
Astronomy and Geology Compared. By LORD ORMATHWAITE.
London: John Murray. 1872.

The Origin of Species by Means of Natural Selection. By CHARLES DARWIN, M.A., F.R.S., &c. Sixth Edition, with Additions and Corrections. Eleventh Thousand. London: John Murray. 1872.

Man in the Past, Present, and Future. From the German of Dr. L. Büchner. By W. S. DALLAS, F.L.S. London: Asher and Co. 1872.

THE title of Lord Ormathwaite's work is that of the first Essay, in which the evidence afforded by Astronomy and Geology are compared with the view to ascertain the value of that of the latter science. The third Essay treats of progress and civilisation. The author's thoughts are throughout clearly expressed; and there is little need to tell the reader that under the affliction of extreme dimness of sight an amanuensis has been employed. The second Essay entitled, "Remarks on the Theories of Mr. Darwin and Mr. Buckle," gives the points on which Lord Ormathwaite is at issue with Mr. Darwin, Mr. Buckle receiving but little consideration. Strangely, one of the chief objections to Mr. Darwin's theory is answered by an addition to "The Origin of Species" in the present edition, both works being published at the same time. We quote the reply, because the argument is one often advanced against the theory of the mutability of species. "But as my conclusions have lately been much misrepresented," says Mr. Darwin, "and

it has been stated that I attribute the modification of species exclusively to natural selection, I may be permitted to remark that in the first edition of this work, and subsequently, I placed in a most conspicuous position—namely, at the close of the Introduction—the following words:—‘I am convinced that natural selection has been the main but not the exclusive means of modification.’ This has been of no avail. Great is the power of steady misrepresentation; but the history of science shows that fortunately this power does not long endure. It can hardly be supposed that a false theory would explain in so satisfactory a manner as does the theory of natural selection the several large classes of facts above specified. It has recently been suggested that this is an unsafe method of arguing; but it is a method used in judging of the common events of life, and has often been used by the greatest natural philosophers. The undulatory theory of light has thus been arrived at; and the belief in the revolution of the earth on its own axis was until lately supported by hardly any direct evidence. It is no valid objection that science as yet throws no light on the far higher problem of the essence or origin of life. Who can explain what is the essence of the attraction of gravity? No one now objects to following out the results consequent on this unknown element of attraction; notwithstanding that Leibnitz formerly accused Newton of introducing ‘occult qualities and miracles into philosophy.’”

I see no good reason why the views given in this volume should shock the religious feelings of any one. It is satisfactory, as showing how transient such impressions are, to remember that the greatest discovery ever made by man, namely, the law of the attraction of gravity, was also attacked by Leibnitz, “as subversive of natural, and inferentially of revealed religion.” A celebrated author and divine has written to me that “he has gradually learnt to see that it is just as noble a conception of the Deity as to believe that He required a fresh act of creation to supply the voids caused by the action of His laws.” This quotation not only answers Lord Ormathwaite’s objection, but it also removes the obstacle to the reception of the Darwinian theory by the most timorous in acknowledging the advancement of scientific inquiry. It may be said to be the chief addition, as it is that embodying the widest principle; the remaining corrigenda relate to natural science particularly, and are further evidence in support of the theory.

Dr. Büchner divides his work under three heads: “Our Origin;” “What are We?” “Whither are we Going?” In considering the origin of man, the author very carefully brings to the surface all the geological proofs of man’s antiquity, buried to the general reader in almost inaccessible works. The method of the arrangement is admirable. “What are we?” cannot strictly be said to follow the Darwinian theory of evolution,

because Dr. Büchner's lectures were delivered before Mr. Darwin's "Descent of Man" was known in Germany; but the following obtains in the superior evidence brought forward by Mr. Darwin. Dr. Büchner has answered the preceding questions; but the next he proposes, "Whither are we going?"—we must agree with his translator, Mr. W. S. Dallas, F.L.S., in saying that we do not arrive at the same conclusions. Man, Dr. Büchner, who is a thorough materialist, considers to be immortal, to the extent that the living principle which animates the material form is transmutable, and, following the doctrine of the conservation of energy, is never removed from this world, being absorbed by other, on the decay of the present material; thus it is form only that suffers change. From this basis it would appear that man is to go on improving until the struggle for the means of existence becomes a struggle for existence itself, guided by a fully developed intellect. Then the author proceeds to depict this mundane paradise, governed by a republic, possessing no restrictions as to private property, the restoration periodically of capital to the community. In spite of this philosophical Hades to which we are to be consigned, it is certainly comforting to know that we are not an animal system to be developed by-and-bye into a yet more perfect organisation; but that the advance we make in this present life will benefit us when we become somebody or something else, or a portion of several somebodies or somethings else. Seriously, while admiring the logical continuity of the first sections of the work, it must be said that the last portion is liable to cause the condemnation by many of the entire work. So far from being the opinion that the theory of evolution logically results in utter materialism, Professor Huxley has just said in the "Fortnightly Review," that "personally he was not a materialist, but, on the contrary, believed that materialism contained grave philosophic error." And Professor Huxley is not only a naturalist second to none, but an enthusiastic advocate of Darwinism. We recommend the books collectively and individually to our readers.
