

to 150 feet above the river, and either gradually or suddenly succeeded by the angular drift of the neighbouring mountains, and that with little or no change in the inclination of the acclivity.

Mr. Jukes, in attacking the great seeming objection to the fluvial origin of valleys, namely, the necessity for believing that a river must have wandered over, and excavated a large plain during the time that its action, in a contiguous area, was limited to the wearing down of a narrow gorge, endeavours to explain the disparity by reference to the more easily eroded rocks composing the area of the plain. In Ireland he believes that the Carboniferous limestone was the easily denuded rock, and the Old Red Sandstone, or some other silicious formation, the comparatively resisting rock. But, I think, in many districts, this explanation would not hold good. In the case of the plain of Herefordshire, and the narrow gorge of the Wye between Ross and Chepstow, it would require to be reversed; for there the plain is Old Red Sandstone, and the sides of the gorge Carboniferous limestone. Farther up the Wye, I do not think Mr. Jukes' explanation would apply; though on this point I would wish to speak with deference, and with the greatest willingness to be corrected.

The gorges or passes connecting the vales of Central Wales look as if they were more *recently* excavated than the vales themselves. They cut abruptly, and without any warning, through the ridges by which the vales are separated. Their commencement is as sharply defined as if they had been sliced out of the ridges, and I cannot help thinking that they have been widened, and their sides rendered more precipitous, by the action of the sea during the glacial period of submergence. At the same time, probably, the cliffs of Abereddw (which, in many respects, are perfect fac-similes of cliffs now washed by the sea on the Cardiganshire coast), were formed and upheaved in succession. It is quite true that all this implies the previous existence of the valleys on a smaller scale; but on this subject I cannot enter farther at present. Its elucidation would require a re-examination of the nature and distribution of the various kinds of drift by which a great part of Central Wales is covered from the mountain top to the lowest depression.¹—I am, Sir, yours truly,

D. MACKINTOSH.

DOLGELLY, 9th May, 1866.

LEPIDOSTROBUS BROWNII.²

To the Editor of the GEOLOGICAL MAGAZINE.

SIR,—In the interesting paper by Mr. Carruthers, which appeared in the October number of your Magazine, I was glad to see that he distinguished the beautiful specimen of Dr. Robert Brown (who had shown it to me during his lifetime,) from the *Lepidostrobus* described

¹ There are several very important points in Mr. Jukes' letter, the consideration of which I must reserve for a future, and more systematic communication.

² See *ante*, p. 271. Report of the Manchester Geological Society.—This letter was accidentally omitted from our last number.—EDIT.

by Dr. Hooker in the Memoirs of the Geological Survey. There is evidently a marked difference between the two specimens. Dr. Brown's came from France, and he states that M. Brongniart had in his possession a similar one from Strasbourg. However, nothing was known of the locality or formation from which these specimens were obtained. I had little doubt in my mind that they came from the Coal-measures, but I had no evidence to prove the fact. A short time ago Mr. Wilde, of Oldham Edge, allowed me to slice a *Lepidostrobus* obtained by him from a nodule found in the Upper Foot coal of Oldham, the same seam from which I have for a long time obtained specimens, and I met with evidence which established its identity with *Lepidostrobus Brownii*. The size of the specimen, the form of the sporangia, and their arrangement around the central axis, as well as their contents, a great numbers of spores, showing a triple arrangement of sporules, are the same in both. The central axis of the strobilus affords evidence of similar structure to that found in the stem of *Lepidodendron vasculare* described and figured by me in the "Quarterly Journal of the Geological Society" for 1862, namely, hexagonal tubes having all their sides bound by transverse striæ and by wanting the internal radiating cylinder found in *Sigillaria vascularis*.

I am, yours truly,

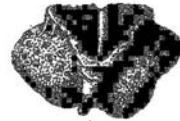
EDWARD W. BINNEY.

MANCHESTER, March 21, 1866.

GONIOPHYLLUM IN THE WENLOCK SHALE.

To the Editor of the GEOLOGICAL MAGAZINE.

DEAR SIR,—It may be interesting to some of your readers to know that Mr. L. P. Capewell of Dudley has found a very perfect example of the *Goniophyllum pyramidale*, His., (and of which I enclose a drawing) in the Upper Wenlock Shale of Dudley. It appears to be the first example of this interesting fossil hitherto discovered in our British Silurian rocks, and is attached to a specimen of *Heliolithes*. It agrees well with a young Swedish example of *Goniophyllum pyramidale*, described and figured by Herr Lindström (pl. xxx., fig. 4) in his excellent memoir on "Zoantharia Rugosa." Having submitted a carefully made drawing of our English specimen to Herr Lindström, he has entirely concurred with the identification here given.



GONIOPHYLLUM
PYRAMIDALE, HIS.
UPPER WENLOCK SHALE,
DUDLEY.

I am, Dear Sir, yours faithfully,

THOS. DAVIDSON.

REMAINS OF PREHISTORIC MAN IN CENTRAL INDIA.

To the Editor of the GEOLOGICAL MAGAZINE.

SIR,—I intended to have sent you a notice of my having found, on the bank of the Godavery river, south of Arungabad, traces of