

THE TYPEWRITER TRADE IN SCOTLAND, FROM THE 1870s TO
1920s

James David Inglis

A Thesis Submitted for the Degree of PhD
at the
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The Typewriter Trade in Scotland, from the 1870s to 1920s

James David Inglis



University of
St Andrews

This thesis is submitted in partial fulfilment for the degree of

Doctor of Philosophy (PhD)

at the University of St Andrews

August 2022

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Abstract

This thesis explores the typewriter trade in Scotland from the 1870s to the 1920s. It analyses the businesses and individuals involved in the marketing, sale and use of writing machines, revealing the processes by which typewriters went from little known novelties in the mid-1870s to essential technologies for commercial and professional work by the early twentieth century. Alongside conventional archival and print-based sources, this thesis makes use of typewriters held at National Museums Scotland and the Glasgow Museum Resource Centre. These collections shed light on the leading figures in Scotland's typewriter trade, while strengthening our understanding of the reasons why typewriters were designed, advertised, sold and used in the way that they were.

Throughout the variety and diversity of businesses involved in the commercialisation of typewriters is revealed, demonstrating that in addition to the buying and selling of writing machines, Scottish businesses profited from producing typewritten transcriptions on demand; providing typing tuition; selling typewriter supplies; repairing typewriters; and dealing in second-hand machines. The focus on these customer facing businesses constitutes an entirely fresh approach to the history of typewriters. To date, scholars interested in the historical significance of these technologies have concentrated on either manufacturing and technical developments or on the expansion of typing as an area of employment. However, there has been hardly any analysis of the businesses that mediated between manufacturers on the one side and users on the other, in Scotland or anywhere else. The lacuna in the historiography has implied that the businesses which sold typewriters and typewriter services played a trivial role in commercialisation.

In reality, the businessmen and women in Scotland's trade were active agents in the sale and promotion of typewriters. Through advertising, exhibitions, lectures, canvassing, typing classes, sales and a whole host of other promotional methods, they introduced typewriters to the Scottish public and demonstrated the potential that these devices had for streamlining office work and transforming the production of written documentation.

Acknowledgements

This project has been made possible through the support of several people, research organisations and funders.

Firstly, I'd like to extend my thanks to my excellent supervisory team. At St Andrews, Aileen Fyfe has offered incredible advice and expertise at every juncture, helping me to focus my research and refine my arguments. Also at St Andrews, Malcolm Petrie provided valuable guidance, particularly on the Scottish history elements of the thesis. At National Museums Scotland (NMS), Sam Alberti enthusiastically facilitated my access to the organisation's facilities while also offering his knowledge of using collections in academic research. Alison Taubman was there to guide me through my research at NMS and was also the driving force behind *The Typewriter Revolution* exhibition at the National Museum of Scotland which was based on the research from this thesis. It has been a real honour to work with such a talented group of people!

My research was also shaped by archives, museums and libraries around the UK. At Glasgow Museums Resource Centre, Heather Robertson facilitated my access to their excellent collection of writing machines. I am particularly indebted to the staff at the National Library of Scotland for helping me search through more than fifty years of Post Office directories from around Scotland. In addition, I am grateful for the assistance of archivists and librarians at the Leicestershire Record Office, the Staffordshire Record Office, the National Archives, the University of Edinburgh Library and the British Library.

Throughout this project, I have learnt a great deal from the international community of typewriter collectors and enthusiasts who have keenly embraced my research. Tom Hodges, the owner of Typewronger Books in Edinburgh, showed me the basics of typewriter operation and repair. Meanwhile, Peter Weil and Greg Fudacz, both prominent members of the Early Typewriters Collectors' Association, gave me free access to their research and archival collections.

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List of abbreviations

GMRC	Glasgow Museums Resource Centre
IPS	Incorporated Phonographic Society
NMS	National Museums Scotland
NLS	National Libraries Scotland
NRS	National Records Scotland
NUT	National Union of Typists
RSA	Royal Society of Arts
SCOT	Social Construction of Technology
SOT	Society of Typists
SPEW	Society for Promoting the Employment of Women
UT&C	United Typewriter & Supplies

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Chapter 1 Introduction

On May 6, 1876 the Reverend David Macrae from the town of Gourrock in the West of Scotland wrote to the *Glasgow Herald* stating:

Sir,

You had a description from *The Times* the other day of the new machine called the type writer, used for writing with instead of the pen... As the one I am using may, for all I know be the only one in our part of the country yet, it occurs to me that many of your readers, might like to know how it is found to work in ordinary hands.¹

Within four days, James D. Dougall, a representative of the Glaswegian gun maker J. D. Dougall and Sons, wrote into the *Herald* to correct Macrae on his speculation that he was the only user of the Type-Writer in the west of Scotland.² Dougall responded: 'I think it right, if you will give me the privilege of your columns, to point out that the type writer has been for some time in use in Glasgow'. Inserting a sly bit of advertising for his own business, Dougall continued: 'as agent for this invention... I have supplied several professional and mercantile gentlemen in Glasgow and neighbourhood with it.' Dougall at least gave the minister credit for his 'very correct' and 'intelligible' description of the machine.³

Macrae and Dougall were responding to an article reprinted in the *Herald* on April 27, 1876 which described: 'A new "type writer" which will enable any one possessing a knowledge of spelling to express his ideas on paper in far less time than he can be taught the ordinary process of writing, and to express them, too, in more distinct characters, and in the end, in about half the time.'⁴ The new machine was the Sholes & Glidden typewriter. One of the earliest commercially manufactured typewriters, it was released by American

¹ David Reverend Macrae, "Letters to the Editor," *Glasgow Herald*, May 6, 1876, 3.

