
Joshua Routledge 1775–1829

John V. Knott

The Routledge two-foot, folding Engineers Slide Rule, made in boxwood, was invented by J. Routledge in 1809. A report of 1888 indicates that “although there is information on Routledge Slide Rule, none can be found of the inventor”. It appears that a large quantity of letters, etc., were burned after his death, and only a journal, of his business transactions in Bolton, Lancashire, England, and his last diary (for 1828 until his death in 1829) remain.

His invention consisted of changing the carpenter’s slide D scale, which has a single radius running from 4 to 40, to a single radius scale starting a 1 at the left hand index. He also introduced gauge point tables for squares, cylinders, globes, polygons having 6 to 12 sides, circles and pumping engines.

No patent can be found, although a record does exist for four different editions of his *Instructions for the Engineers Improved Slide Rule*. The fourth edition dated 1813 was printed in London.

The following is a chronology of his life:

- 1773. Routledge was born in Riccall in Yorkshire on April 27th.
- 1800. At the age of 27 he became manager for Murray & Wood in Leeds.
- 1808. He invented the Engineer’s Slide Rule.
- 1810. He came to Bolton and worked for the Thomas Swift & Co. Foundry.
- 1814. He started and ran his own business as an ironmonger until 1818.
- 1818. He invented the steam rotary engine, Patent No. 4232.
- 1824. He left England for Warsaw under an engagement with Thomas Evans & Co., Engineers of Warsaw, Poland, at a salary of £300. He was engineer in charge of erecting a large steam corn mill. The machinery for this mill was made by Hey Foundry of Wigan, Lancashire.
- 1828. Routledge contracted a tumor. His diary indicates that Thomas Evans owed him money, and the tumor was very bad. Apart from the pain of his illness, both he and his wife were suffering from lack of food and from having to beg for money he had justly earned (and then only receiving small installments, barely sufficient to keep him and his family alive).
- 1829. He died in pain and poverty on the 8th of February, at the age of 55. He was buried in the Lutheran burial ground in Warsaw.