

THE SCIENTIST.

ALFRED RUSSEL WALLACE.

The lives of some men remind one of lofty mountains, serene and sublime. The tempest plays around their peaks, the thunder bolts in fury dash their rugged sides; the lightning's lurid wrath is hurled upon them: they are invincible; grand in their strength and serenity. Unmoved they pursue their course. They are children of science; they seek the light; they care not for the prejudice of man, the intolerance of the masses, the opinion of the past. They are seekers after truth; for her they endure calumny, slander, misrepresentation, and social ostracism. They frequently die in poverty, are buried in obscurity; their maligners say they will be forgotten on the morrow. A generation passes and they are heroes, loved, honored, and revered. The truths they gave the world have become a portion of man's common heritage. They were children who gave their lives for the enfoldment and demonstration of a principle of which they had caught luminous glimpses

in lonely hours given to profound thought and patient investigation. A notable representative of this class of men is found in the person of Alfred Russel Wallace, England's great scientist, and unquestionably the greatest living naturalist. Dr. Wallace was born in Usk, in Monmouth, in January, 1822. From early boyhood he evinced a passion for everything relating to natural history, and though educated for an architect and surveyor, he turned to everything pertaining to animal life, as the child turns from his task to play. It became a consuming fire that illuminated his intellect and crowded out all taste for the labor for which he had been prepared, and in 1845 he cast aside all else and devoted his whole time and energy to this department of scientific research. In 1848, we find him under the burning sun exploring the Amazon and Negro rivers of Brazil, an adventure abounding in perils on every hand. The fever threatened him, he faltered not. Serpents, scorpions, vipers, and hundreds of other venomous creatures seemed omnipresent. The torrid rays from above beat upon his brow, still he toiled on.

Conviction that a great principle lay ready to be unfolded, that a new truth might be given to the world, poured iron into his will and fire into his heart.

DEATH CANNOT FRIGHTEN SUCH MEN FROM THE FIELD OF
TRUTH,

and so we find this lonely toiler spending four years among the tribes of Indians, haunting the banks of the rivers, collecting specimens of animal and vegetable life,

which he hoped would cast light on his studies and give new meaning to the thought that had been awakened in his soul. This rare collection was almost entirely lost at sea. In 1852 he returned to England and published his "Travels on the Amazon and Negro Rivers." This work was shortly followed by a valuable scientific acquisition to our literature, entitled, "Palm Trees of the Amazon and Their Uses." Not satisfied with the discoveries he had made, and with soul burning to learn more of life, he embarked for the Malay Archipelago, where he spent eight years of persistent and untiring toil—years of privation and danger. It was during this time that another great and serene man, goaded on by the same hints and filled with the same thirst for knowledge, was with similar perseverance in foreign lands pursuing the same line of investigation.

THIS GREAT MAN WAS CHARLES DARWIN ;

but neither Wallace nor Darwin knew aught of the other's researches. In different parts of the globe they were working on the same problem, and what is still more remarkable, each arrived at the same conclusion at about the same time, for in 1858, while still in the Malay Archipelago, Mr. Wallace embodies the result of his investigation with his conclusion and deduction in a comprehensive essay on "Tendency of Varieties to depart from the Original Type." This paper was forwarded to Sir Charles Lyell, to be read before the Linnean Society in July, 1858. At the same meeting was read Mr. Darwin's paper on

“The Tendency of Species to form Varieties.” This coincidence is one of the most remarkable in the history of scientific thought. Two great thinkers working in widely remote parts of the earth arrive simultaneously at the same conclusions ; write their conclusions and forward them to an annual meeting of a great scientific society, where they are again simultaneously given to the world. In invention these coincidences are frequent ; in scientific research they are not rare, but we know of no instance so striking as the above. But though Mr. Darwin and Dr. Wallace were a unit on the subject of “Natural Selection,” they differed widely in regard to belief in immortality, Darwin being an agnostic, leaning toward atheism, while no man believes more profoundly in a future life than does Alfred Russel Wallace.

On his return from the Malay Archipelago in 1862, Mr. Wallace brought with him more than eight thousand birds, and above one hundred thousand etymological specimens. Immediately on reaching England, he set to work classifying and arranging this enormous collection ; a work which required several years.

In 1869 he published his great work in two volumes, entitled, “Malay Archipelago,” and in 1870 another able scientific work entitled “Contributions to the Theory of Natural Selection.” His “Geographical Distribution of Animals,” is one really great contribution to the scientific literature of this century. These are but a partial list of the profound works of this tireless student and careful investigator.

We referred above to his belief in a future life ; something noteworthy in so great a scientist in this age when materialism seems to have almost captured the disciples of physical or natural science. On this point, as on all others, Dr. Wallace has the courage of his conviction ; he is outspoken in his belief of another life. In the course of an exceedingly able and logical address on the subject,

IF A MAN DIE, SHALL HE LIVE AGAIN ?

delivered by Dr. Wallace in San Francisco during his visit to this country in 1887, he thus refers to the direful results that would befall the race should materialism become universally accepted by mankind :—

“ If all men without exception ever come to believe that there is no life beyond this life, if children are all brought up to believe that the only happiness they can ever enjoy will be upon this earth, then it seems to me that the condition of man would be altogether hopeless, because there would cease to be any adequate motive for justice, for truth, for unselfishness, and no sufficient reason could be given to the poor man, to the bad man, or to the selfish man, why he should not systematically seek his own personal welfare at the cost of others.

