

clunch was well exposed. The clay contained many glaciated pebbles of clunch, but the point of interest was that the clunch beneath the clay showed signs to the depth of several feet of having been dragged along, for it contained horizontal shearing planes, and was full of slickensides. The mechanics of this kind of action is not very obvious. It would not seem at first sight that this case was quite analogous to that supposed by Mr. Deeley, because it was not ice, but clay, which appeared in contact with the disturbed clunch.

Now though ice may be regarded as a highly viscous fluid, flowing, though slowly, like water, yet this condition cannot be predicated of Boulder-clay, much less so if the clay were frozen. But if it were not frozen, and was dragged along by a deep layer of ice that covered it, it can hardly be supposed that the ice communicated its own motion to the whole thickness of the plastic Boulder-clay, and through it to a considerable depth of solid clunch besides. Or was the clunch disturbed by the ice itself, in accordance with Mr. Deeley's suggestion, before any ground moraine had reached the locality?

The subject is worth investigation, and I would advise Cambridge geologists to keep a look out for the section being again exposed, or possibly to get it reopened for the purpose of examining it. A man with a pick and shovel could do it in an hour or so.

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April 19, 1911.

'FACETTED PEBBLES' AND 'DREIKANter'.

SIR,—The reviewer of Messrs. Lake & Rastall's Text-Book of Geology (*GEOL. MAG.*, February, 1911, p. 85) states that the use of 'dreikanter' and 'zeugen' is pedantic and ill calculated to advance knowledge, and evidently considers that the expressions 'facetted pebbles' and 'tabular outliers' are equivalent, or "sufficient" as he calls it. Apart from the reviewer being wrong in both cases, the terms are recognized and used by geologists of many nationalities, and it is surely desirable in a textbook to employ standard words which the advancing student is likely to meet with elsewhere. If the suggestion of the reviewer were adopted and carried to its logical conclusion, the already considerable obstacle of language would be increased by each nation having its own set of scientific expressions.

A pebble may be facetted by glacial action, but there are characters which would often enable us to distinguish it from a dreikanter. The selective action of the wind-blast on softer parts of the rock may produce furrows, but these are not to be confused with glacial striæ.

A zeuge may take the form of a tabular outlier when it is formed of horizontal strata, and then only if there is a suitable arrangement of hard and soft beds. In country of massive, folded, or crystalline rocks the zeugen would not be tabular and 'outlier' a misnomer. I have just had the privilege of traversing some 800 miles of desert with no less an authority than Professor Walther, and in the course of

our journeys we saw many hills of this type. They are formed in the denudation of plateaux and stand forward on the plain in evidence of the former extent of the elevated land. The term 'zeuge' expresses this and may be rendered as 'sentinel rock' or 'témoin'.

I have not yet had the pleasure of seeing the textbook in question and consequently am unacquainted with the definitions given by the authors. If their terms are really ill calculated to advance knowledge, those of the reviewer would probably confound it.

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KHARTOUM.

March 17, 1911.

MISCELLANEOUS.

AUSTRALIAN ASSOCIATION FOR THE ADVANCEMENT OF SCIENCE. AWARD OF THE MUELLER MEDAL. Sydney University, January 9, 1911.—At the opening meeting of the Association, under the presidency of Professor D. Orme Masson, M.A., D.Sc., F.R.S., of Melbourne, the Council awarded the Mueller Memorial Medal to Mr. Robert Etheridge, Curator of the Sydney Museum, for his past services in the cause of science, particularly in connexion with palæontology, ethnology, etc. Mr. J. H. Maiden said Mr. Etheridge's work as a bibliographer was unsurpassed. Prior to his residence in Sydney, he had served as an officer on the Geological Survey of Victoria and of Scotland, also in the British Museum (Geological Department). Dr. Hall, of Victoria, and other eminent geologists testified to the invaluable services rendered to all the Colonies by Mr. Robert Etheridge's work as a palæontologist. His friends in England and Scotland will rejoice to hear the honour conferred upon him by the Australian Association.—*Sydney Evening News*, January 9, 1911.

REMARKABLE TIDE AT ALDEBURGH.—Great damage was caused at Thorpness, Aldeburgh, on April 3, by the high tide, the beach being diminished to an extraordinary extent. The bungalows, formerly a hundred yards away, are now within a few feet of high-water mark. The seas have washed out of the sands hundreds of coins, gold, silver, and bronze, dating from early Saxon times, antique bronze rings and ornaments, and an old bronze bag clasp with a silver inscription, said to be of King John's period.—We quote the above record from the *Morning Post*, April 4, and may at the same time recall attention to the paper on "Recent Coast Erosion at Southwold and Covehithe" by Mr. John Spiller (*GEOL. MAG.*, January, 1896, p. 23).

INTERNATIONAL CONGRESSES.—The Fourth International Philosophical Congress assembled at Bologna in April, when, among other subjects discussed, Professor Emile Boutroux dealt with the relationship of philosophy and science. As remarked by Sir A. Geikie in his address to the Royal Society in 1909, this aspect of scientific thought "is too apt to be overlooked amidst the engrossing pressure of modern research".