

the blocks; the icefloes serving as rafts, would suffice to convey the blocks to other parts of the coast, whilst they would not require any great depth of water to float them.

DISCUSSION.—Mr. Hughes pointed out some difficulties in accepting the theory of the transport of these blocks by means of coast-ice, but was not able to offer any better solution of the question than that suggested by the author.

CORRESPONDENCE.

THE BOULDER-CLAY OF CAITHNESS.

SIR,—In the first part of his paper on this subject, Mr. Croll says, “The notion that unstratified Boulder-clay could be formed by deposits from floating ice is not only erroneous but is also positively pernicious.”

The great chalky boulder-clay or uppermost of the glacial deposits of East Anglia, though of great thickness, is everywhere destitute of stratification, and, according to Mr. Croll’s dictum, no part of it can have been deposited from floating ice. This clay, however, rests over large districts upon a thick sand and gravel formation; and it may be seen in coast sections some miles in length thus to rest continuously, the sands below it being finely stratified and of undisputed marine origin. The junction of this unstratified clay with the sands is there quite undisturbed, presenting an even line of transition; while in other sections a passage-bed, a few feet in thickness, formed of the sand and clay interstratified, not unfrequently marks the junction.

Now, had a mass of ice pushed over this sandy sea bottom, and so produced the unstratified boulder-clay thus covering it, or had that clay itself been pushed over the sands, these could not have escaped being squeezed up and contorted, instead of having, as is the case, their stratification undisturbed up to the very line of junction. Instances, moreover, occur where this unstratified clay makes a dip into the previous sandy sea-bottom; and where a cross section of such a dip can be obtained, the sands are found undisturbed, except in the space ploughed, a feature obviously pointing to the impact of a floating body upon the sea-bottom. In rare instances, threads of sand a few inches thick occur in this unstratified clay; and if there chance to be two such threads together, their horizontality to each other is preserved. Conversely to this, I may add, that a band of this unstratified clay, two or three feet thick, but in all respects undistinguishable from the mass of the boulder-clay itself, is to be found in some instances interbedded in the sands and gravels to which I have just alluded, the stratification of these, both above and below such band, being quite undisturbed.

I dissent from so many of Mr. Croll’s views that I would not have troubled you with this letter upon only one of them, but that I am unwilling so unqualified and denunciatory a statement should remain longer without a traverse.

BRENTWOOD, ESSEX.

SEARLES V. WOOD, JUN.