

Collections Department
Museum of Science & Industry
Liverpool Road
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Manchester
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A. G. Thornton Ltd

The Museum's collections include scientific instruments and slide rules made by A. G. Thornton Ltd, which specialised in making and supplying good quality drawing and surveying instruments and materials to engineers, architects, shipbuilders, surveyors, local authorities, railway companies and schools.

Alexander George Thornton may have begun his career in the drawing material trade by becoming apprenticed to W. H. Harling of London. Between 1874 and 1878, Thornton worked for George Gallie & Sons, booksellers and stationers of Glasgow. In 1878, he set up a business in Manchester at 8, Albert Square in partnership with Joseph Halden as wholesale drawing material importers and mounted paper manufacturers. However, this partnership only lasted for a couple of years and Thornton moved to premises of his own at 109, Deansgate. By the 1890s, these consisted of a single-fronted shop with show rooms, warehouses, and workshops at the rear and in the basement.

The firm soon built up a large national trade and an extensive export business to all parts of the world. It did a special line in loose drawing instruments which it claimed were the cheapest for their type and quality ever offered. It also introduced a case of drawing instruments in 1892, which provided good, reliable instruments at a 'convenient price for students and apprentices'. The company introduced a number of improvements to instruments and equipment such as drawing boards. By 1895, new designs included rotating compasses, screws for drawing instruments, a miner's dial, fluid transfer ink for drawings or tracings which were to be copied, a typograph copier and a paper stretching board.



In 1897, the firm moved to 11, St. Mary Street with works on Bridge Street and, again in 1904, to Paragon Works on King Street West. Here there were showrooms, main offices and warehouses, and facilities for mounting hand-made papers and maps. Manufacture of surveying, drawing and other scientific instruments took place at the Minerva Works on Sidney Street, Salford, purchased in 1907.

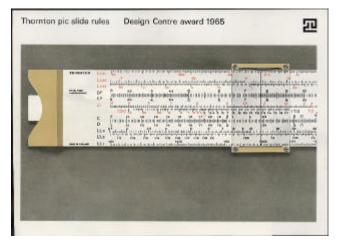
During the late 1910s and 1920s, the

business expanded quite rapidly due to the growth in demand from colonial and other overseas markets. In 1912, larger works were acquired in Cross Street off Lloyd Street in Hulme. The works moved again twelve years later to be split between two premises in Heald Place, Rusholme and North George Street, Salford. The company also patented several of its own designs of drawing instruments such as beam compasses, drawing curves and dividers. It used international exhibitions to advertise its products and won medals at the Franco-British Exhibition, London, in 1908 and at the International Exhibition

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in Dunedin, New Zealand, in 1925-6. By this time, Thornton's customers included leading universities and colleges and government departments around the world. During the 1920s, production costs for hand-made drawing instruments increased. Companies, including A. G. Thornton Ltd., introduced more machine-made instruments using standardised and interchangeable parts. The King Street West premises were destroyed during the Second World War and the various departments were dispersed to different parts of the city: the offices to Gartside Street, export department to Brazenose Street and showrooms to Bridge Street.

In 1949, the company moved to purpose-built premises in the new industrial park on Longley Lane in Northenden. The retail showroom was retained on Bridge Street in the city centre. A special feature of the new building in Northenden was its dust extraction system to remove dust created by machinery. By this time, the company had 220 employees, most of whom had been there for many years. The managing director was A. M. Thornton, a grandson of the founder.



In the 1960s, A. G. Thornton Ltd, under its managing director J. T. Reynolds became increasingly concerned with product design. Working with design consultants, company staff analysed the uses to which each item would be put and introduced new and more suitable materials. One example was a new instrument case lined with level cushions of foam plastic in the base and lid instead of individually shaped wooden recesses lined with velvet. The company's range of slide rules won a Design Centre Award in 1965 and their drawing desks and

art desks attracted much praise. In March 1967, the company changed its name to British Thornton.

In the late 1960s, the company began to change its line of business. The manufacture of drawing office furniture was increased until it accounted for most of the work, although slide rules and drawing instruments were still made. The firm began to sell calculators instead of slide rules in response to the increasing popularity of calculators in the 1970s. This was very successful for a few years until the competition from other companies became more intense. By 1990, British Thornton supplied furniture and furnishings to schools and colleges, especially for Craft, Design and Technology courses. These supplies included computer-aided design software and electrical hardware such as power supply units. The firm had 38 employees and used half of its original factory space. The directors set up a new holding company with a stock market listing. This company acquired two other companies to expand the manufacturing company's production base. One of these was Education and Science Furniture (ESF) in Burley, Wharfedale, in Yorkshire. British Thornton itself merged with ESF in January 1992 and moved to Burley.

For more information:

Read Wetton, J. 'Scientific Instrument Making in Manchester, 1870-1940',

Scientific Instrument Society Bulletin, 54, September 1997.

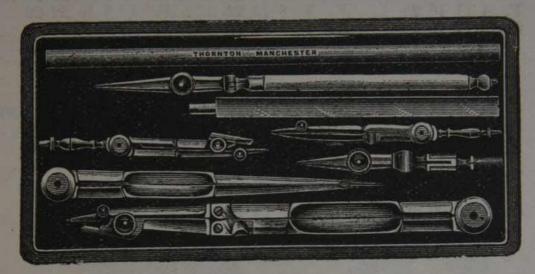
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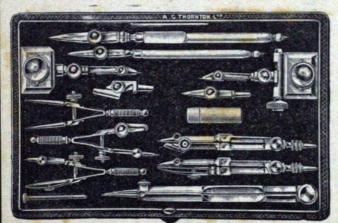
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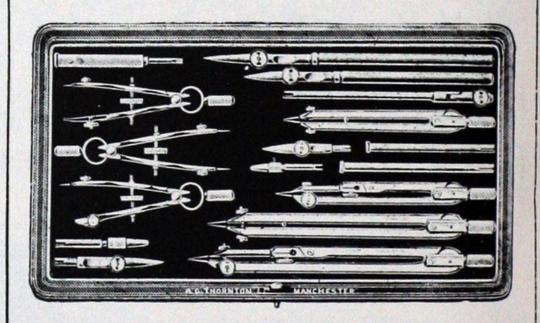
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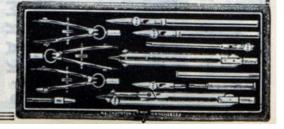
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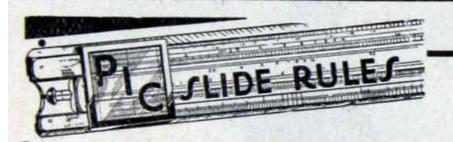
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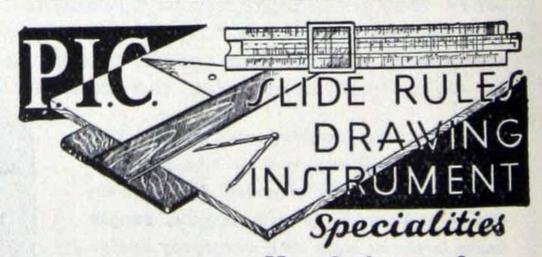
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