

Whether this or a larger movement be the source of the appearances at Hitchin, I do not mean now to argue.<sup>1</sup> But that the clean-cut faults, passing through Chalk, pebble bed, and loamy gravels, exist in this locality, only needs a second visit to ascertain. Indeed, as I hope I fully mentioned in a note to the paper (for I have not the Journal at hand), one of these faults have been previously marked in the sections given by Mr. S. V. Wood, jun.—a fact I was not aware of when the paper was read at Somerset House.

After all, in most cases, we only see what we look for; and if I had been examining the Chalk specially, I should probably not have seen these dislocations. I am sure your correspondent could not have been long at Hitchin without making many good friends there, so I shall recommend him to go and dine with some of them this holiday time, and pay a visit to the old chalk-pit again.

I am, yours truly,

J. W. SALTER.

MALVERN, Dec. 3rd, 1866.

#### GLACIATION IN DEVON AND ITS BORDERS.

To the Editor of the GEOLOGICAL MAGAZINE.

SIR,—I have always distrusted my own power of observation in Glacial and other superficial phenomena, for whenever I have made an observation to a regular glacialist, or “drift describer,” I have generally had to *stand corrected*. It would not, therefore, be at all surprising to me to find I was quite wrong in my conclusions as to what appeared to me to be a glaciated surface on the cliff on the banks of the Exe above Barlynch Abbey.

The first time I ever was able to see these phenomena of rounding, moulding, and striation, so as to recognise them, was in the S.W. of Ireland, about the year 1851, under the guidance of the late Sir Henry De la Beche. Since then I have had many opportunities of observing them not only in Ireland, but in other parts of the British islands and in the Alps.

Coming down the valley of the Exe on the occasion described in the letter published in your MAGAZINE in 1865 (Vol. II. pp. 473), I saw before me a cliffy ridge marked, as it appeared to me, precisely in the same way in which so many so-called glaciated surfaces are marked.

These markings being large and obvious, and my time being all too short for geological observations of much greater importance, I did not spend more than ten minutes in examining them. If, therefore, they are not glacial as my friend, Mr. Pengelly and Mr. Vicary, have concluded, it only assures me of the wisdom of the old proverb, *ne sutor ultra crepidam*, and warns me to stick to the rocks themselves, and leave their external markings and superficial covering to those whose tastes and powers of observation are more suited to them than mine are. I hope, however, that some practised

<sup>1</sup> I may as well observe, that the faults at Hitchin station, large and small, are very nearly parallel to one another—as in most of our faulted districts. I think this indicates a more general movement than is implied in the idea of subsidence over cavernous ground, such as may account for the minor flexures in the drift gravel.—J.W.S.

glacial observer may visit the locality some day, and give us the benefit of his opinion upon it. In the meantime, as Mr. Pengelly, in his letter in your last number, agrees in the correctness of my description of the facts, perhaps he will favour us with his ideas as to their origin, for I certainly have never seen anything like them except on a so-called glaciated surface.—Yours truly,

DUBLIN, Dec. 4, 1866.

J. BEETE JUKES.

DR. FRAAS ON PRE-HISTORIC SETTLEMENTS.

*To the Editor of the GEOLOGICAL MAGAZINE.*

SIR,—In your impression of this month (page 550), Dr. Fraas concludes an interesting article on Pre-historic Settlements with two remarks, thus: “And, secondly, that the discovery at Schussenried indicates a totally different climate, such as *now* begins at 70 degrees of north latitude.” But he gives a *fact* which fully contradicts this *theory*. The remains of *horses* were found at Schussenried. “In one case the skull is still nearly perfect, and it belonged to a species with a large head; while certain bones of the extremities indicate a *strong, bony, and powerful animal*. The brain cavity has been opened, the vertebræ had been split, and the bones containing marrow had been broken in pieces, so that there can be no doubt of horse-flesh having been one of the table delicacies of the ancient Swabians.” Are there wild horses at the North Cape *now*? or in Nova Zembla? or at the Samoyede Promontory?

I have the honour to be, Sir, your obedient servant,

GEORGE GREENWOOD, Colonel.

BROOKWOOD PARK, ALRESFORD,  
December 7th, 1866.

THE DEVONIAN ROCKS OF NORTH DEVON.

*To the Editor of the GEOLOGICAL MAGAZINE.*

DEAR SIR,—I wish I had power at present to enter the lists on the new issue raised by Professor Jukes as to the integrity of the Devonian system. It seems so odd to try to explain away a series of rocks which must have some place, and are distinguished, as all know, by a peculiar set of fossils. Though the Devonian has not *many* striking peculiar types of shells, it has some quite distinct; while the mass of its species are undoubtedly peculiar, and neither Silurian nor Carboniferous. And it is 10,000 feet thick!

Meanwhile, till I have more opportunity, let me just keep your younger readers in possession of the facts that in North Devon, proceeding southwards from Linton and the N. Foreland to the Culm-measures, there are the following distinct series, which Professor Jukes rather summarily groups into Coal, Carboniferous-slate, and Old Red. I know “a rose by any other name will smell as sweet,” but I prefer the well-known names:—

1. Slates and sandstones of Linton and the North Foreland (Lower Devonian).

2. Grey slates and limestones of Combe Martin and Ilfracombe (Middle Devonian).