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# **A CHALLENGE TO DARWIN'S THEORY OF EVOLUTION**

Published by  
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## PREFACE

The publication of this treatise, controverting Darwin's theory of evolution, has special significance in the present day world, when the thinking world, worried by the complicity of modern life, has little time to devote to religious scriptures and readily accepts for itself any theory that may appear superficially plausible. In recent years my discussion of the subject "creation of the world," with quite a few highly educated and well placed friends, revealed to me how, in ignorance of the Hindu Scriptures, they believed in Darwin's theory. And so I made up my mind to make a thorough study of the subject. The Atheists and Scientists are welcome to their own views, but facts compel us to admit the existence of some Supreme and Unseen Power at the back of all the immense and wonderful creation. Tiny colourless seeds produce flowers and fruits of untold varieties, colours and tastes, propelled by creative power, in contact with soil and moisture. Parents produce progeny after their own kind. The Hand of God is manifest at every niche of this world.

The theory under discussion has crept upon us insensibly that in ignorance of the teachings of religion and misled by the clever way Darwin has propounded it, we have come to accept it as incontrovertible truth. Instead of realizing that God in His unbounded Wisdom has created in all conceivable types and forms as a manifestation of profundity, Darwin linked them so cleverly as to show they have grown from one species to another by biologic process. That such an assumption does not correspond with realities, is the theme of this work, and I hope that serious minded readers will find much in the context to interest them and to realise the truth taught by philosophical religions. —even the atheist may feel the fallacy of his position and develop faith in the existence of God and His creation.

My cordial thanks are due to Professors Nitya Nan Patel Pandit, M.A., Anand Shankar Misra, M.A., and Prof Ganga Sahai, M.A., for their valuable help in the completion of this task.

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"Avhar," Dharmasala,  
The 1st January, 1950.

## FOREWORD

The present work is an attempt to refute Darwin's theory of Evolution, and how far the author has succeeded in this attempt, it is for the readers to judge. But as far as I can see, it is an attempt in the right direction. Darwin's Theory of Evolution has not only undermined religion, it has also undermined the modern world of its moral backbone. With the semblance of an exact and perfect science, it has a tendency to corrupt and vitiate the young minds. It is to counteract this tendency that my friend, Diwan Ram Nath Khosla Ashyap (a retired forest officer) has undertaken the trouble of having the chapter on Vikas'Vad (Evolution) translated to English and printed at a great expense, and I am glad to commend it to the readers for a careful perusal. I shall only urge upon them that while reading this book, they bear in mind Professor Lloyd Morgan's statement that the results can be explained as the results of already existing conditions, emergents like the advent of life, mind and effective personality cannot be explained without the Divine activity. To put in the words of Sir Radha Krishnan, the progressive emergence, in the course of evolution, of life, the mind and personality, requires to assume a creative principle operative in nature, a timeless reality in the temporal.

GANGA SAHAI, M.A.,

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Dated the 21st October, 1949. Dharmasala.

## INTRODUCTION

The Theory of Evolution is supposed to have a scientific basis. Therefore we propose to consider the past and the present state of science with a view to finding out the extent to which its present position differs from its past. The word "Science," for the purposes of this book, signifies "European Science." The scientific age may conveniently be split into two periods, of which the first embraces the science before the twentieth century and the second the science of the twentieth century. During the first period were enunciated some novel theories of which Darwin's theory of Evolution was the most momentous. It created a stir in the entire world and undermined the beliefs of the educated public. It dealt a severe blow to the current notions about God, life, re-birth and revelation. It seemed at the time that the old theories would finally collapse; but scientists were resolved to state nothing but truth. This characteristic coupled with their persistent efforts has resulted in a remarkable change of attitude in the scientific world. The discoveries and researches of the last twenty or twenty-five years have necessitated the overhauling of old science. In fact, a close and critical examination of the present scientific world makes it manifest that the old world has yielded place to the new which has been brought into being by recent researches. Though all this has happened—Science has been revolutionised, the theory of Evolution has been repudiated—yet the deep impressions created by half a century of propaganda cannot be easily dispelled. The Doctrine of Karma and the theories proving the existence of God are evidently galling to the self-willed individuals. The theory of Evolution emancipated them from their irksome yoke. Therefore they view the reinstatement of those theories with alarm. There are still men in Europe, particularly in India, who cling to and endeavour to sustain the discredited theories. But they

are bound to fail in the face of learned and unbiased scientists engaged in the pursuit of truth.

The obstinate atheists of this country who have never cared to keep pace with recent scientific researches in the west are too ignorant to face theists and are, therefore, not very aggressive. But in the comparatively free atmosphere of the west it has been possible for self-willed atheists to pester Christian clergymen. "The suggestion was assiduously conveyed that religion was an outworn superstition, a morbid sentiment, or a phase of hysteria, all of which had been exposed by modern science. These misleading and harmful impressions need to be dispelled. The best way of dispelling them is to let Science herself speak through the lips of her chief exponents" (Science and Religion, page 4'5). Therefore in the year 1914, seven eminent scientists were invited to the famous Browning Hall, London, where they "discussed God, life, Religion and Revelation for seven days. Their views on the subjects are embodied in the book entitled "Science and Religion."" The seven scientists are introduced below.

1. Sir Oliver Lodge, F.R.S., D.Sc., LL.D., Professor, Liverpool University; Principal, Birmingham University; ^resident, Physical Society, London; President, Research Physical Society; President, British Association. He is a renowned scientist and author. He is an authority on ""Wireless" and "Electricity".

2. Prof. John Ambrose Fleming, M.A., D.Sc., F.R.S., Demonstrator in Chemistry, Royal College; Master Kelton' hamr College; Professor of Science and Mathematics, University College, Nottingham; Electrical Engineer, Edison Company Promoter, Morley College; (Professor of Electrical Engineering, University College), London; Adviser, Marconi Jompany. He has been awarded many medals. He is an authority on Electricity.

3. Prof. W. B. Bottomley, M.A., Ph.D., F.L.S., F.C.S.; Professor, King's Botanical College. He is an authority on Agriculture and has been awarded many honours and medals.

4. Prof. Edward Hull, L.L.D., F.R.S., Nestor of Geological Science; Director, Geological Department, Ireland;

President Geological Society; a friend of Lord Kitchener; Discoverer of the Islands in the Atlantic.

5. John Allen Marker, President and Office Bearer of several scientific societies.

6. Prof. German Simms Woodhead, M.A., L.L.D., F.R.C.P., F.R.S.E., Professor of Pathology, Cambridge University; President Royal Medical Society; President Royal Microscope Society; Director Royal College and Head of the Medical Department.

7. Professor Sylvanis Philips Thomson, B.A., M.D., L.L.D., D.Sc., F.R.S., Professor of Physics, Physicist and an authority on Electricity.

All the seven are eminent scientists of the present day. Their views command as much respect in the scientific world as the views of Rishis (sages) in India. Most of them are alive. Their views on God, Life, Religion, Evolution, etc., are up-to-date, and are embodied in the book entitled "Science and Religion."

## MODERN SCIENCE

We shall now endeavour to show how strikingly different are the views of the present from those of the old fashioned scientists, whose opinions not only carry no weight with the present scientists, but are also ridiculed by them. Prof. Bottomley, a renowned scientist of the present day, remarks about Haeckel's school :—

"That is the old materialistic school—Haeckel's school if you like—which, let me tell you, is hopelessly out-of-date and antiquated" (Science and Religion). The book, written in reply to Haeckel's book, "The Riddle of Universe," is humorously entitled, "The OLD Riddle and The Newest Answer." Another scientist maintains in "Science and Religion" that "all the theories of matter advanced during the last twenty years are based on a conceptional postulate of non-material. That is the latest science."

"Not long ago it was to some extent fashionable in scientific circles to be an agnostic. But to-day a man who glories in his ignorance is blamed and not lionised. The attitude is quite out of fashion. Thanks to the labours of science/" (remarks yet another scientist) (Science and Religion). It is now believed and propagated that "progress is made more rapidly and more economically by rational than by natural selection and that the time has arrived for man to control his own evolution instead of leaving it to the blind forces of nature." (Deshdarshan). "What is evolution ? (according to a modern scientist-unfolding, development'unfolding as a bud unfolds into a flower, as an acorn into an oak. Every thing is subject to a process of growth of development, of unfolding" (Science and Religion, p. 16). "And it is just here that religion completes the wonderful story of evolution, gives us the purpose of the universe, and reveals the eternal energy behind all, not as simply an impersonal infinite energy, which is a non-material something, but

reveals the Infinite as a personal God." (Science and Religion, p. 68). As has already been pointed out, the foregoing theories have been advanced during the last twenty years and "The Theory of Evolution,"<sup>1</sup> so rigidly and dogmatically propounded by Darwin, Huxley, Haeckel and others, has exploded in the new light shed on it.

The universe of Darwin's conception was simply material and it had no room for a Supreme Thinker, but now the scientific world has recognised the existence of such a Being. Hence it can no longer be maintained that Nature is subject to no control. The latest science has also recognised the sentient individual soul. Now learned Psychologists, Phreno\* logists and Spiritualists have recognised soul and its transmigration also. The recognition of God and Soul, leads inevitably to the recognition of Revelation and Salvation—And these—God, Soul, Revelation and Salvation—are the four pillars of religion. Science has not only recognised them beyond the shadow of a doubt but has also re-invigorated them. When God, Soul, Revelation and Salvation have gained recognition, Nature can no longer be regarded as Sovereign and its subjection to eternal laws cannot be denied. Nature cannot spontaneously mould matter into any shape to suit environments. It is now beyond the power of Darwin's Nature to arrest 'the evolution of a bee into a bird' with a view to make it evolve into a snake. Nor can the serpent yet in the process of evolution into a camel, be compelled to evolve finally into a peacock. Subject as Nature now is to Divine Will and to the doctrine of Karma, it can accomplish nothing but what has been ordained. A thing must become what it has to become according to eternal laws. That is why Sir Oliver Lodge, commenting on the theory of Evolution, observes that "evolution is nothing but unfolding, development-unfolding as a bud unfolds into a flower, as an acorn into an oak." It simply means that environments, change and accidents do not in reality play the role they were supposed to play in evolution. Modern science has brought to light many species which have persisted without any alterations since their origin. Until recently the

theory of Profs. Souh, Keith, Shimper, Haeckel and **Dr.** Church—the theory, which had sought to establish that Man was only eight hundred and twenty thousand years old and that he had reached the present stage of his development within this period, held the field. But the discovery of a six million year old shoe sole by Mr. John T. Rhode was the last thing needed to deal a fatal blow to the lingering prestige of the "theory of Evolution." After the discovery of this shoe sole, none of the numerous ways employed to determine the age of this earth can be of any avail in discovering all the links of evolution. God alone knows the exact number of forms linking the two extremes—amoeba and man. If each of these intervening forms takes ten million years to evolve into a new form (and it must take at least ten million years as the recently discovered shoe sole makes it abundantly clear that the space of six million years is too short a period of time for an organism to evolve into a new form), it is impossible to calculate the age of this earth. It has been recently established that Man has not evolved from Ape. On the contrary, Ape is descended from Man. The sponsors of this theory maintain that there was a time in the history of mankind when human beings reached the summit of intellectual attainments, and that the mental strain involved therein so thoroughly weakened their minds that some of them sank down to the level of savages, and apes. These theories of the last twenty years are entitled to greater respect as they are based on up-to-date knowledge and weighty experience of outstanding scientists of the present. From the foregoing theories, the following facts about creation emerge:—

Nature can fashion organisms into no forms but those which accord with patterns, pre-determined by the Almighty in view of the karmas of creatures in their previous existence. As a bud must unfold into a flower, so an organism must unfold into a pre-determined form. Environments, chance and accidents cannot mould an organism into any arbitrary form. The fact that the human race, like other persistent species, has known no change during the last six million years .

of its existence, proves conclusively that no creature can change its form.

There was a time when Man was at the zenith of intellectual development, but later on he reeled back into the beast.

None of these theories smacks of "Evolution," or of Darwinism. The old scientists are completely ignored. Modern science has no room for the old "Theory of Evolution." The only thing in old science that accords with facts is that God unfolds creatures as a bud unfolds into a flower. Later on we shall try to discover whether it is at all essential for God to seek the aid of evolution in order to create. For the present we are content to state that the old "Theory of Evolution"<sup>1</sup> has collapsed beyond revival. Here we cannot help asking our fellow countrymen, Nana Pawagi and Avinash Babu, why, in their preoccupation with history, they had neglected to attempt a critical examination of Western science. Had they cared to examine Western science critically, they would have encountered amongst Westerners' misconceptions and errors matched only by those about the antiquity of the Vedas and the Aryan civilization.

As a matter of fact we have already exposed the theory of Evolution. But in order to weaken its hold upon public mind, it is necessary to demolish it as systematically as it was erected. Guided by Mr. Vinayak Sathe's book on evolution, we shall now plunge into elaborate and systematic criticism of almost all the important aspects of the "Theory of Evolution" and shall see whether it has a sound basis. Briefly stated below is the "Theory of Evolution."

Ether is the source of all natural substances. Ether vibrations and waves generate electricity, light, sound and heat. Its minutest particles are known as electrons which generate electricity. This very energy takes the name of matter when it assumes shape. Matter is known as gas in its thin shapeless state; liquid in its fluid, and solid in its compact state. These substances, of which ether is the source, thicken and revolve due to the force of attraction. After some time the circular mass thus formed becomes the sun.

The intense heat of the sun coupled with the tremendous velocity of its revolution, causes the formation of rings which, when detached become other planets. These planets in their turn throw off small fragments which form satellites. Our earth is one of the planets, circulating around their parent sun since their origin. The earth has come into being in the aforementioned manner. It is not necessary to invoke the aid of the Creator to explain the origin of the earth. This planet was intensely hot in the beginning. Gradually it cooled; seas appeared; land emerged above the surface of water; and life began when the earth had ceased to be far too hot for life to be able to obtain or retain a footing on it. Thus matter gave birth to life.

Life gradually developed. In the beginning it was neither fauna nor flora but had the germ of both. One of its branches developed into unicellular amoeba. This species multiplied beyond the means of subsistence as all organisms reproduce at an excessive rate. Only those members of this species which were best fitted for a struggle for existence, and which possessed variations best adapted to their environments, survived and multiplied, others perished. But the struggle went on for want of adequate means of subsistence and resulted in the further extermination of the unfit and in the survival of those possessing useful variations which were passed on by heredity to the future generations and which became slowly accentuated till a new character was developed. The forms possessing this new character became a new species different from its remote ancestors. The survivors were subjected to the same process over and over again. Thus all forms—fish, frog, snake, bird, cow, bull, ape, gorilla and man respectively — evolved, through generations of gradual modifications, from a single species. Every new species was designed perfectly to suit conditions under which it was placed. The causes and the process which make the Indian, the European, the Red Indian, the Negro and the Chinese racially so different from each other also account for the difference between man and ape. The fact that all living organisms originate from matter and all alike life and

generative organs, proves that all existing species are modified descendants of pre-existing species as the modern bicycle has reached its present finished form through years of gradual modifications of its clumsy original. If all the old models of cycles are arranged in a progressive series, all of them will appear to be only modified forms of the same original. The first cycle was a tri-cycle which was paddled; but now we have motor-bicycle which is only a modified form of the original tri-cycle. Similarly all existing species are only modified forms of amoeba. No creature is fundamentally different from others. There is no essential difference between a snake without feet and a centipede which is a modified form of the former. Further back we trace the ancestral history of the living things, their structure appears simpler and simpler until finally we could trace back all the various organisms to a very simple common ancestor. First simple, then complex: first invertebrates, then vertebrates—such has been the order of evolution. The same order is revealed by the fossils unearthed as a result of excavations. Simple fossils have been found imbedded in the lower and the complex fossilised vertebrates in the upper strata of the earth's crust. Embryos tell the same tale. It is a well known fact that animals are more alike in the earlier stages of their development. It is only later that they are demarcated. Every animal in its developmental history (Ontogeny) recapitulates in an abbreviated and altered form the history of its race (Phylogeny). It means that many of the various stages in the development of an animal correspond to or repeat, in many fundamental features at least, the structural condition of the animal's ancestors. We know that a man begins life, like an amoeba, as a single cell. Then we find that the embryo of a man presents at an early stage visceral arches and clefts of a fish and has a blood circulation in accordance with this; while at a later stage it exhibits in these particulars some resemblance to an Amphibian, later on to a Reptile, then to a Bird, thereafter to an Ape and it is only when development is further advanced that it takes on its special human characters. The plan of structure running through

all the creatures of the universe, the fossils discovered at various places and the animals inhabiting different countries of the world exhibit, that all the animals in the world are descended from a common ancestor. We also find vestigial Organs throughout the animal kingdom. These vestigial organs are of frequent occurrence in every species though in some they have completely disappeared. The presence of four or eight mammary glands in some women and of vestigial tails in some men show that man has inherited these useless structures from remote ancestors in which they were functional. Inability of man to move his ears and the rupture of the intestines commonly known as hernia make it quite evident that his ears and intestines have been considerably weakened. Thus all available evidence supports "The Theory of Evolution." The bat and the winged'squirrel show the phenomenon of evolution at work, and are the best illustrations of the missing links.

## **CRITICISM**

Let us now consider evidence for and against evolution with a view to finding out whether "The Theory of Evolution" can hold the field against the latest science and against recently gained knowledge about creation. The first of the two preceding paragraphs describes how the world of life arose from matter. We have nothing to say about this order of creation. But inanimate matter cannot create anything independently of a Sentient, Supreme Being. We, therefore, launch our criticism at this point.

## **DENIAL OF GOD**

The learned author of the "Theory of Evolution" states in his book on evolution that the evolutionists believe that changes akin to those in the present world took place in the immemorial past and that, thanks to those changes, we find creation in its present state- He also maintains that the "Theory of Evolution" has a scientific basis. Hence the aid of a Supreme Being need not be invoked to explain the origin of the world.

If the foregoing statement is truly scientific, then implied therein is the existence of a unique Originating and Directing Power. If the whole universe is the result of a ceaseless change, it follows that this change must have had a beginning and must ultimately come to an end—as change is not an innate quality of Nature. Change signifies mutability. Innate quality is immutable. Therefore change cannot be an innate quality of Nature. If this visible world is really a thing, it must have some characteristics which defy all change. But every day we witness changes about us. Therefore the only explanation that can be given is that this "changefulness" is the gift of some Supreme Power. The hand of a clock is subject to change, it moves; but it is obvious that it owes this characteristic to its maker. This change must ultimately come to an end, it must stop. The force that impels the bullet fired from a gun, is not its own. It is imparted to it by the person who fires it. It drops down when that force is spent. All things which share with the bullet and the clock their changefulness, like them, cease to be susceptible to further change after some time. All things, now subject to change, were motionless, like the clock and the bullet, before starting upon a career of change. Hence this changing universe too must have been motionless in the immemorial past before it was set in motion by some power, and it must reach a stage at which its susceptibility to further change would disappear. Who set it in motion? is the inevitable question: The Almighty—is the irresistible answer.

As the existence of God has been recognised by scientists, it is needless to pile evidence upon evidence to establish it. Recent scientific researches on the subject have demonstrated that God is the starting point of all science. "To sum up this part of our argument, we can say that scientific study most certainly shows us the presence in this physical universe of an order, Stability, Directing Power and Intelligibility, and capability of being understood by us. These qualities are not spontaneously produced. They do not come by chance. They are not the result of mere accident. They always imply thought and intelligence. This universe is not merely a.

Thing; it is a Thought, and Thought implies and necessitates a Thinker. Hence there is in this universe a Supreme Thinker or Intelligence of which our own intelligence is but the faint copy and image." This statement by the eminent scientist J. A. Fleming in "Science and Religion" represents the views of the seven scientists introduced above. All of them have forcefully established the existence of God. This, in brief, is the present position of science. We shall dwell on the subject no more. Soul, our second important subject, will now claim our attention.

## **DENIAL OF SOUL**

The treatment of life in connection with evolution is considered irrelevant by the author of "THE THEORY OF EVOLUTION." The following are only two of the theories advanced by scientists to explain the origin of life. The first of these two theories attributes the origin of life to meteorites. It states that meteorites sowed the seeds of life on this planet. But it is doubtful whether protoplasm contained therein was sufficiently powerful to survive the period of time taken by meteorites to reach the earth. The second theory states that millions of years ago this earth, when it had ceased to be far too hot for life to appear and retain its hold on it, witnessed a sudden and spontaneous generation of life. But Darwin himself admits that as yet scientists have no definite knowledge about the origin of life. Though the theory that dead matter gave rise to life cannot be accepted without misgiving in the absence of positive evidence to support it, yet it is perfectly consistent with other theories about the origin of life. The foregoing theories make it quite evident that scientists have hitherto failed to find out how consciousness comes into being, but they all believe that it is natural. According to them, consciousness is nothing but [rotoplasm and the honey like fluid that fills the protoplasm is only a compound of twelve material substances such as carbon nitrogen hydrogen phosphorus, etc. It is also said that all these substances result from combinations of electrons though we know now

that electrons cannot be combined and that all these substances originate from atom which gives rise to life as well. On page twentyseven of his book Darwin quotes Huxley's remark that though animate objects daily appear before us like the flame of a lamp or like a whirlpool, yet they change ceaselessly. It merely means that the soul is composed of atoms. The old atoms which drop off are replaced by new ones. This goes on for ever. This stream is never interrupted. Therefore the vital Connection between knowledge and consciousness is never broken.

Modern science tells us that every atom is composed of several electrons which exist apart from each other and defy combination. "Most people think of atoms as something like marbles, only very, very small. They are not little hard marbles, no, they are much more like solar systems. Just as the planets by laws revolve round the sun, so the electrons by laws revolve round the nucleus of the atoms."—(Sir Oliver Lodge). Just as a number of stars which are distant from each other form one cluster, likewise several electrons constitute one atom from which originate the above-mentioned twelve "material" substances which, it is said, are the constituent elements of the soul. Like its constituent elements, the soul changes every moment. Scientists hold that the atom has a speed of one hundred thousand miles per second. It passes our comprehension how atoms which exist apart from each other and which travel at such bewildering speed, can transfer their content of knowledge to other atoms and thereby prevent consciousness from being impaired. A student fails to retain what he has been taught at school by his teacher for twenty long years. It is difficult then to believe that the distantly located atoms, while rushing past other atoms at a terrific speed, transmit their content of knowledge to them. It is really strange that such absurdities are easily accepted by educated people. This theory of rapid transmission of knowledge by atoms is so absurd that it merits nothing but ridicule. But it is gratifying that the age of Haeckel and Huxley is gone beyond recall. Now the theories of the old scientists are brushed aside as old riddles. Spirit'

ualism has now convinced scientists that the soul is non material and immortal.

In the CHILDREN'S NEWSPAPER, dated 8th December, 1923, there appears a review of Prof. Richet's book "Thirty Years of Psychical Research." The author has really devoted long years to the study of the soul. The following words about the soul occur in that book, "Science was never so conscious as now of how much there is to learn. Fifty years ago the attitude of science was that all happenings that could not be explained by known physical laws, were not real events, but the imaginings of credulous or superstitious people.

