

George W. Denys, Bart. Professor McChesney, U.S. Consul at Newcastle, Dr. Walton, Mr. Bowes, and Mr. Cockburn joined the party. The chairman, after dinner, in an appropriate speech, alluded to the manner in which their president had before entertained them at Saltburn, and to his uniform kindness and untiring efforts for the good of their society and the spread of a taste for natural history pursuits. Mr. Wood having responded, other speeches followed, and the pleasure of the excursion was completed by a visit to Rushbrook Hall, the seat of John Bell, Esq.—*Darlington and Stockton Telegraph*.

---



---

## CORRESPONDENCE.

---

### NOTES FROM OUR CORRESPONDENTS.

1. DR. GUSTAF LINDSTRÖM writes from Wisby, Island of Gotland (August 18th): "The debates on the recent changes of the surface of the land, now going on in the pages of your Magazine, are of great interest to us Swedes, as our Geological Survey has had almost exclusively for some years to handle questions of that kind. We have natural features similar to your Eskers and Kaims, your Boulder-clay, Leda-clay, etc.; I think these formations have been more thoroughly studied here than elsewhere."

2. In a subsequent letter, dated October 4th, Dr. LINDSTRÖM writes: "The marks figured by Mr. Mackintosh in the last number (September) of your Magazine, Plate XV., Fig. 5, are evidently *ice-marks* (or made by Glaciers) not made by the waves and stones as he supposes. We have plenty of them here, and their exact counterparts may be seen in the Alps."

3. MR. SPENCER G. PERCEVAL<sup>1</sup> writes (August 20th) to correct an error as to the discovery of "Wulfenite,"<sup>2</sup> in Pembrokeshire. "It is not," he writes, "'Wulfenite,' as I was led to suppose, but 'Brookite' (oxide of Titanium); for which information I am indebted to Mr. Warington Smyth" (Mineralogist to the Duchy of Cornwall). "The crystals which I supposed to be of Tin, are likewise Titanium. Those of Brookite much resemble specimens from Snowdon, but are far more minute."

4. MR. THOMAS C. BROWN, of Further Barton, Cirencester (Sept. 11th), gives a long and interesting account of an ancient forest near Loch Maree, Ross-shire, of which the following is a summary:

"The stools of the trees are wholly embedded in peat, varying from 18 to 36 inches in thickness. Beneath the peat is a bed of gravel, in the surface of which the trees appear to have grown. They were generally, if not exclusively, Fir, the natural tree of the Highlands."

The diameter of the bole of several measured from 14 to 28 inches, consisting exclusively of heart-wood—the sap-wood had

<sup>1</sup> Severn House, Henbury, Bristol.

<sup>2</sup> See GEOLOGICAL MAGAZINE, August (No. 26), p. 377.

perished. The rings showed a slow but uniform growth of about twelve annual lines to an inch. Trees of this size far exceed those now growing south of Loch Maree in less exposed positions. The roots are extremely singular. In one case Mr. Brown found a plexus of inoculating roots, ten feet in diameter, forming almost a platform, the separate roots measuring ten inches in width.

Mr. Brown proceeds to infer that the change of climate must have been very considerable to have first caused the growth of such fine forest trees, and then their overthrow and the production of peat.

Mr. Brown suggests that this Highland region of Laurentian Gneiss surmounted by Cambrian rocks has remained elevated above the sea, and clothed with vegetation when all the younger rocks were submerged beneath its waters, which would by their genial influence favour a more rich vegetation than the present climate.

5. Mr. E. B. KEMP-WELCH, of Lindfield, Malvern (Sept. 17th) announces the discovery of a Trilobite new to the Malvern district, viz: *Ampyx nudus*, March; the specimen was obtained "from the Woolhope limestone, at the tunnel shaft, on the Worcester and Hereford Railway, Colwall, near Malvern." Mr. Welch encloses a sketch, which is certainly very like an *Ampyx*, a remarkable find, indeed, in the Upper Silurian of Malvern.—We had, however, the pleasure to see this new find the other day; it was kindly brought for our inspection by Dr. Grindrod, of Malvern. We are sorry to state that *it is manufactured*.—EDIT.

---

MACKINTOSH ON WELSH VALLEYS. GEIKIE ON SCOTTISH KAMES.

*To the Editor of the GEOLOGICAL MAGAZINE.*

SIR,—As sure as there are alternations of hard and soft strata in the course of a valley or river so sure will there be alternations of gorge and alluvial flat. Mr. Mackintosh credits this principle to Professor Jukes. I, however, first published it in 1857, in the first edition of "Rain and Rivers," p. 53, in accounting for the river-gorges through the north and south Downs. Also at page 174. And I have since sung the cuckoo-note in various letters to periodicals. In the "Athenæum" of 26th December, 1863, I advanced the principle as "the open sesame of the secret of the parallel terraces of Glen Roy." In February, 1864, Mr. Jukes kindly sent me a copy of an article of his in the "Reader." I remarked to him that he had used my argument. His letter in reply begins, "I had your description of Glen Roy in my head when I wrote the passage you allude to." In page 16, second edition of "Rain and Rivers," I have said, "Any one may make parallel terraces for himself in the road-side gutter. Dam up the run of rain. A pool will form above the dam. Every rain will deposit on the bed of the pool, till the flat alluvium rises to the height of the dam. Take away the dam. The rain cuts through the alluvium which it has deposited and runs between two parallel terraces till they vanish by denudation. This is the whole secret of the terraces of Glen Roy, or of any other valley or river."