

INSTRUMENT MAKERS TO THE WORLD

A History of Cooke, Troughton & Simms



ANITA McCONNELL

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Foreword

COOKE, TROUGHTON & SIMMS is a name known and respected throughout the world in the field of scientific instruments. It has a history going back over 200 years to the Troughtons and then to the Simms in London, and some years later to the Cookes in York. They were all drawn to the craft of fine instrument makers by their love of hand-made precision engineering.

Anita McConnell, a well-known historical authority in this field, has now recorded in detail the fascinating story of how the business grew from small beginnings in a yard behind Fleet Street in London into a world-renowned manufacturer. She records how the parts of the business were brought together as a subsidiary company of the armaments giant, Vickers. She records, alas, the final disappearance of the famous name from the ranks of scientific instrument makers.

Anita has drawn upon her own extensive and expert knowledge, and has also delved deeply into many collections, archives and libraries. Her long list of acknowledgements reveals the extent of her research.

A collection central to the subject is the Vickers Instruments archive at the University of York. The documents and photographs are in the Borthwick Institute there, while examples of the actual products are in the Physics Department. Until a few years ago

these were all held at the works of Cooke, Troughton & Simms in Haxby Road, York; they have now been sorted, arranged and indexed by Alison Brech, thus saving them from a fate all too familiar to company historians.

It is most appropriate that the archive has been retained in York. For this we are grateful to the University authorities, particularly to Professor Jim Matthew and to Dr David Smith who have given the fullest support both to the setting up of the archive and to the writing of this book. It is to be hoped that these will encourage others to carry out further research in the scientific, historic and economic fields covered by Anita's book.

A collection complementary to the Vickers Instrument archive is that containing the Vickers head office records now lodged with the Cambridge University Library. This covers the wide-ranging armaments and commercial activities of Vickers and its forebears, including those of the later activities of Cooke, Troughton & Simms.

We are all most grateful to Anita McConnell for recording this most interesting story of a long-established company in the field of scientific instruments.

HUGH SCROPE
Company Secretary of Vickers Limited
1967 to 1984

Preface

IN 1946 SELECTED CUSTOMERS AND friends of Cooke, Troughton & Simms of York received a small book, its blue cover embossed with a gold orrery and the words 'At the Sign of the Orrery'. Subtitled 'The origins of the firm of Cooke, Troughton & Simms Ltd from material collected by E. Wilfred Taylor and J. Simms Wilson', it was privately published and distributed. In 1960 a second edition was published 'brought up to date by P. D. Scott Maxwell', who had succeeded Taylor and Simms Wilson as Managing Director. Since then, though many valuable studies of some aspect or period of its business have been published, no full history of this company has been attempted.

Taylor's curiosity about the origins of Troughton & Simms seems to have been aroused by his interest in dividing engines. Several of his technical papers were prefaced by a brief account of his firm's history as he understood it. Simms Wilson was the great-grandson of that William Simms who became partner to Edward Troughton in 1826. He had salvaged a few documents from Troughton & Simms' Charlton Works, and these, supplemented by family papers, suggested further lines of enquiry to document the early days of the business in the City of London. Unfortunately, World War Two was in full swing when they decided to carry out this research. Taylor and Simms Wilson were joint Managing Directors of a company fully engaged on war work. They were based in York, whilst the archives that would have helped their enquiries were either in London or evacuated to some safe place of storage for the duration of the war. They were not historians, and their method was to employ an antiquarian print-dealer named Moon to search for suitable material. Moon unearthed more information about those instrument makers – Worgan, Rowley and Wright – whose shop had been located in the western end of Fleet Street, hence the emphasis on

these characters in the book. He found nothing on the two John Troughtons, uncle and nephew, who consequently received scant attention. As a result of these circumstances, facts and dates were not checked, and sins of omission and commission proliferated.

Cooke, Troughton & Simms Ltd was part of the Vickers Instruments Division of Vickers Ltd in 1988 when it was closed down as a consequence of a Vickers Group reorganisation. Since then, the name lives on only as a dormant 'shell company'. Vickers handed the surviving business documents and their small collection of instruments to the University of York, and these have now been made accessible for study. The University of York commissioned my research and writing of this book, which was generously funded by the Renaissance Trust.

Over two centuries have elapsed since the Troughtons first plied their trade in London; one-and-a-half centuries since Thomas Cooke set up in business in York. To write the full technical or business history of these firms, even supposing that supporting documentation could be found, would take years of time and travel. But it is said that Edward Troughton burnt all his papers when he took Simms into partnership, and many other records were destroyed for want of space or during moves from one factory to another. Nor have I had access to relevant material in the Hydrographic Office archives, which have been closed in recent years. So this book aims simply to supply the framework on which others can build according to their own interests. Suggestions for further reading are intended to help people without specialist knowledge of scientific instruments or background history; the notes are for enthusiasts with access to major libraries and the rich archive material in Britain.