"But to-day unanswerable proof exists that things do happen which appear to be outside all known physical laws. Such happenings are called by the rather difficult name of psychical, which comes from a Greek word meaning the soul, because such things were formerly supposed to have to do with the soul and not with the body." Even those who hesitate to state anything definitely, do not consider the soul to be "material." Sir George Darwm, son of the renowned scientist, Charles Darwin, while presiding over the meeting of the British Association in South Africa on 16th August, 1905, remarked that "the mystery of life remains as impene\*trable as ever." The views of Agnostics no longer command any respect. The age of Agnostics has yielded place to that of believers. Prof. Geddes, who is a theist, remarks that "some authorities who have found satisfaction in the Meteor-vehicle Theory have also suggested that life is as old as matter." (Evolution--Prof. Geddes).

Another authority on the subject remarks that "dead matter cannot become living without coming under the influence of matter previously living. This seems to me as sure a teaching of science as the law of gravitation." (Nature and Origin of Life). Researches in Psychology, Phrenology and Spiritualism have dispelled all doubts about life. A psychologist writes that "no single organic function has yet been found explicable in purely mechanical terms, even such relatively simple processes as the secretion of a tear or the

exudation of a drop of sweat continue to elude all attempts at complete explanation in terms of physical and chemical science" (Psychology—Prof. W. McDougall, F.R.S., H.B.). Dr. Gall, the father of Phrenology, writes: "In my opinion there exists but one single principle which sees, hears, feels, loves, thinks, remembers, etc. But this principle requires the aid of various material instruments, in order to manifest its respective functions-" The conception of the human soul as embodied in the Upanishads is in no way different from Dr. Gall's.

At present spiritualists are engaging the utmost attention of the world. Some of them conjure up ghosts, some hold communion with souls. The greatest authority on spiritualism is the eminent scientist Sir Oliver Lodge who has proved the existence of the soul and who has dispelled all doubts about consciousness. He maintains that "once you realise that the consciousness is something greater, something outside the particular mechanism which it makes use of, you realise that survival of existence is natural, is the simplest thing. It is unreasonable that the soul should jump out of existence when the body is destroyed. We ourselves are not limited to the few years that we live on this earth. We shall go on without it. We shall certainly continue to exist. We shall certainly survive. Why do I say that? I say it on definite scientific grounds. There are many who have not yet investigated . . . But if a person gives thirty or forty years of his life to this investigation, he is entitled to state the result at which he has arrived." How forcefully does Sir Oliver Lodge prove the immortality and eternity of the soul and how emphatically does he plead for thirty to forty years of strenuous study to understand this subject! We do not deem it necessary to collect proof and arguments to prove that soul is non<sup>^</sup>material and immortal. It has already been proved to the hilt though twenty years ago our knowledge about the soul was very limited. Now science loudly proclaims the existence and immortality of the soul. Hence it is easier now to establish not only the existence of God and the immortality of the soul but also the transmigration of the soul. Recognition of God

and Soul has completely upset the "Theory of Evolution." New ideas have now taken the place of old ones. The most pressing questions that demand answer to-day are:—

1. Why should God invoke the aid of evolution if He creates human beings only to partake of the joys and sorrows of life to which their Karmas (actions) in their previous existence entitle them?

2. Can't He create distinct species through special creation? As God, Soul, the doctrine of Karmas (actions) and the authority of Divine Laws have been recognised, we shall now proceed to find out as to which of the two ways of creation is the better one—evolution or special creation?

Previously Darwin's evolution depended on chance, accidents, environments and on the transformation of dead matter. But after the recognition of God and Soul, it has to be considered as something that is subject to eternal laws. Sir Oliver Lodge observes that "we are in the process of evolution; we have arrived in this planet by evolution— That is all right. What is evolution ?—unfolding, development—unfolding as a bud unfolds into a flower, as an acorn into an oak. Everything is subject to a process of growth, of development, of unfolding," (Science and Religion) but not to the process of Darwinian Evolution (Science and Religion). According to Sir Oliver Lodge Nature is powerless to force a camel to evolve into a sheep. Everything must evolve into predetermined forms and must partake of the joys and sorrows of life to the measure predetermined by God. Just as a bud must unfold into a flower and not into a bee, an acorn must unfold into a tree and not into a bead, similarly all things in the universe must become what they are destined to become according to the iron laws of the Creator. This is supported by what T. H. Huxley says in his Anniversary Address. According to him there are some varieties of a fauna and flora which he characterises as persistent. They have known no change ever since they were created. Mr. T. L. Strange, once a Judge of the Madras High Court, goes a step further in his book entitled "The Development of Creation on the Earth." He states therein that numerous

kinds of creatures of different forms and shapes daily appear amongst aquatic creatures. They are not necessarily modified forms of other creatures. On the contrary, they are born at the same time but are of different shapes. The Theory of Evolution does not have any explanation to offer for this phenomenon.

We thus find that recent researches have completely demolished The Theory of Evolution. Our observation also does not lend any support to the Theory. It has been observed that the louse to which the dirt coating the scalp gives birth and the bug which also owes its existence to dirt, do not pass through different forms before taking their usual shape, but are born in the same form all over the world. Besides, all the tiny creatures which urine breeds, have the same shape throughout the world. They do not evolve into different species. These instances clearly show that before taking a certain shape, a thing need not pass through different forms. All this justifies and fortifies the conclusion that it is God, whose playful contraction of the brow brings the Sun and Moon into being and who miraculously creates proto plasm and amoeba with which evolution begins and who is responsible for giving different forms to different creatures. Agassiz, one of the greatest scientists of the present day, remarks in his book "Principles of Zoology" that "there is manifest progress in the succession of being on the surface of the earth. This progress consists in increasing similarity of the living fauna and among the vertebrates especially, in their increasing resemblance to man . . . . But this connection is not the consequence of a direct lineage between the fauna of different ages. There is nothing like parental descent connecting them. The fishes of the Palaeozoic age are in no respect the ancestors of the reptiles of the secondary age, nor does man descend from the mammals which preceded him in the Tertiary age. The ties by which they are connected is of a higher and immaterial nature and Himself, whose aim in forming the earth, in allowing it to undergo success\* ively all the different types of animals which have passed away, was to introduce man upon the surface of our globe.

Man is the end towards which all the animal'Creation has tended from the first appearance of the Palaeozoic fishes."

After recognising God and Soul, it is absurd to contend that Nature acts independently of God or, that God sits ~~idle~~ while Nature acts. If God has created the universe, there must be some purpose behind it. God maintains justice in the universe by creating living beings to reap what they sowed in their previous existence. It is, therefore, natural that the life of every creature must be woven of that measure of joy and sorrow to which that creature is entitled. But it is only through the body that joys and sorrows are experienced and the capacity of a particular creature for the enjoyment of blessings and for the endurance of suffering is determined by the shape of that particular creature. Therefore bodies of different creatures are differently designed to suit different measures of joys and sorrows previously earned. It ill befits the Supreme Being uselessly to force a creature successively to pass through numerous forms before bestowing upon it a form best suited to it. Therefore it is foolish to suggest that God invokes the aid of evolution to create living beings. Will it be wise and in the interest of justice if the police for years together transfers a culprit, sentenced to three months imprisonment, from one prison to another. Obviously not. Then how can the Supreme Being be so unwise as to make a creature pass through different forms before giving it the proper one?

Hitherto we have considered God and Soul and have seen that both of them play an important part in creation. We have also seen that the Theory of Evolution cannot stand close scrutiny. We now proceed to attempt a detailed criticism of the Theory.

## **ELEMENTS OF LIFE, PLAN OF STRUCTURE AND VARIATION**

It is one of the assumptions of Evolutionists that the living cell from which all life originates, is composed of sixteen " material " substances and that all living creatures have three common characteristics.

(1) The bodies of all living creatures are composed of the same simple elements. Birds and animals do not differ in this respect.

(2) All creatures recover their lost energy after the day's exertions.

(3) Like machines they are subject to modifications into different forms.

All creatures have eight common functions and an equal number of necessary apparatuses.

1. Nourishment: Consumption and digestion of food and nourishment of the whole body.

2. Respiration: Inhaling and exhaling of fresh and impure air respectively.

3. Excretion of filthy and useless substances.

4. Circulation of blood throughout the system.

5. Excitement of muscular activity by means of motor' nerves.

6. Balancing the body.

7. Conveying impulses of sensation between the brain and other parts by means of sensory nerves.

8. Procreation.

Here two things have been stated :

1. All creatures are composed of the same substances.

2. All creatures have eight common functions and requisite apparatuses. We have not much to say about these things. That all creatures are composed of the same substances, is not a discovery of modern science. It was not unknown to ancient India. It is not a discovery at all. All

creatures that eat, work, procreate must have apparatuses necessary for the eight common functions. There is none so foolish as to think that whatever a creature consumes, remains in his stomach and that blood flows like water in a drain and that creatures procreate without generative organs. These are facts known to the entire world. The one thing that deserves consideration is that like machines which change beyond recognition as a result of gradual modifications, creatures are also modified into new forms.

A machine reflects the imperfections of its inventor's mind. These imperfections are gradually remedied by the inventor who grows wiser by his experience. These limitations of the inventor's mind account for the great difference between the final shape of a machine and its clumsy original. But is the Creator's mind subject to limitations akin to those of the human mind? God creates living beings to share the joys and sorrows of life. Therefore He bestows upon a creature no form but the one best suited to the enjoyment and endurance respectively of blessings and sorrows that the creature merits. For the reason stated above, the assumption that like machines the physical forms of creatures also are subject to modifications, is quite incompatible with the laws of creation. It might have been true if creatures were fashioned by Nature or by themselves. But it is the Supreme Being who shapes all creatures. Therefore the foregoing analogy is altogether inappropriate. Darwin himself says on page twentyone of his book on evolution that it has to be admitted that scientists have hitherto discovered no method which may enable them to establish by experiments that creatures do evolve into different forms, nor do they know the laws governing such evolution. Scientists confess their ignorance of the laws of variation—they do not know how variations occur and none has hitherto seen a single creature in the process of evolution. In the absence of any definite evidence, nothing is proved except that evolution is a mere theory.

The Theory of Evolution should have dealt thoroughly with the origin of life, of creatures and of species, but it has

done no justice to the origin of any one of them. Authorities on the subject simply confess that their origin is shrouded in mystery. The author of the theory himself confesses it. J. A. Thomson, in his book, *Introduction to Science*, remarks: "How did living creatures begin to be upon the earth ? In point of science we do not know". Another authority on the subjects says: " The question is : what was the manner of their being upon the previously tenantless earth ? Our answer must be that we do not know ". (Evolution—Prof. Patrick Geddes). .

Yet another scientist confesses that " we know very little that is certain in regard to the originative factors in evolution : we must still confess with Darwin : our ignorance of the laws of variation is profound". (Evolution—P. Geddes).

Science does not know anything about the origin of life, nor does it know anything about the origin of creatures and it knows little about the laws governing variation. Then how can it be maintained that the Theory of Evolution has a sound scientific basis ? Thus far we have examined the Theory of Evolution without touching the details of it. We shall now proceed to consider evidence which various branches of science have made available for the formulation of the Theory of Evolution.

According to the author of the Theory, the following are the five branches of science which support the Theory of Evolution :—

1. Classification.
2. Comparative Anatomy.
3. Embryology.
4. Palaeontology.
5. Geographical Distribution.\*

\* Since item No. 5 is allied to item No 2, we, therefore, in our **criticism** have treated it (Geographical Distribution) as item No. 3.

## 1. CLASSIFICATION

It is the function of this science to classify all life. Classification has different bases. But the most common classification is that which is based on internal structure.

All life is divided into two animal and vegetable kingdoms. The latter has been left out of account by the author of the Theory. We too shall not concern ourselves with it. Here we are concerned only with the animal kingdom, which has been divided into two subkingdoms—of vertebrates and invertebrates. Invertebrates have been split up into five classes :

1. Protozoa.
2. Coelenterata.
3. Echinodermata.
4. Annelida.
5. Mollusca.

There are five classes of vertebrates also :—

1. Fishes.
2. Amphibians.
3. Reptiles.
4. Birds.
5. Mammals.

These classes are further sub-divided into classes, orders, families, genera, and species respectively. For example : we shall now indicate the place of the ordinary street dog in this classification. Such a dog obviously belongs to the subkingdom of vertebrates in the animal kingdom and is of the class of mammals. It is of the carnivorous order and is a member of the wolf family. It belongs to the genus of dogs and it is of the species of the common street dog. Thus classification indicates an animal's true place in the animal kingdom. Pages thirtynine to forty-one of Darwin's book on evolution deal with classification.

Evolutionists do not classify animals as aquatic, aerial, terrestrial ; as oviparous, viviparous ; as sprouting, heat'born ; or as plants, animals, human beings. According to them the only right classification is that which is based on comparative anatomy. But the latest science characterises this classification as unsound and imperfect. Blood tests have recently revealed that classification based on comparative anatomy is altogether untrustworthy. Until recently the guinea fowl was thought to be only a variety of ordinary fowl but blood tests have

indicated that its place is with the ostrich. Similarly the bear was previously placed in the wolf family even by Darwin, but blood tests have revealed that it is more akin to such aquatic creatures as the seal.

Blood tests have not only discredited the old classification but have also struck at the very root of the Theory of Evolution. When, as the Theory maintains, all creatures in the world are descended from a common ancestor, when all are composed of the same elements and have eight common functions, and when all are supposed to have originated in the same manner, why do the blood corpuscles of different creature differ in shape ? Some creatures have round blood corpuscles, some flat and some spherical. This difference clearly proves that different creatures have different kinds of blood corpuscles. Therefore it is certain that the different species of the world are not descended from a common ancestor. Each species came into being independently. This is our criticism of classification. Let us now see how far Comparative Anatomy supports the Theory.

## **2. COMPARATIVE ANATOMY**

Pages forty-two to eighty six and again two hundred to two hundred and sixty eight of Darwin's book have Comparative Anatomy for their subject matter. This branch of science provides sufficient material which facilitates classification. Despite extreme diversity in external appearance, Comparative Anatomy places many animals in the same group. Similarity of internal structure is the basis of classification. The bat, the whale, and the cow which are aerial, aquatic and terrestrial animals respectively and which are distinct in appearance from each other, have been placed in the same class. They are all mammals, as the same plan of structure runs through all of them. Comparative Anatomy, it is said, lends support to the Theory of Evolution by revealing resemblances and differences which unite and demarcate species. For instance, different species of dogs have common as well as distinctive features. All of them are classed at

dogs on the basis of their common characteristics. And their classification as bull dogs, hounds and ordinary dogs is based on their distinctive features. But they are descended from a common ancestor. For similar reasons, the fox, the jackal and the wolf are distinct from each other. Yet the fact that all of them belong to the carnivorous order of mammals, points to a common origin- The cat and the wild cat also exhibit unity in the midst of diversity. The same is true of the tiger, the leopard and the lion. All of them belong to the carnivorous order of mammals. Even offspring results from the inter-mixture of such species as tiger and lion, wolf and dog. The bear also is a carnivore. Though its internal structure slightly differs from that of the cat and of the dog, yet it is more akin to them. The badger, the weasel and the otter also belong to the carnivorous order of mammals and have many common characteristics. The whale also is a carnivore. Previously it was a terrestrial creature but now water is its proper element. Continued disuse has considerably weakened its legs and has so much flattened them that they are more like the oars of a boat. Much of its former vigour has ebbed out of it. Rodents such as rats, moles, bandicoot rats, squirrels, rabbits, etc. are also mammals. The winged squirrel and the bat too belong to this order of rodents. Their wings are constructed on the same plan as the fore-legs of land creatures. They are the best illustrations of evolution at work. The cow, the horse, the elephant, the camel, the deer, the rhinoceros and the hippopotamus are also included among mammals. They have hooves. The elephant, the Tapir, the rhinoceros, the camel and the horse respectively have five, four, three, two and one toes. This systematic decay of toes most certainly shows the phenomena of evolution at work. Australian Kangaroo also supports the Theory of Evolution. The female kangaroo has a pouch in which it carries its young ones which are born imperfect. This pouch is equipped with apparatus for suckling them. When the young ones are sufficiently grown up they emerge out of the pouch. Another marsupial animal known as opossum is found in America. The duckbill and

the echidna too are mammals. They lay eggs but are equipped with pouches for carrying them. So among mammals we find viviparous, semi-viviparous and oviparous animals, the kangaroo and the duckbill, representing the semi-viviparous and the oviparous animals respectively. They bridge the gulf between the viviparous and the oviparous. Thus far the mammals have been dealt with.

Next come the birds which constitute the second class of vertebrates. There are numerous varieties of birds. Some of them are granivorous, some carnivorous and some aquatic. The shape of their beaks, legs and webbed feet vary according to environments. The Penguin, a sea-fowl, which is common in Australia, in Africa, in New Zealand and in America, also reflects the influence of evolution. Where it abounds no other bird abides. Immunity from danger and consequent disuse of wings rendered it incapable of flight. It swims under water with the help of scaly paddles which represent its wings. The ostrich and the peacock too cannot undertake sustained flights as immunity from danger rendered frequent flights unnecessary and consequently weakened their wings. This is how environments influence evolution.

Reptiles such as the guana, the snake, the python, the alligator and the tortoise, form the third class of vertebrates. There are several varieties of guana. One variety is without forelegs. There is another variety which has no legs at all. The snake too, has no legs. All these facts lend support to evolution.

Amphibians come in the fourth class of vertebrates. The history of the frog is simply remarkable. Its developmental history leaves us in no doubt about its origin from fishes. At an early stage it breathes like a fish and has a tail also but later on it drops the tail and breathes like the familiar frog.

Fishes fall in the fifth class of vertebrates. There are numerous varieties of fishes, which easily suggest the possibility of evolution..

The sub-kingdom of invertebrates also is full of evidence that corroborates the Theory of Evolution. Invertebrates

have segmented bodies. The centipede, the scorpion, the spider, the bee, the wasp, etc., belong to this class. Though they differ in certain respects, they have one common feature—all of them have segmented bodies. This similarity points to a common origin. The hydra, an extremely small creature, and the amoeba precede them in order of evolution. They also have eight common functions : nourishment, respiration, excretion, blood circulation, excitement of muscular activity, balancing, conveying impulses of sensation between the brain and other parts, and reproduction, and are equipped with apparatuses necessary for the discharge of those functions. In this respect they are in no way different from vertebrates. The genealogy of animals shows that, despite obvious differences, they have many common characteristics. In any arrangement of creatures in a progressive series, the amoeba, the hydra, the centipede and the jointed insects precede vertebrates such as fishes, after which come amphibians, reptiles, birds and mammals respectively. If they differ in form from each other, it is because of evolution. Just as new machines replace old ones which are discarded, so too in the course of evolution old forms yield place to new ones which with accentuated variations become new species. Vestigial organs of many animals bear abundant testimony to it. Man is a mammal. So are the gorilla, the ape and the lemur. Then there is no reason to suppose that the existing species do not owe their origin to evolution.

Let us briefly summarise all that has been stated above in support of evolution. The following are the five important points which seem to favour the Theory of Evolution :—

1. Classification based on internal structure not external resemblances alone is sound and scientific.

2. A comparative study of fishes, amphibians, reptiles, birds and mammals, reveals that all of them are constructed on essentially the same plan.

3. The opossum, the duckbill, the penguin, the peacock, and the whale testify to the fact that environments play an important part in the decay and development of structures and it is the decay or development of structures under the

influence of environments which unites or demarcates species

4. Progeny springs from the intermixture of different species also points to a common origin.

5. The order of evolution in the animal kingdom is in no way different from the order of evolution of machines—Such simple organisms as the unicellular amoeba and the two-celled hydra precede the more complex worms and jointed insects after which come fishes, amphibians, reptiles, birds and mammals respectively. These points pretty well bring out all that is important in the two sections on classification and Comparative Anatomy in Darwin's book.

Let us examine these points critically.

1. It is maintained that in comparing different animals, consideration of internal structure only is scientific. It may be so ; but we find that Comparative Anatomy is guided in the classification of animals only by external features. Anatomists have chiefly based classification on external resemblances. Feeding on flesh, drinking water with the aid of the tongue, interlocking of animals engaged in copulation, vision in the dark, all this is of the nature of external evidence, and on such evidence Anatomists have depended for classification. Only animals with sharp teeth have been classed as rodents.

Reptiles are called reptiles because of their serpentine motion. Swimming of birds, webbed feet and hooked beaks of birds of prey, and segmented bodies of some insects also constitute external evidence. When classification is throughout based on external evidence, why is it said, then, that Classification is based on internal structure ? The whale, the bat and the cow have been classed as mammals as they exhibit certain common mammalian characteristics. It is nothing but the possession of sharp teeth that has secured for the bat a place among the rodents. Comparative Anatomy has always blundered whenever it has ignored external evidence. For example, it has blundered in the classification of the guinea fowl and the bear, as has already been pointed out, blood tests have revealed that the guinea fowl and the bear belong to categories quite distinct from those in which

they have been placed. In short it is impossible to base Classification on internal structure. Bones, veins, arteries, womb, etc., distinguish vertebrates from invertebrates. Once we realise that the difference between a cow's mechanism and that of a dog accounts for the difference between the mode of drinking water of a cow that gulps it and that of a dog which licks it up, we shall be convinced that the two do not belong to the same class. The internal structure of animals is too complex to serve as a convenient basis for classification.

2. Equally absurd is the contention that the same plan of structure runs through all creatures, from amoeba to man. Such an unbridgeable gulf intervenes between vertebrates and invertebrates that, however hard European scientists and Evolutionists may strive, they will never succeed in bridging the gulf. Vertebrates have nothing in common with invertebrates. Therefore neither class has evolved from the other. Even the greatest of Evolutionists cannot explain how bones came to be in vertebrates. There are only four theories about the origin of bones :

1. Mental activity brought into being.
2. They are the result of strenuous work. Just as a part of body subjected to hard work gets hardened, similarly strenuous work caused the formation of bones.
3. Consumption of foodstuffs with a large percentage of calcium led to the formation of bones.
4. Some such parts as veins and arteries hardened into bones.

Let us see whether any of these theories is tenable.

