## WALLACE ON DARWINISM.

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It is generally acknowledged that Professor Russel Wallace discovered simultaneously with Charles Darwin the theory of evolution. In the preface of a popular book recently put forth by his publishers he mod-

estly terms his researches "Darwinism," thus yielding to the great naturalist the honor which ought equally to attach itself to his name. As a scientific work it is thorough-going and conclusive. His knowledge is immense, his style simple, his logic irresistible. As a text-book of the doctrine which it seeks not only to further popularise but to substantiate by the latest scientific discoveries, it is a brilliant compendium of Charles Darwin's two great books-"The Origin of Species" and "The Descent of Man." It is more than this. It boldly and intelligently enters a field which other celebrated naturalists refused even to touch and draws conclusions as to the ethical aspect, or fatality of the doctrine as applied to man. In fact it is a forcible accessory to the doctrine of optimism which for generations asserted itself in Christian polemics and, in a vague but certain manner, dominated Greek and Oriental philosophy. Professor Wallace admits that he has differences, that his differences in many respects clash with the minor assertions of his beloved co-worker, Charles Darwin; but he announces that his entire work tends forcibly to illustrate the overwhelming importance of natural selection over all other agencies in the production of new species. It has been urged as a palpable objection to Darwin's work, that he founded his theory on the evidence of variation in domesticated animals and cultivated plants; and from this field of inference built up the generalisation which made the doctrine of evolution a method of the universe. Professor Wallace, primarily, seeks to prove the theory by a direct reference to the variations of organisms in a state of nature and hence his labors are the more interesting and valuable because of the objections raised against Darwin's alternative. Hence, whatever defects exhibited themselves in the modus operandi of Charles Darwin are in this book noticeably absent and the way is paved for continued triumphs which "Darwinism" as a doctrine has already achieved.

Two suggestions which Professor Wallace makes are particularly worthy of notice, altogether because they are facts which underlie the present social order and which are inexcusably forgotten in much of the current discussion of social and religious questions. In fact they are—the one an objection to the Malthusian doctrine of population which Darwin seemed to hint at, that population tends to increase faster than subsistence; and the other, the necessary development or contingency of that part of Darwin's work, which he seemed timid of asserting, or disqualified by his own testimony in his "Antobiography" to argue-the optimism which groups and centres the phenomena of nature about the benevolence of God or what most of us mean when we say God. It is needless to say that these facts are interdependent and would associate

themselves in any thoughtful mind. It is also needless to remark that they circumscribe the problem of evil (which has always puzzled humanity) and the problem of eschatology about which sectarian Christianity has had so much wrangling. It would not be irrelevant to the general discussion to observe that I take for granted the doctrine of evolution, reaffirming Professor Wallace's revolutionary postulates.

Malthus found no greater advertiser of his cruel doctrine than Charles Darwin who, in the third chapter of his "Origin of Species" maintains that the struggle for existence is "the doctrine of Malthus applied with manifold force to the whole animal and vegetable kingdoms." Hence our own Agassiz, for he was Americanised enough to be called our own, bitterly opposed "Darwinism" chiefly if not altogether because it conflicted with his notion of a benevolent supreme being and seemed to be, to use his own language, "Malthus all over." To Malthus we are indebted for one of those high sounding formulas-the geometrical and arithmetical ratios-by which the misery of the many seem to be naturally justified, and which among a vast number of people, as J. S. Mill declares, carries far more weight than the clearest reasoning. It is to quote Mr. Mill again "an unlucky attempt to give precision to things which do not admit of it, which every person capable of reasoning must see is wholly superfluous to the argument." And yet Mr. Mill accepted the theory that population tends to increase beyond the means of subsistence. Now Professor Wallace vigorously opposes this view of the universe. He indirectly touches upon the subject in what may yet prove to be an axiom, that the tendency everywhere in nature is to give to animals "the maximum of life and the enjoyment of life with the minimum of suffering and pain." This conclusion in itself carries great weight in as much that, as an indirect argument, it can be employed very effectively against the Malthusian doctrine. For if the reverse were true, if the tendency of nature to furnish animals with the minimum of life and the enjoyment of life or the maximum of suffering and pain, a doctrine which hinting at the method of the universe, Malthus seemed to think was the fatality of all animal creation, then Professor Wallace's work is in vain. Then is God not benevolent but omnipotent and his caprice our inexplicable damnation. The fact is as Professor Wallace has shown that there are innumerable barriers erected by nature herself among her own offspring for the possession of the very thing Malthus and Darwin mournfully despair of, and that everywhere in the sudden catastrophies which befall and accompany animals in their growth and history, catastrophies in which whole species of animals are annihilated, the tendency if not the actual law of the universe is, to ameliorate