Acknowledgements

I HAVE DRAWN EXTENSIVELY on the Vickers Instruments archive, now being catalogued at the Borthwick Institute, and my first duty of thanks must be to Chris Webb, David Smith and their staff, for hospitality and friendly assistance over the past year as I worked through the numerous volumes and boxes. I am much obliged to Professor Jim Matthew of the Physics Department, University of York, who has been responsible for overseeing this project, for oiling the wheels and generally offering advice and guidance. My thanks also to Alan Gebbie of the Physics Department, who undertook some of the drawings and photography, and printed the old Cooke glass negatives, for this book. Jim Matthew, Alison Brech, Allen Simpson and Hugh Scrope kindly read and commented on earlier drafts of the text, and I am much obliged to them for this essential service.

It gives me pleasure to record here my thanks to the Directors and staff of the following institutions for their willing help, and in many cases for permission to draw on material in their collections: American Philosophical Society Archives, Armagh Observatory Archives, Borthwick Institute, York, British Library, Cambridge University Library, and Observatory, City of London and Greater London Record Offices, Guildhall Library, Map Room, and Manuscripts, Imperial College Archives, Institution of Civil Engineers, Gloria Clifton of Project SIMON (Scientific Instrument Making, Observations and Notes) at Imperial College, Public Record Office, India Office Library and Records, Lambeth Palace Library, Messrs Coutts & Co., Bankers, Messrs C. Hoare, Bankers, Midland Bank Group Archives, Museum of the History of Science, Oxford, Royal Astronomical Society, Royal Geographical Society, Royal Society, Royal Observatory Edinburgh Archives, Royal Greenwich Observatory Archives, Royal Society of Arts, Science Museum Library and Archives, Scott

Polar Research Institute, Ransomes Collection, Reading. On a personal level, I am grateful to Lajos Bartha, Luiz Alte da Vega, Mary Brück, Pamela Gardam, Dave Gavine, Julian Holland, Jane Insley, Martin Lunn, Chris McKay and Carole Stott. Former employees of Vickers and Vickers Instruments, Hugh Scrope, Robert Brech, Stephen Marshall, John Munro, Jack Andrews, Derek Cottam, Geoff Pannett, Alec Swales, and Eric West shared their memories of working at Cooke's and Bio-rad Micromasurements kindly allowed me to look round the factory. Peter Hingley, Tony Simcock and Alison Morrison-Low gave moral support and assistance above and beyond the call of duty. My warmest thanks go to Alison Brech, presently in charge of the Vickers Instruments archive, without whose tremendous support and enthusiasm I should have frequently fallen into error and despondency.

To anyone engaged on historical research, true friends are those who selflessly share their knowledge of facts and sources. The huge file of letters accumulated during the writing of this book made me aware of my good fortune in this respect. May I now say to my correspondents from around the world, thank you – for your contributions, suggestions and discussions, and keep writing. For my part, it has been an enjoyable and rewarding year.

It remains only to say that readers familiar with 'The Sign of the Orrery' will remark the disappearance of certain 'facts'. They will not meet John Worgan and John Rowley, whose link with the Troughtons is not proven. Regretfully the Danish National Archives could not confirm the statement on p27 that the King of Denmark awarded a 'special Gold Medal' to Edward Troughton. Nor was William Simms apprenticed to one Bennett. Any evidence in refutation of these points will be gratefully accepted . . . Doubtless other errors remain, for which I take the responsibility.

A Note on Terminology

THIS STORY RUNS FROM the early 18th century to the late 20th century, during which time nations and empires emerged, shifted their boundaries, and, in some cases, vanished from the map. Who now can identify the multitude of small and not-so-small units of government that held sway through central Europe, or within the Indian sub-continent? Where I have used such terms as 'Germany' or 'India', these refer to geographical regions, rather than to any political division.

In dealing with dimensions I have retained the originals; a 12-inch sextant, for example, was made to

that radius, not to 30.48 centimetres. Prices are given in their original pounds, shillings and pence, or guineas (where one guinea, £1-1-0, is £1.05 in decimal coinage).

Dating presents other problems. With the largest apparatus, several years could elapse between the order being given, the instrument being completed, then delivered (taking months rather than weeks, to reach America, India or Australia) and finally set up for use. The dates given here may, therefore, conflict with others elsewhere.