1. Mind affects nothing but that which is vitally connected with it. Bones have no obvious connection with the mind. If a tooth is pricked with a needle, mind is not in the least affected thereby. Therefore mental activity cannot cause the formation of bones. The second theory too is unconvincing. Friction involved in hard work hardens only the surface of the skin. Bones cannot be the result of food either. No food—not even food with a high percentage of calcium in it—can form bones in invertebrates. There are

invertebrates which consume food that helps the formation of bones in vertebrates, yet no bones are formed. It is a well-known fact that blood forms bones in men and animals. For generations, nits, lice, doglice, bugs, leeches and ants have fed on human blood, yet they are boneless. Equally unconvincing is the theory that some veins and arteries hardened into bones. A child is born without teeth. It is only later on that teeth appear, but they drop off after some time. These teeth do not have their roots in veins. After some time a new set of teeth appears. If it is veins that somehow get transformed into teeth, it can be only once. How is the reappearance of teeth to be explained ? The same set of veins cannot twice be transformed into teeth. Why do teeth reappear when the set of veins that was transformed into the first set of teeth, is no longer there ? As years advance, teeth fall off for the second time. Again no connection between veins and teeth is discovered. Doctors pull out teeth in hundreds, yet they have failed to discover any connection between the two. Teeth are deep rooted like nails and like them have no connection with veins. Like teeth the vertebrate skeleton also is quite distinct from flesh, veins, arteries and skin. Then how did invertebrates become vertebrates ? Evolutionists hold that environments helped the evolution of invertebrates into vertebrates. But even environments cannot possible form bones. Brothers and sisters are born under identical conditions, yet the latter are beardless. Despite similar environmental conditions, the female elephant is without the tusks which distinguish the male (from the female); the hen and the peahen are without the comb and the beautiful feathers of the cock and the peacock. Why cannot a woman, born under the same conditions as man, by herself bring forth a child with a bony skeleton ? According to Shushrut, if in the course of unnatural intercourse between two female homo'sexualists, the discharge of either woman finds its way into the womb of the other, it develops into a foetus without a vertebrate skeleton. The same thing happens if a woman's own nocturnal discharge enters the womb after the menstruation period. Hair, beard,

moustache, white nails, teeth, nerves and sperms, all these are the exclusive contributions of a father to the body of a child. This accounts for the absence of beards in women, of beautiful tail in peahen, of comb in hen, and of tusks in female elephants. Now the question arises why these characteristics are possessed by males and not by females. Also the question arises which is male and which is female in a unicellular amoeba and how does the species continue ? How, why and when are the two sexes demarcated ? And how do the invertebrates later evolve into vertebrates ? The Theory of Evolution has no satisfactory answers to give. It is clear from all that has been stated above that bones do not come into being by themselves. Structurally vertebrates and invertebrates are poles apart.

2. It is said that the unicellular amoeba later evolved into two-celled hydra. Evolutionists say that cells multiply in geometrical progression. If it were true, the weight and the size of the resulting species would also multiply in geometrical progression. But facts do not support the contention. The fact that amoeba multiplies by division and re-division, clearly proves that it is not unicellular. If the amoeba were a single cell, protoplasm contained therein would flow out of the cell the moment it is divided and would be lost. But this does not happen. The amoeba, the segmented insects, the vertebrates and the invertebrates are all structurally quite distinct from each other. We do not ask what the science of mammals (mammalogy) is. We simply want an explanation for the absence of mammary glands in the horse which is also a mammal. But no explanation is forthcoming. We know that scientists have no idea about the forms and varieties of amoeba. They do not know whether amoeba is unicellular or several-celled. Their knowledge of cells is very meagre. They do not know what distinguishes the two sexes amongst cells. They cannot explain how division and re-division of the original unit gave rise to the higher animals. They do not know whether there are any intermediate forms between worms and vertebrates. It does not occur to them that the formation of bones through evolution

is impossible. The horse breaks the chain of evolution. It has no mammary glands, an essential feature of mammals. In view of so many flaws in the evidence upon which Comparative Anatomy has relied, this branch of science cannot give any valuable support to the Theory.

### 3. EMBRYOLOGY

It is maintained that environments are responsible for the decay or development of animal structures. In support of this contention it is pointed out that the opossum, the duck-bill, the penguin, the peacock, the whale and the ostrich have certain vestigial organs which proclaim the influence of environments, and which also indicate how variations occur. How do the Evolutionists know that environments are responsible for the decay or development of structures ? Where is the evidence to support this contention ? Each species has persisted without any change since creation. How far is it correct to say that the legs of the whale and the wings of the peacock and the ostrich have been weakened through disuse ? When the legs of the whale still serve as swimming paddles, is it not absurd to argue that since it has abandoned land to become an aquatic creature, its legs have been considerably weakened by disuse ? How do we know that previously it was a terrestrial creature with stout legs ? The peacock and the ostrich are, it is said, too stout and strong to have any cause for fear from other birds. It is argued that the consequent disuse of their wings, has deprived them of the power to fly. Nothing can be farther away from facts. Even now they have wings, if not for distant and sustained flights at least for saving them from cattle. How far is it correct to say, then, that environments have weakened their wings ? When so often we see peacocks being mangled and killed by dogs, is it not difficult, then, to believe that they have no enemies and that their wings have been weakened by consequent disuse ? In view of the keen interest in aviation evinced by man in recent times, it is impossible to believe that birds suffered such a wonderful gift as wings to

remain useless till continued disuse deprived them of wings and thereby gave rise to mammals. Do the birds have no enemies now ? If they have, why did they lose their wings willingly to become mammals ? We are convinced that this theory is altogether absurd. We have already pointed out that environments cannot cause the decay or development of animal structures. If it were so, the female elephant, born under the same environmental conditions as the male, would also have tusks. Body is a God given gift through which the joys and sorrows of life are to be experienced for a specified period.

Through classification Evolutionists have sought to make the Theory palatable and comprehensible. Natural Selection has been introduced to bridge such obvious gulfs as exist between amoeba and hydra, vertebrates and invertebrates, horse and other mammals. Yet it is quite obvious that each species came into being independently by a special act of creation. Different species have different spans of life and differ from each other in respect of enjoyment, also. Environments play no part in the decay or development of structures. Every creature is endowed with a form best suited to the enjoyment and endurance respectively of the blessings and sufferings of life to which that creature's actions in the former existence entitle him.

#### **4. PALAEONTOLOGY**

It is also wrong to hold that members of two distinct species can interbreed fruitfully. What are mistaken for two distinct species, in reality belong to the same stock. Union between two distinct species does not give rise to offspring. In rare cases union may prove fruitful, but the resulting offspring is incapable of carrying on further reproduction. Union of some species is fruitless, of some is fruitful but the resulting offspring is incapable of carrying on the species. In some cases, it is said, the offspring resulting from the inter' mixture of species, is capable of carrying on reproduction. There is not a single recorded instance of fruitful union

of distinct species. But it is said that, when tiger and lion or dog and wolf inter-breed, offspring results. On page fifty of his book on evolution, Darwin says that inter-mixture of tiger and lion is fruitful and adds that the only possible explanation for it can be that both have a common origin. No offspring can possibly result without this similarity. Inter-mixture of dog and wolf also gives rise to offspring which is preferred by hunters as it combines the faithfulness of dogs with the daring of wolves. It is evident here that only progeny results but different from its parent species.

The Mule, a cross between the horse and the donkey, and also the plum and the mango fruits of the crossed plum and mango trees respectively bear abundant testimony to it. The mule, which is a cross breed and the stone of the plum fruit of the crossed plum trees are both sterile, a fact which clearly indicates that their parents are not homogeneous. But the progeny resulting from the intermixture of tiger and lion or of wolf and dog is fertile. The stone of the fruit of the inter crossed mango tree also bears fruit. All this evidence goes to show that their parents are homogeneous. But the descendants of such an offspring gradually recapture the distinguishing features of either of the two parent species. In other words the offspring of tiger and the lion tends to become either tigers or lions- And the fruit of crossed mango trees also gradually acquired the distinguished characteristics of either of its two parent species. These instances do not in the least help the Theory. Evolution is important only if it leads to evolution of organisms into distinct permanent and fertile species not if it merely leads to sterile offspring. Offspring results even when two female homo'sexualists commit unnatural intercourse. But such an offspring is off' spring only in name as it has no life, no vertebrate skeleton and *ia* also sterile.

It is reported that a certain American Botanist, Luther Burbank by name, caused a variety of fruits and flowers to spring from crossed plants. We do not deny that offspring results from the union of homogeneous species. Burbank must have experimented with homogeneous plants. We, our-

selves, believe that union only between homogeneous plants and between homogeneous animals can be fruitful. Similar parturition alone is not enough. Two more conditions have to be satisfied before union can be fruitful. The span of life and enjoyment of each of the two parties contracting sex relations must conform to the span of life and enjoyment of the other. If these conditions are not fulfilled, creatures cannot reap the fruits of their actions in their former life. Union between carnivorous and herbivorous animals can never be fruitful. Nor can two animals with different spans of life, say having thirty and sixteen years as their respective spans of life—unite fruitfully. In short the above-mentioned conditions are indispensable for fruitful union. It is through the body that fruits of actions in the former existence are to be enjoyed. The body has a limited span of life and a fixed quota of pleasure and suffering.

It may be argued that certain herbivorous animals were forced, on the failure of other means of subsistence, to become carnivorous. But can evolution explain why the span of life of creatures from amoeba to man varies? Our knowledge of the span of life of various animals is limited. But the span of life of man, monkey, cow, goat, camel, donkey and worms varies considerably. Why is the span of human life limited to a hundred years? Why does the span of life of various creatures vary? Evolution cannot explain it. If an attempt at explanation is made by Evolutionists, it will inevitably lead to the repudiation of the Theory.

Evolution places among vertebrates reptiles, including the tortoise and the snake. Authorities on the subject put the age of the tortoise and the snake at hundred and fifty and hundred and twenty years respectively. Evolutionists also maintain that reptiles evolved into birds, but the pigeon, which also is a bird, lives only for eight years. It is also said that mammals evolved from birds. The branch of science dealing with the span of life of animals puts the maximum age of rabbits, dogs, horses, monkeys and men respectively at eight, fourteen, thirty-two, twenty-one and hundred years. This means that evolution shortens the span

of life. The tortoise and the snake have hundred and fifty and hundred and twenty years respectively as their maximum age, but the pigeon which has beaten them in the struggle for existence, has only a short span of eight years. Other more advanced mammals have a relatively higher (longer) age. The rabbit, the dog and the horse respectively live to eight, fourteen and thirty-two years of age. Monkey, which is second only to man, lives only for twenty-one years, and man, the crown of all creation, lives only for a hundred years.—The span of human life is thus shorter than the span of life of the tortoise as well as that of the snake.

Only the fittest survive in the struggle for existence and give rise to new species. That is what the Theory maintains. But we fail to understand how evolution benefits creatures subjected to the process. They struggle for existence, are improved thereby, and change their forms only to find themselves nearer to death. The complex highly improved forms have a shorter span of life than the simple undeveloped ones from which the former have evolved ! The machine which previously used to last for a hundred years, in its modified form, lasts only for eight years ! Such is the improvement brought about by evolution ! What a wonderful evolution it is ! !

It is said reptiles evolved into birds. But how did segmented insects such as the bee, the wasp and the fly and winged fishes come to possess wings ? How are they to be compared with birds and how are worms, fishes and birds to be interrelated ? Is there any possibility of fruitful union between birds and winged insects or between fishes and birds ? Is there any possibility of fruitful marriage between man and monkey ? Certainly not.

It is maintained that the order of evolution of animals is—first simple then complex. We do not deny that simple forms precede complex ones. But we are not prepared to believe that simple forms evolved into complex ones. The plan of structure of winged insects and fishes is as complex as that which runs through birds. The snake is less complex than a centipede, and the crow is simpler in structure than

the butterfly. But the Theory of Evolution asserts that the butterfly and the centipede precede the crow and the snake in order of evolution. The complexity of the butterfly and the centipede goes against the supposed order of evolution according to which simple forms precede complex ones. For the Evolutionists the butterfly may not be as complex as vertebrates but it is obvious that even plants are structurally more complex than vertebrates. In place of vertebrate skeleton plants have boughs and branches, leaves, flowers, fruits and respiratory apparatus of such great complexity that in comparison the complexity of the human form is nothing. A flower with its hues, design and fragrance alone surpasses the beauty and complexity of the human form. Therefore, man cannot challenge comparison with plants. But we regard plants as simple because they lack the freedom of birds and the mental faculties of man.

First the object of enjoyment and then the partaker—such is the order of creation. A creature is an object of enjoyment or partaker according to actions in the former existence. Objects of enjoyment are simple in structure but the partakers are structurally and relatively complex. But for it, no object of enjoyment would serve as such. If vegetation flees from cattle, how will they live? If the horse attains the mental level of man, who will give him a ride? According to this arrangement first flora, then fauna came into existence and last of all came man. We accept this theory, which is as old as the Vedas.

The conclusion to which detailed and critical examination of the five important points mentioned above leads us, is before the readers. It would not be out of place here to repeat that the Theory of Evolution has not been properly presented and that no reliance can be placed on the evidence on which the Theory is based. Fully alive to the discrepancies in evidence, the author of the Theory on page seventyseven of his book on evolution confesses that Comparative Anatomy has largely depended on conjectural evidence for points of similarity in the structure of different animals. He adds that resemblances and differences revealed by a comparative

study of structures of different animals were considered and pursued to their logical and scientific conclusion and the Theory of Evolution was erected. Here actual evidence did not help at all. It is quite obvious from what Darwin confesses, that the Theory of Evolution has no solid basis.

## GEOGRAPHICAL DISTRIBUTION

Darwin deals with this subject last of all but we take it up after Comparative Anatomy to which it is closely allied. It also gives only the skeleton of the Theory. It forms the subject matter of pages hundred and forty to hundred and fifty of Darwin's book. We give below a summary of the pages with a view to examining it critically. The purpose of this science, according to Darwin, is to discover organisms which inhabited, or still inhabit, different parts of the world, and to find out the principle underlying such distribution. He further observes that the numerous species which we observe to-day did not come into being simultaneously. When life first appeared on this planet, simple organisms which later, under the influence of environments developed into different complex organisms, came into being.

Lions, tigers and elephants which are common in India are conspicuous by their absence from England. Other animals such as the snake and the scorpion of the tropics, are not to be found in cold European countries. The giraffe and the peacock respectively are common only in Africa and America. Similarly the English, the Japs and the Sidi (Negroes) who differ from each other in complexion and features are common only in their respective countries. Men differ as do fauna and flora. Before the colonisation of Australia by Europeans, there were no rabbits there, despite the fact that climatic conditions prevailing there were quite favourable for their appearance. It was because the sea served as a barrier between them and Australia. When ships surmounted the formidable barrier and thereby made their introduction in Australia possible, the rabbits quickly multiplied. In other words, there cannot be any spontaneous generation of a species in a region unless it is introduced. Gallopagus islands are remarkable for such animals as alliga'tors, chameleons, lizards, snakes and birds. They are common in Africa, India and America too, but Gallopagus animals more closely resemble American reptiles and birds. The only

explanation for this striking resemblance can be that they are descended from American reptiles and birds. These isles are in the neighbourhood of America of which they must have formed a part till some upheaval separated them, along with their population of animals, from the mainland of America. The population of these islands migrated from one isle to another and were slightly modified by changing environments. But all of them are obviously descended from common ancestors. Ogiers Islands, in the north-west of Africa, are inhabited by animals very much akin to those inhabiting Africa. Similarly, islands scattered throughout the Pacific Ocean have numerous varieties of snails. Geologists tell us that these isles once formed one continent. This explains why these snails present many common features, and indicate a common origin. In short, the farther the two regions are from each other, the greater is the difference between the animals inhabiting them; the nearer they are the greater is the resemblance between the animals of the two regions. But sometimes the inhabitants of distant regions exhibit great resemblance. For instance, despite great distance intervening between them, the English and the Japs closely resemble. On the other hand the inhabitants of Australia and New Zealand differ a great deal despite close proximity of the two countries. Nature is responsible for this difference. If a mountain divides a certain region into two parts, the fishes on one side of the mountain will be different from those on the other side, as fishes cannot cross a mountain. For such reasons sometimes the inhabitants of neighbouring regions are strikingly different. If communication between the two distant regions is maintained, their inhabitants may display marked resemblance. On the basis of evidence referred to above, Evolutionists maintain that all species have a common origin and that environments are responsible for such differences as distinguish one species from another.

All the important points in this branch of science are specified below.

1. In order of evolution complex forms come after simple ones.

2. In no region can a particular species spontaneously spring without migrating from another.

3. Animals inhabiting different parts of the world present many common features which point to a common ancestry.

4. Neither distance nor proximity but environment is responsible for common characteristics.

5. Environments account for the evolution of the progeny of a single parent into distinct species.

We think we have enumerated all the important points in this science. All these points have already received our attention in the preceding pages.

!We shall now take them up for a more detailed consideration. All of them can be modified to suit our purpose. If it can be proved that the existing species have not evolved from a common ancestor but from distinct ancestors who spread far and wide from their common original home, we shall be spared the trouble of deciding whether all the human races are descended from common ancestors or separately evolved in different countries. Evolutionists maintain that some solitary corner of the world witnessed the birth of amoeba from which have evolved all existing species. Our view also is that the original home of all species was the same. But we do not believe that all existing species have evolved from amoeba. The examination of the foregoing points will show how far our view is correct.

1. In the order of evolution complex forms come after simple ones. Preceding pages have shed sufficient light on this subject. A comparative study of simplicity, complexity, workmanship and utility of animal structure reveals that the partaker comes into existence after the objects of enjoyment. All objects of enjoyment are called simple, and all partakers complex for this reason. This is our interpretation of simplicity and complexity. Evolutionists' interpretation is far from correct.

2. In no region can a particular species spontaneously spring up without migrating from another. If spontaneous generation were possible, Australia with its congenial climatic

conditions would not have remained without rabbits till they were introduced there. The peacock which is a native of India, is rarely to be found elsewhere. But it has now become common in parts made accessible to it. Spontaneous generation is impossible. We know no new species that has spontaneously sprung. This fact deals a severe blow to the Theory. We fail to understand why, in spite of the Nature being and the same everywhere climate congenial, no new amoeba springs to evolve gradually into some new species. Why does Nature confine itself only to old creation ? Is it possible for Nature to bring life into being ? Definitely not.

3. Animals inhabiting various countries of the world exhibit many common characteristics which point to a common origin. But it is wrong to conclude that the dog and cat or the dog of one country and the cat of another have a common ancestry simply because they are carnivorous mammals. But there is nothing wrong in regarding the bull' dog, the hound and the ordinary dog as descendants of common ancestors. Structural resemblance alone does not indicate a common origin. Parturition enjoyment and span of life must also conform. It did not occur to Darwin that the pigmies whom he encountered in Terrodelphigo were members of the human race. But he did not for a moment hesitate to place gorillas and chimpanzees among men as he was deceived by their striking resemblance to man. Darwin's Theory may be attributed to his reliance on external resemblance. The fact that union between pigmies and other human beings is fruitful and that between human beings and gorillas is fruitless, clearly indicates that the first two are homogeneous, but the last two belong to two distinct species. Similarly the horse and the mule belong to two distinct species though there is greater resemblance between them than between gorilla and man. Such investigations should enable us to find out the different species inhabiting different parts of the world. We concede that different species spread far and wide from the same original home but we are not prepared to believe that all of them have evolved

from amoeba. It is our belief that distinct species have sprung from distinct ancestors.

4. Neither distance nor proximity but environments are responsible for common characteristics. Despite the fact that thousands of miles intervene between the Sidis (Negroes), the Chinese and the Indians, their parturition enjoyment and span of life conform. Common ancestry is the only convincing explanation. So far as the influence of environments is concerned, it is confined to such manifest differences as demarcate the Sidis, the Chinese, the Red Indians and the Germans or the bulldog, the hound and the pie'dog or the whaler, the Arabian horse and the horse of the of the Dutch variety from each other. Environment cannot go beyond this. It cannot force a snake to evolve into a camel.

5. It is equally untrue to say that the existing species are only modified forms of the same original. The following difficulties make the acceptance of the theory of common origin impossible :—

1. How were the two sexes demarcated in the unicellular amoeba ?

2. If amoeba evolved into the two'celled hydra, why did not the other species also evolve in geometrical progression ?

3. If winged organisms evolved from, and not into reptiles, why do we find wings among worms and insects which precede reptiles in order of evolution ?

4. How were bones formed and how did invertebrates evolve into vertebrates ?

5. When there are birds, aquatic animals and insects of prey, why is the term carnivora applied only to carnivorous mammals ?

6. Why don't woman, peahen, hen and female elephant have beard, tail, comb and tusks when they are born under the same environmental conditions as their males ?

7. Why does the number of teeth vary from species to species ? Why do the graminivorous animals such as the cow and the buffalo have only the lower set of teeth ? Why

does the horse differ from them in this respect ? Why do the teeth of the dog not fall off ?

8. Why is the horse without mammary gland and why are the mammary glands of the bullock situated near the scrotum ? What is the Utility of mammary glands in males ?

9. Why do the feet of the horse bear vestiges of wings ? Why does the mare drop its tongue at the time of giving birth ? Why do not the other animals drop their tongues while giving birth ?

10. Why cannot females by themselves create a vertebrate ?

11. If animals, like modified machines, are improved in the process of evolution, why do the snake and the tortoise live longer than birds and mammals which evolved from them ? Why do those with a longer span of life have a shorter period of gestation than those with a shorter span of life ?

These are the difficulties which confront those who hold that all species have a common origin. There are many more things besides which we shall presently come to and which go to show that environments cannot influence a single creature to evolve into different species- No creature can travel so far away from its ancestors as to differ absolutely from them in parturition, span of life and enjoyment. The characteristics which distinguish the two sexes also show that environments cannot wield much influence. Then the theory that all species have evolved from a common ancestor is untenable. And the fact that the different species have different spans of life, proves that species do not evolve like machines. Thus far we have considered Geographical Distribution which drives us to the conclusion that if this branch of science is divested of all its absurdities, it supports the Vedic (Hindu) theory that the ancestors of all existing species were independently created by God, and had the same original home whence they spread far and wide, and were slightly modified by changing environments, but their parturition, enjoyment and span of life did not undergo any changes.

## PALAEONTOLOGY

Pages 104 to 140 of Darwin's book deal with the subject. We give below a summary of the pages. According to Darwin, palaeontology studies fossils found imbedded in different layers of the earth in relation to existing species. Many links in the chain representing evolution are missing. It is not necessary here to answer why they are missing. It is enough to state that this branch of science endeavours to discover these missing links. Its efforts in this direction have been attended with appreciable success. Scientists are of the opinion that the future of the Theory of Evolution is linked with the future of this science. *Its failure to discover all the missing links will inevitably prove fatal to the Theory.* Yet the evidence of Embryology is of far greater importance to the Theory, as an embryo clearly reflects the changes it undergoes and all the changes are clearly indicated by a single embryo. Palaeontology is a hundred years old. It has done much useful work during the period. Thanks to the labours of this science, it has been found possible to prepare genealogies of the horse, the elephant, the Iguanodon and other animals on the basis of fossil horses in London Museum, of tusks in South Kensington, of fossil iguanodons in Brussels and of other fossils collected in Crystal Palace, New York, in London and in Genoa. All the links in the genealogy of the horse have been discovered. Archaeopteryx, which is a connecting link between reptiles and birds, has also been unearthed.