the suffering and destroy the pain of the unfortunate. What has usually been supposed to be horrible and agonising pain among the lower animals chiefly, is, in reality, nothing of the kind but is the picturesque fancies of our own pathetic nature—a fact which many of us can testify in our own experience. And along this line Professor Wallace proves conclusively that it is the fear of death as a dreaded crisis among men and a partial cause of much needless and anticipated pain which, horrifying the human mind, makes many imagine must be the actual condition among the animal families in the war for the survival of the fittest. And he states that as the death of animals is generally unanticipatory and in nearly all cases immediate and not lingering, the fact of their terrible pain is at once preposterous conjecture if not an impossibility. Why some animals should die that others might live is a question which no one has been able to explain yet because it is so is no reason for affirming that the method is derogatory to any animal's happiness or pleasure. It is a presumption which has no foundation in reason—is built upon sophistry and is a part of that pseudo science which has found apologists in every age and among every civilised people on the globe. The fact is as Professor Wallace admits that this daily and hourly struggle, this incessant warfare, is nevertheless the very means by which much of the beauty and harmony and enjoyment in nature is produced, and also affords one of the most important elements in bringing about the origin of species. He adds weight to what some might call his speculative moralising by asserting in contradistinction to Malthus and Darwin that "while the offspring always exceed the parents in number, generally to an enormous extent, yet the total number of living organisms in the world does not, and cannot, increase year by year." "Consequently," he continues, "every year, on the average, as many die as are born, plants as well as animals; and the majority die premature deaths." Of course this fact does not disprove at a single stroke what Winwood Reade writes in his "Martyrdom of Man,"\* nor does it furnish any adequate explanation of this very condition he bewails but it disproves the theory of Malthus and hence destroys the lofty superstructure of sophistry which was built upon the assertion that as population tends to increase, the power of subsistence tends to decrease or to be inadequate. Hence the claim made by a rising political economist that poverty as the failure of nature to meet the requirements of an ever increasing population, is a gross

\*"Pain, grief, disease and death, are these the inventions of a loving God? That no animal shall rise to excellence except by being fatal to the life of others, is this the law of a kind Creator? It is useless to say that pain has its benevolence, that massacre has its mercy. Why is it so ordained that bad should be the raw material of good? Pain is not the less pain because it is conducive to development. Here is blood upon the hand still and all the perfumes of Arabia will not sweeten it." misrepresentation of nature, a caricature of the creator's beneficence, the very opposite of which being really the case, that there is plenty of provision for all the natural wants of animal creation.

When we ascend from such considerations up into the greater thought of an optimism which such facts employ, an interpretation of the universe from the standpoint of benevolence will not seem impertinent. The great conflict in which nations of men and species of animals were actors, has been the means of developing a higher plane and multiplying opportunities for life's enjoyment. The truth is very much as Professor Wallace has stated, that all the slow growths of our race struggling toward 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 toward justice, all the aspirations for virtue and the wellbeing of humanity, in fact the whole purpose, the only raison d'être of the world, with all its complexities of physical structures, with its grand geological progress, the slow evolution of the vegetable and animal kingdoms, is the development of the human spirit in direction of its perfect and perpetual happiness. Professor Wallace has no suggestions to offer on the reconstruction of the universe, although he recognises his utter inability to explain away the fact that pain and pleasure are not one and the same thing-a conclusion to which many philosophers, chiefly Hegelians, give their support. For viewing any and all sensations in man as conditioning some immediate or future beneficent object, Professor Wallace was but carrying out the a priori assumption of God's benevolence to its legitimate end when he stated that beings thus trained and strengthened by their surroundings, are surely destined for a higher and more permanent existence than the one in which they now live, and we may confidently believe, he concludes, 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 dipped in baths of hissing tears,
And batter'd with the shocks of doom
To shape and use."

There can be no philosophy of life more sound and rational than that one, which being designated "Optimism," traces in the method of the universe, the benevolence of God, and dares to affirm that all things work together for good—that love and the issue of the universe is correlative and at one—that our pleasures are proportioned to the planes upon which we live—that our wills are ours we know not how perhaps, but they are ours to make them what God intended they should be. Into this obscure realm of thinking, where many intellectual giants have become lost, where many millions of earth's children have

buried their hopes in despair and where religion has proven in many instances to be but a will-o'-the-wisp to tempt man to leap from the edge of a sword into a fool's paradise, Shakespeare flashes a light when he says:

"There is nothing good or bad, But thinking makes it so."

The whole scheme of life-whatever may be the issue—is a fatality approved if not ordained for the wellbeing and eternal happiness of mankind. And it is a matter of small importance whether we stand weeping in utter despair at the order of the universe, or whether like a famous Athenian philosopher we laugh at the follies of man; for by taking thought we cannot add one cubit to our stature nor change the universe one iota, and we act and shall continue to act, whether through wisdom, sophistry, or prompted by our mechanism, forever in the direction of perfect happiness. For this end Professor Wallace seems to believe our life is destined. And judging by the efforts which many are making to-day to develop paradise among us, we are on the high way to a joy in which many instead of a few will find satisfaction, and by which "Darwinism" truly shall see its final earthly triumph.