the rocks affected by great movement range from the Archæan to the Lower Coal-measures, the Upper Coal-measures and Permian rest relatively undisturbed on the denuded rocks of the range: thus the range is a member of the Hercynian system produced during Coal-measure time, and probably the two approximately rectangular directions of movement were practically contemporaneous and were produced during the limited interval between the deposition of the Lower and Upper Coal-measures. There is no evidence to prove that the Malvern and Abberley Hills formed part of a coast-line against which the Triassic beds were deposited; for the Upper Bunter Sandstone forms the base of the Trias throughout the district and rests unconformably on the Haffield Breccia, together with which it passed unconformably over the site of the West of England Chain. The present position of the Permian and Trias on the east of the hills is due to a post-Liassic fault of moderate downthrow, which tends to run parallel to the western front of the old range.

CORRESPONDENCE.

THE LIMESTONE KNOLLS OF CRAVEN.

Sir,—According to Mr. Marr the limestone knolls in Craven are due to the rock having been squeezed up, under intense lateral pressure, through the overlying shale. If this be the case, we should find the knolls most pronounced where the pressure has been greatest. Now the pressure, as proved by excessive folding, was greatest along what is now the Skibeden Valley, between Skipton and Wharfedale, but there are no knolls there. The knolls are confined to the region of Thorpe, where the rocks are not much folded and have therefore not suffered great pressure. As the knolls, then, do not occur where, according to the theory of Mr. Marr, they ought specially to be found, the theory cannot be true.

J. R. Dakyns.

Pen-y-Gwrych, Llanberis.
November 3, 1899.

SUBMERGED PHYSICAL FEATURES OF THE MEDITERRANEAN BASIN.

Sir,—Since my return from the Continent I have been engaged in tracing out the physical features, by means of isobathic contours, of the western portion of the Mediterranean, and not without some interesting results. Considering the essential difference in the physical conditions of the Mediterranean and the Atlantic—that is, of an inland sea, with numerous large islands, and the vast sweep of an ocean almost unbroken through a thousand miles from the British Isles to the Straits of Gibraltar—we may well be prepared for differences in the submerged features of each; although it may be assumed that any changes of level which the eastern borders of the Atlantic can be shown to have undergone have been shared by the western portions, at least, of the Mediterranean. The great changes of level, amounting to thousands of feet vertical, which are indicated by the slopes of the continental platform and its intersection down to its very base of 1,000–1,500