Invertebrates and vertebrates constitute the two main divisions of the animal kingdom. Invertebrates mingle with the dust when they die and leave no trace behind. But fossilised vertebrates may be unearthed thousands of years after their death. All these fossils would have been unearthed but sea covering a very large portion of the globe, intense

heat and cold of torrid and frigid zones and the formidable depth intervening between excavators and fossils make excavation work impossible. Dogs, vultures and jackals often remove bones from easily accessible places. Such Geological and Biological causes render it impossible to collect sufficient evidence helpful to Palaeontology. Geological changes such as river erosions sweep away many valuable remains of animals, geysers burn them, and the pressure of the upper layers crushes beyond recovery the fossils imbedded in the lower layers. The question of unearthing the remains of invertebrates does not arise as they mingle with the dust.

Determination of the ages of different strata of the earth's crust is a far more important function of Palaeontology than the discovery of fossils imbedded therein. But scientists have no sound method of determining the age of the earth. They take recourse to speculation. According to Geologists one hundred million years have elapsed since life appeared on this planet. But scientists who calculate the age of the earth from the heat of the sun, put the figure considerably lower. But Radium has indicated a considerably higher age to Professor Pierre Curie. Geologists tell us that there are four strata of earth's crust. The first, i.e., the lowest stratum must have had invertebrates which are no longer there. The second presents only fossil fishes and reptiles. The third stratum contains higher animals also, but it is the fourth stratum which has all the existing species. These facts also corroborate the theory that invertebrates were followed by vertebrates, such as fishes and amphibians, after which came reptiles, birds and mammals respectively. There existed only one kind of organisms at a time and all of them were gigantic in form. When fishes appeared, they alone existed. When snakes came into being, they existed to the exclusion of other forms- There was a time when lizards weighing eighty maunds abounded—a fact to which fossils bear abundant testimony. Not only fossils but also animals with flesh, skin, veins, pulse and other organs intact, like those of Egyptian mummies, have been unearthed. Even winged snakes which later developed into birds, existed in the past. The fossils of

snails discovered in Germany also exhibit the same order of evolution. Facts about the origin of the horse also are not wanting. A comparative study of paws and hooves of fossils, reveals the different forms through which the horse has evolved. The top layers present the familiar horse but the middle ones present the horse with three or four toes, and the bottom layers have the horse with five toes, which resembles a rabbit. The cow and the buffalo each has lost one of the five toes on each foot while the four of the five toes of the horse have disappeared leaving the middle one which has developed into a hoof. The original ancestors of the horse are not yet known yet it is certain that they had five toes on each foot. The genealogies of the elephant and the deer also cannot be traced back right up to their original ancestors. Archaeopteryx with its small head, big jaw, snake-like teeth, wings and bird-like claws is a well known example of missing links. It is a winged snake. Another such example is Pterodactyl, each of whose hands has one prominent claw which supports the wing. It shares with reptiles, birds and mammals some of their characteristics. Hesperornis Kangaroo, and opossum also are animals which aid the investigations of this science.

The following are the seven important points in the preceding summary:—

1. The Theory of Evolution depends largely on this science for support but all the fossils embedded in the strata of the earth's crust cannot possibly be unearthed for certain reasons.

2. All links in the genealogy of the horse have been unearthed.

3. Mummified organisms have also been discovered.

4. The strata of the earth's crust represent certain periods of time which help to determine the time taken by different organisms to evolve from one form into another.

5. The strata also present evidence to support the theory that vertebrates came into being after invertebrates.

6. Only one kind of organism existed with their varieties at a time and were gigantic in form.

7. There was a time when winged'connecting links and winged snakes existed.

## **CRITICAL EXAMINATION**

These are the facts with which this branch of science confronts us. Let us critically examine the main points in the foregoing summary of the Chapter on Palaeontology in Darwin's book.

1. The structure of the Theory of Evolution rests chiefly on the evidence which this science provides and holds promise of providing, but the whole earth cannot be explored-We quite appreciate the difficulties which hinder exploration work. We also know that the whole earth cannot be excavated. Even excavation may not reveal the presence of organisms. The pressure of the upper layers of the earth might have destroyed many fossilised organisms contained therein. In short, fossils of all organisms cannot possibly be traced. In view of all these difficulties, there is no reason why so much importance should be attached to this science. It is altogether unsound to compare fossils. Fossils of horse, donkey and sebra recovered from the same place may, by their striking resemblance, deceive Evolutionists into the conclusion that the three fossils are of members of the same species. We know that they represent distinct species, union between which does not result in offspring capable of perpetuating itself. It is wrong, therefore, to read kinship in external resemblance.

2. It is also wrong to say that all links in the genealogies of the horse, the elephant and the deer have been traced. The genealogy of the horse, in particular, is supposed to be quite reliable by Evolutionists but the latest research shows how unreliable it is. Evolutionists have endeavoured to marshal some queer fossils of different times, unearthed in Europe and America, as the ancestors of the horse. These fossils are supposed to represent forms through which the horse has passed. Huxley once referred to these fossils in the course of a lecture. These are his words: "Firstly, there is the true horse. Next we have the American Pliocene form,

Pliohippus. In the conformation of its limbs it presents some very slight deviation from the ordinary horse. Then comes Protohippus, which represents the European Hipparion, having one large digit and two small ones on each foot." (The Old Riddle and The Newest Answer). This view has been entertained ever since it was expressed. But modern research has completely repudiated this view. Sir J. W. Dawson has amply demonstrated in his "Modern Idea of Evolution" that these fossils discovered in Europe and America which are wrongly regarded as the ancestors of the horse, are quite distinct from each other. "In America," he says, "a series of horse-like animals, has been selected, beginning with the Eohippus of the Eocene—an animal of the size of a fox, and with four toes in front and three behind—and these have been marshalled as the ancestors of the fossil horses of America. . . . Yet all this is purely arbitrary, and dependent merely on a succession of genera more and more closely resembling the modern horse, being procurable from successive Tertiary deposits often widely separated in time and place. In Europe, on the other hand, the ancestry of the horse has been traced back to Palaeotherium—an entirely different form—by just as likely indications, the truth being that as the group to which the horse belongs, culminated in the early Tertiary times, the animal has too many imaginary ancestors. Both genealogies can scarcely be true, and there is no actual proof of either. The existing American horses, which are of European origin are, according to the theory, descendants of Palaeotherium not of Eohippus; but if we had not known this on historical evidence, there would have been nothing to prevent us from tracing them to the latter animal. This simple consideration alone is sufficient to show that such genealogies are not of the nature of scientific evidence." The horse is an extremely strange animal whom five features distinguish from other graminivorous animals:—

- (1) It has both the upper and the lower sets of teeth.
- (2) The mare drops off its tongue at the time of giving birth.

- (3) The joints of the forelegs of the horse have vestiges of wings.
- (4) The horse has no mammary glands.
- (5) It has hooves instead of cloven hooves.

It is also maintained that the ancestors of the horse also had five toes on each foot and that the four of the five toes on each foot gradually disappeared, leaving the middle one which developed into a hoof. But in the cow and the buffalo, it is said, the middle toe has disappeared leaving the other four of which two form the cloven hoof in each foot and the two digits remain on each foot. Obviously the middle toe is missing from each of the four feet of the cow and buffalo, while all but the middle toe on each foot has disappeared in the case of the horse. Is it not a haphazard evolution subject to no uniform laws?—in some animals all the toes but the middle one have disappeared while in others all but the middle one remain.

As has already been pointed out, fossils of the donkey, the horse and the zebra; of the wild cat and the tiger; and of other distinct animals may present such striking resemblance as may lead to wrong classification. M. De Quaterfagus, in his "Lcs Emulcs de Darwin" remarks: "The first thing to remark is that not one of the creatures exhibited in this pedigree has ever been seen, either living or fossil. Their existence is based entirely upon theory.—All the ancestral groups or less ill'represented in the actual organic world, do not suffice to fill up the gaps in this pedigree, from one stage to another there is sometimes too broad a gulf." Similarly Jones Bowson, in the issue of November 1922 of "New Age," ascribes to Dr. Ethrige, of the British Museum, the statement that there is not an iota of evidence in the British Museum to show that species have been subject to evolution. Nine out of ten contentions of Evolutionists are not based on facts. There is nothing in the world to aid The Theory. Modern research has amply demontsrated that Palaeontology cannot possibly discover all the missing links.

3. Animal mummies have also been unearthed. It is said in this connection that thousands of years ago many

creatures were buried alive under snow, and their undecomposed dead bodies are sometimes recovered. May be so. This fact does not go counter to our contentions. On the other hand it supports our views in a way, since as yet not a single creature has been recovered which may be regarded as a missing link.

4. The strata of the earth's crust represent certain periods of time which help to determine the time taken by different organisms to evolve into other forms. But the Theory of Evolution cannot thrive on this imperfect branch of science. Hitherto the ages of the different strata of the earth have not been properly determined. We have already mentioned that opinions even about the age of the earth widely vary. If Geologists give a certain age, those who have tried to find out the age of the earth with the help of radium, put the figure considerably higher. There are others who come between them. So long as the age of the earth is based entirely upon theories, it can never be accurate. It must be remembered that the accurate age can be known only from the "horoscope" that is from history; hair and teeth cannot help in determining it. The exact age of the earth as also the periods of time represented by different strata of the earth's crust, must be known before the time intervening between fossils imbedded in different strata, can be determined. Scientists do not know when man and his predecessor gorilla made their appearance. Evolutionists know not how to make the total time supposed to be represented by different links put together, harmonise with the supposed age of the earth. Nor do the modern scientists yet know the forces that shape the earth. If scientists had knowledge of the forces behind the physical universe, of their speed, power and influence, they would have experienced no difficulty in calculating the age of the earth. But all these things are beyond human comprehension, and an age that is based on theories, can never be reliable.

In the Theosophical Path of August 1923, Hanson refers to the discovery, by John T. Rhode, of a human footprint and a well-made shoe sole, which, Rhode asserts on the

strength of his geological knowledge, is six million years old. It represents finer stitching, finer thread holes and finer twisted thread than the best modern shoe presents. It clearly indicates that even six million years ago man was familiar with shoe, needle and yarn making processes and could prepare shoes to suit different measurements. These processes, the Theory of Evolution will maintain, must have been slowly learnt. Then man must have made his appearance much earlier than the time to which the shoe sole belongs. If we accept this view and put the age of man at ten million years ; if we also accept Haeckel's contention on page two hundred and ninety-five of his book " History of Creation," that man is the twenty-second link in the chain of evolution, the other twenty-one being:—

1. Monera
  2. Single-celled Primeval animals
  3. Many-celled Primeval animals
  4. Ciliated planulae (Planulae)
  5. Primeval Intestinal animals (Castraea)
  6. Gliding worms (turbellaria)
  7. Soft worms (Scolelecida)
  8. Sack worms (Tardigrada)
  9. Acrania
  10. Monorhina
  11. Primeval fish (Pisces)
  12. Salamander fish (Amphibia)
  13. Gilled Amphibia (Gnathostomia)
  14. Tailed Amphibia (Urochordata)
  15. Primeval Amniota (Amniota)
  16. Primary mammals (Mammalia)
  17. Marsupialia
  18. Semi-apes (Prosimia)
  19. Tailed narrow-nosed apes
  20. Tailless narrow-nosed apes (Hominidae)
  21. Pithecanthropus (speechless or ape-like-man),
- and if each link represents ten million years, then twenty-two crore years intervene between the first living organism and man, and the total number of years that have elapsed since

the appearance of life on this planet, should be twentythree crores. Lokmanya Tilak says in his "Gita Rahasya," on the authority of Dr. Gadaw, that fish took fortythree lakhs and seventy-five thousand generations to evolve into man. The amoeba must have taken an equal number of generations to evolve into fish. Then about ten million generations have elapsed since the appearance of amoeba. Some generations live for a day and some for a hundred years. If on an average a generation lives for twentyfive years, then twenty five crore years have passed since the appearance of life on this planet. It is certain that life appeared on this earth millions of years after the origin of the earth. And since the appearance of life up-to-date twenty-three crore years have gone. This figure is considerably higher than the age of the earth calculated by scientists and Evolutionists. According to the author of the Theory of Evolution those strata of the earth which contain fossilised organisms represent only ten crore years. Thus even from the point of view of time, the Theory of Evolution is untenable.

5- Vertebrates came into existence after invertebrates. This, the only truth in the Theory, has been repeated times without number. We ourselves believe that simple forms were the first to appear on this earth, but by "simple" we do not mean amoeba but plants. Amoeba is not simple but complex. Can the process of its reproduction be called simple ? Vegetation is simple and came into being first followed respectively by animals and men. Among animals graminivorous animals appeared earlier than carnivorous. There are carnivorous aquatic, aerial, and terrestrial animals and insects also. By simple and complex organisms we mean only objects of enjoyment and partakers respectively.

The lower strata do not present fossilised organisms—a fact which proves that primeval organisms were invertebrates. This theory also is untenable. It is stated on page one hundred and twentythree of Darwin's book that under pressure of the upper strata the lower strata give way and thereby destroy the fossils contained therein. It is wrong, then, to conclude from the absence of fossils that the primeval

organisms were invertebrates. Even if it be true, it does not necessarily follow that invertebrates later evolved into vertebrates. Bones cannot spontaneously spring. Therefore invertebrates cannot acquire them. Here, too, we do not find anything to support the Theory of Evolution.

6. Only one kind of organisms with their varieties existed at a time and were gigantic in form. If it were true, we would not have found a single primeval animal existing side by side with later organisms. But even now single-celled primeval animals exist and are more numerous than man, the last evolved of creatures. This fact goes against the above contention. Moreover each stratum would have been strewn with fossils of one kind only if there were any truth in the contention. But even arduous excavation reveals the presence only of a few fossils of one kind in each stratum. So far as the size of the animals is concerned we also believe that it was gigantic. We hold the view that some of the primeval forms were huge in size but this fact goes against the Theory according to which life began with microscopic organisms. It is said that these tiny animals developed into lizards weighing eighty maunds and that small trees developed into coal-yielding mountains. It is really strange then that not a single fossil-man of the stature of a palm tree, has yet been unearthed. Why did only lizards so develop? Why did not amoeba and man, the first and the last creatures respectively, so develop? Why no ant of the size of a buffalo has ever existed? There is not a single living creature to match those gigantic primeval creatures. Our view is that those huge extinct organisms perished under their weight. But the Theory maintains that those huge forms evolved from amoeba and perished under hostile environments.

7. It is altogether useless for Evolutionists to take shelter behind intermediate forms. Though they wholly depend upon them for proving the Theory of Evolution, we do not find any justification for regarding certain forms as intermediate. Why is the bat regarded as the bridge connecting birds and beasts? Was the development of birds

through bats into mammals sudden or gradual ? If gradual, thousands of links preceding and following the bat have to be shown. It is absurd to argue that such links have perished. One may believe that the forms preceding the bat were weaker and ill'equipped and consequently perished. But what led to the destruction of the stronger and better equipped forms succeeding the bat ? None can be deceived into the belief that the bat has managed to survive both the worse'equipped and weaker forms preceding it and the better equipped and stronger forms following it.

Mythology makes mention of the winged snakes ; and the Evolutionists have actually discovered the fossils of such snakes. Thus the two—Mythology and Evolution—lend support to each other. But there are references to winged horses and flying hills in mythology. According to a tradition, the legendary hero, Udan Singh of Mahoba owned a winged horse, Bendula by name. Is it all true then ? No, the winged snake is as much a creature of imagination as winged horses and hills. Even now there are people who believe that the snake in its extreme old age grows wings which enable it to undertake a flight to the "Malayanil Mountain" where, it is said, it entwines itself about a sandal tree and that all those on whom falls its shadow in the course of its flight are paralysed. This too is not a fact but a fiction. "Ashwa" and "Suparna" are the two words which occur in the Vedas and which have been used in the sense of beams or rays but which also signify horse and bird respectively. Suparna (bird) flies. Ashwa and Suparna are synonyms when they signify rays. As they are synonyms also, mythologists (authors of Puranas) gave the attributes of Suparna to Ashwa even when they used the two words. Ashwa and Suparna, not as synonyms but to signify horse and bird respectively. That is why they talk of flying horses. Again clouds fly or sail. The same word has been used in in the Vedas for clouds and mountains. Therefore sailing or flying which is an attribute of the clouds has been given by mythologists to mountains also. The word "Ahi" has been used to signify snake as well as clouds. Therefore

mythologists say that "Ahi" flies even when they use the word in the sense of snake.

As a matter of fact the very conception of missing links is baseless. The so-called intermediate forms are not the links in the chain of evolution. They represent independent species which are reaping the fruits of their previous actions. Thus far we have examined Palaeontology in detail but we have not discovered anything to support or reinforce the conclusions of the Theory. This branch of science too, like other branches, has attempted to make the Theory palatable by laying stress on simple and complex organisms and missing links. But these things do not have any foundation in fact and, therefore, do not constitute evidence. This branch of science too, has not aided the author of the Theory to establish anything. Darwin himself confesses on page 108 of his book that a glance through the documents of Palaeontology reveals the sorry state of this Science. Not only pages but whole sections are missing from the history of evolution supplied by Palaeontology. Therefore the discoveries of Palaeontology are very misleading. If it is asked as to which of the two—Embryology and Palaeontology—throws greater light on the history of evolution, we cannot help saying that the evidence of Embryology is far more valuable. Here it is evident that Darwin himself does not attach much importance to the evidence of Palaeontology. Let us, then, examine Embryology on which he relies so much.

## EMBRYOLOGY

Pages 81 to 99 of Darwin's book are devoted to the discussion of Embryology. A brief summary of the pages, followed by a critical examination, is given below.

According to the author Embryology imparts knowledge of the structural changes which an embryo undergoes between conception and birth and between birth and maturity. The embryo in its developmental history recapitulates, in an abbreviated form, the history of its race. The successive forms, such as amoeba, hydra, segmented insects, fishes, amphibian, reptile, bird and mammal, through which an organism evolved are all reflected in the embryo. The developmental history of the frog unmistakably supports evolution. The black, smooth, viscous balls which are so often observed on the surface of floating logs and leaves are the embryos of frogs which develop tails and flat heads in three or four days. In the early stages of their development frogs have gills akin to those of fishes and they use them for respiration for some time even after emerging out of the egg'shells. As winter draws near, they go underground and start growing on the approach of rainy season. Gradually their tails disappear and legs make their appearance. Lungs are soon formed, and they cease to breathe air through their gills and start breathing through lungs instead. At this stage they are full-fledged frogs. Thus the developmental history of the frog clearly demonstrates that every organism has to recapitulate the history of its race. In other words the embryos of all existing organisms evolve through all the forms through which their ancestors evolved. The history of the hen, tells the same tale. The embryo of the hen also begins as a single cell. It has fish-like gills while yet within the egg'shell. The vestiges of these gills remain even after the embryonic stage. This fact clearly indicates

that birds have evolved through fishes and frogs. Though the embryo recapitulates the history of its race only in an abbreviated form, yet clearly enough, embryos of pig, cow, rabbit, man and other mammals develop along similar lines. The human embryo also evolves through fish, amphibian, reptile and bird respectively. This fact conclusively proves that man is akin to them. Whatever the number of years that might have intervened between amoeba and man, the fact remains that man has evolved from amoeba. It is quite obvious, and nature cannot give a stronger proof than it has provided in the developmental history of the embryos. The embryos of insects also are all alike in the early stages of their development. It is impossible to distinguish the embryos of butterfly, black-bee, wasp and centipede from each other. The embryos of the butterfly and the silk worm, though they develop through two distinct series of forms, are yet alike in the early stages. This fact points to a common origin. The embryo begins as a single cell and develops in geometrical progression. The single-celled amoeba yielded place to the two-celled hydra in the course of evolution. Embryology also proves that simple structured organisms are followed by organisms complex in structure. There are only two points in the foregoing summary which alone are sufficiently important to merit consideration.

1. The order in which the embryo evolves, is the same as the order of evolution of organisms. All organisms evolved from amoeba which is single-celled. All embryos begin as a single cell and then evolve through fishes, amphibians, reptiles, birds to take mammalian forms.

2. The developmental history of the hen and the frog bears abundant testimony to this fact. A comparative study of the embryos of pig, rabbit, cow and man also corroborates this conclusion. The embryos of insects also in their developmental history repeat the same thing. In other words the development of embryos clearly indicates how one organism evolves into another and also how the embryo recapitulates, in an abbreviated form, the history of its race before taking the form of its parents. To sum up, every organism

evolved through simple and complex forms respectively and this order of evolution is corroborated by the developmental history of embryos. Let us critically examine these two points.

1. We have repeatedly stated that complex organisms come into being after simple ones, but the former do not evolve from the latter. The two have distinct and independent origin. It is because of the peculiar relationship between the object of enjoyment and the partaker that simple forms precede complex ones. If the embryo, which is simple in its early stages, grows complex later on, it is not to exhibit the order of evolution of organisms, but because such is the principle of construction of all machines. Every machine must have a simple framework to hold together the more intricate parts. For example, the maker of the spinning wheel prepares a wheel, runs a simple rod through it, drives two pegs into a wooden board which form the simple base of the spinning wheel, which rests on the two pegs. Other parts of the spinning wheel, which are situated near the spindle also rest on a simple wooden base. In short, a simple base is the first thing that is required in constructing a machine. Human body also is a machine. What is mistaken for a fish is nothing but the backbone which serves as a base to the more complex parts of the human body. When head, hands and feet add themselves to the backbone, Evolutionists are deceived into the belief that fishes evolved into amphibians which are supposed to be represented in the embryo by the backbone with head, hands and feet added to it. Is it at all possible to join head, heart, limbs, etc. without the backbone? Can the Evolutionists show a single machine, the intricate parts of which hold together in working order without a base? Can they make isolated parts of the human body serviceable without joining them to the backbone? Never. In segmented insects too, something like the backbone is present to hold the joints together. Thus the changes which an embryo undergoes, are not the recapitulation of the history of its race but the illustration of the fundamental principle of construction of machines.

We have already pointed out that no organism is simple in structure. Even amoeba, which is regarded as the simplest organism, is highly complex. How skilfully have all its microscopical parts been arranged within its equally microscopical body ! How can the nit or the bug or the ant be regarded as simple in structure when structurally they are more complex and present finer workmanship than human beings ? Then no organism is simple or complex. Some Western scientists also say the same thing though in different words. Nicholson remarks on pages 9'12 of the "Manual of Zoology" that amoeba is only a microscopical cell, yet its digestive system is no less complex than that of highly complex organisms. It consumes and digests food without the aid of any separate apparatus for the purpose. The most remarkable thing about it, is that it has a fine sense of discrimination. It accepts only the nutritive portion of its food and rejects the useless part of it. In the preface to "Classification," Huxley remarks, respecting such other minute organisms, that there are no organisms lower than those of the Gregannida order, but organisms of the Rhizopoda order are simpler. It has been observed through the microscope that they are without structure properly so called. They are like specks of thinned glue. Yet they have all the elements of life. They are born of like organisms and are capable of activity. They can digest their food and are capable of boring tiny holes to serve as their abodes which are complex in design. Though themselves without apparent design and limbs, these jellylike specks have sufficient control over natural forces which help them to bore mathematically accurate holes for themselves. In view of these facts, who can assert that they have no complex structure ? In fact simplicity and complexity mean something different from what they are interpreted to mean. All objects of enjoyment are simple; all partakers complex. Plants are without intellect and activity; animals are active, but are without intellect; but intellect and activity distinguish man from either. Plant\* are simple in relation to animals which are simple in relation to man. Thus simple and complex are relative terms and the

classification of organisms as simple or complex, is based on the presence or absence of either or both intellect and activity. While plants are objects of enjoyment and animals partakers, both plants and animals are objects of enjoyment for man who is superior to both of them by virtue of his intellect and activity. We simply mean that the idea of life was first expressed in plants which were followed by animals, after which man made his appearance.

