

## William Smith; Father of English Geology

By Kevin, Volunteer

I am helping to transcribe the correspondence of William Smith ("Father of English Geology") who is a particular hero of mine. I am an engineering geologist and Smith was likely the very first applied geologist, working in the fields of minerals, mining, drainage, coastal defences, landslips, etc., whilst most other geologists of his day were only interested in collecting fossils as curiosities. Reading through his letters reminded me so much of my experiences as a consulting geologist: Where are the drillers logs? I am still waiting to be paid. Sorry but the report will be late.

He travelled thousands of miles for business in some years. As a personal project I set about trying to locate Smith's numerous addresses and those of his correspondents. Using various sources, including old maps and internet searches, I have determined grid references for many of the locations. Some are the exact building, but others are just the centre of the town or road mentioned.

I have put these into a Geographic Information System (Fig.1), the beauty of which is the ability to relate the points to other spatial data layers such as aerial photography, LiDAR, historic OS mapping, geology, etc. For example, Fig. 2 is a zoom-in to central London; Fig. 3 is central Bath on the 1796 map; Fig. 4 is Tucking Mill, Bath on the 1880 OS map with modern geology. I am hopeful that a simplified version of this GIS might be mounted on the OUMNH website sometime, for all to explore.

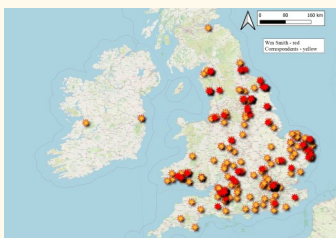


Fig.1

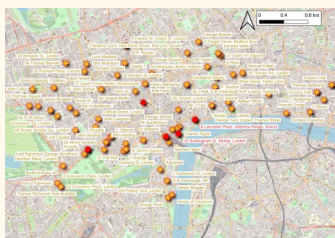


Fig.2

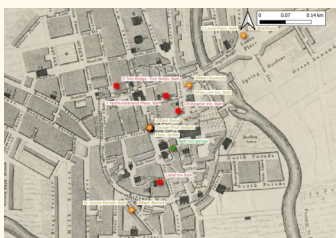


Fig.3

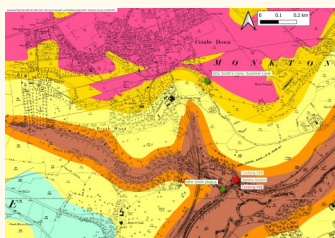


Fig.4

## Ali and the Lucernal Microscope [inv. 67792]

By Ali, Multaka Volunteer



I chose this microscope by George Adams because I have studied biology at University in my country Iran, and I am very eager to know more about the history of the development of microscopes.

George Adams was an English scientist, optician and scientific writer during the reign of king George III. George Adams wrote many articles on electricity, magnetism, astronomy, geography and mathematical instruments.

George Adams invented the lucernal microscope in 1770. It is a type of projection microscope where the image is projected on a screen by a large oil lamp. Adams designed and built a number of lucernal microscopes with wooden and brass bodies. Some microscopes were very large and they had a dense lens that was more than 8 inches in diameter and their focal angle was near 24 inches.

The Multaka project was very enjoyable for me because there are many expert teachers in these activities and I am interested in group work and can learn a lot from others. It is also very useful to develop my English. When I was in my own county, I spent most of my life in the university, researching and writing articles, I am now interested in researching different subjects and topics. I will definitely continue to research object in the future.

Image: Compound Lucernal Microscope.

Image Credit: [Science Museum Group Collection](#)

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