

wish of the majority is, or by a show of hands. There is a subtlety in the decision, for if the chairman wishes he can rule on a single show, or he may ask for 'Ayes' and 'Noes,' or he may compare the number of hands shown with the number of persons present. But it is decreed that our friend, the speaker, must stand down, and there is something pathetic in his self-conscious, proud and satisfied bow, and the death-like silence which follows it for one moment. A discussion now takes place. At first absolute oblivion of time seems to surround the Chair, and the first intimation which the occupant of it receives of the fact that one member has occupied the platform for nearly half an hour is that his conversation with a colleague is interrupted by a dozen eager members who wish to have their say. Then he rings the bell and asks if the speaker has much more to say, but to do this he waits until the latter has reached the middle of a sentence. 'I am just finishing,' is the reply. Five minutes later a further ring, the same question, the same reply. Still five minutes later the chairman says that Herr X. is in possession of the platform, and requests the loquacious one to stand down. He forgets to bow, and, collecting his notes and papers slowly mumbles that he has had no time to give his most important points of argument. Will he try to continue his arguments at next year's congress?—*British Medical Journal*.

CURRENT NOTES ON PHYSIOGRAPHY.

THE MARYLAND COASTAL PLAIN.

A LUMINOUS generalization concerning the geological history and the geographical features of our Atlantic coastal plain has lately been announced by Shattuck ('The Pleistocene Problem of the North Atlantic Coastal Plain,' Johns Hopkins Univ. Circulars, No. 152, 1901). Five shore lines with wave-cut and wave-built terraces, accompanied by spits, bars and lagoon deposits, are recognized. The uppermost is the Lafayette on the margin of the Piedmont uplands at altitudes of from 300 to 500 feet. The lowest is on the present coast. The development of each shore line was preceded by a period of erosion during a somewhat higher stand of the land; hence when submergence to

the new level occurred, the shore was of irregular outline. Valleys were thus repeatedly drowned, and rivers transformed into estuaries; for one may trace the younger terraces along the sides of the older valleys. The changes of level do not seem to have been accompanied by so much warping as has been inferred by other observers: the conclusions thus announced are thought to be applicable to the coastal plain for some distance northeast and southwest of Maryland. A fuller description of the topographic details on which these changes are based will be waited for with interest.

DUNMAIL RAISE.

THE low pass between Windermere and Keswick in the English Lake district, annually crossed by thousands of tourists in stage and on foot, is known as Dunmail Raise. Its elevation is 782 feet, between Helvellyn, 3,118, and Scafell pikes, 3,210. R. D. Oldham ('On the Origin of Dunmail Raise, Lake District,' *Quart. Journ. Geol. Soc.*, LVII., 1901, 189-195) points out the striking disproportion between the size of the local streams and the dimensions of the opposing valleys that head in the open pass, and concludes that it is the work of a large river which once flowed from north to south through the mountains, long maintaining its course in spite of their upheaval, until at last overcome by a too rapid warping. While the conditions of such an origin are readily conceived, the consequences by which the conditions may be tested are not explicitly stated, and the reality of the postulated river is left in doubt. The present form of the opposing valleys being held to be beyond production by the existing streams, the valleys are taken as the product of the extinct river. The valleys being still but little modified by their streams, the warping by which the river was broken in two must have been relatively recent. The slopes of the opposing valley floors being strong and of recent origin, the warping that produced the slopes must have been rapid. As the present north-sloping valley descends against the slope of the extinct river for ten miles or more, the warping must have affected the district for a number of miles north of the pass. So rapid and extensive a warping can hardly have been

limited to the valley of only one river; its effects should be visible in all the neighboring valleys of the lake district, and until these effects are carefully deduced and systematically searched for, it seems safer to regard the erosion of the pass by a recently extinct river not as a probable conclusion, but only as an open suggestion.

A possible origin of the pass by glacial erosion in a preglacial notch of less depth is considered by Oldham and dismissed, because traces of glaciation were not found at a sufficient height; but on the latter point other observers do not agree, some maintaining the occurrence of an extensive local glaciation before the minor glaciation referred to by Oldham. Hanging valleys are not rare in these mountains ("We find in the Lake district a number of tributary valleys occurring in the hearts of the ridges, and opening out far above the bottoms of the main valleys, discharging their waters down the slopes in cascades." Marr, 'Scientific Study of Scenery,' 136), and one of them may be seen opening in the mountain side on the east just north of Dunmail summit. Glacial erosion as well as river erosion may, therefore, still deserve consideration in discussions as to the origin of the pass.

BRITTANY.

ONE of the excursions of the International Geological Congress held at Paris a year ago was led through Brittany by Barrois. An interesting account of it has been prepared by H. Credner under the title of its ancient name ('Armorika,' *Geogr. Zeitschr.*, VII., 1901, 21 p.). In contrast to the great deformation of the ancient rocks, moderate reliefs prevail to-day, much of the surface being nearly level to the eye for long distances. The region is peneplain, with occasional ridges and uplands maintained by the stronger rocks, but even there the forms are well subdued. The plain is usually clothed with a deep soil. It is here and there incised by narrow, steep-sided valleys, on whose walls the firm rock is exposed. The uplift of the peneplain, whereby the incision of young valleys has been permitted, is not explicitly stated, and the assertion that 'the valleys are extraordinarily old' is liable to misunderstand-

ing, until the reader infers that it is the predecessors of the present valleys that must be meant. The coast is generally marked by cliffs, torn into a ragged outline by a violent sea. The destructive work of the waves has been aided by a submergence of the land, of which there is not only geographical evidence in the form of bays and drowned valleys, but historical also, in the form of the ruins of a submerged town, of Roman roads that lead into the sea, and of megalithic monuments visible only at extreme low tide. The separation of England from France is ascribed to this submergence as well as to marine abrasion.

W. M. DAVIS.

A NEW ARCHEOLOGICAL PUBLICATION.

COMMENCING about September 1, the Archeological Section of the Wisconsin Natural History Society will publish, at regular intervals, a little 6- or 8-page sheet to be devoted to the cause of Wisconsin archeology. By this means it is hoped to keep alive and further the interest of the students, educators and collectors of Wisconsin in bringing about a better state of affairs as regards the preservation of the prehistoric monuments of the State.

The as yet uninterested attitude of the legislators argues that, for a year or two, at least, no bill favoring a State survey can be introduced. It is best, at present, to band together all persons interested until the time for action shall arrive so that the project can be carried to a successful issue.

The Bulletin is to be the organ of the campaign for a State archeological survey. It will not trespass upon the field of the journals now being published and which, being of too high price for the majority of State collectors and of a nature technically beyond their training, are not available for this purpose. It is intended to publish articles of local interest, short, general articles intended to train the average student, editorials favoring the free study and preservation of antiquities, notes, contributions of state collectors and students, notices of books bearing upon Wisconsin archeology, and all matter which will make the Bulletin of particular value to the archeologist of Wisconsin.