Evolutionists endeavour to prove that complex organisms were preceded by simple ones. Though they cannot convincingly prove it, yet we accept this contention. Does such an obvious thing require any proof? Is it at all necessary to repeat that plants came into existence earlier than animals? Has there ever been anybody so foolish as to contend that animals appeared earlier than plants or that man made his appearance on this earth before the coming into being of plants and animals? Evolutionists hold that plants and animals simultaneously appeared, but we differ. If the embryo, in the course of its development, recapitulates the history of its race, what does the upside-down position of the human embryo in the womb represent? Evolutionists have no answer to give. The upside-down position of the human embryo is not without significance. The state of the embryo is in no way better than that of the plant. The plant is without understanding and activity, so is the embryo. The child in its early childhood moves about like a quadruped, as at this stage its level of intelligence is the same as that of a quadruped. With the awakening of its intellect, the child becomes a man and stands erect. This explains why the human embryo is in an upside-down position in the womb, and this also clearly indicates that the idea of life was first expressed in a plant. The progress of modern scientific research has secured recognition for this fact. By simplicity and complexity of organisms is meant nothing more than what has been stated above about simplicity and complexity of organisms.

2. The second point is about the recapitulation of its racial history by the embryo. We have already given the

developmental history of the hen which is a bird and which as such came into existence after fishes, amphibians and reptiles. If the fish-like gills of the embryo of the hen in the early stages of its development and its striking resemblance to the frog in later stages point to the evolution of birds through fishes and amphibians respectively, why is it that the embryo does not show at any stage in its development some of the features of reptiles which are supposed to be the immediate ancestors of birds? No bird but the bat presents the characteristic teeth of the reptiles. And then the bat does not seem to be evolving from a reptile into a bird but from a beast into a bird; it has mammary glands and ears. As the hen does not present the features of reptiles, the recapitulation theory becomes untenable. It can now be easily imagined how dangerous it is to erect such monstrous theories merely on the observation of apertures in the region of the hen's neck.

The development of the frog is machine-like. If it were a fish, it would have been without feet. It uses its gills for respiration only during the period of its development at the embryonic stage. Even the human embryo draws life and nourishment through a tube. Does it mean, then, that it too is a fish? If it were so, all embryos would have employed gills for respiration, as all of them are said to have originated from fishes. But the embryos of human beings and animals alike draw the breath of life through the respiratory organs of their mothers. Therefore the evidence advanced by Evolutionists in support of their contention, does not cover all embryos. It is not universally true. Different laws govern the development of embryos and mature organisms.

A comparison of human and animal embryos also exhibits that they develop along the same lines as machines. All embryonic development begins with the backbone, which is erroneously supposed to represent the origin of existing organisms from fishes. At a later stage when head and limbs give to the embryo the likeness of a frog, this likeness deceives the Evolutionists into the belief that it represents

the second stage—the amphibian stage—in the development of all organisms. But it is strange that; human and animal embryos do not at any stage of their development present either the teeth of reptiles or the wings of birds.. If embryos really recapitulate the history of their race in the course of their development, why do they not present the features of reptiles and birds to whom they are nearer than they are to fishes and amphibians ? Evolutionists have no answer to this question. Obviously the embryo neither represents the order in which various organisms originated, nor does it recapitulate the history of its race.

While considering comparative anatomy, we pointed out that the span of life of various animals seemed to accord to no system. Similarly the periods of gestation of various animals also seem to be arbitrary. Mammals like mares, cows, buffaloes, monkeys and human beings give birth to their young ones, twelve, nine, ten, four and nine months after conception. The period varies from four to twelve months. Neither physical vigour nor the span of life plays any part in determining this period. The horse, which is more vigorous than man, but which has a shorter span of life, has a longer period of gestation. The tortoise which has a longer span of life, is less vigorous and has a shorter period of gestation. No Evolutionist has ever been able to explain these vagaries.

None can explain why the limbs of the bundled up embryo within the womb remain unimpaired though they are bound to be disabled if they are bundled up on emergence from the womb. The strangeness of the embryo and the workmanship of the Great Creator are beyond the comprehension of the puny man. Even scientists do not have full faith in the science which maintains that the embryo recapitulates the history of its race in the course of its development. The author of the Theory himself points out that Huxley and Haeckel have remarked that the history of the embryos has been so briefly written that any elaboration and criticism of its sentences will run into volumes. Sometimes lines, paragraphs and even whole pages are missing from

it. Even apocryphal chapters have been interpolated. Such is the state of that branch of science on which Evolutionists rely so much. Whole chapters from Comparative Anatomy, whole pages from Embryology are missing. The fact that the whole earth cannot be excavated, explains the absence of chapters from the former, but there is no excuse whatsoever for the absence of chapters from Embryology. When the embryo recapitulates its ancestry from amoeba to man, why so many pages are missing from Embryology ? Huxley also confesses that there are many interpolations in Embryology. How monstrous ! If Embryology is the history of the order of evolution, how have interpolations been possible ? Why do deviations from the normal course of development of the embryo make themselves apparent ? Why does not the development of the embryo conform to the supposed order of evolution of organisms ? Why is it that the embryo omits to recapitulate the reptile stage after passing through the fish and frog stages ? Why does it resemble a meteor instead ? Embryology should have been free from these shortcomings. The author of the Theory has endeavoured to explain this formidable deviation by pointing out that those points at which, under the influence of different environmental conditions, the same kind of organisms tended to take different forms, are clearly indicated by the embryo in the course of its development. For example, it is said, the point at which the graminivorous mammals tended to become carnivorous under the influence of environment, is indicated by the embryo. This is nothing but ugly patchwork. Was the transformation of graminivorous into carnivorous animals sudden ? Was the calf suddenly transformed into a wolf ? If Evolutionists believe that this transformation was sudden, they have to prove it. On the other hand, if there was no sudden transformation but only gradual evolution, then there is no reason why the embryo should omit to represent any of the supposed stages in the evolution of organisms. The representation of the evolution of a calf into a wolf should not be so difficult as the representation of the fish into the frog. When Evolutionists have demonstrated

that the embryo of the frog develops into a frog, it is absurd to maintain that subsequent stages in the evolution of organisms are not clearly indicated by the embryo, because of deviations under the influence of environment at those stages. What is the explanation for the absence of so many pages from the developmental history of the embryos ? Why does not the embryo of a hen present the teeth of reptiles at any stage of its development ? No answers are forthcoming from Evolutionists. As a matter of fact the embryos of different organisms have different periods of development and they develop independently. None of them recapitulates the history of its race, nor the order of origin of organisms. When cornered, the author of the Theory confesses on page 81 of his book that the developmental history of no embryo is fully known and that neither all the changes which any embryo undergoes, have been observed, nor the causes thereof are known. Here the matter ends. The branch of science which held so much promise also falls to the ground. We also conclude our criticism here to take up the consideration of the origin of man.

## ORIGIN OF MAN

We need not re-state the result of our critical examination of the Theory of Evolution and its evidence, which have been considered in the preceding pages. The author of the Theory has left no stone unturned to produce evidence in support of the Theory. He himself states on page 154 of his book that he could hardly have made the Theory more comprehensible by going into greater details of structure and development of organisms and of fossils. Quite true. The Theory endeavours to establish only three things. Firstly, to prove on the strength of evidence supplied by the top and bottom strata of the earth that complex organisms followed simple ones. Secondly, to show that the embryo passes from simple initial stages of its development into more complex ones, and that it recapitulates in an abbreviated form the history of its ancestors in the course of its development. Thirdly, to show that there are intermediate forms to lend weight to the Theory of Evolution. The raw material out of which Evolutionists have fashioned the Theory, is limited to these things. Darwin himself finds Palaeontology unsatisfactory and Embryology incomplete, as many pages are missing from it. Under the circumstances intermediate forms cease to have any importance. Therefore he is right when he says that he could hardly have made the Theory more comprehensible by going into greater details. We shall now consider his views on the origin of man. Given below is a summary of the pages 200 to 260 of his book, which embody his views on the subject.

1. We have a right to discuss, he says, the origin of man after the foregoing discussions. But man's professed superiority to other organisms, stands in our way.

2. A comparison of human structure, embryonic development, and fossils with the structure and embryonic

development of other organisms, reveals that human beings are subject to those very laws of Nature to which other organisms are subject.

3. Human body is composed of the same elements as the bodies of other organisms and has the same eight systems. Cells which contains protoplasm, compose the body. Man is constructed on the same principle as vertebrates; the same plan of structure runs through both ; therefore man's place is with the mammals. Man is only a species of anthropoid apes and as such belongs to the order of apes in the class of mammals.

4. The order of apes has eight peculiarities:

(a) The embryo of this order is enveloped in the membrane with which a tubular vessel communicates.

(b) Hands and feet alike can be used for clutching, as their toes can turn in all directions.

(c) The members of the order dwell on trees.

(d) They also have both milk and permanent teeth.

(e) The number of teeth varies from family to family within the order.

(f) Each member of the order has five fingers on each hand and has nails and claws.

(g) Each member has prominent and strong collar bone.

(h) Each member of the order has only two mammary glands.

5. Upright walking, highly developed brain, power of speech and thinking distinguish man from ape.

6. The first two characteristics do not imply any difference of kind but only of degree. Upright walking is only a result of the extraordinary development of the brain.

7. There are several genera, species and families of apes. Lemur is a semvape and has only apelike hands and feet. Marmoset resembles a lemur, but is nearer to ape and has claws. Then there are ordinary monkeys with which all of us are familiar.

8. Anthropoid apes also form a family within the order of apes. There are four varieties among them:—

1. Gibbon
2. Orang Outang
3. Chimpanzee, and
4. Gorilla.

They (the anthropoid apes) have teeth like man's, slightly curved noses but do not have two nostrils. They have arms longer than legs. They are without the tails and pouches of monkeys.

9. Female Gibbon washes the face of its young ones. Chimpanzee, by pressure, tries to stop bleeding. Scientists are of the opinion that the chimpanzee has the brain of a nine month old human baby.

10. Man has only two distinguishing characteristics. He has a highly developed brain and walks erect. The second characteristic is only a result of the first. Anthropoid apes can stand on two legs but droop forward a little.

11. Hernia afflicts man because he walks erect. A comparison of the brains of man and chimpanzee betrays only a difference of degree, not of kind. Whereas the brain of the chimpanzee is under-developed, human brain is highly developed. The same is true of hands and feet. The ape can pick up things with its feet. A savage woman can also do so. The wisdom tooth of man appears late and is small, but that of a gorilla appears very early and is strong. The wisdom tooth of a savage also appears early. Human body has few hairs, but some people have hair on their shoulders and ears. In Japan there are people known as Aneu whose bodies are thickly covered with hair. A lady, Miss Julia Pastrana by name had her whole body thickly covered with hair. To sum up, there is only difference of degree, not of kind between man and ape.

12. Man even now has many vestigial organs. Though a man can no longer make his skin creep, he still retains the nerves for the purpose. All men cannot make their scalp creep, but some there are who can. Not all but a few can wag their ears. Some have a keener sense of smell than others. Man cannot make his hair stand on ends, though

he still has nerves for the purpose. Such organs are still functional in animals though in man they have gradually ceased to function. Contraction of eyebrows and forehead, movement of lips, cheeks and nose at will is still possible for man.

13. The vermiform Appendix at the end of the alimentary canal, though useless for man, is still functional in animals. It is not only useless but also dangerous for man, if accidentally a fruit stone or some other hard thing enters it, life may be imperilled thereby. Six month old baby has as thick a growth of hair as apes. Young ones of monkeys cling fast to their mothers. The new born human baby also can remain suspended from a rope by gripping it tightly.

14. The last joint of the human backbone is known as Coccyx and is regarded as a vestige of the tail. Tailed men have Coccyx eight to ten inches in length. It is composed only of muscles and is entirely without bones.

15. Human fossils are procurable only from tertiary deposits. There were many types of men in the past but they are now extinct. The skull of a creature midway between anthropoid ape and savage was discovered in Java.

16. The louse and other such worms are found on the bodies not only of men but also of animals. Plague afflicts not only rats but also men. There is no disease which afflicts man exclusively. Both men and animals undergo like treatment for various maladies. Reaction of both to intoxicants is the same. They have round or flat or elliptical blood corpuscles.

17. Porcupine, mouse, bitch, squirrel, cat and bear and all graminivorous rodents have ten, eight, eight, eight, six, six and four mammary glands respectively; but a German lady had four, a Jap lady six and a Polish lady ten mammary glands. Thus far the author of the Theory has presented evidence and arguments respecting the origin of man. A little reflection will convince us that the whole edifice has been erected on imaginary foundation. It is not at all related to facts. Let that be as it may, we shall now examine

the various points in the order in which they have been presented.

1. Man's profession of superiority to other creatures has not at all stood in the way of Darwin, Huxley and Haeckel. Even now there are lakhs of people who regard apes as their ancestors. As a matter of fact there have been few right-thinking countrymen of ours who have been guilty of a false sense of superiority to other creatures and of arrogance of which Darwin accuses men. A poet of our country, goes to the extent of regarding human body worth' less when compared to animal body. Even after the death of an animal, he says, its body is not without use to human beings. It provides hide for shoes to the shoe^maker. But the human dead body is utterly useless. Here the poet obviously undervalues man. But man is worthless only when he forgets his Maker. Man has never, without adequate justification, laid claim to superiority. The author of the Theory himself confesses on page 236 of his book that there is some difference between man and beast. Man has merited the highest place among creatures by his highly developed faculties. Though superior in physical and muscular strength to man, Gorilla is yet inferior to him in wisdom and intellect. It is for this reason that man triumphs over the gorilla.

2. We have already considered in connection with other animals, human structure, embryonic development, fossils and the laws governing alike the growth and development of human and animal embryos. The author of the Theory has expressed his own doubts about the value of evidence advanced by the five branches of science already referred to. Each of these branches has relied more on conjecture than on investigation. It has not been proved that under the influence of environments, creatures like machines improve as they evolve. We do not want to reconsider what we have already discussed.

3. Man is composed of the same elements as other organisms. He, too, has eight systems. The millions of cells which constitute the human body, contain protoplasm which the cells of other organisms also contain. He belongs to the

class of mammals in the sub'kingdom of vertebrates. Most of these things have been discussed in the preceding pages. According to an ancient Indian belief, human body is composed of five elements—earth, water, fire, sky and air. No organism merits the name of an organism without the eight systems. We have already thrown sufficient light on cells and protoplasm contained therein. One thing should be noted here. Amoeba is regarded as unicellular. It is said that all the functions of the eight systems are performed by the single cell that amoeba is. When amoeba divides itself, another cell is formed within it and remains within it till the two separate. If so, why is amoeba regarded unicellular ? The individual cell which is a unit in the bodies of multi-celled organisms, does not singly discharge all the functions of the eight systems of the body, though the single cell of the amoeba does so. Different cells in their case have different functions. In view of this fact there is no justification for maintaining that there is no difference between the cell that amoeba is and the cells which compose the bodies of multi-celled organisms. There is obvious adjustment of cells in multi-celled organisms and in each of these organisms there is probably a key cell which controls and holds together the other cells. Without such co-ordination, organisation of bodies cannot be possible. The fact that there is co-ordination of cells in organisms, proves the existence of a co-ordinating cell. How far is it correct, then, to hold that all cells are living ? Protoplasm contained within the cells cannot be the cause of life. Consciousness cannot be the result of combination of living cells, as several conscious cells are bound to pull apart and to make adjustment impossible. Man may be said to belong to the order of mammals in the sub-kingdom of vertebrates, but no fruitful inter-mingling of man and other mammals is possible, nor does any mammal have the same span of life as he. Nor is there any parity between man and other mammals in respect of enjoyment and the period of gestation. In view of these facts it is unjust to compare man with beasts.

With the exception of man, there is no other creature in

the world whose hair undergoes any change between birth and death. A cow never changes its colour. The same is true of camel, horse, donkey, bullock, buffalo, goat, sheep, etc. Apes and anthropoid apes also retain the same complexion throughout. But the human hair changes its colour four times in the course of life. The golden hair of the child changes into black in the prime of life and thereafter grows grey. In extreme old age it grows yellow. These changes in colour which the human hair undergoes, distinguish man from beasts. All animals—even apes—swim naturally but man cannot unless he learns to swim. This is another distinction between man and animals. Man walks on two legs, speaks, thinks, laughs, weeps, sings and does so many things besides, but none of the other animals does so. Animals are guided in their activities by instincts and impulses and, therefore, they do not require any training, though man does. All these things go to show that man is not akin to animals.

As wide a gulf intervenes between animals and plants as between man and animals. All animals are quadrupeds and as such have horizontal bodies, but plants grow upside\* down. Their sensory organs also differ from those of animals. In respect of their food too, plants and animals differ materially. Nitrogen, which gives life to plants, causes the death of animals. In other words, what is food for plants is poison to animals. Plants yield life giving oxygen while animals exhale life-destroying nitrogen. Thus it is obvious that plants and animals have nothing in common. Neither man nor plant belongs to the class of animals. The Theory of Evolution blunders when it tries to interrelate the three.

4. The eight characteristics of the order of apes which have been enumerated in the preceding pages are in reality not the exclusive peculiarities of apes. More than half of these characteristics are shared by other animals also. The few remaining exclusive characteristics of apes loudly proclaim that man and ape are distinct from each other. Even the buffalo has the tubular vessel communicating with the embryo. The fact that the toes of the apes can turn in all directions, shows that the place of ape is not with man. Even

birds and insects dwell on trees. The cow and the buffalo also have both milk and permanent teeth. Number of teeth varies from animal to animal. The squirrel also has five fingers. Nails and claws of apes remove them farther away from man. The strong and prominent collar bone of the ape does not concern us here. The goat also has two mammary glands. We fail to understand how the consideration of both common and exclusive features, has helped the author of the Theory.

5-6. To the extraordinary development of the human brain are attributed man's powers of speech, thought and erect-walking, but highly developed brain alone is not a distinguishing characteristic of man. Scientists have recently repudiated the theory that man owes the above-mentioned powers to the better development of the brain or to its better organisation. We are all familiar with the ant as well as with the hollow of its head which is without the brain substance. Still, the ant gives proof of such intelligence and such ability to rule that scientists have been led to conclude that it is second only to man in its ability to rule the world. "Could the ant have ruled the world?" Lord Avebury has suggested that "in the absence of man the ant might have become the master of the Earth. Nowhere do we find the ability to rule so well developed as in these remarkable insects, which enslave other insects—the aphides—into their service. The white ants or termites, display an even higher intelligence when the eggs are about to be laid by the queen hiding away the mother for the period. The ants might have won the race for mastery if man had not been there.

"Had the ant combined its balance of experience and specialised instinct with greater bodily development, involving greater responsibilities and opportunities, it might, in the meantime have stood forth as certainly a competitor for the mastery of the Earth" (Harmsworth Popular Science, Vol. 1, pp. 54, 55). It is quite obvious that big and highly developed brain alone does not give rise to intelligence and thinking.

7. There are several varieties of apes just as there are several varieties of carnivora—dog, jackal, wolf, cat, tiger,

lion, etc. But we have already pointed out that only homogeneous creatures capable of fruitful union can be said to belong to the same family. Lemur, marmoset, etc., have been placed among apes with a view to lending weight to the Theory, but in reality they are not homogeneous and therefore should not be classed with apes. They are distinct species.

8. There are four kinds of anthropoid apes which also have been placed among apes though they have very little in common with them. Each one of them represents independent species-

9. While the female gibbon washes the face of its young ones, there are other animals also such as the cow and the buffalo which lick the faces of their young ones clean. The bird feeds its young ones. While the chimpanzee tries to stop bleeding by pressure, the dog eats grass to cleanse its bowels and the elephant knows remedies for its ailments. While the chimpanzee has only the intelligence of a nine month old human baby, the ant has the ability to rule the world like man. Therefore the ape cannot be said to be akin to man simply on the basis of a certain degree of intelligence of which it gives proof.

10. The absence of brain in ants completely demolishes the brain theory. Even if the ant has brain, it is smaller than that of the chimpanzee. When the ant displays extraordinary intelligence without the brain, it is wrong to maintain that man owes his intelligence and wisdom to his highly developed brain. A comparative study of the brains of man and ape cannot provide a sound basis on which kinship between man and ape can be built up. The author of the Theory himself admits that difference does exist between man and ape.

11. It is said that as man passed from the quadruped to the biped stage, a new malady in the form of hernia or rupture of intestines appeared to afflict man and that the cause of the malady was nothing but man's erect walking. If hernia had followed in the wake of man's attempt to walk erect, he would have abandoned the experiment immediately

and would have ever remained a quadruped. As a matter of fact over-eating is the cause of hernia. Animals eat only when they must and only as much as is strictly necessary to satisfy their hunger, but man sometimes overeats. The renowned Dr. Louis Kuhne on page 399 of the second volume of his book entitled "New Science of Healing," attributes hernia to the pressure resulting from the accumulation of harmful matter in the region of the abdomen. This internal pressure causes a protrusion, through abnormal or accidental opening, of the abdominal viscera. Points of such rupture differ from person to person, but the cause is always the same. It is wrong to say that hernia results from injury, fall, etc. Other causes may damage the viscera, but injury is not the cause of hernia. It is claimed by Dr. L. Kuhne that the treatment suggested in the book purges all injurious matter and thereby causes the disappearance of the openings. The cause of hernia is no other than the one given by Dr. Kuhne. It is absurd to argue that hernia is a sequel to the passage of man from the quadruped to the biped stage. The ant has completely demolished the brain theory according to which the degree of intelligence of a creature is proportionate to the size of the brain. There can be no comparison between human brain, arms and legs on the one hand and the brain and limbs of other animals on the other. As a matter of fact those parts of the animal body which are used for walking and running, cannot appropriately be called arms. They are legs, not arms. The anthropoid apes are quadrupeds and will remain quadrupeds, unless they abandon the use of forelegs for walking and running. Under the circumstances it is wrong to give the name of arms to the legs of animals. Only human arms are arms; the supposed arms of apes are their legs. Therefore there is no justification for comparing human arms with the fore-legs of apes. Apes can pick up things with their feet. So can a wild woman. This similarity does not justify the conclusion that the latter also is an ape. A juggler can pick up a pice with his eyelids and a female juggler, with her head submerged, can run her nosering through a bead with the aid of her tongue. They acquire

this power by practice. Apes cannot perform such feats. Expert wrestlers skilfully employ their legs. Acrobats also perform marvellous feats with their legs. Are we justified, then, in concluding that their feats testify to their kinship with apes? Certainly not. Similarly the early appearance of wisdom tooth in savages does not prove that they have evolved from apes. Daughters of prostitutes develop mammary glands very early. Does this fact indicate that they have evolved from a species which matures very early? Diet, climate, behaviour, etc., play an important part in the development of organs. It is our conviction that wisdom tooth appears early in savages as they consume raw food and flesh. Their food also accounts for the bigness of the wisdom tooth. An excess of male element in their composition accounts for the thick growth of hair over the bodies of some men. The hair of the offspring is affected by the excess or deficiency of male element. Excess of male sperms in the composition of certain women also explains why they have beards and moustaches. On the other hand its deficiency accounts for the absence of beards and moustaches from the chins of some men. Hair, bones and sinews are a father's exclusive contributions. There is no justification whatever for concluding that man has evolved from the ape, simply because some men have as thick a growth of hair all over the body as apes. If thick hair points to the origin of man from the ape, what do the beards of some men and the beardless chins of others indicate? Have there ever been apes with hairless chins and adjacent parts like those of women? The explanation for the hereditary growth of thick hair is that once hair appears, they take generations to disappear. The Aneu people of Japan are gradually losing their thick hair. Therefore it is wrong to contend that man's hair points to his origin from the ape.

