Large engraved wall map, dissected and mounted on linen, in three sections, fine original full-wash colour, signed and numbered “a65” by the author to the lower right corner of the north section, third issue (the “a” series), housed in original brown mottled paper slipcase, rubbed.

“THE MAP THAT CHANGED THE WORLD”

A Delineation of the Strata of England and Wales, with Part of Scotland; exhibiting the Colleries and Mines, the Marshes and Fen Lands originally overflowed by the Sea, and the Varieties of Soil according to the Variations in the Substrata, Illustrated by the most descriptive Names. [together with] A Memoir to the Map and Delineation of the Strata of England and Wales, with part of Scotland. By William Smith, Engineer and Mineral Surveyor.

Author
SMITH, William

Publication date
1815

Publisher
John Cary,

Publication place
London,

Physical description
Large engraved wall map, dissected and mounted on linen, in three sections, fine original full-wash colour, signed and numbered “a65” by the author to the lower right corner of the north section, third issue (the “a” series), housed in original brown mottled paper slipcase, rubbed.

Dimensions
2325 by 1850mm. (91.5 by 72.75 inches).

Notes
The first large scale, detailed scientific geological map of any country: “A major cartographic and scientific achievement” (Eyles, DSB). Smith’s triumph in executing this, his subsequent fall and then final recognition is the stuff of scientific legend: “he was imprisoned for debt, turned out of his home, his work was plagiarised, his wife went insane and the scientific establishment shunned him” (Winchester). However, Smith’s overwhelming contribution to the science of geology was his recognition, as outlined in the Memoir, “that each stratum is also possessed of properties peculiar to itself, has the same exterior characters and chemical properties, and the same extraneous or organised fossils throughout its course”. It was this theory, developed as early as 1796, that enabled Smith to “accurately predict, and therefore map, the geological composition of Britain” (Challinor). The connection between strata and their fossils was noted by the Danish scientist Nicolas Steno in his 1669 work ‘De Solido’, but it was Smith who first understood that the principles of stratigraphy could be applied on a national scale. His development of the mechanisms of superposition (the theory that geological strata are formed in order), placed palaeontology as a fundamental part of geology and lent credence to the theory of deep time, leading to a better understanding of the age of the earth. His great map is astoundingly accurate, and modern versions have made only relatively minor modifications to his work.

Five states of Smith’s work have been identified: an early unnumbered state (known in only a few copies); a series numbered 1-100, which Smith signed between 2 November and 17 December 1815; a series numbered a1-100 (the present example is of this series), signed between 17 December 1815 and 23 January 1816; a series numbered b1-100, signed after 23 January 1816; and an unnumbered series probably issued in 1823 or later (watermarks are dated 1823).

“The map was supplied either in sheets [usually bound as an atlas], or mounted on canvas and rollers, or fitted in a case for travelling [as in the present example]” (Eyles, Bibliography). Most probably no more than 320-350 copies of the map were published, of which perhaps 130 survive today.

The present example corresponds to Eyles’ second issue, series III map: “a65”, was examined and signed by Smith on 13 January 1816. It was one of a batch of 15, which had been coloured by Morse, signed that day and numbered.

Scale: 5 miles to one inch.

Bibliography
J. Challinor, “The Beginnings of Scientific Palaeontology in Britain” Annals of Science 6 (1948): 46-53; Joan M. Eyles, “William Smith”, in Dictionary of Scientific Biography (vol.12), ed. Charles Coulston Gillispie (New York: Scribner, 1970-80) 486-492; Eyles, “William Smith: A Bibliography of his Published Writings, Maps and Geological Sections” Journal of the Society for the Bibliography of Natural History V (1969); H.D. Horblit, One hundred books famous in science: based on an exhibition held at the Grolier Club (New York: Grolier Club, 1964), 94; Ruth A. Sparrow, Milestones of Science: Epochal books in the history of science as represented in the Buffalo Society of Natural Sciences, (Buffalo: Buffalo Society of Natural Sciences, 1972), 180; Simon Winchester, The Map that Changed the World (London: Harper Collins, 2001).

Provenance

Price:

Inventory reference: 14309