² For details of J.D. Dougall & Sons see *Post Office Glasgow Directory For 1876-1877* (Glasgow: William Mackenzie, 1876), 172.

³ James D Dougall, "Letters to the Editor," *Glasgow Herald*, May 10, 1876, 6.

⁴ "The Type Writer," *Glasgow Herald*, April 27, 1876, 3.

gun and sewing machine manufacturers E. Remington & Sons in 1874.⁵ By April 1876, advertisements in the Scottish press show there were agents for the new writing machine in several major towns and cities which supported Dougall's claim that the typewriter was 'exciting considerable interest in this district.'⁶

The flurry of interest in 1876 did not immediately lead to the establishment of a new industry. Initially, typewriters were sold in very small numbers and marketed by agents as little more than a novel side-line to more popular consumer durable goods such as sewing machines, bicycles and firearms. Most of the early agents – including J. D. Dougall & Sons – stocked the typewriter for only a year or so before leaving the trade. Yet by the end of the century, the typewriter had stimulated the emergence of a substantial business sector, with dozens of typewriter retail outlets in Scotland's four principal cities of Glasgow, Edinburgh, Dundee and Aberdeen, selling a wide range of brands manufactured in America and Europe. In the years up to the First World War, the number of typewriter businesses in Scotland continued to grow with 123 in operation by 1914. From this time the trade entered a period of maturity with the number of typewriter businesses levelling off into the 1920s. Yet it seems likely that the market continued to expand, buoyed by new products such as portable typewriters which were promoted to untapped demographics of domestic users.

Histories of the typewriter trade have, to date, centred on developments in America and particularly on the major developments in invention and manufacture. These narratives have usually focused on the heads of major typewriter manufacturers and have said far less about the marketing, sale and commercial use of typewriters 'on the ground' either in America or in export markets. There has been little analysis of the typewriter trades in European countries, including Britain, which was the world's leading consumer of typewriters after America at the turn of the century.⁷ Through its focus on Scotland, this thesis offers a new perspective. Scotland's principal cities were important centres in the

⁵ Donald Hoke, "The Woman and the Typewriter: A Case Study in Technological Innovation and Social Change," *Business and Economic History* 8 (1979): 76–77.

⁶ Earliest known example of an agent in Scotland advertising a typewriter in "The Type Writing Machine," *The Dundee Courier and Argus*, April 5, 1876, 3; James D. Dougall, "Letters to the Editor," *Glasgow Herald*, May 10, 1876, 6.

⁷ "American Exports," *Typewriter Topics* 20, no. 4 (1912).

UK's trade. Glasgow had one of the largest typewriter trades outside of London, while Edinburgh also had a vibrant trade catering to the capital's high concentration of professional workers in law, medicine, architecture and education. The trades in Dundee and Aberdeen, while smaller than Glasgow and Edinburgh, were home to pioneering figures in the sale and promotion of typewriters and typewriting services.

In this thesis, published and archival materials are used alongside museum collections of typewriters to build up a picture of Scotland's typewriter trade from the introduction of the Sholes & Glidden typewriter in the mid-1870s up until the 1920s. We will uncover the stories of the leading men and women who set up and ran businesses which made money out of the sale and use of typewriters. In doing so, this thesis will demonstrate the processes by which typewriters were promoted, sold and adopted on a wide scale.

Key to this project is my partnership with National Museums Scotland (NMS) and the Glasgow Museum Resource Centre (GMRC). The rich collections of typewriters and auxiliary devices held by these institutions have framed my print and archival research within a material culture analysis. Engaging with typewriter collections has strengthened my understanding of these devices, allowing me to write with greater authority. The objects held in these collections are more than just examples of antique typewriters. Many have uniquely Scottish histories which have led me to new discoveries concerning the businesses that sold these typewriters and the customers that used them.

[Brief history of typewriters](#)

In 1714, Englishman Henry Mill took out a patent for a 'Machine for Transcribing Letters' which he described as:

an artificial machine or method for impressing or transcribing of letters, one after another, as in writing, whereby all writing whatsoever may be engrossed in paper or parchment so neat and exact as not to be distinguished from print.⁸

⁸ Michael Adler, *The Writing Machine: A History of the Typewriter* (London: G. Allen & Unwin, 1973), 47–48.

While there is no physical or documentary evidence that Mill's machine was ever constructed, this patent provides the earliest known description of a machine which could be described as a typewriter. Conceptually, Mill's device was quite different from the printing press as it would have enabled the operator to compose their text as they were going along, character by character. This broad definition covers the full range of inventions that have been considered typewriters, at one time or another. Unless otherwise stated, in this thesis the terms 'typewriter' or 'writing machine' will be used synonymously to describe any device which allowed the operator to print letters onto paper, one character after another 'as in writing'.

