

**FAMILIAR LETTERS ON THE PHYSICS
OF THE EARTH, TREATING OF THE
CHIEF MOVEMENTS OF THE LAND,
THE WATERS AND THE AIR, AND THE
FORCES THAT GIVE RISE TO THEM**

Published @ 2017 Trieste Publishing Pty Ltd

ISBN 9780649238019

Familiar letters on the physics of the Earth, treating of the chief movements of the land, the waters and the air, and the forces that give rise to them by Henry Buff

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HENRY BUFF

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THE
PHYSICS OF THE EARTH.

G
Bu

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TREATING OF
THE CHIEF MOVEMENTS
OF
The Land, the Waters, and the Air,
AND THE FORCES THAT GIVE RISE TO THEM.

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LONDON:
TAYLOR, WALTON, AND MABERLY,
UPPER GOWER STREET, AND IVY LANE, PATERNOSTER ROW.
1851.

TO
NEIL ARNOTT, M.D., F.R.S.

BY WHOM

THE ELEMENTS OF PHYSICS WERE MADE FAMILIAR TO
ENGLISH READERS,

THE TRANSLATION OF THESE LETTERS

IS DEDICATED,

BY HIS ATTACHED FRIEND.

THE EDITOR.

EDITOR'S PREFACE.

IN offering the present volume to the British Public, I have but little to add to the statements of the Author concerning the object which he had in writing it.

The rapid progress which science has made during late years, under the united exertions of the naturalists of all countries, has revealed to us many new and remarkable facts relating to the formation and temperature of the Globe, and to the movements of the Ocean and of the Atmosphere, as well as to the influence of both on climate, and on the adaptation of the Earth for the

dwelling of man. The deep interest taken in such inquiries has created a great and general demand for information on these subjects, especially with persons who,—unable, from want of time or of the necessary preparation, to enter into the study of the actual phenomena,—must necessarily be satisfied with receiving the results obtained by others. To the desire to supply this want, which is strikingly illustrated by the almost simultaneous publication of several Treatises on similar subjects, these Letters on the Physics of the Earth owe their origin. In their publication, it was not so much the Author's object to offer new facts to the man of science, as to render to a large circle of readers some assistance towards obtaining clearer views and more precise notions of the processes which are at work, on the largest scale, on this our Earth, of the causes by which they are governed, and of their influences on the condition and general features of the surface of the Globe. His Letters are addressed to a person not supposed to have any greater amount of scien-

tific knowledge than is possessed by every man of education:—in language intelligible to such a reader, he endeavours to explain the great phenomena of nature.

How far the Author has succeeded in the task he proposed to himself, I must leave to the decision of the reader; but I may be allowed to state that I was induced to undertake an English edition of these Letters—the contents of which are not immediately connected with my special pursuits—by no other motive than the desire of rendering accessible to the Public a source of information from which I had myself derived no less of profit than of pleasure.

In conclusion, I have to express my sincere thanks to my friend, Mr. C. B. Mansfield, for his valuable assistance in editing the present volume.

A. W. H.

LONDON,

OCTOBER 26, 1851.

CONTENTS.

LETTER I.

	Page
GRAVITY AND ITS EFFECTS	1

LETTER II.

THE TIDES	16
------------------	----

LETTER III.

THE HEAT WITHIN THE EARTH	33
----------------------------------	----

LETTER IV.

WARM SPRINGS	44
---------------------	----

LETTER V.

HOT SPRINGS AND JETS OF STEAM	59
--------------------------------------	----