preserved, including archaic and unusual words, as well as unusual or inconsistent spelling and hyphenation. For instance: Phœdrus is usually spelled as Phædrus, this has not been changed.

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