

Then there was the question of the effect of the earth's rotation known as Baer's law. How far could this be proved to exert an influence in diverting rivers to the right in the northern hemisphere? Other points considered were:—

The results of regional tilt; the effect of wind and the differential erosion of the banks by prevailing rain-bearing winds as suggested by Fabre in the case of the rivers flowing over the plateau of Lanne-mezan at the foot of the Pyrenees.

Further points considered were the evidence of lateral migration as shown by "cut-offs"; the position of maximum velocity in a meander system; and the tendency of the meander system to migrate down the valley. Other features discussed were "incised" and "intrenched" meanders, and "underfit" rivers.

The address concluded with a discussion of the original problem: "Do the meanders of the river deflect the tributaries so as to force them to enter at the concave banks or do the tributaries exert an influence in deflecting the course of the river?"

Though realizing that further investigation was required before the question could be satisfactorily answered, it was suggested that while accepting Professor W. M. Davis' view that the general migration of the meanders down the valley may tend to cause the tributaries to enter at the concave banks—cases could be cited where the tributaries appeared to have exerted a marked influence in determining the meanders. The address was illustrated by maps and diagrams in explanation of the various examples quoted.

CORRESPONDENCE.

THE BASE OF THE MILLSTONE GRIT NEAR HAVERFORDWEST.

SIR,—In connexion with the horizon of the Millstone Grit at Haroldston St. Issels, and the problems of the relations of the Millstone Grit to the Lower Carboniferous in South Wales, referred to by Professor O. T. Jones in your December number (p. 558), it may be of interest to state that a student here, Mr. R. O. Jones, B.Sc., has for some time been investigating the Millstone Grit faunas of South Wales. A few of his goniatites have been submitted to Mr. W. S. Bisat, and the evidence already obtained proves the existence of the overlap suggested by Professor Jones. In Carmarthenshire and Glamorgan, goniatites collected near the base of the Millstone Grit indicate the presence of zones below that of *Reticuloeceras reticulatum*, which occurs at the base of the series at Haroldston. Apparently the basal beds are of different dates in various parts of Glamorgan.

Mr. R. O. Jones' results will be published in due course, but in view of Professor Jones' letter it appears desirable to record these conclusions now.

It is hoped during the next few months to carry out some digging in the basal Millstone Grit near Bishopston, Gower, where the succession is presumably more complete than in many parts of South Wales.

A. E. TRUEMAN.

ANNOUNCEMENTS AND INQUIRIES.

A report by Dr. W. H. Collins on the geology of the north shore of Lake Huron has been published by the Geological Survey of Canada. It presents the results of a detailed examination of the lithological, structural, and stratigraphic features of the Pre-Cambrian rocks underlying the area and of the age relations of the different systems. The section of country studied includes the type Huronian area and the report will consequently prove of great interest to students of Pre-Cambrian geology. Descriptions are also given of the deposits of gold, copper, and other economic minerals. Copies of this report may be had on application to the Director, Geological Survey, Ottawa.

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The results of an attempt to fix the time of the retreat of the last ice-sheet from Eastern Canada are presented in a report by Ernst Antevs recently published by the Geological Survey of Canada. The method employed is one that has been used in north-western Europe. It consists in counting and correlating the annual layers of sediments deposited in lakes lying at the edge of the ice-sheet. An interesting piece of work is that which shows that the retreat of the glacier from the mouth of Montreal river on Lake Timiskaming northward to Englehart was made in 600 years. Interesting notes are also given on the large lakes that occupied the basins of the Great Lakes during glacial times and on the flooding of the St. Lawrence and Ottawa valleys by the sea when the ice-dam holding it back was removed. A charge of twenty-five cents is made for this publication. It can be had by applying to the Director of the Geological Survey, Ottawa.