

a horizontal distance of 75 metres. Still more remarkable is the slope disclosed at the Charbonnage du Nord du Flenu, at Ghlin, where the distance between the shafts is only 20 metres and the difference of level of the base of the Cretaceous is 10·78 metres, a slope of over 1 in 2. It is, therefore, concluded from these and many other instances that the pre-Cretaceous land surface is extremely irregular in detail. These irregularities are regarded as forming a system of ravines due to water action, which sometimes contain isolated patches of Wealden alluvium below the usual and continuous marine Cretaceous.

BRITISH MUSEUM (NATURAL HISTORY) GUIDES.

GUIDE TO THE EXHIBITION GALLERIES OF GEOLOGY AND PALÆONTOLOGY. pp. 64, with two plates. 1s. net.

AN INTRODUCTION TO THE STUDY OF ROCKS and Guide to the Museum Collection. By the late SIR L. FLETCHER. 6th edition, pp. 142. 1s. 6d.

THE Catalogue of Meteorites in the Mineral Department was recently reviewed in these columns. We have now received two more of the excellent publications describing the collections in the Natural History Museum. The first named gives a general account of the zoological and botanical relations of the organisms preserved as fossils, with special reference to the specimens exhibited in the cases, which are accompanied by many useful models and other aids to a right understanding of their nature. The Stratigraphical and Dynamical series and the Historical Collections are also briefly described.

In the 6th edition of the *Study of Rocks* very little alteration of the original text has been made, but Mr. Campbell Smith has revised some of the definitions of rock types in accordance with more modern views and the recommendations of the Committee on Petrographical Nomenclature. The pamphlet now forms an excellent introduction to petrology.

OBITUARY.

Madame Christen (Sydney Mary Thompson).

The death of Madame Christen, which took place from heart-failure at Llandudno in July, 1923, will arouse affectionate memories among geologists in all parts of Ireland. Thanks to her wide sympathies, her father's house at Macedon, on the shore of Belfast Lough, became the recognized rendezvous of naturalists. Many members of the Geologists' Association will recall the gathering and the hospitable welcome there in 1895. Inheriting at Macedon a broad and tolerant outlook upon life, Sydney Mary Thompson cultivated tastes ranging from water-colour painting to the study

of both botany and geology in the field. She was an active supporter of the Belfast Naturalists' Field Club, and did much in the organization of winter courses of lectures and practical work dealing with stratigraphy and petrography. Her original observations and records were mostly concerned with the sources of material in the Glacial deposits of Northern Ireland. In 1900 she married M. Rodolphe Christen, a Swiss artist, and she produced after his death, which occurred six years later, a finely illustrated work devoted to his memory (Longmans Green & Co., 1910). In her home, among the hills near Ballater, Madame Christen never lost her interest in geology, and the last of many continental journeys undertaken by her was to the volcanoes of Auvergne in 1922. She died in the fullness of years; but the years to come need spirit and inspiration such as hers.

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MADAME CHRISTEN: "Investigations into the Glacial Drifts of the North-east of Ireland": *Irish Naturalist*, vol. xi, 1902, p. 275. "A Summary of the [B.N.F.] Club's recent Glacial Work": *ibid.*, vol. xv, 1906, p. 80.

G. A. J. C.

CORRESPONDENCE.

THE BASE OF THE DEVONIAN.

SIR,—Most geologists will, I think, agree that Dr. Stamp has made out a *primâ facie* case for his correlation of the rocks at the base of the Devonian. Whether the Downtonian and Schistes de Mondrepuits and the other beds correlated with them should be regarded as Silurian or Devonian has still to be determined. The remarkable similarity of the fauna of the Downtonian of Scotland with that of the Old Red Beds that overlie them constitutes a strong point in favour of the view for which he contends. Might not the most satisfactory solution be to regard the strata in dispute as passage beds between the two formations?

I am sorry to see the "Welsh Lake" and "Lake Caledonia" make their reappearance. I thought that it was now agreed that the typical Old Red Sandstone deposits were laid down by streams or short-lived lagoons, usually of a local character.

Is there any reason to suppose that the south-eastern shore line of the Silurian Sea of the Welsh border was continued as an east and west ridge in the neighbourhood of the Bristol Channel? Even if it was, it could not have formed the boundary between the Old Red Sandstone and Devonian types of sedimentation except for a comparatively short period. At the time when the Foreland