

rock through which Mr. Stephenson penetrated was really *greenstone*, as noticed at page 499 of your last number. Mr. Hull, in the 'Memoirs of the Geological Survey,' gives a correct account of this achievement. My anecdote is original only as regards the words used by Mr. Stephenson on the occasion.

Yours truly,  
D. M.

SIR,—The anecdote in the concluding paragraph of your November number is interesting, in spite of its geological inaccuracies, as it tends to throw light on a question that has often puzzled me. The facts are these :—A very slight examination would show that the Coal-measures of the Coleaton and Snibston Field pass to the east beneath a thick mass of New Red marl and sandstone, and that still further to the east the two must abut and end off against the western flank of the mass of slaty and igneous rocks of Charnwood Forest. Thus much we may safely assume that Stephenson knew when he began to sink through the New Red at Snibston in search of the Coal-measures. The sinking was carried down through the marls and the underlying sandstone till a bed of greenstone (not 'granite') was struck. It would have been only natural to take this for the underground prolongation of the Charnwood Forest rocks, and consequently to conclude that the shaft was too far to the east, and that there was no hope of finding Coal-measures there. But, nothing daunted, Stephenson carried on his work, and after passing through sixty feet of greenstone reached, not 'more productive Coal-measures,' but the first Coal-measures that had been met with in the shaft. Now I have often wondered whether Stephenson had any *reason* for hoping in the end to be successful, or whether it was only a plucky determination to go on, even in the dark, and see what would come of it. I think your anecdote shows that the latter was the case; but perhaps some of your correspondents may be able to tell us more on the subject.

Yours obediently,

A. H. GREEN.

28, JERMYN STREET: Nov. 7, 1865.

#### ANCIENT BRONZE IMPLEMENTS.

*To the Editor of the GEOLOGICAL MAGAZINE.*

DEAR SIR,—I hear that bronze implements have been discovered in the Kirkhead Cavern. Surely the exact analysis of the metal of which they consist would prove of interest. If samples of ancient bronze, brass, or other alloys are placed at my disposal, I shall be most glad of the opportunity of analysing such of them as are likely to yield good results. Fragments of from five to ten grains generally afford sufficient material for one quantitative analysis, but a larger quantity is preferable.—I am, dear Sir, yours truly,

A. H. CHURCH.

R. A. COLLEGE, CIRENCESTER: Oct. 29, 1865.