Although Mill's machine may never have been built, by the early 1800s there were several inventors in America and Europe who were working towards making a practical writing machine, with some success. Typewriter historian Michael Adler credits the Italian Pellegrino Turri as the earliest verifiable typewriter inventor, for a machine constructed around 1808.⁹ Another prominent figure in typewriter development was the Reverend Malling-Hansen whose writing ball was sold in small numbers across Europe from the 1870s, including one noteworthy sale to Friedrich Nietzsche in 1882.¹⁰ For the most part, until the last quarter of the nineteenth century the manufacture of writing machines was on a small scale by lone inventors creating a handful of devices on commission or as prototypes.

In 1873, the American arms and sewing machine manufacturers E. Remington and Sons took an important step towards the mass production of typewriters when they bought the rights to the Sholes & Glidden 'Type Writer', which they released onto the market the following year. Developed by inventor Christopher Latham Sholes, printer Samuel W. Soule, mechanic Carlos S. Glidden and clockmaker Mathias Schwalbach between 1867 and 1873, this typewriter was the first to feature the QWERTY keyboard layout. Initially, sales of the typewriter were low, not helped by the high price tag of \$125, almost two months wages for

⁹ Adler, 162.

¹⁰ "Rasmus Malling-Hansen" Paul Robert and Peter Weil, *Typewriter: A Celebration of the Ultimate Writing Machine* (New York: Sterling, 2016), 15–19.

the average worker at the time.¹¹ The first Remington typewriters were reportedly sold in Britain as early as 1874, and by 1876 *The Times* reported that the typewriter was in use in the Admiralty, the Board of Trade, and the General Post Office.¹² The same year there were newspaper accounts of Remington-made typewriters being sold in Glasgow, Edinburgh, Dundee and Aberdeen.¹³ But as in America sales remained sluggish for several years.¹⁴

In 1878, Remington released the Perfected Typewriter later known as the Remington Standard No. 2. Among the improvements was the addition of a shift key for shifting between upper and lower-case letters, as Remington's first typewriter had only typed in capitals. The Standard No. 2 was the first typewriter which was a true commercial success, in America and abroad. By the time the No. 2 typewriter was withdrawn from production in 1894 almost 100,000 machines had been made.¹⁵

From the early-1880s, competing manufacturers brought new designs to market, most of which were manufactured in America. Like the Remington, many of these typewriters were keyboard machines such as the Caligraph released in 1880, and the Hammond and the Yost typewriters both launched in 1884. To rival these designs some manufacturers developed index typewriters, such as the Hall released in 1881 and the Columbia in 1885. These were simpler and cheaper machines which, instead of a keyboard, came with character index plates or dials. Usually, this meant the operator selected a letter with one hand and used their other hand for pressing a key which printed the character. On the Columbia in Figure 1.1, the operator turns the black dial on the right to select a letter and then presses the black key on the left to print. By the end of the 1880s, a wide range of keyboard and index

¹¹ Robert A. Waller, "Women and the Typewriter during the First Fifty Years, 1873-1923," *Popular Culture Association in the South* 9, no. 1 (1986): 41; Carrol D. Wright and Waever W. Oren, "Bulletin of the Department of Labor" (Washington, 1898), 668.

¹² Herkimer County Historical Society, *Story of the Typewriter, 1873-1923* (New York: Andrew H. Kellogg Company, 1923), 93, <http://archive.org/details/storyoftypewrite00unse>; "The Type Writer," *The Times*, April 25, 1876, 6.

¹³ David Reverend Macrae, "Letters to the Editor," *Glasgow Herald*, May 6, 1876, 3; James D. Dougall, "Letters to the Editor," *Glasgow Herald*, May 10, 1876, 6.

¹⁴ Herkimer County Historical Society, *Story of the Typewriter, 1873-1923*, 93.

¹⁵ "Remington Typewriter Serial Numbers," Typewriter Database, 2020, <https://typewriterdatabase.com/remington.42.typewriter-serial-number-database>.

typewriters were being sold in the UK, with many having dedicated agencies in Scottish cities.



Figure 1.1. Demonstration of Columbia No. 2 typewriter made in New York, c. 1885. NMS collection, object number T.1949.3.1. For video demonstration visit: <https://www.nms.ac.uk/explore-our-collections/stories/science-and-technology/history-of-the-typewriter/>

During the 1890s there was a proliferation of typewriter designs with more new manufacturing companies set up in America and in the UK. The first typewriters manufactured in large numbers on UK soil were the American-designed Caligraph typewriters, made at the American Writing Machine Company's factory in Coventry from 1889 to around 1894.¹⁶ Pioneering British brands included the Maskelyne manufactured from around 1890, the English from the same year, and North's established in 1894. Despite their innovative designs, most British manufacturers were short lived, selling machines in small numbers. The exception was the Salter typewriter, made in West Bromwich from 1896 by the scales and springs manufacturers George Salter and Company. Tens of thousands of Salters were sold in the years up to the First World War (Figure 1.2).


