

XVI.—SHORTER NOTICES.—A Geological Map and Report on the Tarcoola District, by H. Y. L. Brown, has just reached us. It is part of the Records of the Mines of South Australia, and deals mainly with gold supply.

THE Carnegie Museum at Pittsburgh, which was opened in 1895, is described in the Popular Science Monthly for May, 1901, by Dr. J. W. Holland, the Director. Professor Hatcher is making full use of Mr. Carnegie's special fund for research in palæontology, and it is interesting to read that the most perfect specimen of *Diplodocus longus*, six imperfect skeletons of *Brontosaurus*, and the largest known *Mastodon* are in the Museum.

MR. J. C. MANSEL-PLEYDELL has published in the Proceedings of the Dorset Field Club for 1900 a paper on the Influence of Climatic and Geological Changes upon the British Flora. His annual address for 1900 dealt with the geological history of Pisces. That for 1901, still to be published, dealt with the geological history of the Amphibia and Reptilia.

CORRESPONDENCE.

A SUGGESTED LINK IN THE 'BREAK' BETWEEN PALÆOLITHIC AND NEOLITHIC MAN.

SIR,—In the very interesting paper by Sir Henry Howorth in the August number of your Magazine, we find that to him the great gap between Palæolithic and Neolithic Man means a great catastrophe. In the present attitude of geological opinion, such a statement appears somewhat startling. But if we restrict the meaning of the word 'catastrophe,' as used by Sir Henry, to the occurrence in ancient times of climatic and physical changes of similar nature to those taking place around us at the present day, though of very much greater intensity, probably no geologist is now so rigidly uniformitarian in his views as to refuse to accept it.

The facts before us are these:—During some portion of the Pleistocene Period, probably owing to the co-operation of astronomical and geographical causes, climatic and physical changes, of an intensity which it is difficult for us to realize, were brought about. One of the results of these changes was the distribution of the Drift. There can be little doubt that when this took place man had already made his appearance upon earth. Indeed, Sir Henry is satisfied with such evidence as we possess that his existence dates back even into the previous Pliocene Period. However that may be, and whether we hold that earliest man was Eolithic or Palæolithic, all physical traces of him disappear, with the exception of his imperishable flint implements and a few doubtful bones; and when he next appears on the scene, he has undergone the very considerable advance in development indicated by his entrance on the Neolithic stage. Sir Henry holds that the great gap between Palæolithic and Neolithic man is coincident and in all probability connected with the distribution of the Drift.

However catastrophic in its occurrence the distribution of the Drift may have been, it is obvious that the progress made by man in his passage from the Palæolithic to the Neolithic stage was not characterized by that suddenness which is ordinarily associated with the term. Of the history of that progress, of the place of man's abode during it, we know nothing. There is a true 'gap' or 'break.'

In geology and archæology these two words simply imply that our knowledge as to the periods of time concerned is imperfect, and we always expect to find certain of the missing links of the chain of evidence come to light, which they sometimes do in unexpected places.

Is there any link to be found, however remote, to help to bridge over that extraordinary gap between Palæolithic man and his Neolithic successors? I believe there is one, and that it is to be found in the almost universal tradition of a 'deluge'—a tradition which appears to me to have been handed down from our Palæolithic ancestors through the Neolithic, Bronze, and Iron ages of their successors, and to have reached us as a dim and misty conception of their ideas of the—let us call it very bad weather—of the Pleistocene Period. That the story as conveyed to us from Asiatic sources is very different from that written on the page of the rocks in Northern Europe, is not surprising. All tradition undergoes a process of corruption as it is handed down from age to age, and the particular form in which the deluge tradition has reached us is obviously no exception to the rule. Unfortunately, when such a theory is advanced, it is usually seized upon as a confirmation of the miraculous inspiration of Scripture. It is no such thing.

I cannot claim originality for the theory, because I find in Mr. Tiddeman's "Work and Problems of the Victoria Cave Exploration," 1875, the following passage:—"As similar evidences of a submergence late in the glacial period have been observed over large areas in the Old and the New World, and in both hemispheres, in mean latitudes, it may be that the traditions so common to many races and religions of a great deluge are but lingering memories of this great event. It matters not that these myths all differ in their surroundings. The central core still has the solid ring of truth, albeit masked and disfigured by the rust of time."

I venture to suggest that the theory that the deluge tradition is the one and only link which bridges over the gap between Palæolithic man and ourselves, his descendants, is one which is worthy of more attention than it has hitherto received.

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EOLITHIC MAN.

SIR,—It is remarkable that in a quasi-geological paper by a well-known writer should have been allowed to pass current such a statement as that at p. 340 (*GEOL. MAG.*, August issue), to the effect that "Huxley caused McEnergy's now famous memoir to be