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978-1-108-00239-4 - A Handbook to the Geology of Cambridgeshire: For the Use of Students

Frederick Richard Cowper Reed

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A Handbook to the Geology of Cambridgeshire

Beneath Cambridgeshire's towns, villages, farmland, hills, fens and waterways lie the rocks that display a variety of geological landscapes. Basement rocks are buried under sandy deposits from ancient tropical seas. The rising and tilting of the land due to large-scale movements permitted water flows that produced gradual alterations. Glaciation, erosion and dramatic variations in climate all wrought more rapid changes. The consequences of these processes are revealed in this scholarly 1897 account of the geology of Cambridgeshire, which integrated the latest research then available. Proceeding from the most ancient to the most recent beds, systematic consideration is given to the features, distribution and modes of formation, as well as the economic implications of the various strata. Discussions of palaeontology, including detailed lists of site-specific fossils, and of water supply are also provided. An appendix lists maps, memoirs and other publications of H.M. Geological Survey from 1814 to 1897.

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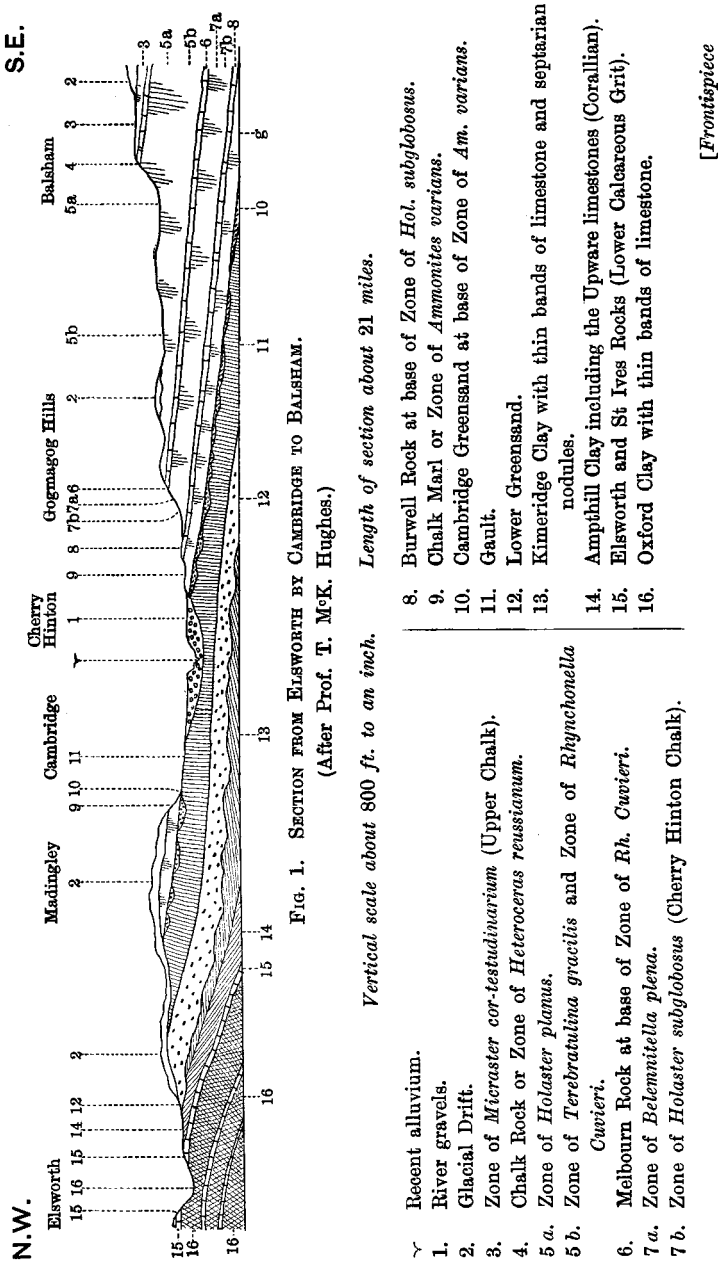
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A HANDBOOK
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FOR THE USE OF STUDENTS

BY
F. R. COWPER REED, M.A., F.G.S.
ASSISTANT TO THE WOODWARDIAN PROFESSOR OF GEOLOGY.

CAMBRIDGE:
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1897

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PREFACE.

THE earliest paper on Cambridgeshire Geology was published more than a hundred years ago, but the first important general description was given in 1861 in the lecture by Professor Sedgwick on "The Strata near Cambridge and the Fens of the Bedford Level." It was first reported in the local press but afterwards reprinted with a supplement and diagram sections. Two years previously Mr Lucas Barrett, assistant to Prof. Sedgwick, had published with the aid of the latter a map of the neighbourhood of Cambridge. Since then a multitude of geologists have studied the stratigraphy and palæontology of the district and have added immensely to our knowledge by their detailed investigations, but they have only tended to establish the general accuracy of the broad outlines sketched in by Professor Sedgwick.

Amongst the earliest and most energetic workers at the local geology was Prof. H. G. Seeley, whose careful and energetic research in this district is represented not only by numerous papers in various scientific journals but by the arrangement of a considerable part of the local collections in the Woodwardian Museum.

In 1872 Mr A. J. Jukes-Browne, who for many years has been issuing the valuable results of his geological

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work in East Anglia, published a revised version of Mr Barrett's map; and in 1875 Prof. T. G. Bonney, who had been requested to re-edit Prof. Sedgwick's lecture of 1861, brought out his excellent manual of "Cambridgeshire Geology," which since then has been the standard book on the subject for students.

The Memoir of the Geological Survey on the southern part of the county issued in 1881 was followed in 1893 by that on the northern portion; and these with the original articles and papers of which a list is given in the appendix must be consulted for details.

Owing to the recent publication of Sheets 9 and 12 of the inexpensive Index Map of the Geological Survey it has been considered unnecessary to increase the cost of the present handbook by the addition of a geological map, since these Sheets include the whole of Cambridgeshire and portions of the adjoining counties.

The increasing number of geological students in the University and their constant request for a concise account of the local geology embodying the results of the most recent research have led me to prepare this little book. I am especially indebted to Prof. T. McKenny Hughes for invaluable assistance and advice, and to Prof. Bonney for his kind permission to make free use of his manual on the local geology. My thanks are also due to Mr H. Woods for much information about the Cretaceous beds.

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