

MAN—THE TAMER OF CHAOS.

BY EDWIN MILLER WHEELOCK.

[The essay which follows, is made up of gleanings from a manuscript left by Edwin Miller Wheelock at his death in 1901—a work evidently completed in 1874, and which must have been intended by Mr. Wheelock for publication in book form. The paper which appeared in the September issue, 1920, of the *Open Court*, under the title of "The Psyche—A Study in Evolution", was, in reality, gathered from the same source. Interspersed through the manuscript are passages from *Proteus*, a complete edition of which was published by the Open Court Publishing Company in 1910, and it might seem that *Proteus* was originally part of a more extensive work which the author had projected.

The preface to the manuscript bears the significant date of March 30th, 1874. That date marked the end of his connection with the Reconstruction Government in Texas, and brought to a close a warfare of absorbing interest—a career which had begun with his resignation of a Unitarian pastorate at Dover, New Hampshire, and his enlistment with the Northern armies in 1862, and which in its varied phases makes up a rare story of heroic and earnest action. The outline of that story, condensed from an unpublished biography, the present writer endeavored briefly to sketch in the *Open Court* for September, 1920, and in the issue of the same magazine for February, 1922, he dealt with the "John Brown sermon" of Mr. Wheelock—a noteworthy utterance spoken just before the execution of the great abolitionist and the prophetic character of which Von Holst deemed worthy of mention in his *Constitutional History of the United States*.

Edwin Miller Wheelock, on the active side of his career, was a soldier of freedom, whether in pulpit or camp, but on his reflective side he was a prose-poet, whose pre-occupation with the deepest problems of being has given to us a series of essays remarkable for their exquisite verbal beauty and high philosophic appeal.—Charles Kassel.]

CREATION moves through transformation on transformation, arriving at highest results without miraculous leaps or arbitrary shocks. Yet, in nature, from kingdom to kingdom and from

stage to stage, there is always an uplifting. The beginning of the animal is not the organic sequent of the vegetable kingdom; nor the viviparous animal of the oviparous, nor man of the Chimpanzee. At each stage, there is a lift between successive orders, a break in the level sequence, where plastic nature interpolates a new thought, and the *Praesens Numen* makes the bridge from kind to kind. The transition is not the measured increment of a progressive series, but a new inflowing of originating Spirit.

There are two kinds of Birth. There is the propagation of individuals of the same species on the same plane, which is ordinary generation; and there is the birth of species, or ascent from a lower to a higher plane, which is creation. In the former the all-fructifying Spirit acts through finite parentage; in the latter it operates directly through the matrices of nature, the Universal Mother.

If we trace any new type of being to its beginning, we find, of necessity, that it rests upon something both higher and lower than itself. On the natural side it has been evolved from something lower, as animal life from vegetable; and on the higher side from nothing less than the ever-brooding Creative Spirit. The creation of every new type of life, be it the human species or any other, has some lower nature on the maternal side and the all-vitalizing power on the paternal. Each new type of life includes what is below it as its basis and background, and something more; and that something more must come from above and beyond nature.

From this view-point of science, nature is seen as a vast system of evolution climbing upward, from the nebula to the mineral, from the mineral to the plant, from the plant to the animal, and from the animal to Man,—the glorious flower of the whole, for whom everything beneath serves only as root and stem.

The tendency of each type is not to change into the next higher, but to perfect itself after its own plan. The mollusk does not attempt to transform itself into a vertebrate, but it changes by degrees into a more perfect mollusk, and the branches it gives forth, whenever they reach their ultimate of progress, become extinct. The same holds good in all other types.

The starting point of every form of life is always from a prepared matrix. The sun was the matrix of the earth; the earth or mineral realm was the universal matrix of the vegetable

kingdom; this in turn was the basis of the lowest forms of the animal kingdom; these lowest forms furnished the matrices for those higher, and so on up to the highest. Man, the last creation, having the most complex organization, could only be formed from the highest animal form next below him. In the body of man all the organs of the animal creation find their completion, and every other brain is condensed in his. All inferior forms, animal, vegetable and mineral, are fragments, portions, prophecies of the grand type.