12. Inability to wag some parts of the body, does not imply that they have ceased to function. Why have they ceased to function? Does not the back of man stand in need of getting rid of flies and mosquitoes now? If it is argued that there are other means of getting rid of such creatures'

why is it that the ability to wrinkle the forehead, to wink and move the lips still remains? This power should also have been lost with the employment of the hand as a means of getting rid of flies, mosquitoes, etc. In fact, God has endowed creatures with organs best suited to the performance of tasks for which they have been brought into being. How else, if not by gesticulation, could actors and dancers express themselves? How could two individuals unfamiliar with each other's language, possibly express themselves to each other, if they had lost the power of gesticulation? Man still possesses a fine sense of smell which enables him to distinguish scents, fragrance of different flowers, stench of excreta, urine and sweat from each other. But an experienced dealer in perfumes has a keener sense of smell than other men. A person's keen sense of smell is usually regarded by dealers in perfumes as a sure indication of that individual's prosperity. The trained ear of a musician catches those subtle musical notes and their variations to which the untrained ear is totally deaf. The same is true of the sense of smell. Uncivilized and illiterate people largely depend on their memory, which is consequently greatly developed. But their well-developed memory has nothing to do with their ancestry. It does not point to their descent from ancestors with highly developed memory. There are footprint experts in Rajputana whose knowledge of footprints enables them to trace thieves. From which particular species have they inherited this power? Man is not a hairy creature. He does not feel the necessity of making his bodily hair stand on ends. But his hair does stand on ends when he is in the grip of intense human emotions—rapture or dismay. This fact clearly proves that the nerves that control the hair have not been impaired as a result of disuse. A thing which has been impaired and rendered non-functional by long disuse, cannot function even once. If a broken arm functions properly, it is not a broken arm in the real sense of the term. In view of the fact that horripilation occasioned by rapture, dismay, etc., even now affects human beings, it is absurd to maintain that the nerves have been impaired. These nerves do

function, though man has lost control over them. Man has no control over his heart either. None can stay the beatings of the heart which functions spontaneously. Though man has no control over his heart, yet none contends that it is weak or that it has been impaired. It is simply unreasonable to argue that the fact that man has no control over the nerves that control the human hair, proves that these nerves have ceased to be functional. Horripilation is essentially a human characteristic. Other creatures are strangers to it. Therefore there can be no comparison between man and animals so far as this particular characteristic is concerned.

13. The vermiform appendix is there to warn against the danger to life likely to result from accidental swallowing' up of the plum, date and mango or rose-apple stones. It is for this very reason that people generally warn young children against swallowing up fruit'Stones. Lest their warning should not be heeded by children, they frighten the children by telling them that if they swallow the stones, trees will spring therefrom in their stomachs. But for the danger to life likely to result from the swallowing up of fruit'Stones, man would never have taken care to avoid swallowing them up. The hard fruit'Stone soon impairs digestion and hastens a man's end. The vermiform appendix, therefore, serves a useful purpose by preventing them from swallowing up fruit'Stones. As man is a fruit'eater, he is very likely to swallow up fruit' stones accidentally. The thick growth of hair all over the body of the embryo, does not point to its descent from the ape. If the embryo undergoes changes only to represent the history of its race, the inevitable question that arises is as to what does the primeval unicellular amoeba represent? The hair covering the embryo serves a purpose altogether different from that which it is generally supposed to serve. Six months after conception the embryo becomes viable. Many children are born prematurely—sometimes seven months after conception—and live through the normal span of human life. The hair covering the embryo is waterproof and, therefore, it protects the embryo's skin from the dirty fluid that is present in the womb. In no case can there be

any comparison between human hair and the hair of the ape. Which of the apes has ever had four feet long hair on its head? Which of the apes has ever had a yard long beard? We have come across men and women with three feet long beards and four feet long hair respectively. No other creature has such long hair. A child possesses till the age of one the power of clinging fast to a rope overhead. It is not because the child inherited this power from the ape, its supposed ancestor, but because the hands of the child in the womb remain clenched lest the fingers of the outstretched hand should get entangled with something in the womb and should thereby make delivery difficult. The Almighty, in His infinite wisdom, has taken every precaution, but man's imperfect knowledge has so much intoxicated him that he cannot see things in their proper perspective.

14. Coccyx, which is wrongly supposed to be the vestige of the tail, is as the author of the Theory himself admits, composed of only fibrous flesh and has no bones. Its abnormal growth does not in any way represent the tail. Just as the people inhabiting the banks of the River Amazon in America have foot-long lips—an abnormal feature, yet are not, for that reason, supposed to have descended from the elephant, similarly the abnormal length of the Coccyx should not be supposed to prove man's evolution from the ape. It is said that man has evolved from the anthropoid ape which has no tail. How, if ever, could man have a tail when his supposed ancestor is without it, and specially when apeman is supposed to be his immediate ancestor? Elephantiasis, hydrocele and bronchocele are diseases very common in the districts of Gaya, Faizaba and Jagannathpuri respectively. In Marwar the swelling of the belly is very common. Africans have thick lips. Elephantiasis, bronchocele and hydrocele are supposed to be diseases but in fact they are not, as they are neither painful nor fatal like other diseases. The abnormal growth of the Coccyx is very much akin to elephantiasis, bronchocele, hydrocele, etc. It is wrong to call it a vestige of the tail.

15. The skull found in Java might have been either

of a boy or, according to Phrenology, of a fool. Just as Palaeontology mistook the rabbit-like fossils for the ancestors of the horse, similarly skulls and fossils may again be mistaken for fossils of creatures other than those to whom they actually belong. On page 255 of his book, Darwin remarks that it is idle to hope to discover the exactly intermediate form between modern man and the anthropoid ape. If so, where was the necessity of referring to the skull unearthed in Java?

16. Animals are composed of the same elements as man. They too have flesh and blood and live on foodgrains. When the same five elements compose them, there is nothing surprising if nits, diseases, remedies, intoxicants, etc., produce the same effect on them as on man. Is this similarity enough to bridge the wide gulf that separates man from beasts? We have already pointed out that the changes that the human hair undergoes, and the ability of animals to swim naturally without any previous training, clearly demonstrate that man and beasts belong to two distinct categories.

17. According to the Theory of Evolution, women with varying number of mammary glands prove that man has evolved through such forms as porcupine, mouse, bitch, squirrel, cat and bear. We have referred to the long-lipped American people who may be said to bear resemblance to the elephant. Shall we infer, then, that man has evolved through the elephant form also? The Bushmen of Africa have a long range vision even in the dark and pounce upon their distant prey. Does this fact prove that man has also evolved through the vulture, the owl, the snake? Man sometimes presents a tail also. Has he undergone the forms of the dog, the cat, the camel, the ape and all other creatures which have tails?

If some of the characteristics which man share with another organism prove that he has evolved through that organism, we are sure that a careful observation of the characteristics of different men in the world will reveal that there is not a single organism in existence, some of whose characteristics are not shared by man. If it is proved, will Evolutionists accept that man has evolved through all the

forms in the world? If they do, the theory of Haeckel and Huxley, according to which man is the twenty'second link in the chain of evolution, falls to the ground and it becomes evident that man is related not only to the twenty'One forms referred to by them, but to all forms in the world. Evolu'tionists may stubbornly refuse to accept that man has evolved through all the forms, but without accepting it, they cannot explain why man presents some one or other characteristic of every form in the world. The Shastras of the Hindus maintain that man has to pass through eight million and four hundred thousand forms. A child's predilection for suction immediately after birth and such emotions as joy, sorrow and fear which it betrays, are only impressions of former lives. When on the very first day of birth so many indica'tions of former lives are given by the child, impressions of previous lives are quite likely to be revived from time to time during the embryonic stage also. But it cannot be said with any amount of certainty when the impressions of a particular form revive. Just as an embryo's own impressions play an important part in determining its form, so too the thoughts and behaviour of a pregnant mother influence the embryo in a variety of ways. It is said that in countries where superstition sways pregnant women to keep their feet submerged during an eclipse lest they should give birth to cnppls, sometimes cripples are actually born when they fail to do as superstition demands. But such a thing does not happen in countries where superstition does not find favour. Besides the influence of the mother, the conditions obtaining in a country at a time, climate, famine and prosperity also influence the embryo. Hail, war and fires are also not without effect on the embryo. Thus

1. An embryo's own impressions of former lives,
  2. Its mother's thoughts and behaviour,
  3. Conditions obtaining in the country of birth and
  4. Coalition of sperms at the time of conception—all
- combine to cause deformities in the embryo—deformities which are mistaken by Evolutionists for vestiges of forms through which man is supposed to have evolved.

But creation confronts Evolutionists with certain facts which deal a death blow to the Theory. Mammary glands of males, mammary glands in the region of the neck, of some she'goats, the absence of mammary glands in the horse, a ram's horns, the six fingers on the hands of some human beings—have all demolished the fanciful theory of vestigial organs. When, why and how did the bullock, the buffalo, the goat, the elephant, the camel, the lion, the dog, the ape and man develop mammary glands ? Why is the horse without them ? Why does the goat sometimes have mammary glands in the region of the neck ? Why does the ram have horns ? Why does man sometimes present six fingers ? Evolutionists cannot possibly answer these questions. The two sexes have not existed since the beginning of creation—since the appearance of amoeba. The amoeba itself performs the functions of both the sexes. With the coming into existence of the mosquito, the fly, the nit and the louse, the two sexes were demarcated yet they did not develop mammary glands. Then came the segmented insects which too were without mammary glands. Fishes, amphibians and reptiles respectively followed the segmented insects. They too did not develop mammary glands. Nor did birds which appeared after reptiles. The bat was the first to present mammary glands. It was followed by a train of mammals. Till the coming into being of mammals, young ones of the preceding forms were brought up without being suckled at the breast and everything went well. Millions of generations passed since the demarcation of the two sexes and for millions of generations offspring were brought up without being suckled at the breast. Now the question arises as to why did the bat develop mammary glands ? It is difficult for Evolutionists to account for mammary glands in females. All the more difficult for them is to explain the presence of mammary glands in males. Their difficulties are further aggravated by the absence of mammary glands in horses. But most difficult for them to answer is the question: why does the she'goat sometimes present mammary glands in the region of its neck ? The two sexes had been demarcated before the

appearance of mammals—before the coming into being of birds, reptiles, amphibians, fishes and segmented insects. Therefore none can assert that mammary glands were developed even before the demarcation of the two sexes and that consequently they have persisted even after the demarcation of the sexes. We have already noted that mammals appeared millions of years after the demarcation of sexes. The formidable question that inevitably arises is: which of the numerous forms preceding the mammals has passed on its mammary glands to the mammals, if male mammary glands be regarded as vestigial organs? Why is the horse without them? If it is argued that they are newly developed organs, what is their utility to males? Why do they have no utility for the horse which is without them? Likewise the mammary glands of the she-goat in the region of its neck, six fingers on the hands of some men and the horns of ram cannot be accounted for. The mammary glands in the region of she-goats' neck are not vestigial organs, as no organism other than the goat has ever presented them. Nor are they a hereditary and characteristic feature of all goats. The same is true of the six fingers on the hands of some men. There is no creature in existence, nor has there ever been any in the whole range of animal kingdom—in any class, order, family, genus or species between amoeba and man—which has had six fingers. Therefore the sixth finger is not a vestigial organ. Nor it is a distinctive and hereditary feature of any species. Sometimes a six-fingered mother's children have only five fingers. On the other hand sometimes parents and grandparents have the usual number of fingers, but their offspring present six fingers. In view of these facts, it is absurd to argue that the sixth finger is either a vestigial organ or a new feature. Can Evolutionists possibly account for this feature? Likewise it is difficult to explain why the ram sometimes has horns. This feature too is not hereditary. They are accidental organs. Evolutionists may call them vestigial organs, but in fact they are not. Male mammary glands and six fingers on the hands of some men alone are a sufficiently emphatic refutation of the theory of vestigial

organs, which cannot satisfactorily explain the presence of these organs. The only satisfactory explanation comes from theists, who, as has already been pointed out, hold that the impressions of the previous lives, the behaviour of the mother, the climatic conditions and the coalition of the spermatozoa—all together are responsible for various abnormal features of creatures. Exceptions apart, only man presents such abnormal features. Other organisms seldom present features not their own. Only human beings sometimes present more than two mammary glands and tail. Animals seldom present organs not their own. No monkeys with ten or more mammary glands and giving birth to more than one young one at a time have been observed, though they are nearer than man to animals with several mammary glands and giving birth to many young ones at a time. A monkey keeps its young one pressed to the heart and can look after only one at a time "If it were to bring forth more issues than one at a time, it would not be possible for it to tend all of them properly. The result would be that all but one would be neglected. Hence the monkey does not have more than one issue at a time. But human beings have often given birth to more than one child at the same time. Some have had more than two mammary glands. Thus it is patent that neither monkeys have evolved from any other organism, nor has man descended from monkeys. Mammary glands which some human beings present, are not vestigial organs, Man owes these organs to the extraordinary development of his mental powers. Just as the powerful human mind enables a child to express joy, sorrow and fear on the very first day of its birth, so too it helps the revival of the impressions of previous lives during the embryonic stage. These impressiions, the thoughts and behaviour of the mother, climatic conditions, conditions obtaining in the country of birth, all together give rise to some one of the peculiar features of some one of the eight million and four hundred thousand forms in existence. Beasts with their feeble mental powers are utterly incapable of reviving impressions of their previous existence during the embryonic stage, and therefore they do not develop characters

of forms distinct from them. It is a spiritual law. Which is supported by a physical law also. When two of the several spermatozoa coalesce, they give rise to abnormal organs. It is a well-known fact that the seminal fluid of man contains countless spermatozoa and that each spermatozoon as capable of giving rise to a physical frame. When these spermatozoa enter the womb, all but one or two are destroyed. Sometimes more than one—two or four escape destruction and give rise to as many children. In exceptional cases some tiny portion of a destroyed spermatozoon coalesces and develops with a whole spermatozoon. This portion of the destroyed spermatozoon develops into some abnormal feature such as the sixth finger, several mammary glands, tail, mole, etc. This also explains why some rams have horns. Some" times a he-goat and a ram on the very same day mount the same sheep. When, with the seminal fluid of the ram which causes conception, mingles the seminal fluid of the he-goat, a horned ram is the result, the horns being contribution of the he'goat. Grafting of the organs of one animal on another is very common. Those who are familiar with the process of grafting, are not surprised to see a five-footed cow. They know that the fifth foot is the result of grafting. Recently we came across a horned Sidi (negro) in Bombay. In England many cases of grafting are to be met with. During the embryonic stage also grafting takes place. Thirston, in his book "The Science of Propagation," remarks that a pregnant cow never lets a bull approach it. If the bull, however, forcibly mounts a pregnant cow, the prospective calf will have some abnormal features, such as three or five feet, two tails or two heads. In the Hindi Bangvasi of 17th March, 1924, appeared the news that in a certain hospital in Belgrade, the capital of Servia, two children were taken out of the stomach of a young man of twenty-two. After a good deal of hard thinking the scientists came to the conclusion that the mother of the young man had conceived three children at the same time and that while the young man as an embryo was yet in the womb, the other two embryos somehow found their way into him. Darwin says

on page 163 of his book that whenever there is famine, not only is the growth of plants arrested, but they also present some unusual features. All this evidence goes to show that abnormal features or organs result from abnormal conditions and from the coalition of spermatozoa. It should be remembered in this connection that these features only characterise individuals and are not hereditary. We rarely find such abnormal cases. Men with tails, women with eight or ten mammary glands are as much exceptions as men with six fingers, horned rams and she-goats with mammary glands in the region of their necks. None of these features are vestigial. Thus the last prop of the Theory also collapses.

There are three important contentions in this chapter on the origin of man:—

1. Man is a species of the apes;
2. There is only a difference of degree between the brains of man and ape; and
3. Man even now presents vestiges of forms through which he has evolved.

In the preceding pages, it has been amply demonstrated that comparison serves no useful purpose. The author of the Theory also holds the same opinion. The latest facts about the ant have demonstrated the futility of comparing brains. Male mammary glands, she-goats' neck (mammary glands), absence of mammary glands in the horse, ram's horns, six fingers of man—all deal a fatal blow to the theory of vestigial organs. The Theory of Evolution has failed miserably to prove that all organisms, including man, have undergone various forms before acquiring present ones. From beginning to end the Theory of Evolution has nothing more important to make mention of than vestigial organs and intermediate forms. We have already indicated the causes of those abnormal organs which are not vestigial, though they are supposed to be so. Now we shall proceed to discuss intermediate forms with a view to finding out the real causes of their origin.

## INTERMEDIATE FORMS

Intermediate forms are known to the Evolutionists as Missing links. Classification, Comparative Anatomy, Palaeontology and Geographical Distribution, all seek to collect evidence respecting them. There are three divisions of the missing links.

1. The first division is constituted by organisms which resemble two distinct forms. The bat, the duckbill, the archaeopterix, the opossum and the kangaroo, etc., all belong to this division.

2. In the second division come the whale, the peacock, the ostrich, the penguin and other such creatures, which possess certain non-functional organs.

3. In the third division fall creatures with certain extra or abnormally developed organs, e.g. women with more than two mammary glands, tailed men, etc.

Creatures in the first division present characters of two distinct forms. They are intermediate forms, but not in the sense in which Evolutionists use the word intermediate. Regeneration by transmigration of the soul accounts for the presence of such creatures. There are two kinds of intermediate forms:—

1. Higher, and
2. Lower.

Winged squirrel and the bat; monkeys and anthropoid apes are examples of the two kinds. The higher intermediate forms are those which pass from the lower to the higher forms and the lower intermediate forms are those which tend in the opposite direction—from the higher to the lower forms. A man who has been condemned to be a beast or bird for his sins, will first take the form of an anthropoid ape, then of monkey and only thereafter will he pass through the still lower forms. On the other hand, a lower creature which has made adequate amends for its past sins, will tend through higher forms—through monkey, anthropoid ape, etc.—towards man the ultimate end. The great gulf which separates beasts from birds is bridged by such Forms as the bat, the winged squirrel, the duckbill, the Archaeopterix, the

opossum, etc. They belong to either of the two categories of intermediate forms. They are either tending towards beasts or birds. Those which present a greater number of animal features are passing from bird forms to animal forms, while those which have a greater proportion of bird features are tending, through beast-forms, towards bird-forms. This is universally true.

Evolutionists do not yet know the distinction between vegetation and worms. They maintain that the primeval creature was something between vegetation and crawling creatures, but it is not a fact. Vegetation survives division but animals do not. It is said that some of the crawling creatures such as the earth worm survive division like vegetation, but earth worm is obviously a worm. Though it crawls and is sufficiently big in size, yet it is not a vertebrate like a snake. It has the colour of the yellow piper betel that entwines about trees. There is only a difference of degree and not of kind between an earthworm and the piper betel which creeps like the earthworm to which it is very much akin. Both survive division. Just as the parts of the die' membered piper betel maintain separate existence only when cut at a particular point, similarly the parts of the earthworm also survive division only when cut at a particular point. The porous part which forms the middle of the earthworm, contains the seed of life. The earthworm is a herma' phrodite, and therefore it multiplies by division and re-division. If an earthworm is cut into two in such a way as to divide the porous middle part of the earthworm, both the parts will survive. If, on the other hand, the tailed part of the earthworm is detached from the porous middle part containing the spark of life, the tailed portion cannot survive. Just as the limbs of a human being are rendered lifeless when amputated, but the main body including the head survives, similarly the life in the earthworm is centred in the upper part of its body. This fact clearly demonstrates that life is not something that pervades the whole body. The tailed portion of the earthworm will become instinct with life only if this portion retains the porous middle part containing

the spark of life. It is obvious that life is centred in the porous middle of the earthworm. Just as the human body survives when limbs are amputated, similarly the upper part of the earthworm lives even when the tailed part with the porous middle is detached from it. It shows that the earthworm's own life abides somewhere in the upper part of its body, while the middle of it contains the seed of life from which spring other earthworms. When divided, the tailed part of the earthworm, if it retains the porous part, also becomes instinct with life and develops into a new earthworm, the porous part forming the mouth and the tailed part developing into the body. This characteristic of the earthworm distinguishes it from man, but plants share this characteristic with it.

All plants in the world do not multiply in the same manner. Some of them carry on the species through the fruits, some through roots and some through offshoots. The earthworm's process of multiplication is similar to the process of multiplication of certain plants through offshoots. If the offshoot of such a plant is detached, the life of the plant" is not annihilated thereby and the detached offshoot will give rise to another tree, provided it has the seed of life without which it cannot give rise to another tree- If the offshoot develops into a new tree, it is obvious that it has the seed of life in it. This offshoot provides the body to the seed which imparts life to the whole tree. The same is true of the earthworm and the piper betel. That is why we think that the earthworm is akin to the piper betel. These facts do not at all repudiate the theory that plants survive division but worms do not. This theory retains its force in spite of the foregoing facts. The earthworm is an exception, not a rule, It is an intermediate form.

Just as monkeys and anthropoid apes come between man and animals and the winged squirrel and bat come between animals and birds, similarly the earthworm and the piper betel are intermediate forms between worms and vegetation. The earthworm is more of a worm as the piper betel is more of a plant. The earthworm is tending towards worms through

the piper betel stage, while the latter is tending towards vegetation through the earthworm stage. In this way all existing intermediate forms serve as a bridge to facilitate the passage of one form to another. Regeneration without these intermediate forms cannot be possible. It is however wrong to think that the intermediate forms indicate that either of the two forms, the characteristics of which are represented by them, has evolved from the other.