¹⁶ James David Inglis, 'John J. Deas and His 'Yankee Notions': Typewriters in Scotland', *Journal of the Early Typewriter Collectors' Association*, 2021, 20–25.

World's RECORD Order

3,000 **SALTER TYPEWRITERS** *were ordered on February 8th, 1908, by Messrs. Lever Bros., Ltd., Port Sunlight.*

THE ONLY STANDARD TYPEWRITER MADE IN GREAT BRITAIN. IS COMPARABLE IN EVERY WAY WITH ANY **£22** FOREIGNER.
 VISIBLE WRITING. PERFECT ALIGNMENT.

SALTER
STANDARD
TYPEWRITER



BRITISH
MADE
THROUGHOUT

Our **RENTAL SCHEME** will interest you. **WRITE FOR DETAILS.**

SALTER TYPEWRITER CO., 40, Holborn Viaduct, London, E.C.

Mention this Journal. BRANCHES EVERYWHERE.

Figure 1.2. Salter advertisement (1908) promoting a 'record' order for the Lever Brothers, Port Sunlight.

Image sourced from Grace's Guide Ltd.

Yet Salter's success paled in comparison with American brands. By 1905, the US was producing approximately 200,000 typewriters per year, almost half of which were exported to Europe.¹⁷ In the early decades of the twentieth century, American manufacturing continued to expand, with new brands like Underwood selling in their millions, as promoted in Figure 1.3.

¹⁷ Elmer Henry Beach, *Tools of Business, an Encyclopedia of Office Equipment and Labor Saving Devices* (Detroit, Michigan: Book-keeper Pub. Co., 1905), 182.

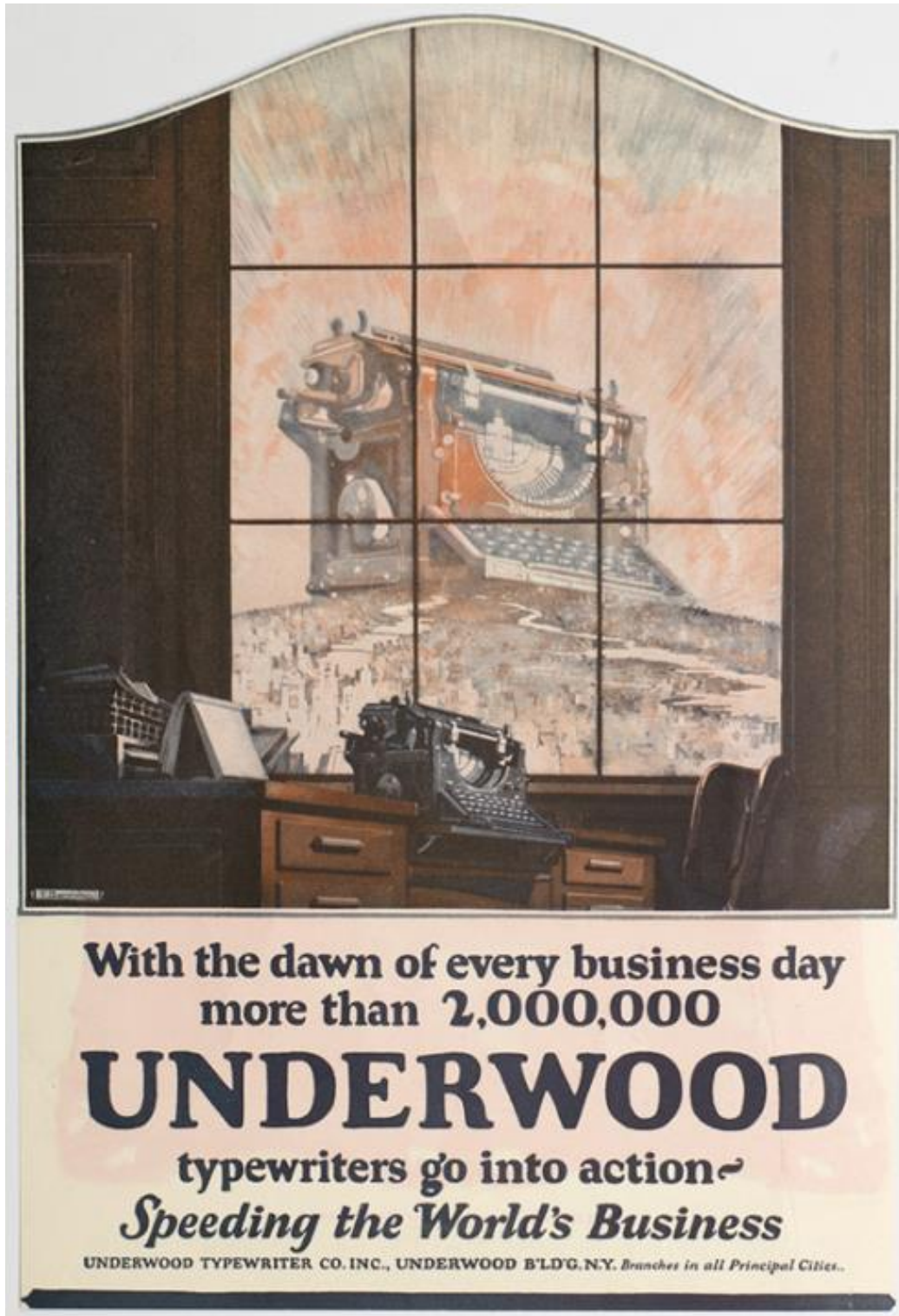


Figure 1.3. Advertisement for the Underwood typewriter, c. 1924.
Courtesy of Peter Mitterhofer Typewriter Museum.