In previous chapters we penetrated, as with a mental telescope, the foregone ages, even into that voiceless eternity, when as yet time, and space, and nature were not. We beheld the birth of the Material Universe; matter evolved from the prior substance of Spirit and existing at first in the form of the rarest and subtlest ethers. We saw this grand *ovum*, or germ, fecundated by the Creative Spirit, developing into vast nebulae or nuclei, from which successively unfolded solar systems, planetary systems, flaming spheroids, geological epochs, mineral aggregations, plants in their regular order of ascension from lowest to highest, animals rising from the sponge and the jelly-fish, through sea-worms, fishes, reptiles, birds, and beasts, the diapason closing full in *Man*.

In the first dawn of being, vitality was united to matter; this vitality in each ascending period became of a higher and yet higher order,—the vitality of the mollusk, the fish, the reptile, the mammal, the responsible and immortal man.

From the first, Creation has striven to put forth the human form. Low down in the series we find animal forms with but a spine and head; then limbs and other organs begin to show themselves, one by one,—claws and fins shadowing forth the five fingers of man, and the approach to the human form growing more distinct, till man appears, with his dual nature, animal and spiritual, and rounds the full circle.

And all these changes are law-developed and law-governed, with no savor of chance or of miracle. By no miraculous, unlinked, and unrelated effort of divine power were they caused; the large analogies of nature all forbid. Nor yet did matter climb its spiral round from chaos to crystal, from crystal to plant, from plant to animal, and from animal to man, by the power of any laws inherent in itself. Life and its powers are spiritual, and it was spiritual forces that pushed each of nature's successive kingdoms into air and life. The worlds, with their contents, are out-

goings from God. It is the Spirit of God that tints the flower, that forms the fruit, that arches the firmament, that rounds and lights the star. It was the Creative Spirit, that, through the power of an upward attraction, drew the atomic particles into higher, and still higher, and finally into the highest forms;—the mineral, the vegetable, the animal, each growing out of the kingdom next below, with the Divine Spirit as its procreant and vitalizing cause.

The chain of Nature's being is continuous still. See her branches and families interweave. Thus, for example, we find bitumen and sulphur linking earth and metals; vitriols uniting metals with salts; crystals connecting salts with stones; and lithophytes joining plants and stones. Again, the polypus unites plants to insects; and the humming-bird insects to birds. The African vegetable serpent connects plants with reptiles, the tube-worm joins shells with reptiles, the eel forms a passage from reptiles to fish, the flying-fish unites fish with birds, the bat and flying squirrel link birds to quadrupeds, and the monkey gives the hand equally to quadruped and to man. Man by his physical nature is linked to the brute creation on the one hand, and by his spiritual soul to Heaven, on the other!

Nature discloses innumerable plants, rising step by step, the lowest interweaving with the lifeless mineral, and the highest piercing the domain of animal life. Above these are myriad animals, in regular lines of ascent, the lowest blending with the vegetable, and the highest stretching forth his hand to man. This is the grand ladder of progression, up which, from the lowest round, man has climbed to his kingdom. He seems, indeed, to halt midway between animality and divinity. He is semi-beast, demi-god. As Deity's highest personification on earth, he appears cut off from the animal world. But this is only an appearance, for the closest relations exist.

As life, in its climbing path, has left way-marks all along, from the simple cell to the most complex animal, so has it left traces at every step from the animal to the human being. As the crystal is but a mineral flower, and the plant but a vegetable crystal and the animal but plant with senses, locomotion, and nerves, so is man an animal in every respect; but in addition thereto he possesses a unique moral and spiritual life, in which consists his humanity.

The evolved man sits in the ear of nature, and hears the deep-keyed utterance and diapason of her communings. The crystal

privacies of space open to his gaze. He wins the Divine Secrets. He can approach undazzled the primal essence where suns, and stars, and galaxies roll out like sparkles from an eternal flame. He is omnipresent in the great circle of the Universe. He is the root and fibre whose bloom and fruitage is the world, and everything in nature, and each thread in the web of universal being, has its end in man's heart and brain.

Every animal of the barn-yard, the field and the forest has contrived to get a footing in man, and we may still trace the remains and hints of these relationships. His faculties reveal the animal kingdom through which he has arisen. The thin line of nervous matter of the Hydra and the Amphioxus, is a prediction of the convoluted brain of the mammal and of man. The proboscis of the elephant is but an extended nose; the wing of the bat but an altered hand; the shell of the turtle but modified ribs.