“ The well-being of the race in the distant future, set before us by some philosophers, would not certainly influence the majority of men, more especially as the universal teaching of science is, that the entire race, with the world it inhabits, must sooner or later come to an end. ‘ The greatest good to the greatest number,’ that noble ideal of

many philosophers, would never be admitted as a motive for action by those who are seeking their own personal welfare. The scoffing question, 'What has posterity done for us?' which influences many men even now, would then be thought to justify universal self seeking, utterly regardless of what might happen to those who come afterwards. Even now, notwithstanding the hereditary influences, the religious belief and religious training in which our characters have been molded, selfishness is far too prevalent. When these influences cease altogether, when under total incredulity and with no influences whatever leading men to self development as a means of permanent happiness, the inevitable result will be that might alone would constitute right, that the weakest would always and inevitably go to the wall, and that the unbridled passions of the strongest and most selfish men would dominate the world. Such a hell upon earth as would thus be brought about will happily never exist, because it would be founded upon a falsehood, and because there are causes now at work which forbid the disbelief in man's spiritual nature and his continued existence after death."

Again in Dr. Wallace's great work entitled "Darwinism," after setting forth the great system of evolution as believed and expounded by Darwin, in a manner at once clear, concise, and entertaining, the author comes to the front in an able defense of man as a spiritual being; reasoning as a scientist arguing with scientists, who, though accepting the doctrine of evolution, hold material-

istic views. In concluding his argument Mr. Wallace uses the following striking language :

“Those who admit my interpretation of the evidence now adduced — strictly scientific evidence in its appeal to facts which are clearly what ought not to be on the materialistic theory, — will be able to accept the spiritual nature of man, as not in any way inconsistent with the theory of evolution, but as dependent on those fundamental laws and causes which furnish the very materials for evolution to work with. They will also be relieved from the crushing, mental burden imposed upon those who, — maintaining that we, in common with the rest of nature, are but products of the blind eternal forces of the universe, and believing also that the time must come when the sun will lose its heat and all life on the earth necessarily cease — have to contemplate a not very distant future in which all this glorious earth — which for untold millions of years has been slowly developing forms of life and beauty to culminate at last in man — shall be as if it had never existed : who are compelled to suppose that all the slow growths of our race struggling towards a higher life, all the agony of martyrs, all the groans of victims, all the evil, and misery, and undeserved suffering of the ages, all the struggles for freedom, all the efforts towards justice,

ALL THE ASPIRATIONS FOR VIRTUE, AND THE WELL-
BEING OF HUMANITY SHALL ABSOLUTELY VANISH,

and, ‘like the baseless fabric of a vision, leave not a wreck behind.’ ”

As contrasted with this hopeless and soul-deadening belief, we, who accept the existence of a spiritual world, can look upon the universe as a grand consistent whole adapted in all its parts to the development of spiritual beings capable of indefinite life and perfectibility. To us, the whole purpose, the only *raison d'être* of the world — with all its complexities of physical structure, with its grand geological progress, the slow evolution of the vegetable and animal kingdoms, and the ultimate appearance of man — was the development of the human spirit in association with the human body. From the fact that the spirit of man, the man himself, — is so developed, we may well believe that this is the only, or at least the best way for its development; and we may even see in what is usually termed “evil” on the earth, one of the most efficient means of its growth. For

WE KNOW THAT THE NOBLEST FACULTIES OF MEN ARE
STRENGTHENED AND PERFECTED BY STRUGGLE
AND EFFORT;

it is by unceasing warfare against physical evils and in the midst of difficulty and danger that energy, courage, self-reliance, and industry have become the common qualities of the northern races; it is by the battle with moral evil in all its hydra-headed forms, that the still nobler qualities of justice, and mercy, and humanity, and self-sacrifice have been steadily increasing in the world. Beings thus trained and strengthened by their surroundings, and possessing latent faculties capable of such noble development, are

surely destined for a higher and more permanent existence ; and we may confidently believe, with our greatest living poet —

That life is not as idle ore,
 But iron dug from central gloom,
 And heated hot with burning fears,
 And dipt in baths of hissing tears,
 And battered with the shocks of doom,
 To shape and use.

We thus find that the Darwinian theory, even when carried out to its extreme logical conclusion, not only does not oppose, but lends a decided support to a belief in the spiritual nature of man. It shows us how man's body may have been developed from that of a lower animal form under the law of natural selection : but it also teaches us that we possess intellectual and moral faculties which could not have been so developed, but must have had another origin ; and for this origin we can only find an adequate cause in the unseen universe of Spirit."

Such is the profound conviction of one of the foremost living naturalists of the world, a man whose whole life has been given to the investigation, demonstration, and elucidation of truths on a strictly scientific basis.

The snow of age has fallen on the brow of this seeker after truth ; but age in this instance witnesses no diminution in the wonderful intellectual power of the man. Like Victor Hugo, his mind seems to gain strength, his intellect grow brighter, his soul more luminous, as he nears the gates of the other world.