In an attempt to expand the market even further, manufacturers in America and Europe worked on new designs including noiseless models, electrically-powered typewriters and portable machines, all of which were sold in America and Britain before the First World War,

as the advertising slogans on a London agency in 1903 reveal (Figure 1.4). The most successful of the new designs were the portable machines which were promoted to users outside of the office. This included people working ‘in the field’, such as combatants. For example, the lightweight and foldable Corona typewriter was particularly popular among British Forces during the First World War.¹⁸ As a Corona advertisement of 1915 attested ‘History is in the making in the trenches in Europe. And the Corona Typewriter is on the ground recording it’.¹⁹ But portables were also popular with private owners. Their small size and sleek designs made them more suited to domestic settings, a point endorsed in a 1930s advertisement for the Royal Portable typewriter. (Figure 1.5)



Figure 1.4. Store front for the Blickensderfer typewriter, London, 1903. Peter Weil Typewriter Archive.

¹⁸ Wilfred A. Beeching, *Century of the Typewriter* (British Typewriter Museum Publishing, 1990), 37.

¹⁹ Robert Messenger, “What To Do When War Breaks Out,” *oz.typewriter*, 2014, <https://oztypewriter.blogspot.com/2014/07/what-to-do-when-war-breaks-out-pack-up.html>.

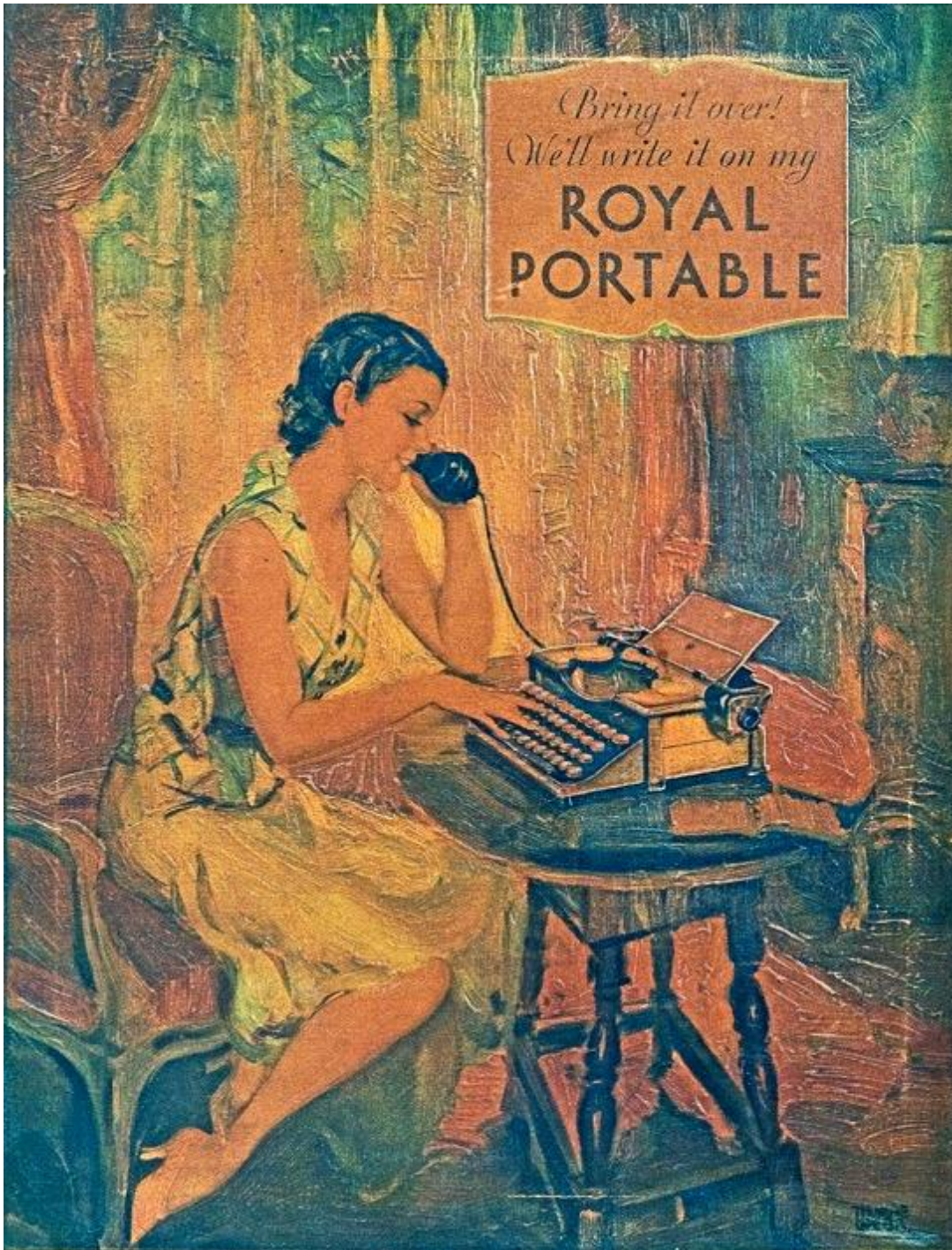


Figure 1.5. Advertisement for the Royal Portable c. 1930.
Peter Weil Typewriter Archive.