All life springs from the cell. The nebula of Chaos was the parent cell of the Universe. From its sheddings solar systems were born; whose cells floating away became planets. In minerals and crystals we again perceive laminæ or cells, but now they have advanced a step, they follow a definite line, and form beautiful geometrical figures. In the plant kingdom we have the constant germ or cell, but now metamorphosed into organs, performing distinct offices. Man, standing at the summit, has passed through all lower degrees of evolution, and it is, therefore, in human embryogony that we find unrolled the great panorama of organization.

The whole animal creation, from the mollusk to the man, have passed through the same gateway, and travelled the same path. The degree of development varies with the length of the path. The brain in all living beings is formed on one plan, and the process of growth is the same in each; but at a certain point the lowest stop. Others go farther before their development is arrested. Man, beginning at the same point, goes farthest of all. He ascends to and surpasses the highest, hence he is the most intelligent.

Birds have a third eyelid, which is of essential use to them, and is always present. In man the same eyelid is readily seen as a minute scale, of no possible use. In man there is a little cartilage, hardly visible, joined to one of the nostril-bones, and entirely useless. But in the horse these shut off the great cavity of the nostrils from foreign bodies, and in the whale they grow

to the size of bolsters, sealing the nostrils against a thousand fathoms of water as the animal plunges into the abysses of the ocean. In the grazing animals a strong muscle supports the head while eating. The same is found in man, but as it is not needed, it is only a thin white line of cartilage. As the organic remains in the rocky strata show the lines of the earth's progress, so these abortive and useless organs in man reveal the animal stock from which he was derived.

Man is the builded aroma of the world. The human body, as Pan's last flock, crops every nature that it touches. That which is scale in the fish, coil in the serpent, woolly or hairy coat in the quadruped, impenetrable mail in the pachyderm, becomes in man the four-fold clothing of the surface of his body. Nature is a force willed from the first to sculpture the images and paint the portrait of human attributes in plant, beast and bird; for the human is a traveling form, which reaches from man to God and involves all beings as it goes. Each mineral, animal and plant prophesied of man, and mollusk, sauroid and pachyderm were his heralds.

Man is the Microcosm. He is the embodiment of all the forms and forces of nature. He looks in all directions; he has relation to all beings and things; he can be acted on by all substances and forces. Every mineral, every vegetable, and every animal existence is contained in man, and draws its nutriment from the paps of his destiny. Humanity is built upon the kingdoms below, as coral continents rise into the red light of the sun. Plant and tree, knotty oak and nodding *weed*, dove and butterfly, rotifer and mammifer, are but so many steps of the Psychical essence on its way to man. Through geologic eras, with their million-yearred convulsions and slow adjustments; through a thousand dumb material forms, she has won her patient way.

The roots of man are deeper than can be told, and belong to the Immensities and Eternities. They reach down below the protoplasm and the granite, to that depth where the individual is lost in his source. For the creation, from the beginning, was in preparation of man. Long before he emerged into existence, the sun of a myriad epochs had decomposed the granite, soaked the land with light and heat, and covered it with plants and animals—the manufacturers of soil. Each particle of oxygen, each atom of lime waited for him, ready to obey his thought. The earth, the water and the air worked for him; the glacier and the frost

plowed for him. The huge mountain chains are but gases and fluid wind, which took form and solid mass to serve his turn. Humanity is the primal fact on this planet.

Nature is an outgrowth from man and takes his color and expression. Lands, seas and atmospheres are his sheddings. Stocks and stones are but the outer vegetation of the seeds of the soul. Each solar orb turns on the occult axis of spirit. Space itself has no existence; it is but a geometrical figure drawn by the finger of the Infinite. Man is the form for whose end all things exist. The end of nature is man and he is related to the farthest star. He is set by the Maker in the rhythm of His plan, receiving and transmitting the rush of Destiny.

When, in the immense day of creation, the hour for humanity struck at last, upon this crust of soil which the ages, and seasons, and forces had refined, man was placed to co-operate with sun and moon, rainbow and flood, to govern matter as the vehicle of powers higher than its own and as the organ of the Reason that made the world. In his ear the well kept secret of the Universe is whispered at last—that all things exist to moral ends and from moral causes, *and that it is for man to tame the chaos!*

Man is the bond where-with God has bound in one the sheaves of His great universe. Through him the very stones, or the horny nails and terminations of the earth, return to God; and the creation lives on the perpetual condition of spending alike its worlds and particles, its days and its very seconds, upon humanity. Not a stone, or a plant, or a living creature, but carries up its heart's thread into his loom, there to be wound into human nature, and thence forth to follow the lead of his own immortal destinies.