CORRESPONDENCE

ON THE OCCURRENCE OF LINNAEITE IN THE COAL MEASURES OF SOUTH WALES

SIR,—In 1928 the *Geological Magazine* published a note [1] on linnaeite following a paper [2] by Dr. F. J. North and the writer on the distribution of millerite in South Wales. The records of occurrence are, of course, of academic interest only. The more important significance is the light which the occurrence of these minerals throws on the source of the sediments deposited in what is now South Wales during Coal Measure times.

In the 1928 [1] paper, I remarked that the only previous record of Welsh linnaeite which I could find takes the form of a note (without title) by A. L. des Cloizeaux in a French publication.[3] This record was based on a specimen from the " Rhonda " (Rhondda) discovered by a Mr. Terrill of Swansea, " which does not seem to have been preserved."

I visited the Museum d'Histoire naturelle in Paris and was most kindly received by Dr. Orcel, who gave me access to the reserve collections. I failed to find the specimen as it never occurred to me that it might still be in the collection made by Mr. Terrill.

In 1937 the Terrill collection of minerals was presented to the National Museum of Wales, but after ten years the name had no particular significance for me and it was not until 1951 when the collection was being critically examined that I discovered a specimen of linnaeite from South Wales and realized the Terrill who made the collection and the Terrill referred to by des Cloizeaux in 1880 were one and the same person.

The specimen in the Terrill collection is no better than those described in 1928, and it has no information giving the precise horizon and locality.

The specimen consists of separate crystals or aggregates of minute modified octahedra on dolomite or ankerite lining septarian cracks in clay ironstone.

I have now confirmed the occurrence in Wales of all the minerals found in similar circumstances in the clay ironstones of Bohemia with the exception of whewellite, hydrated calcium oxalate. The specimens kindly given to me for the National Museum of Wales by Professor Slavik from the Prago Mine, near Kladno, Bohemia, show the whewellite to be the last formed mineral and it way well be that the Bohemian mineral is of very recent origin, possibly associated with the decay of pitprops in abandoned workings.

REFERENCES

1. HOWARTH, W. E., 1928. On the Occurrence of Linnaeite in the Coal Measures of South Wales. *Geol. Mag.*, lxv, 517–18.
2. NORTH, F. J., and W. E. HOWARTH, 1928. On the Occurrence of Millerite and Associated Minerals in the Coal Measures of South Wales. *Proc. South Wales Institute of Engineers*, xliv, No. 3, 325–348.
3. *Bulletin de la Société minéralogique de France*, IIIe (1880), 170–1.

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ANGLE BETWEEN THE PRINCIPAL HORIZONTAL STRESS AND TRANSCURRENT FAULTS

SIR,—By a coincidence two papers recently published in the same number of the *Geological Magazine* (xci, 2) provide evidence that under some conditions the angle between the principal horizontal stress and transcurrent faults is about 60° and not, as suggested by Anderson (1942, p. 14), always less than 45°.