The 1910s and 1920s was a time of gradual growth in the UK's manufacturing base, with the Imperial Typewriter Company of Leicester the most successful. Established in 1908, Imperial grew steadily in the years up to 1914. After suspending typewriter manufacture during the War, the company went from strength to strength in the 1920s. By the end of the decade, Imperials were widely sold in Britain, with retail outlets in Glasgow, Edinburgh, Dundee and

Aberdeen. This period also saw several North American brands taken over by British entrepreneurs who had manufacture and development transferred to the UK. In 1915, the rights to the American Bar-Lock typewriter were bought by a British company with production transferred to Nottingham. In 1924, the Salter typewriter works in West Bromwich were repurposed for the production of the British Empire typewriter, originally made in Canada. In 1928, manufacture of the Oliver typewriter, one of the leading American brands in the 1890s and early-1900s, was transferred to Croydon, Surrey. As we will explore in chapter 4, representatives of UK manufacturers were keen to capitalise on the enthusiasm for 'Buy British' campaigns, which gathered momentum in the early twentieth century.

By 1930, typewriters had been in continuous commercial manufacture for around 60 years. In America and Europe, the designs of typewriters had, in some respects, homogenized around core design principles such as the QWERTY keyboard. But in other ways, manufacture was still diversifying. Alongside the conventional manual office typewriter, alternative designs such as portables and electric typewriters were gaining popularity. For customers, choosing a typewriter remained a bewildering task, but for entrepreneurs the varied nature of the typewriter industry presented a vibrant and profitable landscape.

Literature Review

Histories of the typewriter have been written since the late nineteenth century.²⁰ From that time a significant branch of the historiography has been produced by trade insiders, typewriter collectors and enthusiasts. These histories have usually consisted of technical descriptions of developments in typewriters, hagiographical accounts of inventors, potted histories of the leading manufacturers, or some combination of the above.

²⁰ One of the earliest histories of the typewriter was P. G. Hubert, "The Typewriter; Its Growth and Uses," *The North American Review* 146, no. 379 (1888).

Several insider or enthusiast histories were commissioned by typewriter companies to promote their brands and the typewriter trade at large.²¹ For example, *The Story of the Typewriter, 1873-1923*, published in 1923 to coincide with the fiftieth anniversary of Remington purchasing the rights to the Sholes & Glidden typewriter, was sponsored by the Remington Typewriter Company. The history itself was put together by the Herkimer County Historical Society, the county where Remington's factory was located. Unsurprisingly, *The Story of the Typewriter* heavily emphasises Remington's role in the successful development of the typewriter, partly at the expense of rival companies, while treating the development of the trade in Western Europe as a story of American companies conquering foreign markets. It is typical of company sponsored histories which are generally jubilant and uncritical in their historical analysis of the typewriter.

Alongside these sponsored histories, there have been what typewriter historian Donald Hoke has described as 'genuinely independent' publications by trade insiders and enthusiasts.²² These include the 1909 history by typewriter instructor George Mares, typewriter collector Rupert Gould's publication of 1949, and typewriter enthusiast Michael Adler's *The Writing Machine* released in 1973.²³ These historians are often more critical, particularly in their evaluation of typewriter designs.²⁴ In Adler's work he is also keen to point out the flaws in earlier histories of typewriters.

However, the focus on technical developments – both in company sponsored histories and independent publications – left little room for critical engagement with the social, cultural, or economic significance of typewriters. For example, the role that typewriters played in the

²¹ *The Evolution of the Typewriter* (New York: The Royal Typewriter Company, 1921); Herkimer County Historical Society, *Story of the Typewriter, 1873-1923*; *History of the Typewriter* (Detroit Mich.: Metropolitan Typewriter Co., 1923); *Enlisted for Victory: The Story of Underwood Elliott Fisher's War Production* (New York: Underwood Typewriter Company, 1945); *Royal Standard: 50th Anniversary Issue*. (New York N.Y.: Royal Typewriter Company, 1954).

²² Donald Hoke, "Reviewed Work(s): The History of the Typewriter, Successor to the Pen by George Carl Mares; The Typewriter Legend by Frank T. Masi," *Technology and Culture* 28, no. 3 (1987): 701.

²³ George Carl Mares, *The History of the Typewriter: Successor to the Pen: An Illustrated Account of the Origin, Rise, and Development of the Writing Machine* (Arcadia CA: Post-Era Books, 1909); Rupert Gould, *The Story of the Typewriter: From the Eighteenth to the Twentieth Century* (London: Office control and management, 1949); Adler, *The Writing Machine: A History of the Typewriter*.

