of the European fauna in the form of a little book, as it was not so easy for the student to obtain access to the original paper in the Royal Irish Academy's Proceedings. The illustrations add greatly to the interest of the volume, but they might well have been more numerous. We are sure it is a book which will have many readers and some few critics. We have already made some criticisms on the original paper,<sup>1</sup> and will now only commend it to our readers in its present form as a most attractive little volume on a most fascinating subject by a very able and clever Naturalist.

## CORRESPONDENCE.

## THE LIMESTONE KNOLLS OF THE CRAVEN DISTRICT.

SIR.-In a recent suggestive paper on the Limestone Knolls of the Craven District (Q. J. G. S., vol. lv, 1899, pp. 327-358), Mr. Marr's criticisms of my views on the Keisley Limestone appear to demand some reply, as unfortunately I was not present when his paper was read. I do not intend to examine the plausibility of Mr. Marr's views of the origin of the Craven knolls, with which I have only a slight acquaintance in the field, though, as I have paid some attention to their fossils, I may remark in passing that he does not bring forward the least palæontological evidence in support of his conclusions. It is the neglect or lack of appreciation of the palæontological evidence furnished by the Keisley Limestone by which he escapes the difficulties in which he would otherwise he there involved. For it is not here a case, as Mr. Marr appears to think (op. cit., p. 356), of the relative abundance of fossils, but of an assemblage of fossils with a facies entirely distinct from that of the neighbouring strata. When Mr. Marr can prove that the fauna of the thin white limestone which apparently represents stratigraphically the Keisley Limestone is identical with the fauna of the latter, his conclusions will rest on a firmer basis. Moreover, in order to demonstrate that the theory of discontinuous distribution is untenable, Mr. Marr must be able to prove the general distribution of the peculiar Keisley Limestone fauna over the intervening areas; otherwise he must acknowledge that some special local biological or physical conditions contributed to the congregation of this fauna in isolated colonies. Modern instances of discontinuous distribution with stations of limited superficial area admittedly offer problems hard to solve, but we cannot shut our eyes to their existence; and there is no a priori reason why similar instances should not be discovered in the records of the past, though naturally the difficulties of fully explaining them would be increased in dealing with extinct species.

It is needless here to recapitulate my reasons for drawing my conclusions as to the nature of the Keisley Limestone fauna; some of the less important ones are quoted and discussed by Mr. Marr, but the more important detailed palæontological evidence which he omits can be studied in my papers (Q.J.G.S., vol. lii, 1896,

<sup>1</sup> See GEOL, MAG., 1897, pp. 420 and 468.

pp. 407-437, and vol. liii, 1897, pp. 67-106). When Mr. Marr sees fit to produce satisfactory paleontological proofs in support of his views as to the Keisley Limestone I shall be quite prepared to modify mine, but until then I see no reason that certain features of physical structure capable of other explanations should be considered sufficient to nullify the evidence of the organic remains; and accordingly I maintain that the Keisley Limestone cannot be brought forward as an illustration of Mr. Marr's theory of the formation of knoll-reefs, whatever may be the value of that theory in other areas. F. R. C. REED.

October 10, 1899.

## OBITUARY.

## GEORGE DOWKER, F.G.S.

BORN APRIL 2, 1828.

DIED SEPTEMBER 22, 1899.

THIS well-known Kentish Geologist, Botanist, and Archæologist, passed away at Ramsgate on the very day of his return from the Meeting of the British Association. He was born on April 2, 1828, at Stourmouth House, Stourmouth, the home of his father, James Dowker, and was educated at Sandwich Grammar School; he afterwards studied farming at Hoddesdon Agricultural College, and at the age of 30 farmed his own estates. It is probable that an early love for botany was due to his schoolmaster, the Rev. J. Layton, and it is certain that a warm friendship with William Whitaker turned his attention seriously to geology. He was a good antiquary and contributed numerous papers to Archaologia Cantiana, chiefly dealing with Richborough, Reculvers, Wingham, and Preston Roman remains, and with the Anglo-Saxon cemetery at Wickhambreaux. His botanical researches are mainly contained In "The Flora of Kent," edited by Hanbury & Marshall, and his geology found expression in the following papers: "On Tertiary Strata at Bekesbourne," "Water Supply of East Kent," "On the Junction of the Tertiaries and the Chalk," "Chalk of Thanet," " On the Mouth of the River Stour."

Dowker was a good microscopist and was well acquainted with the pond life of his district. He was President of the Margate Microscopical Club, a prominent member of the East Kent Natural History Society, and was its President for several years. He paid special attention to coast erosion, and contributed a paper on the subject to the last meeting of the British Association, while one on Dungeness formed the subject of a recent lecture to the Geologists' Association of London. Dowker was a good draughtsman; his fossils found a home some years ago in the Maidstone Museum, but he leaves a valuable local herbarium. He was a F.G.S. for thirty-five years, and a member of the Dover Antiquarian Society. He leaves a widow and nine children to mourn his personal loss; but his death deprives Thanet, and indeed Kent, of an energetic and devoted servant of science, of a type only too rare in his district.