

**THE COTTESWOLD HILLS:
HAND-BOOK INTRODUCTORY
TO THEIR GEOLOGY AND
PALÆONTOLOGY**

Published @ 2017 Trieste Publishing Pty Ltd

ISBN 9780649556779

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Cover @ 2017

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JOHN LYCETT

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THE
COTTESWOLD HILLS.

HAND-BOOK

INTRODUCTORY TO THEIR GEOLOGY AND PALEONTOLOGY:

BY

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ALSO OF VARIOUS PAPERS IN THE PROCEEDINGS
OF THE COTTESWOLD NATURALISTS' CLUB.



LONDON:
PIPER, STEPHENSON AND SPENCE,
23, PATERNOSTER ROW.

STROUD:
F. W. HAMMER, GEORGE STREET.

1857.

STROUD:
PRINTED BY F. W. HARMER,
GEORGE STREET.

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INTRODUCTION.

THE physical features of the Cotteswold hills are distinctive in their character, strongly marked, and exhibit much picturesque beauty; their rock structure and fossil zoology are also replete with subjects of extensive and varied interest. The non-existence of any recent work illustrative of the Geology and organic remains of this region may be allowed to invite the present little treatise, in which it is endeavoured to render the language as free as possible from terms which are not in common use, and are therefore not intelligible to the general reader. The frequent appearance of elementary treatises on Geology by men whose names are guarantees for the value of their works afford a convincing proof that the number of their readers is considerable, and it may fairly be presumed that the public are now familiarized with the leading features of the science. Works of that description may therefore be considered to have prepared the way for Hand Books which have special reference to particular districts. The second edition of Sir R. Murchison's Geology of Cheltenham, edited by Messrs. Buckman and

Strickland, relates chiefly to the vicinity of that place, and has been published upwards of eleven years; its scope, therefore, is different from that of the present production. The time which has elapsed forms so considerable a period in the history of geological science, and the labours of local observers have been so unremitting during that period, that the combined effects of both causes have sufficed to impart almost a new aspect to the subject. In the proceedings of the Cotteswold Naturalists' Club are memoirs which bear upon portions of our subject; others will be found in the Journal of the Geological Society; and these, together with the Monograph on the Mollusca of the Great Oolite, published by the Palæontographical Society contain by far the greater portion of information to be found in English literature: other sources of information, both British and foreign, are duly considered and acknowledged. It is evident that elementary treatises on geology cannot satisfy the desire for information upon particular districts, and that the Monographs of the Palæontographical Society, however valuable they may be to the scientific naturalist, are not calculated to meet the wants of the general public whose reading will be directed rather to the hand-book, provided its contents are calculated to merit and repay the trouble of perusal. To meet these requirements, and at the same time to limit the size of the work by avoiding minuteness of details have been the chief aims of the author.

In the appendix will be found notes upon some subjects which are only briefly alluded to in the body of the work, and descriptions of such new species of testacea as are illustrated in the plates. The glossary of scientific terms contains concise descriptions of those fossil *genera* which

from their prominence or geological range characterize the region of the Cotteswolds. The reader is also referred to the list of authorities given at the end of the work, all of which have been consulted in the preparation of its materials. The small pretensions assumed in the present hand-book should not be regarded as a fair measure of the importance to which the subject may lay claim, but rather as a contribution which it is hoped may arrest the attention of the public, and possibly induce a portion of them to bestow increased notice upon the natural history features of the district in which they reside or to which they have access; to investigate with becoming diffidence and humility the works of the One Great Being whose thoughts we recognize in the varied operations of nature and in the records of the long past not less than in the present scheme of creation; evidenced in the application of means to ends through all the kingdoms of nature, in the minute Polype not less than in the colossal elephant; in a train of idea or pattern of design present continually throughout the great geological epochs and exhibited in the long chain of created beings forming the extinct races of our planet.