

Fowler & Co.

Fowler & Co. was an important Manchester firm of calculator manufacturers. The Museum's collections include a selection of calculators made by the company.

William Henry Fowler was born in July 1853 in Oldham. When he was 14 years old, he began engineering training at the Oldham firm of Platt Brothers, textile machinery manufacturers, and later became a draughtsman. At the age of 20, he won a Whitworth Scholarship and studied for four years at Owens College in Manchester. He was then appointed as Assistant Engineer to the Steam Users' Association and, in 1888, became General Manager of the Chadderton Iron Works.

In 1891, W. H. Fowler's career took a different turn and he became Editor of *The Practical Engineer*, a weekly journal published in Manchester. In 1898, he set up the Scientific Publishing Company on Corporation Street, Manchester. It soon moved to 53, New Bailey Street in Salford and published *Fowler's Mechanical Engineer's Pocket Book*, the first of a series of annual pocket books for a variety of trades. The company moved to premises in West Timperley, near Altrincham, in the early 1940s and again, in the early 1960s, to the Rochdale Road, and was in business until about 1976.

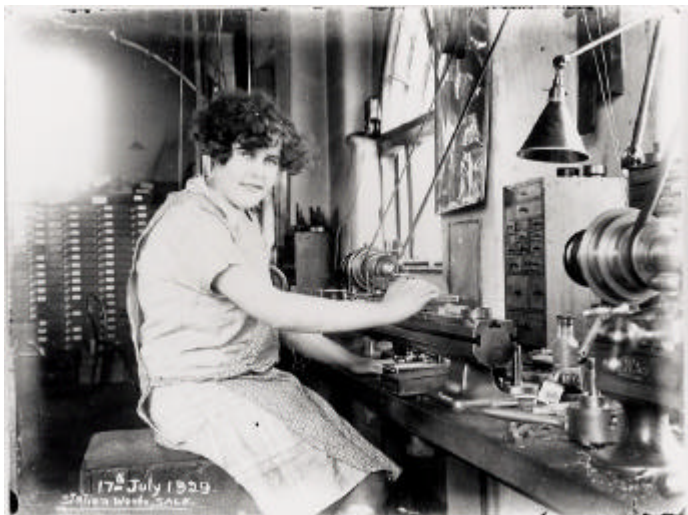
In 1898, Fowler's *The Mechanical Engineer* carried an article on a circular calculator. It had a nickel-plated case and consisted of a revolving dial, operated by a milled nut at the top, and fixed pointers moving over five scales on its face. Records do not show who designed this instrument or where it was made; it was sold via the Scientific Publishing Company.

W. H. Fowler's son, Harold, was born in 1879. He initially followed in his father's footsteps, winning a scholarship to the Manchester School of Technology and then to Owens College where he studied engineering. He worked as an electrical engineer until 1905 when he began working for the Scientific Publishing Company and helped with editorial work of *The Mechanical Engineer*. He also spent a lot of time designing circular calculators and, in around 1908, set up a workshop for their manufacture in a room at his house, Sale Lodge, in Sale. He soon had an assistant to help with assembling the calculators. W. H. Fowler may have financed the purchase of equipment.

W. H. Fowler took out three patents in the next four years, the first covering the double-sided Long Scale or Pocket calculator that was to be the mainstay of production for the next 30 years. In this design, a milled nut moved one dial on the edge of the casing, the other dial and the pointer by a knob in the centre of the face. The calculator had a maximum scale length of 30in (76cm). The business, however, was never very profitable. Circular calculators had a large number of different parts, compared with straight slide rules, and had to be assembled by hand. Production costs were therefore high and the calculator cost four times as much as straight slide rules.

By 1914, W. H. Fowler had moved to a smaller house, Oakleigh, The Avenue, Sale, where he set up a better-equipped workshop. Harold had married an actress and was living at Alston, Old Hall Road, Sale. In 1920, the Fowlers moved the business to larger, separate premises at the Station Works, Chapel Road, Sale. The company introduced the Universal calculator, which was a single dial instrument with a scale of up to 10in (25cm). In 1924, William Henry and Harold took out a joint patent for a development of the calculator, in which an extra milled nut was fitted to the casing edge, enabling the user to move the dials on the two faces with the fingers of one hand. They adapted the patented Long Scale calculator to include this feature. In 1927, the company introduced the Magnum Long Scale calculator which had a maximum scale length of 50in (127cm).

By 1929, Fowler & Co employed four machine operators and a works manager. The



business was still not very successful, however, and took in various engineering jobs to support the calculator making side. W. H. Fowler died in April 1932 and Harold became owner of the firm. By 1936, the company had introduced another model, the 12-10 calculator, designed for architects, builders, surveyors and timber merchants who often had calculations to make with decimal and duodecimal (12ths) notation. All the company's products were still marketed through the pages of the *Fowler's Pocket Books*.

Edie Batsford, one of Fowler's employees.

The business moved again in 1938 to Hampson Street, Sale, when the Chapel Street works was demolished to make way for the Town Hall extension. It continued to be a general engineering workshop as well as making circular calculators. During the Second World War, Jim Cookson joined the business as the new manager and the company's name was changed soon after to Fowlers (Calculators) Ltd. In 1948, the company introduced the Jubilee Magnum extra long scale calculator which enabled calculations to five or six figures and had a total scale length of 76in (193cm). Later, it produced several new models including the Type B or Textile calculator. The company marketed its full range through Joseph Casartelli & Sons Ltd, scientific instrument makers of Salford, as well as through the *Fowler's Pocket Books*. Jim Cookson ran the business after Harold Fowler's retirement. In the early 1960s, the company took over as proprietors of the Scientific Publishing Company. Fowlers (Calculators) Ltd carried on trading until it went into liquidation in around 1988 following Jim Cookson's retirement.

For more information:

Read Wetton, J. 'Scientific Instrument Making in Manchester, 1870-1940',
 Scientific Instrument Society Bulletin, 53, June 1997.

Visit The Museum's Measuring Up! Gallery