

**SCIENCE IN PLAIN
LANGUAGE.
EVOLUTION, ANTIQUITY
OF MAN, BACTERIA, ETC**

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Science in Plain Language. Evolution, Antiquity of Man, Bacteria, Etc by William Durham

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WILLIAM DURHAM

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EVOLUTION, ANTIQUITY OF MAN,
ETC.

SCIENCE IN PLAIN LANGUAGE.

EVOLUTION,
ANTIQUITY OF MAN, BACTERIA,
ETC.

BY

WILLIAM DURHAM, F.R.S.E.



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THERE are many intelligent and thoughtful people who have not the time nor, perhaps, the inclination to read regular scientific works, but who would be glad to know the general results of scientific investigation if that knowledge could be imparted to them in plain every-day language without too much detail. For such this book is intended. Each article it contains is short and complete in itself so far as it goes, and may be read without reference to the others. There is nevertheless a connection between the whole of them illustrating the great principle of evolution.

It may be mentioned that these articles have already appeared in the columns of *The Scotsman* newspaper, but I trust they are of sufficient interest to justify me in putting them into the more permanent form of a book.

WILLIAM DURHAM.

January, 1890.

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SCIENCE IN PLAIN LANGUAGE.



I.

NATURAL SELECTION.



HERE is no scientific theory of modern times which has influenced thought in all departments of human inquiry in a greater degree than that of evolution, based on Darwin's great work on the origin of species by natural selection, and no theory has met with greater opposition, as it seems to upset some of our most cherished conceptions and beliefs. Notwithstanding this opposition, however, it has maintained its position as undoubtedly in the main a great truth, however it may have to be modified or added to in details. Owing to the amount of controversy which has taken place, the subject has got somewhat obscured in the popular mind, and it may not be without interest to explain in a general way some of the facts on which it is based. At the root of the whole subject is the fact of natural selection, and we must first understand what this means before we are in a position to judge how far it is able to bring about the changes observed. In the first place, it scarcely needs proof that all living beings, whether animals or plants, produce during their life-time far more of their kind than can possibly survive to