

*Natural Selection and Tropical Nature.* By Alfred Russel Wallace. (Macmillan & Co., New York.) Biologists of the present, though perhaps unanimous in acceptance of some form of evolution, are divided into two camps as to what factor has been most potent in the progress—the direct modificative influence of the environment or natural selection. Wallace stands for the latter. In 1870 he presented to the world a little volume of essays on “Natural Selection.” In 1878 appeared a similar volume on “Tropical Nature.” Both were delightful, even charming, reading. They have been out of print for some time. Just at this time their reprinting, as in the volume before us, is certainly desirable. Two later essays have been added, and one appeared in a somewhat modified form. These three are: “The Antiquity and Origin of Man,” “The Antiquity of Man in North

America," and "The Debt of Science to Darwin." To differ with a few of his statements and some of his conclusions in the first two of these is not to lack appreciation of their value and beauty of style. Man is no doubt Tertiary. We believe it. But why does Wallace say nothing of the Neanderthal skull? He does mention that from Eugis. Is not the Neanderthal skull as well authenticated as, and is it not evidently older than, that of Eugis? But it is lower than it should be in type to accord with the ideal primitive man our author looks for. Do Easter Island monuments teach degradation? Do they not rather teach succession of races? The argument from the North American mounds is not so conclusive as it seemed a few years ago, and no strong plea can be based upon it for degradation. It is true that in Egypt a civilization has been lost, but the world is the better for its having existed. No one denies local degradation, but there has been no general degeneration in man any more than there has been universal retrogression in the animal kingdom during geological history. In the essay on "The Antiquity of Man in America" we have as good a summary of the subject as could be written at the time. The San Pablo (Cal.) shell heap, a mile long, should cease to be quoted. We are assured that it never existed outside of Mr. Herbert Bancroft's "Native Races." The cases quoted of man's remains occurring with those of extinct mammals are painfully threadbare and are withal doubtful, although he says they "are now supported by such a mass of evidence of the same character that all the improbability supposed to attach to them has been altogether removed." But his only citations from this mass are Auglier's rather vague statements regarding Nebraska's löess relics. What is said of glacial relics of man is to-day supplemented by recent discoveries in Delaware, Indiana, and Ohio. As regards still older remains Wallace champions the Calaveras skull and the relics from the gravels under the lava flows of California. He has lately been over the territory where these were found, and he expresses confidence not only in the authenticity of the finds, but also in their Pliocene age. Of course the interest of Americans in these disputed matters has been greatly increased by the recent discovery of the Nampa Image and by Professor Wright's articles.