

Fulton's pioneering work on the building of canals

Robert Fulton. *A Treatise on the Improvement of Canal Navigation* (London: I. & J. Taylor, 1796). 11 inches x 8 1/2 inches (279 x 216 mm), 144 pages, 18 plates.

In Robert Fulton (1765–1815) the child was truly father to the man. His submarine mines and torpedoes were clearly foreshadowed by the skyrockets he devised at the age of thirteen to celebrate the Fourth of July in his native Lancaster, Pennsylvania. The Hudson steamboats with which his name is identified were anticipated by a manually operated paddlewheel boat invented at the age of fourteen to enable himself and his companions to fish in Conestoga Creek without the tedium of poling. Fulton's career as inventor of cast-iron aqueducts and bridges, of machines for sawing marble and spinning flax, of submarines — his “diving boat” the *Nautilus* descended to depths of 25 feet in 1801, navigating underwater for over four hours — and as a developer of steamboats is recorded in patents, plans, pamphlets, and prospectuses.

An actual book, however, commemorates Fulton's pioneering work on canals. While in England in the 1780s, he worked on the Duke of Bridgewater's projects for a canal linking Birmingham to the sea. Fulton devised a dredging machine or power-shovel for cutting canal channels and several other mechanical contrivances, including a double-inclined plane that would transport canal boats by rail where water was impracticable owing to rough terrain. All are described and illustrated in his *Treatise on the Improvement of Canal Navigation*. Fulton was an accomplished artist and he drew the plates himself, and was an innovator even in this sphere, for he painted what is considered to be the first panorama while in Paris in the 1790s, *L'Incendie de Moskow*. The book was not merely a practical treatise for the construction industry; it was a work of polemic and prophecy, forecasting a prosperous commercial future for nations so enlightened as to undertake to build a vast inland system of canals.

This copy of Fulton's ground-breaking book is from the Bancroft Library at the University of California, Berkeley. It is bound in contemporary calf with a red morocco lettering-piece.

Sabin 26201.

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