²⁴ Rupert Gould, "The Modern Typewriter and Its Probable Future Development," *Journal of the Royal Society of Arts* 76, no. 3940 (1928): 723.

dramatic rise in women clerks and typists at the turn of the twentieth century, when mentioned at all, is usually handled with off-hand and glib remarks. In *The Story of the Typewriter* women are said to have been ‘emancipated’ by the typewriter and the great men behind its invention, as illustrated in Figure 1.6 from that text. More troublingly, the treatment of women as the passive beneficiaries of typewriting technologies is a theme that has also run through certain scholarly studies of typewriters in the late twentieth century. One of the most flippant examples came in the writings of media theorist Friedrich Kittler who argued in *Discourse Networks* (1985) that the Remington typewriter ‘granted the female sex access to the office’. For Kittler it was the Remington ‘sales division’ which ‘turned the systematic handicap of women, their insufficient education, into a historical opportunity.’²⁵ All agency is removed from the women who entered these professions with little reflection on the wider developments taking place that would have resulted in a rise in women clerical workers, with or without the introduction of typewriters.

²⁵ Friedrich A. Kittler, *Discourse Networks 1800/1900 [1985]* (Trans by Michael Metter and Chris Cullens) (Stanford: Stanford University Press, 1992), 352–53.

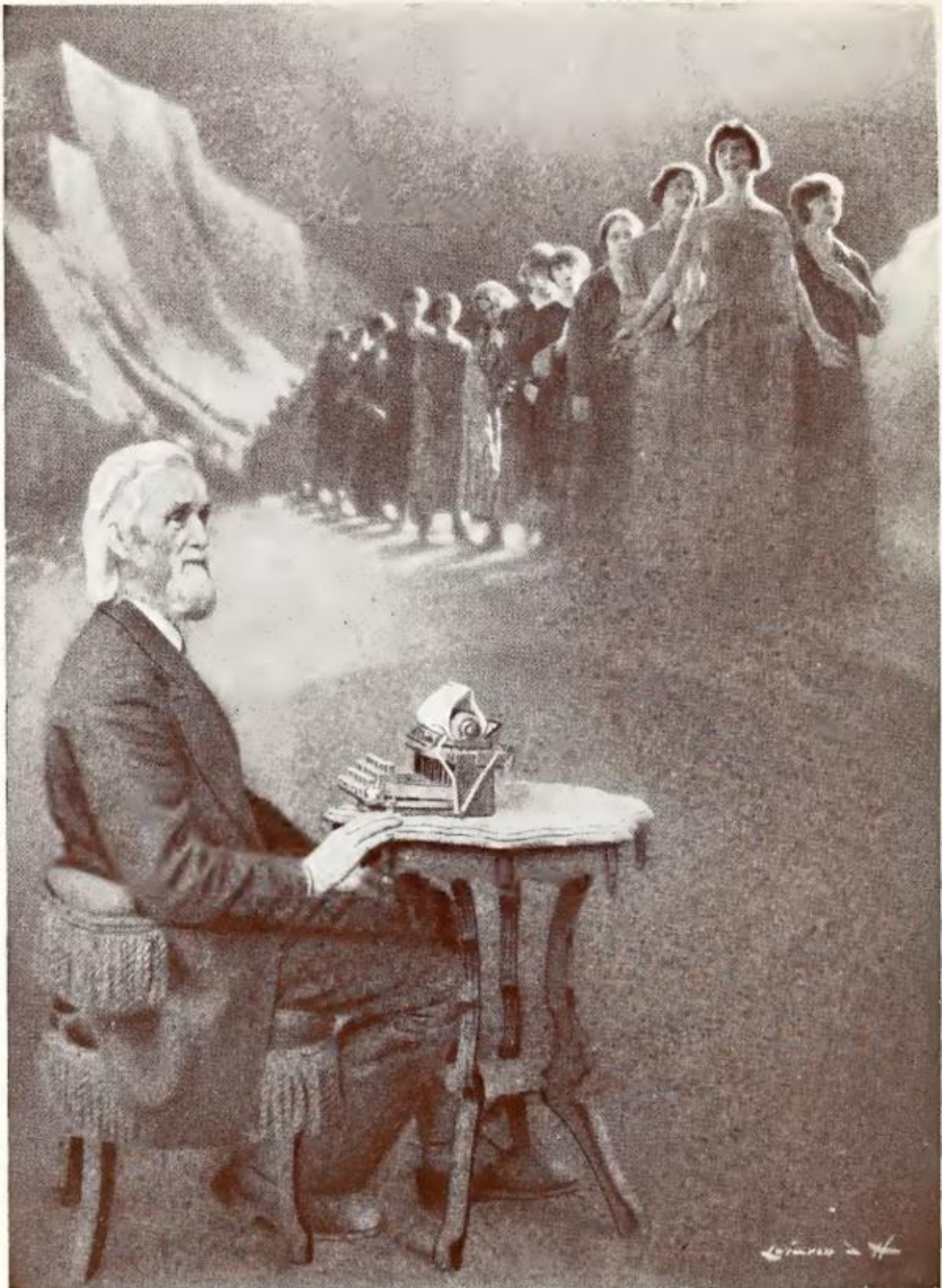


Figure 1.6. Illustration titled 'Emancipation' from *The Story of the Typewriter* by Herkimer County Historical Society, 1923. Christopher Latham Sholes is depicted with his invention in a heavenly setting, approached by an endless line of reverent typists. Accessible at archive.org