It is equally wrong to say that some organs of creatures in the second category have ceased to be functional. In fact, their organs still function. The whale's feet and the penguin's wings still aid swimming. Is it not absurd to say that they have been impaired by disuse? The wings of the peacock still help it to escape its enemies, such as the dog which cannot overtake and overpower it as easily as it does the goat. In view of this fact it is wrong to say that its wings have been impaired by disuse. God has obviously endowed every creature with a form which it has merited by its previous actions and which helps and can help it through life, provided man does not interfere. The organs are strong or weak only in a relative sense. The peacock cannot fly as well as a kite, but it does not imply that environments have weakened the wings of the peacock. Environments cannot divest a bird of its wings so as to enable it to take the form of a terrestrial animal. It is wrong to suppose that the organs of creatures belonging to the second category of intermediate forms have ceased to be functional.

In the third category come those creatures which some times present some abnormal organs which are mistaken by Evolutionists for the vestiges of their ancestors. We have already pointed out that male mammary glands, six fingers on the hand of some men, the she-goat's mammary glands located in the region of the neck, the ram's horns, the absence of mammary glands in the horse and the so-called vestiges of wings which its feet present, all repudiate the theory of vestigial organs. How did males come to possess mammary glands? Was there ever a time when even males could conceive? Never. Why do they have mammary glands

then? Why is the horse without them? Why are they located near the testicles of the he-goat, bullocks, etc? How to account for the mammary glands in the region of the she-goat's neck? Has there ever been a form in the whole range of creation which had this feature? Worms and insects have wings. Some fishes too have wings with the help of which they bound over the bosom of the ocean. Are they vestiges of their ancestors? Amoeba appeared earlier than worms and insects, but it was without wings. From which particular form have they inherited wings? If it is argued that the wings of insects merely heralded a new feature which all succeeding forms were to have, what is the explanation for the absence of wings in comparatively later forms such as amphibians and reptiles? Fish, the first of the vertebrates to make its appearance, has wings. From which ancestor has it inherited them? If they are a new feature, why are amphibians and reptiles which are of later origin, without them?

Among the exhibits at the Allahabad Exhibition of 1910 were a fish-woman, a beet-root having the figure of a man, and a tree with the figure of a human hand. Do these exhibits suggest the origin of plants from man and fishes? Did man exist even before the coming into existence of plants and fishes? Even Evolutionists believe that plants and fishes made their appearance on this planet even before the coming into being of man. How to account for the queer features of the above-mentioned exhibits? The argument that they herald the shape of things to come also is not tenable, as these features are not hereditary. The exhibits are exceptions to the general rule. Therefore it is wrong to generalise on the basis of exceptions. Thus far we have considered the intermediate forms and we find that they also do not support the Theory at all. As a matter of fact they go counter to the contentions of Evolutionists. There remains no evidence with the Evolutionists to be examined. From the consideration of the features, the structure and the evidence of the Theory, we proceed to discuss the process of evolution.

## THE PROCESS OF EVOLUTION AND ITS KINDS

Darwin has devoted pages 150 to 200 of his book to the discussion of how Evolution works—how one form evolves into another, how the fish evolves into the frog, the frog into the reptile, the snake into the peacock, the peacock into the cow and so on. A summary of the pages is given below. Darwin maintains that comparative study of embryos and fossils shows that organisms have not been distinct from each other from the very beginning of the world. There is no evidence to support the Theory that all organisms came into existence independently. Environments and natural changes are responsible for the differences between existing forms. The evolution of organisms is analogous to the evolution of machines in three respects. Both take the forms which the Creator wants them to take, both pass through different forms before assuming the final finished forms, which defy all further changes. The evolution of creatures is in no way different from the evolution of machines.

Adaptation is the first method of evolution. It implies that creatures adapt themselves to environments. In other words they allow themselves to be moulded by environments. There are two characteristics of adaptation:—

1. Differences in environments lead to variations, and
2. These variations are heritable.

Environment, functions and hereditary influences cause variations. By environment is meant heat, cold, rains, rivers, streams, forests, mountains and their inhabitants with their love, fear, hunger, thirst, diseases, etc., taken together. When people belonging to cold climate migrate to tropical countries, they develop consumption. On the other hand people of tropical countries develop diseases of the lungs when they migrate to cold countries. The leaves of trees

which are denied sunlight, grow yellow. Dogs of cold countries die in tropical countries. When there is drought in a country, trees develop some abnormal physical features. Functions also bring about physical variations. A blacksmith has sinewy arms. Beggars who keep their arms constantly raised, have thin arms.

Hereditary influences also lead to variations. Leprosy and other such diseases are heritable. Brown-haired and dark-eyed English people generally bring forth grey haired and brown-eyed offspring. The foregoing are only a few instances of variations wrought by environments, functions and hereditary influences.

The second method of evolution is what Darwin calls natural selection which has five elements:—

1. Universality of variations;
2. Over-production;
3. The struggle for existence;
4. The survival of the fittest; and
5. Transmission of variations to posterity.

Even the offspring of each species differ from each other and this variation is governed by a law. For example, in England, people five feet eight to nine inches in height, are numerically more than those who are five feet seven to eight and five feet nine to ten inches in height. Next comes those who are five feet five to six and five feet ten to eleven inches in height. Then there are those who are taller or shorter and their number is very small. Based on these facts is the law that if the average height of an adequate number of people is known to be five feet eight inches, and if the number of those who are comparatively shorter, is also known, then the number of those who are taller than the average, can also be calculated. This is an instance of a fixed law of variation. What is meant by Over'prO' duction? A pair of birds gives rise to slightly more than two thousand millions of offspring in fifteen years. A hook' worm lays thirty crores of eggs. There are insects and worms that multiply at the rate of one crore sixty to seventy lakhs in twenty'four hours. If there is peace and prosperity,

human population also doubles itself in twenty-five years. From a pair of elephants springs about two crore elephants in eight hundred years. This is what is known as over production.

The struggle for existence means that the struggle for existence is going on everywhere in creation. This struggle amongst the ants alone accounts for the destruction of millions. There are fishes that lay one crore and a half eggs in a single season, but their enemies destroy them. One million plants spring from seasonal plants in twenty years, but all the seeds do not find good soil and therefore most of them are destroyed. Rams, hurricanes, earthquakes, lions, tigers, snakes, etc., and even members of the same species account for the destruction of innumerable creatures. Similarly numerous diseases and epidemics also take a heavy toll of life. This is called the struggle for existence. The survival of the fittest means that only the fittest survive the struggle for existence, to which the weak and feeble succumb. Natural selection tends more towards destruction than towards preservation. This natural selection is the selection of the fittest. Useful variations of the survivors are passed on to descendants. Perhaps the only purpose of nature, in creating numerous varieties of the same species, is to secure the continuation of the species by preservation of at least two or four, five or ten out of these. This is a method of Darwinian evolution.

Lamarck's is the third method of evolution. He holds that the variations resulting from functions also are hereditary. The giraffe strained its neck in order to reach the leaves of the high trees. Its offspring also attempted the same thing, with the result that the giraffe developed a long neck through generations of continual straining.

There is yet another method of evolution—evolution through artificial and natural selection. It is through artificial selection that breeders breed fine bulls and horses. Similarly the farmer raises fine harvests by judicious selection of fine seeds. It is to artificial selection that we owe so many varieties of pigeons. Artificial selection has given twenty

feet long tails to Jap cocks. The Australian rabbits originally had no nails to help them in climbing trees but now they have developed them. This Evolution takes the principle of cause and effect also into consideration. English cows depend upon widows of England for sustenance. England abounds in clover, a kind of grass the growth of which is stimulated by flies. When rats swallow up the eggs of flies, the growth of clover is hampered as a consequence. English widows tame cats which prey upon rats and thereby save the eggs of the flies from destruction. Flies naturally multiply and stimulate the growth of clover by fertilising it with the pollen of flowers. This pollen, when it mingles with clover, greatly promotes its growth and it is this grass upon which English cows are fed. Thus the connection between English widows and English cows is quite obvious. In India where cats abound, rats are few, and consequently there is little danger of plague. Muslims are non-vegetarians and, therefore, they can conveniently tame cats. They seldom fell an easy prey to plague. This too is an example of casual connection.

Darwin gives the following explanation for heredity. According to him, each of the cells composing a body gives rise to gemmules which possess the properties of the cell from which they originate. The gemmules mingle with the gametes and are capable of bringing into being bodies like those from which they spring. Weisman, on the other hand, holds that each of the cells composing a body, contains chromatin which carries heritable characteristics. The paternal and maternal gametes carry equal loads of heritable characters, and as the syngote resolves itself into the community of innumerable cells that constitute the body, chromatin also undergoes a process of equal partition amongst all the various individual cells. Thus chromatin is the physical vehicle of heredity. In the meanwhile, if any variations occur, they are transmitted to posterity. This is a fact which microscope has brought to light. For a long time scientists were reluctant to accept it, but now they have recognised it. It lends support to Darwin's theory. Mendel has estab-

lished that there is greater resemblance between grandson and grandfather than between father and son. De Vries says that sometimes new species unexpectedly make their appearance. He calls them spontaneously modified species. Osborn, Baldwin and Lloyd Morgan are of the opinion that evolution can better be established by supplementing the views of Darwin by those of Lamarck. But the views of Naegeli and Eimer command greater respect. Unknown and unknowable powers, accident and teleology have also come to be believed in by some. Now it may be possible to shed greater light on the process of evolution. All investigations regarding this process hitherto have shown that it is only natural and real.

There are three important points in the foregoing summary:—

1. All forms have a common origin. They have not descended from distinct and independent ancestors.
2. All have evolved like machines.
3. All adapt themselves and are modified in the process and the variations that result are hereditary in character.

Most of the scientists hold similar views on the subject. We think we have fairly summed up the foregoing discussion. Now we shall consider these points systematically.

1. Many evolutionists admit that some forms have come into being independently and that there are some others which have persisted unaltered ever since they were created. Huxley, in his Anniversary Address, observes that there are many persistent types in the animal and vegetable kingdoms. Their forms have undergone no apparent change since they came into existence. Another eminent scientist, De Vries, remarks that sometimes new species unexpectedly appear. T. L. Strange, the author of the remarkable book entitled "The Development of the Creation of the Earth," is yet another authority on the subject. He mentions in his book that many kinds of creatures quite distinct from each other in form, make their appearance every day amongst aquatic creatures. These forms are not the modifications of the same form but spring independently and simultaneously from existing forms. These facts clearly show that new forms

are independently born. Even to-day new forms come into being independently. In view of these facts it is wrong to say that one form evolves from another. Millions of forms have known no change since their first appearance. Amoeba itself retains its primeval form. Then there is no justification whatever for the contention that different species did not come into being independently.

2. There can be no analogy between machines and living organisms. The purpose underlying a machine is altogether different from the purpose behind living organisms. A machine is manufactured by its maker either for himself or for others, not for itself. But the living organisms have not been created for the creator but for themselves or for other living organisms. Has there ever been a cycle manufactured for itself? Never. It has always been manufactured either for the maker or for the species to which the maker belongs. The living organism is neither for the Maker nor for His race. It is for itself or for its species. Therefore there can be no analogy between living organisms and machines. We have already pointed out that machines improve as they evolve and become durable, but quite different is the case with living organisms. We find that the forms, succeeding the snake and the tortoise which have 150 years as their span of life, live for a shorter period of time. Evolution obviously blundered when it evolved mammals from birds. Man's attempt to invent flying machines is nothing but an attempt to regain wings which he lost when he evolved from a bird into a mammal.

3. It is contended that variations are caused by adaptation and are heritable. This contention forms the backbone of the theory of Evolution and has been the subject matter of many a book. In view of the importance attached to it, we shall deal with the subject at length. Adaptation, variation and its hereditary character are very important. By adaptation is meant adaptation to country, times and conditions prevailing in a particular region. In other words, adaptation means moulding and being moulded by environments. Variations are wrought by adaptation. The condition

of skin in summer is altogether different from its condition in winter. Bodies subjected to exercise, differ greatly from bodies which are strangers to it. Variations that occur are passed on to offspring. There is a grain of truth in it. But how do minor variations and their transmission to offspring prove that a snake can evolve into a buffalo?

The only explanation given for the presence of hair on the bodies of animals, is that they are there to protect the animals from cold. But how is it that the intense cold of Terradelphigo, which has dwarfed the inhabitants so much that Darwin himself doubted that they were human beings, has failed to promote the growth of hair on the bodies of the inhabitants? Evolutionists do not have any explanation to give. The explanation that suggests itself to us is that beariike growth of hair on their bodies, or any other structural change would have made it a distinct species between which and the human race, fruitful union would have become an impossibility. It is not the will of the Almighty to transform one species into another. Hence Terradelphigo men have defied all structural changes. This instance brings one important fact about adaptation to light. The extent of adaptation which is not unlimited, is determined by the extent of protection a particular creature requires. Teria' delphigo men have undergone only as much modification as was strictly necessary in their case. Though Evolutionists consider thick growth of hair on their bodies as far more necessary than the dwarfing of their stature, yet there has been no extraordinary growth of hair. They have only been dwarfed. It is neither a case of adaptation nor of its opposite. The bodies of these men have certainly not been improved by modifications they have undergone. On the other hand, they have been impaired. If a machine becomes smaller and less durable than its predecessor as a result of modifications, the resulting variations cannot be called improvements, but their opposite. Similarly if a man is dwarfed and enfeebled as a result of his migration from the country of his birth to another, the changes he undergoes cannot be called improvements. The case of Terradelphigo

men throws as much light on adaptation and variation as on heredity. The present generation of Terradelphigo men presents only variations bequeathed to them by their ancestors. Their stature remains what it was thousands of years ago. There has been no further diminution of stature with the passage of time. This is what is meant by hereditary which merely leads to the fashioning of one after the image of one's father or grandfather. It does not transform one species into another.

Thus far three modes of evolution have been unfolded and the three causes of variations (environments, functions, and hereditary influences) have also been considered. It should be remembered that there is no unanimity of opinion on these subjects. Darwin attaches great importance to hereditary influences which, he says, have not yet been exhaustively dealt with. In Buffon's view, environments play a far more important part. He says that tropical countries give dark complexion to their inhabitants who transmit it to posterity. Lamarck attributes physical changes to functions. A blacksmith's right arm is sinewy and strong. His son inherits this characteristic from him. But Darwin agrees with neither. According to him it is natural selection that is at the back of heredity. Though there is difference of opinion between these scientists, yet all of them agree that variations do occur. We do not deny. Even in a single family we find members who differ from each other in features, strength and wisdom. Inhabitants of one country also differ from those of another. They do not cease to be men despite obvious differences.

Let us now proceed to examine Natural Selection which has the following five elements:—

1. Universality of variations,
2. Over production,
3. The struggle for existence,
4. The survival of the fittest, and
5. Heredity.

Let us take up variations first. We find that change is the law of nature. We have already referred to some per'

sistent types which have known no change since their first appearance on this planet. Amoeba retains its primeval form. So does the hydra. The same is true of all existing forms. Evolutionists maintain that ceaseless and unbridled change is in evidence everywhere. It is here that we disagree with Evolutionists. We maintain that every thing changes as it advances in age, but the changes are such as inevitably accompany age. All forms are travelling either towards youth or towards old age—they are either growing or decaying. But the changes that are in evidence are not such as can transform the earth into a railway train or the sea into a meteor. The earth, the sea, the pigeon, the horse, the donkey—none of these is in the process of evolution into a train, a meteor, a bear, a snake or a scorpion respectively. The variations brought about by climate, hereditary influences etc., are the only changes possible. It is altogether beyond the scope of these changes to give a green complexion to the people of a particular country or to give horns to the camels of a particular region. Though it is difficult to forecast the climate of regions yet in the womb of the ocean as also the likely effect of it on the people who might inhabit them for millions of years after their emergence above the surface of water, yet it is certain that their form, features and complexion will not be much different from the form, features and complexion of existing peoples. It is fantastic to expect the Atlantic to throw up an island the inhabitants of which would become violet complexioned and would develop ears long enough to reach their feet and broad enough to serve the purpose of wings in the course of 85 thousand years or so.

America presents a fine example of limitations to which variations are subject. European colonists in America have been gradually acquiring the physical features of the native Red Indians. Without any intermingling of red men and white, the modern American, thanks to the climatic conditions, resembles the Red Indian far more closely than he resembles his own ancestor of the colonial days. Only 400 years have elapsed since Englishmen first set foot on the

American soil. It was only after the discovery of America by Columbus in 1598 that the colonisation of America began, and it was long afterwards that English colonies appeared in America, yet within the short space of 400 years the English colonists have acquired the features and complexion of the native Red Indians who have been living in America for millions of years during which they have known little change. But for this fact, the Red Indians could never have been overtaken by European settlers. The 400 years during which English colonists have acquired Red Indian features, would have brought about further changes in Red Indians. Whatever changes climatic conditions were capable of effecting, were wrought in Red Indians millions of years ago. This is a fact that slows down, almost to a standstill, the supposedly bewildering speed of evolutionary change. The two instances of Terradelphigo men and Americans show that change itself is subject to certain limitations. Boundless change is a myth. All change is limited and in accordance with certain laws. One species cannot evolve into another, nor can their interrelationship be ever broken. Therefore the limited variation in evidence does not prove Darwin's unlimited variation.

Over production comes next. There is an ocean of difference between overproduction and production. The former is human, the latter divine. Both overproduction and production are subject to an iron law which has six elements:—

1. The species to which an organism is to belong, its span of life and its share in the joys and sorrows of life, are all determined by its actions in its previous existence.

2. An organism, through its species, span of life and participation in the joys and sorrows of life, harms or benefits those harmed or benefitted in its previous life.

3. First the object of enjoyment comes into being, then the enjoyer.

4. The proportion between the members of the two sexes always remains the same. In other words, if a certain number, either of males or of females, of a certain species

is destroyed, the number increases through over production till the proportion is restored.

5. If a certain number of a certain species is destroyed prematurely, the number increases rapidly till the loss is made up.

6. If at a time the number of parents is not adequate, existing parents through overproduction bring forth all the children destined to be born.

Of the six elements of the law referred to above, the three relate to providential production and the other three to over production. Unless there are premature deaths, production is providentially regulated. When violence, starvation, war and natural upheavals take a heavy toll of life, overproduction begins. Man's lust and consequent extraordinary multiplication of population, account for premature deaths. When man fails to regulate production, the reign of unhappiness, wars, epidemics and sins begins. It is only the sinners who have to undergo a variety of forms- It is they who are responsible for overcrowding and who die or are killed prematurely. If man exercises birth control, he will be spared the trouble of being born and reborn- If man strives to attain salvation, the human family will inevitably shrink and all surplus population will disappear. Just as hitherto the earth has yielded sufficient quantity of food to sustain normal population, so in future too, mountains, seas and deserts will yield food for the population of the world. But there is no room for Over-production on this earth. If salvation becomes humanity's object of attainment, all surplus population will disappear and consequently all conflicts will cease. There was a time when there was no over-production and no strife in the world. It was when man was simple and intent upon the attainment of salvation, and when he had no tendency towards over-production.

If man in recent times has tended towards over production, it is because of the lack of moral restraint on the part of man. This tendency is not natural. Over production and premature deaths have followed the aban'

donments of regulated life by man. Man's deliberate violation of the laws of creation, has deflected creation from its natural course. Overpopulation may be attributed to a variety of causes, one of which is that the road to salvation is blocked. The Eternal being is the ultimate and real abode of all creatures. When creatures stay back in large numbers and do not strive to attain God, overcrowding becomes inevitable. Epidemics, famine and wars accompany over crowding and cause premature deaths. Creatures which die prematurely, are reborn to reap the remaining harvest of their actions. The sinners among men also add to the population of the lower creatures by assuming their forms on account of their karmas (actions). The growth of population beyond the means of subsistence, again leads to premature deaths and consequently to births and re'births. If the number of parents in existence at a time is limited and the number of souls to be reborn is large, the existing parents bring forth all of them and thereby create the impression that overproduction has taken place.

Deforestation, exploitation of mines, industrial development, slaughter of animals for consumption, all have deflected creation from its natural course. If man gives up meat-eating, animals would live through their normal span of life and would die only when they are ripe for death. Their carcasses would then provide food for carnivorous animals who would then have no incentive to prey upon living animals for the satisfaction of their hunger. The animals thus spared by carnivorous animals would die only when they are ripe for death and would rapidly undergo other forms till they take the human form. If on assuming human form, they quit themselves like men and do their duty, they would attain salvation. If all obstacles that block the progress of humanity towards salvation, are cleared, and if salvation becomes humanity's object of attainment, overproduction, the struggle for existence, the survival of the fittest etc., would cease. Deforestation is as deplorable as meat eating. Through deforestation, man has choked the sources of fruits and fodder—the natural food of men and animals respectively,

Drought has followed in the wake of deforestation and has led to the shortage of food grains and to consequent starvation and premature deaths. Factories, mills, machines and mining have caused natural upheavals- and have limited the sphere of human and animal activities. We do not exactly know the reaction of clouds, lightning and winds to deforestation and geological upheavals, yet the effect of the changes clouds, lightning and winds have undergone, has been that creatures do not live the normal span of their life. In short man is responsible for the unnatural state in which we find man, animals, birds, insects, moths, grass, leaves, mines and mountains, rivers and seas, etc. Creatures, consequently, have a shorter span of life now. This is man's greatest sin as a punishment for which man has to undergo beastly forms after his death. Violence puts a premature end to the life of animals who for that reason, have to be reborn in the same forms to reap the remaining fruits of their actions in their previous lives. Frequent arrivals naturally add to existing population. Unhappiness and destruction have increased with the multiplication of population and with consequent intensification of the struggle for existence. If man reverts to his natural state and puts an end to all the disturbances he has been responsible for, at least untimely deaths and consequent rebirths would cease. If man ceases to be a brute, overproduction would automatically come to an end.

When overproduction is unnatural, the struggle for existence, as a consequence, is altogether unnatural and artificial. When families are limited, there is no struggle for existence. It is within the power of man to check overproduction. Darwin remarks on page 181 of his book that natural selection tends more towards destruction than towards preservation, but he contradicts it by his statement on page 175 that the only purpose of nature in creating numerous varieties of the same species is to secure the continuation of the species, there being every likelihood of at least a few of these varieties escaping annihilation under hostile environments. Where there is a tendency towards destruction, there cannot be a tendency towards preservation,

Nothing can be a destroyer and preserver at the same time. In fact nature is a preserver, not a destroyer. But for Nature's tendency towards preservation, the earth would have been tenantless. Overproduction, which is unnatural, does undoubtedly cause the struggle for existence, but it can be checked. The struggle for existence, therefore, is not a law of Nature. It is an exception to the general rule.

It is contended that the struggle for existence results in the survival of the fittest, but we find no such thing in evidence in the world. We have given above the number of Englishmen of different heights and have seen that men of medium height predominate. The number of extremely tall and extremely short is very small. If only the fittest were to survive, the tallest Englishmen would have been in a majority, as height is also an important factor in fitness. Though they are the fittest, yet their number is the same as the number of the shortest—the most unfit from the point of view of height. Here we find the fittest contending against the most unfit. While they contend, Englishmen of medium height steal a march over them and win the race for numerical superiority.

