LIFE ON THE EARTH: ITS ORIGIN AND SUCCESSION

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Life on the Earth: Its Origin and Succession by John Phillips

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JOHN PHILLIPS

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JOHN PHILLIPS, M.A. LL.D. F.R.S. 41 LATE PREMIERT OF THE GEOLOGICAL SOCIEFY OF LONDON, PEOFESSOR OF GEOLOGY IN THE UNITABLE TO OF CAUGAD.

> MACMILLAN AND CO. Cambridge : and 23, hencietta street, covent garden, London. 1860.

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TO THE HON. AND REV.

LATIMER NEVILLE, M.A.,

VICE-CHANCELLOR OF THE UNIVERSITY OF CAMERIDGE,

THIS VOLUME

WHICH CONTAINS THE SUBSTANCE OF THE REDE LECTURE,

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DELIVERED UNDER HIS AUSPICES IN MAY, 1860,

IS BY PERMISSION

MOST RESPECTFULLY DEDICATED.

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PREFACE.

In the following pages, the three great divisions of Strata, and the three great portions of Geological Time, are termed Palæozoic, Mesozoic, and Cænozoic; these designations having fairly won their way, and being really preferable, while treating of the Succession of Life, to such titles as Primary, Secondary, and Tertiary, which express something more than the knowledge we actually possess, and something different from the idea we wish to convey.

While speaking of the Lower Palæozoic Strata and the beautiful system of Life which they contain —a system of the highest importance in the inquiry now on hand—I find it convenient to employ the combination of Siluro-Cambrian, or Cambro-Silurian, as the occasion suggests; and have pleasure in thus commemorating in my phrase the gigantic labours, sometimes independent, sometimes associated, but always successful, by which, first of all men, Murchison and Sedgwick laid open for us these deeplyburied monuments of the earliest Life on the Earth.

PREFACE.

Under the title Cænozoic, I wish the reader to comprehend with me not only the Eocene, Meiocene, and Pleiocene of Lyell, but the whole series of Supracretaceous deposits; the latest geological age being chiefly distinguishable by the presence and activity of MAN, for whom the Book of the Strata, inscribed with the earlier Wonders of Nature, has been given to be opened with care and deciphered with reverence, by the help of comparison with the living inhabitants of the Land and Sea.

OXFORD, Oct. 1860.

viii

LIFE ON THE EARTH.

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4

11

CONTENTS.

. 187
188
. 191
194
. 196
200
. 204

1. s

 \mathbf{z}

35

53 fi (5

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82

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LIFE ON THE EARTH.

MR VICE-CHANCELLOR,

THE subject which, by your command, I have the gratification of bringing before the notice of the University of Cambridge, is not offered as new, though, in consequence of being at the present time subjected to that scrutiny which always arises on the production of new evidence, it wears a somewhat novel aspect. For certainly the history of life is a theme which can never have been absent from the mind of a contemplative naturalist. It never can have been absent, because in all the classifications, in all the systems by which we vainly task ourselves to represent the divine idea of nature, we have invariably looked for a beginning, a progress, and a possible end. Standing by the stream of life, we have surveyed the variations in its course, and appealed to history and experience, for the data which might guide us to a right view of its incessant fluctuations, and its recurring uniformitics. We have thus found all nature, organic and inorganic, to be harmoniously combined in mutual dependence; the worlds of

R. L.

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