

Altogether we believe the history of the cavern deposits on the Lesse to belong to that *ancient river history* which geologists now comprehend as the period of the *low-level drifts* of Mr. Prestwich; a period when, as we know, in this country, climatal adaptations, and many of the animals of the period, were very different from the present. Since that period the great mammalia which once inhabited Europe have become extinct, and all our rivers, like the river Lesse, flow in deeper hollows excavated in the hard strata which forms the bottom of their valley.

We consider the drift phenomena of the caverns on the Lesse to bear the same relation to the existing physical condition of the country as our old Severn and Avon *low-level valley drifts* bear to the existing rivers, their silted up lakes and alluvial plains. We see no reason for attributing a more ancient history to the human remains of the "Trou de Naulette," than to the numerous other examples given by Sir Charles Lyell in his "Antiquity of Man," where human bones, or human implements, have been found in cavern deposits associated with the remains of the extinct animals.

The principal interest attached to the caves on the Lesse is owing to the great number of human relics that have been found there; and I may here observe, that the particular cave, in which the very remarkable jaw was found, lying close by the bones of the rhinoceros, is considered by Dr. Dupont to have been a den of the hyæna, for here were found the coprolites of that animal, and also a considerable number of gnawed bones of elephant and other animals. The rhinoceros bone in question presents strong marks of the hyæna's canines.

CORRESPONDENCE.

RIVER-DENUDATION OF VALLEYS.

To the Editor of the GEOLOGICAL MAGAZINE.

SIR,—The attempt of Mr. Green, in the November number of the *MAGAZINE*, to render ridiculous my explanation of the physical facts connected with the valleys of Lancashire and Yorkshire, which facts he allows I have accurately given, will scarcely be acknowledged as a fair way of meeting my arguments.

My views—which I advanced with diffidence—may be erroneous, and whenever they are shown to be so on physical grounds, I am ready to abandon them; but, as it seems to me, the attempt of my colleague to prove them *illogical* has only resulted in exposing himself to the charge of being still more illogical, and of mis-stating my argument.

Taking the case of Todmorden valley, he puts my argument thus: "We know that Jones, heavily shod, etc., has often been seen in the neighbourhood of what is now the vale of Todmorden.

"We do not know for certain that any stream has run through this valley.

"It is, therefore, less incredible that the valley should have been

excavated by Jones than that it should have been hollowed out by a stream."

Now, Sir, if Mr. Green had put "cart wheels," in place of the name for which I have substituted "Jones," I think it would have been still less incredible, etc. But the above is an intentional misrepresentation of my argument altogether. "Jones" does not happen to be an agent of denudation in the geological sense, at least; but on this my reasoning hangs.

What I stated was this,—that of two acknowledged agents of denudation, the sea on the one hand, and streams, etc., on the other, we have positive proof that the former overspread the region of Todmorden valley, and we have no evidence of the latter, *therefore* "it is less incredible," etc.

To conclude, Sir, I think it would conduce more to the advance of science if discussions of this kind were confined to the region of physics; attempts at proving, or disproving, the soundness of speculations on natural phenomena by a logical syllogism are, as it appears to me, scarcely creditable to men of science.

I remain, yours faithfully,

EDWARD HULL.

MANCHESTER,
16th November, 1866.

PRE-HISTORIC DWELLINGS IN GALWAY BAY.

To the Editor of the GEOLOGICAL MAGAZINE.

DEAR SIR,—I have just learned from the Rev. W. Kilbride, vicar of the Aran Isles, at the mouth of Galway Bay, that he and my old college chum, Capt. Rowan, of Tralee, have discovered on the large island, under the Sand-dunes south of Tramore (*anglicè*, the large strand), and extending from them seaward below high-water mark, ancient habitations, consisting of Cloghauns, Fosleac, Kitchen-middens, etc., etc. This ought to prove that the land about Galway Bay has sunk last, not risen. If this is the case, "The Old Lake" mentioned in the paper "On the Rock Basin of Lough Corrib," in the GEOLOGICAL MAGAZINE for November, may have been partly formed since the Glacial period. The bogs now below high-water mark may also have been formed on high land; but still the fact remains, that the morass between Black-rock and Black's-hill, in which peat is forming and trees growing, is below high-water mark.

G. HENRY KINAHAN.

RECESS, CONNEMARA,
Nov. 10, 1866.

THE DENUDATION OF THE WEALD.

To the Editor of the GEOLOGICAL MAGAZINE.

SIR,—In the last number of the GEOLOGICAL MAGAZINE, (p. 484), the Rev. O. Fisher mentions our paper on the Medway Gravels and the Denudation of the Weald;¹ and after saying that we "rely much upon a river gravel at an elevation of 300 feet," he adds, "I do not

¹ Quart. Journ. Geol. Soc., 1865, Vol. xxi., p. 443.