Amoeba is the tiniest and feeblest, yet the most numerous of living organisms. Other tiny insects also are overwhelming in number. All animals except elephants and lions preponderate over man. They beat him by sheer weight of numbers. Man is no match for the elephant, the horse, the camel etc., in physical strength. He has a shorter span of life than the snake and the tortoise. The ant surpasses all organisms in intelligence. The bee is matchless in industry, hoarding, organisation and workmanship. All these creatures are obviously superior to higher forms in so many respects. Then there is no justification for the contention that only the fittest survive. If only the fittest survive, the Germans would have triumphed over the Allies, but they did not. India was at the zenith of her glory—when her downward trend began and thereby created the impression that she was unfit. These facts do not prove that only the fittest survive. If a sick man from his sick-bed sets

fire to the ammunition dump of the enemy and thereby paves the way for the victory of the party to which he belongs, Evolutionists may begin to identify sickness with fitness, but in fact only fitness is fitness. In connection with the struggle for existence we should remember the wings of birds, the span of life of the snake and the tortoise and the intelligence of the ant ; wings, span of life and intelligence are three valuable assets in life, the last being the greatest. How have the centipede and other later forms been benefitted by evolution ? Are not wings which they have gained, a poor compensation for the loss of that span of life which the snake and the tortoise enjoy ? What have the mammals gained at the cost of the ant's intelligence, the snake's span of life, and the wings of birds ? How has evolution benefitted the Lemar, the monkey, the cow, the buffalo, the pig and the dog ? If man were not a mammal, evolution would have lost its significance. What fitness did the forms preceding man possess ? No fitness at all.

Therefore it is wrong to hold that only the fittest survive and that the unfit perish.

It is absolutely wrong to maintain that fitness is hereditary. What we find in the world is that the offspring generally inherits worthlessness. The unfit always predominate. The poor, the weak and the unintelligent preponderate in the world. The offspring of a learned and intelligent individual, seldom inherits his learning and intelligence. If an individual does not exercise pretty good care in training his children, they are spoilt. In view of the predominance of the weak and the foolish in the world, it is absurd to maintain that only the fittest survive and the unfit perish. Did only the unfit perish in the natural upheavals in Japan, in the Great War and in the war between the Kaurawas and the Pand' awas ? Do plague and influenza take a toll of only unfit lives ? No, the fit, and the unfit alike perish. Of course the number of casualties among the fit is comparatively small as they are proportionately smaller in number. The fit are fewer and attain salvation. This world is meant only for the

unfit. The theory that maintains that the fittest survive and that fitness is transmitted to posterity is untenable.

Even Darwin does not find the theory satisfactory. He says on page 185 of his book that the causal connection between the sources of variations and heredity has not been properly ascertained. It was Darwin who believed that natural selection was a means to evolution and that it shed a flood of light on the process of evolution. But on pages 173'174 he says that it is not certain as to which of the three—environments, functions, and hereditary influences—play the most important part in the evolution of species. There is a great divergence of opinion on the subject, yet all scientists agree that all three of them more or less influence evolution. These are facts that show that Darwin and his supporters do not really know the causes of evolution. They have come to no definite conclusion about them.

Natural selection is not a convincing means of evolution. Only an unverified instance of natural selection has been given. On page 191 the author mentions that the Australian rabbits are reported to have been growing claws to help them climb the trees. If true, he adds, a new species of rabbits is in the process of evolution. Though the author himself does not know whether or not his information is correct, we are prepared to take for granted that the nails of the Australian rabbits have become a little prominent, but is that sufficient to make them a distinct species? Have they ceased to have a parturition similar to that of rabbits? If not, Australian rabbits do not constitute a distinct species. The difference between the Australian rabbits and others is no more than the difference between one person and another, between the inhabitants of one country and another, between the negroes and the Chinese. The negroes and the Chinese are the two varieties of the same species. The same is true of the Australian rabbits and others. Natural selection leads either to such differences in physical features as distinguish members of the same species inhabiting different parts of the world or to the sudden development of organ'

by some species. The example of the first is before us all. Despite obvious differences in physical features, the negroes and the Chinese belong to the same species. The white ant is an example of the second. It suddenly develops wings and becomes a moth. If the changes brought about by climatic conditions in the Australian rabbits, are no more radical than the changes responsible for the differences in physical features between the negroes and the Chinese, the Australian rabbits would never constitute a distinct species. The nails may become prominent without interfering with parturition, enjoyment and span of life. If they develop nails abnormally, we know what is likely to happen to them. Nature gives us an idea of the possible consequences of abnormal developments. It is common knowledge that somehow the white ant grows abnormally long wings, but it perishes as soon as its wings transform it into a moth. It brings forth no winged offspring, nor does it give rise to a distinct species capable of perpetuating itself. Darwin himself is not sure whether or not the Australian rabbits have developed long nails. That is why he says, "If it is true." Under the circumstances we do not intend to embark upon a lengthy criticism. Instead we are content to state here a law of creation according to which the changes, different environmental conditions in different parts of the world necessarily bring about, are not revolutionary and ceaseless but are well within bounds and are quickly accomplished. They are not to continue till the'Dooms'day.

These changes are such as do not stop fruitful union between members of the same species, born under different environmental conditions. In other words, the changes wrought by environmental conditions do not transform a species into a new and distinct species. If for certain reasons an organism suddenly develops some abnormal features, such an organism perishes, like moths. It does not perpetuate itself in its transformed form. It is manifest, then, that Natural selection cannot possibly bring a new species capable of perpetuating itself into being.

It has been shown in the preceding pages that Nature

does not, as a rule, bring new species into being. One of the fundamental principles of evolution stands repudiated therein. Let us now consider the principles of artificial selection which make it possible for man to give unusual features to plants and animals. Japan and America, in particular, have made appreciable progress in this direction. The Japs have succeeded in giving to cocks tails as long as twenty feet and in dwarfing giant trees. An American botanist, Luther Burbank by name, has given queer shapes to flowers and fruits, and has transformed many creepers into trees. Similarly pigeon breeders have produced several varieties of pigeons. All these are instances of artificial selection which is subject to the following three limitations:—

1. There are certain limits within which reproduction through artificial selection continues.

2. If artificial selection transgresses certain limits, the offspring tends to revert to the form of either of the two parent species.

3. If artificial selection goes beyond certain limits, reproduction completely stops.

The first limitation is universally respected. It is by respecting the first limitation that man obtains fine seeds of plants and animals. Healthy parents bring healthy children into existence. Reproduction continues if male and female elements in the offspring are preserved. A bull contributes horns, hooves and bones, and a cow contributes flesh and other things to the body of the calf. Bulls with a large proportion of female element in their composition, have no horns, while those with a large proportion of male element have long horns. It is for this reason that we find horned and hornless bulls. The latter are not altogether without horns. They have vestiges of horns in the neighbourhood of their ears. These vestiges are hidden from view by the hair. These bulls are, therefore, capable of giving rise to horned offspring. By acting on the same principle, thorny plants may be rendered thornless (the *ductua*, *Ficus indica*) prickly pear (*Nagphani*) may be shorn of its prickles.

Similarly *Oenothera Lamarckiana* (Sanghari) may also be deprived of its prickles. Such results are obtained by lessening, through artificial selection, male element in the *Oenothera Lamarckiana* and *Cactus ficus indica* (Nag'phani), both of which retain the vestiges of prickles which, if stimulated through artificial selection, again become prominent prickles. Among *Oenothera Lamarckiana* and *Cactus*, *Ficus indica* there are some varieties with small prickles which can be artificially accentuated. Pigeon breeding also is carried on on the same principle. This principle is universally applied. We owe men, women and eunuchs to the same principle.

The fruit of the crossed mango trees illustrates the second law. The mango tree which springs from the stone of such a mango, does not bear as big fruits as those of the crossed-mango tree. In the course of a few generations the mango fruit reverts to its original state. Fruitful union between the wolf and the dog, and between the tiger and the lion is rare. Even if the union is fruitful, the offspring tends to revert to the form of the original parents in the course of a few generations. In other words, no new and permanent species is brought into being as a result of such union. Jones Bowson in the "New Age"<sup>1</sup> for November, 1922, lays down that while walking in his garden, he observed among grafted plants, a struggle for reversion from the artificial to the original natural state. In such a struggle it is the natural state that triumphs over the artificial. In support of his statement, he refers to a chapter in Henry Domendrus "Natural Law in the Spiritual World"\* wherein the author confirms the same thing with reference to pigeons and rose plants. Mendel also has observed the same struggle. According to him, sometimes children resemble their grandfather more than their father. It is so because of the law that if an individual brings about abnormal alterations in his physical structure, his offspring does not inherit his newly acquired characters but those of the grandfather instead. Here it is clear that creation takes every precaution to preserve old species and to prevent new species from coming into being. According to some Evolutionists, Prof. De Vries

discovered some new species that sprang from *Oenothera La Marckiana* and Shirley Poppies. This fact proves that new species comes into being spontaneously. De Vries calls such species "spontaneously modified." We have already stated on the authority of Prof. Mendel and Jones Bowson that if the offspring of any organism is modified under the stress of external conditions, the next generation tends to revert to the characters of the grand or the great grand' father. De Vries' discovery was recently made. The new species discovered by De Vries are sure to revert to their original state within a few years.

The third law of creation provides against abnormal modifications. If an organism deliberately causes abnormal modifications, the modified offspring is rendered unproductive. For example, the mule, which is a cross between horse and ass, is unproductive. The fruit stone of the cross plum tree also cannot give rise to new trees. The same is true of the dwarfed Jap trees and long tailed cocks and of five'footed cows. Abnormally wise persons too, are unproductive. In short, creation brooks no abnormal evolution. Natural evolution is impossible in artificial evolution. The moment the limits set by the laws of creation are transgressed, reproduction stops.

Lamarck tried to reproduce tailless rats through those whose tails were amputated. He deprived several successive generations of rats of their tails, yet they brought forth no tailless rats. The shepherds of Leicestershire tried to give to their sheep the size of the horse and some amongst them strove to reduce them to the size of rats, but both the groups were equally unsuccessful. They grew or shrank in size only a little. The law governing reproduction was obviously at work. The sheep grew or shrank only to the extent compatible with fruitful union. They did not go beyond prescribed limits—they did not branch into two species.

All of us are examples of natural and artificial selection. It is natural selection that makes it possible for one individual to be distinguished from another. It is possible to distinguish between women of the same age. It is because of the

difference wrought by natural selection that it is possible to distinguish between horses, cows, bullocks, and dogs of the same age groups. But for the fact that individuals are distinguishable, there would have been great confusion in the world. The differences we owe to Natural selection are only essential. If peoples of different countries differ, it is because of restrictions on international marriages. If international marriages are encouraged, all differences for which geographical position is responsible, will disappear. But the distinctive features of individuals are God given. They make it possible to distinguish between individuals and the world cannot do without them.

This difference between individuals provides a basis for the contention of Evolutionists that the slight difference which we observe between individuals of the same species, gradually broadens into as great a difference as there is between a squirrel and a bear. Nothing can be farther away from fact. But for such essential difference as we find between individuals and for which natural selection is responsible, there would have been no order but confusion in the world. As for artificial selection, it is altogether incapable of giving rise to new species. For generations it has been customary amongst the Hindus to hole the ears of Hindu boys and girls yet no child with holed ears has ever been born amongst them. Since the time of Prophet Ibrahim, i.e. for the last 3,000 or more years, circumcision has been practised amongst the Jews and the Muslims (in ancient times women also used to be circumcised) yet there has never appeared amongst them a child without the foreskin. It has been customary amongst the Chinese women to encase their feet to arrest their growth, yet they have never given birth to a girl with growth-defying tiny feet.

All these instances clearly demonstrate that artificial selection is not without its limitations. Never have natural and artificial selection promoted the evolution of a species that is unreplicative and has its characteristic span of life and enjoyment, nor is there any evidence on record to prove that such a thing has ever happened. It can, there

fore, be emphatically asserted that the theory of evolution has no sound basis.

The author of the theory has advanced the views of some eminent scientists to show how, guided by certain laws, the stream of life flows on. All the views that have been advanced, militate against the theory. It is not accepted on all hands that the English cows depend for sustenance on English widows or that the Muslims enjoy complete immunity from plague. Even if it is accepted, it does not prove that new species come into being.

Darwin's theory that different parts of the body of the offspring take their rise from the gemmules which spring from the cells composing corresponding parts of the parental bodies, and which mingle with the paternal sperm and maternal egg cells; Weismann's theory that every cell composing a body, contains chromatin carrying equal loads of heritable parental characteristics, and that any new features the parents may acquire, would not be transmitted to posterity ; Mendel's theory that sometimes a child resembles his grandfather more than his father; De Vries' theory that sometimes new species spontaneously and suddenly come into being, and Teleology and the doctrine of the unknown and the unknowable—all together repudiate the theory of Evolution.

The theory that every part of a child's body springs from the gemmules of the corresponding parts of the parental bodies, is a vedic theory which is wrongly attributed to Darwin. The fact that the novel characters suddenly acquired by parents are not transmitted to posterity, which adopts the characters of the grand parent instead, clearly indicates that creation does not encourage the evolution of one species into another. The new forms coming spontaneously and suddenly into being among aquatic creatures, amply demonstrate that species do not evolve but suddenly come into being. They do not require the aid of evolution. Teleology and the doctrine of the unknown and unknowable powers at work, have shown that the Almighty gives creatures forms to which their actions entitle them. Evolution comes nowhere in the

picture. All the facts revealed by recent researches, militate against the theory of evolution. They, on the other hand, support the theory of special creation. The various theories of Evolutionists have ceased to command any respect even among the scientists. None of the three—environment, function and hereditary influences—has been a successful means of evolution. The author of the theory himself confesses that even one keenly interested in finding out whether or not species owe their origin to evolution, cannot observe even the minutest portion of the process of evolution (page 155). When we consider the process of evolution, we are confronted with such and allied problems. Sometimes important questions which cannot be wholly answered, crop up. Ignorant people think that scientists are fully conversant with the branches of science in which they are interested. In fact scientists are the first to point out the impropriety of being dogmatic on any subject. A little thinking will show that though evolution is obviously at work, it is not easy to prove it conclusively.

These are the well considered views of the author himself on the subject. He says what we have been saying hitherto. He gives expression not only to his personal views but also to those of the entire Western scientific world. It is needless here to point out that it is dangerous to believe in such a questionable theory in the face of the views given expression to above. Darwin claimed at the very outset that the theory had a sound scientific basis and advised us to acquaint ourselves with the laws governing evolution, so that we might be able to determine our future course of action. A thorough and critical examination of every aspect of the theory has driven us to the conclusion that it is merely a theory which has no relation to facts. Under the circumstances, if we try to make our lives conform to the laws of evolution, and if we conclude that one of these laws favours the annihilation of the weak, who would be responsible for the resulting incalculable harm in the social, political and religious spheres? State and religion are for contributing towards the Happiness of society. But if we are

convinced that the weak and the unfit have no right to exist, what contribution to social welfare can possibly be expected from us ?

Mahatma Gandhi says in his book entitled "Niti Dharma and Dharmaniti" that, according to Darwin, man and other creatures have an intense desire to live. Whosoever is capable of sustained struggle, survives, whosoever fails, perishes. But it is not physical strength alone that sustains one through the struggle.

Comparatively speaking the bear and the buffalo are superior to man in physical strength. If man were to wrestle with either, he would surely be overpowered, but man's mind triumphs over them. The same is true of the different races of men. In times of war, it is not always the party with numerous fighters and tremendous man power that wins, but the party which has first-rate brains and workers. However small in number and feeble they may be, yet it is they who win. This is an example of mental strength.

Moral strength is of far more consequence than mental or physical strength. The morally strong can more easily sustain themselves than the morally weak. Ancient history tells us that races which were immoral, perished. The inhabitants of Sodom and Gomorrah perished because of their immorality. Even now those who are immoral, perish.

Now consider a few simple moral principles which show how important moral behaviour is even in ordinary life. "Be peaceful in disposition" is a moral principle. Apparently a short-tempered individual seems to thrive, but on due deliberation it would be found that ill temper defeats itself in the end. Another moral principle is "Steer clear of Vices." A third moral principle advocates abstinence from debauchery. Statistics show that in England those who take to drinking at the age of thirty, hardly live for thirteen or fourteen years more, while teetotallers live to be seventy years of age. Licentious men hasten their own ruin. They are either issueless or have unhealthy issue. Their spirits begin to droop and with the passage of time they come to the brink of insanity.

If we cast a glance on the conduct of other races, we observe the same thing. The inhabitants of the Andamans desert their wives the moment their offspring begins to move about freely. In other words, they are more egoistic than altruistic. And the result of it has been their gradual disappearance.

Other animals also have regard for others. A scared bird gathers strength to protect its young ones. All these facts go to prove that the earth would have been without anything but stones and poisonous vegetation if its tenants had not been altruistic.

The main difference between man and other animals, is that he is far more altruistic. He has always laid down his life for others, for offspring and for his country. His sacrifice has always been proportionate to his moral strength. Hence moral strength is superior to both mental and physical strength. Greece testifies to this superiority. The ancient Greeks were intellectually superior to modern Europeans, but when they abandoned morality, their mental strength became their enemy with the result that in the modern world they have ceased to matter. It is neither wealth nor armed forces that sustains nations. Only morality can sustain them. Therefore it is the duty of man to promote the interests of society by acting strictly in accordance with moral principles.

The foregoing discussion makes it abundantly clear that kindness, love and justice alone can sustain a people, altruism alone can contribute towards the progress and prosperity of races. Birds and animals also have instinctive regard for others. Mahatma Gandhi rightly observes that, but for altruism, the world would have been without anything but stones and poisonous vegetables. In the face of these facts the contention of Evolutionists that the struggle for existence is in evidence everywhere and that only the fittest survive the struggle, is untenable. Hence it is not proper for us to be guided in our activities by the principles of Darwinism.

In confirmation of his theory the author quotes certain passages from the Puranas. He quotes in particular the

passage which refers to the eight million four hundred thousand forms. He has also tried to rally to the support of the theory the various incarnations of God—the Fish, the Tortoise, the Boar and the Half Man and Half Lion, Avatars. But none of these quotations serves any useful purpose. Even when the various Avatars appeared, men—both God-like and fiendish—existed. How do the Avatars prove the theory of Evolution ? Darwin quotes two vedic mantras also to prove the obnoxious theory of Evolution. According to the first of the two mantras, vegetation was the first to appear on this planet and was followed by the viviparous, the oviparous and the heat-born. This is a fact which does not, however, prove the evolution of man from vegetation. According to the second mantra which states an astronomical fact, the five planets derive their light from the Sun. Neither of these mantras supports evolution. Once Huxley also wrongly contended on the basis of a vedic mantra that ancient India believed in evolution. The only reason for attributing a theory to ancient India, seems to be to gain respect for it among Europeans who recognise that the principles of creation and religion discovered by the Aryans are unalterable. The examination of the theory of Evolution has convinced us that none of its contentions has any relation to facts. It is for this reason that we now find western scientists modifying the theory. The present trends in the scientific world indicate that a time is fast approaching when the theory would be regarded as no more than a theory and would cease to command any respect among the scientists.

During the Great War there appeared in the "Christian Herald" the news that a session of the British Science Society was held at Walwooven in Australia, under the presidency of Prof. William Watson. In the course of his address he observed that the Darwinian Theory of Evolution was not only baseless but also unscientific. Other speakers referred to the war that was in progress at the time which, according to them, clearly proved that man was what he had ever been before. Several states in the U.S.A. have declared it criminal for a professor in the state schools to inculcate the

principles of Darwinism. In the daily "Vartman," a Kanpur paper, dated 25 : 7 : 25, appeared the news that an American Professor John Scopes, was fined one hundred pounds for disseminating principles of Darwinism. The judge specifically mentioned in his judgment that the accused had propagated that man had evolved from lower animals. Modern scientists no longer believe in evolution, as none of the facts brought to light by recent researches on the origin of man, indicates that man has actually evolved. Prof. Patrick Geddes observed that "it must be admitted that the factors of the evolution of man partake largely of the nature of 'may be's' which has no permanent position in science." (Ideals of Science and Faith). Sir J.W. Dawson remarks that "no remains of intermediate form (between man and ape) are yet known to science. The earliest known remains of man are still human and tell us nothing as to the previous stages of development." Modern scientists have reversed the order of Darwinian evolution. Hitherto it had been propagated by Evolutionists that man had evolved from the anthropoid ape. Prof. Wood Jones of the University of Adelaide, has now come forward with his own view that it is the monkey that has descended from man, not man from monkey (Vedic Magazine, 1925). According to Sydney Coltett "science is equally explicit in its testimony that instead of man having slowly improved from the lower to the higher, the tendency is exactly in the opposite direction—that man's earliest state was his best." (The Scripture of Truth).

The Neanderthal Skull is the biggest ever discovered in Europe. It is 114 cubic inches. The smallest skull in modern Europe is fifty cubic inches and the biggest seventyfive cubic inches. These facts testify that man has been making no mental progress. According to Prof. Huxley, the English Skull is bigger in size than modern European Skull. The Skull discovered in Holland in 1883 is bigger than the average European skull of to-day. It is 150 cubic inches. These facts testify that the earliest man owed his origin not to evolution but to special creation and was mentally superior

to modern man. "How else, if not by evolution, could such multi-celled organisms as man come suddenly into existence ?" ask Evolutionists. Though they believe that the unicellular amoeba spontaneously came into existence, yet they find it difficult to believe that man also sprang spontaneously. It does not occur to them that the Power that brings amoeba into being, also brings the multi-celled man into existence. The Power that shaped such heavenly bodies as the Sun and the Moon and such tiny creatures as the amoeba, also fashioned the cow, the bullock, the elephant, the monkey and man. If the unicellular amoeba can spring spontaneously, so can man. The foregoing discussions, the thorough and critical examination of the Theory of Evolution and the new facts regarding man—all drive us to the conclusion that the theory of Evolution is monstrous and that all species owe their existence to nothing else but special creation. All thoughtful men agree that all original organisms owed their existence to God's special creation. Prof. Max Muller observes "We have been told of late that there never was a first man, but we may be allowed to suppose, at all events, that there were at one time a few first men and a few first women." (Chips from a German workshop Vol, page 237). On page 17 of his work entitled "The Development of Creation on the Earth," T. L. Strange, sometime a judge of the Madras High Court, writes that the earliest creation was not the product of sexual intercourse and that it was excellent and well built. The "Vaisheshak Darshan," dated the 4th February, 1905, says the same thing, though in different words. According to it, there are two kinds of bodies—those that are conceived in the womb—and those that take shape outside the womb. The latter, according to "Prashashtapad" are the bodies of Gods and Rishis who for some unknown purposes spring from the atoms without the intervention of sperms and blood. It is stated in the "Yajurveda" that Gods, Rishis, and Deities spontaneously sprang from the Almighty. All this evidence goes to show that the earliest men and other organisms were not a product of sexual intercourse.



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