

The Great Invention | Inventors | John Roebuck (1718 - 1794)

ROEBUCK, JOHN (1718-1794), was born in 1718 at Sheffield, where his father had a prosperous manufacturing business. After attending the grammar school at Sheffield and Dr Philip Doddridges academy at Northampton, he studied medicine at Edinburgh, where he was imbued with a taste for chemistry by the lectures of William Cullen and Joseph Black, and he finally graduated M.D. at Leiden in 1742. He started practice at Birmingham, but devoted much of his time to chemistry, especially in its practical applications. Among the most important of his early achievements in this field was the introduction, in 1746, of leaden condensing chambers for use in the manufacture of sulphuric acid. Together with Samuel Garbett he erected a factory at Prestonpans, near,Edinburgh, for the production of the acid in 1749, and for some years enjoyed a monopoly; but ultimately his methods became known, and, having omitted to take out patents for them at the proper time, he was unable to restrain others from making use of them. Engaging next in the manufacture of iron, he in 1760 established the ironworks which still exist at Carron, in Stirlingshire. There he introduced various improvements in the methods of production, including the conversion (patented in 1762) of cast iron into malleable iron by the action of a hollow pit-coal fire urged by a powerful artificial blast. His next enterprise was less successful. He leased a colliery at Boness to supply coal to the Carron works, but in sinking for new seams encountered such quantities of water that the Newcomen engine which he used was unable to keep the pit clear. In this difficulty he heard of James Watts engine and entered into communication with its inventor. This engine, then at an early stage of its development, also proved inadequate, but Roebuck became a strong believer in its future and in return for a two-thirds share in the invention assisted Watt in perfecting its details. His troubles at the colliery, however, aggravated by the failure of an attempt to manufacture alkali, brought him into pecuniary straits, and he parted with his share in Watts

engine to Matthew Boulton in return for the cancellation of a debt of 1200 which he owed the latter. Subsequently, though he had to give up his interest in the Boness works, he continued to manage them and to reside at the neighboring Kinneil House, where he occupied himself with farming on a considerable scale. He died on the 17th of July 1794.

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