By the early twenty-first century, the last typewriter manufacturers were finally closing their doors, and as a result publications commissioned by typewriter companies have ceased. Still, there continues to be a significant body of literature produced by collectors and enthusiasts.²⁶ One of the outstanding works in recent years has been Paul Robert and Peter Weil's *Typewriter: A Celebration of the Ultimate Writing Machine* (2016), which features around 90 short histories of typewriter manufacturers active in the late nineteenth and early twentieth centuries.²⁷ This book drew on primary research conducted by Robert and Weil, which they used to challenge falsehoods and fallacies found in previous histories of the typewriter.²⁸ Alongside these books, collectors' magazines such as the *Journal of the Early Typewriter Collectors' Association* include regular articles exploring the more obscure characters and companies that played a part in the early commercialisation of typewriters.²⁹ The ongoing and innovative historical research by typewriter collectors and enthusiasts has proven to be an invaluable source of reference for this thesis.

As well as insider and collectors' histories, since the 1970s academics in America and Europe have taken an interest in typing in the context of clerical work, particularly from the perspective of women's entry into the labour force. Between 1851 and 1911 the number of women clerks in England increased from 2,000 to 166,000; or from 2 per cent to 20 per cent of clerical workers in total.³⁰ In Scotland, the figures were even higher with women accounting for around 40 per cent of clerks by 1911.³¹ The census data for the whole of the UK suggests that by 1901 at least one third of female clerks were employed as typists, a

²⁶ Thomas A. Russo, *Mechanical Typewriters: Their History, Value, and Legacy* (Atglen, PA: Schiffer Publishing, 2002); Robert Blickensderfer and Paul Robert, *The Five-Pound Secretary: An Illustrated History of the Blickensderfer Typewriter* (Laren: The Virtual Typewriter Museum, 2003); Tony Allan and Richard F. H. Polt, *Typewriter: The History, the Machine, the Writers* (New York: Shelter Harbor Press, 2015); Richard F. H. Polt, *The Typewriter Revolution: A Typist's Companion for the 21st Century* (New York: The Countryman Press, 2015).

²⁷ Robert and Weil, *Typewriter: A Celebration of the Ultimate Writing Machine*.

²⁸ Email correspondence between Paul Robert and James Inglis (22/04/2020).

²⁹ "ETCetera Online: Home of the Early Typewriter Collectors' Association," accessed November 15, 2021, <https://etconline.org/>.

³⁰ Angela V. John, "Unequal Opportunities: Women's Employment in England 1800-1918" (Oxford: B. Blackwell, 1986), 154.

³¹ Guerriero R Wilson, *Disillusionment or New Opportunities? The Changing Nature of Work in Offices, Glasgow 1880-1914* (Aldershot: Ashgate, 1998), 37.

profession that had become completely dominated by women. In the Scottish census of 1901, 99 per cent of people recorded as typists were female.³²

In the UK, amongst the earliest scholars to investigate the rise in female typists and clerical workers were Lee Holcombe in *Victorian Ladies at Work* (1973); and Gregory Anderson in *Victorian Clerks* (1976) and later in his *The White Blouse Revolution* (1988).³³ For Holcombe, the typewriter was not exceptional, but one of many new tools and practices that carried forward the revolution in the organisation of office work. Likewise, Anderson sees the typewriter as part of wider changes in clerical work. Yet he does touch upon many of the important themes which have since been developed in the historiography of typewriters. For example, Anderson highlights the prevalent view that competition from female typists who accepted lower wages resulted in a general depreciation of pay for male clerks. This was particularly offensive to men who had a family to support, whereas female clerks apparently only worked for 'pin money'.³⁴ Anderson dismisses the pin-money stereotype but still concludes that most 'female commercial clerks occupied low-status, underpaid positions'.³⁵ However, the animosity between male and female office workers did not last. By the turn of the century, female clerks (often employed in shorthand and typewriting) formed a distinct grouping. Male clerks, employed in other areas of the office work, were rarely in direct competition with female employees. Anderson's account was also unusual in its focus on Liverpool and Manchester as most subsequent British histories of typists and office work have usually looked at events in London.³⁶

In the US, interest in the so-called white-collar revolution had been sparked by sociologist C. Wright Mills in the 1951 publication *White Collar: The American Middle Classes* and

³² Census results for 'typist' as occupation using Findmypast.co.uk

³³ Lee Holcombe, *Victorian Ladies at Work: Middle-Class Working Women in England and Wales, 1850-1914*. (Newton Abbot: David and Charles, 1973); Gregory Anderson, *Victorian Clerks* (Manchester: Manchester University Press, 1976); Gregory. Anderson, *The White-Blouse Revolution: Female Office Workers since 1870* (Manchester: Manchester University Press, 1988).

³⁴ Anderson, *Victorian Clerks*, 57.

³⁵ Anderson, 58–59.

³⁶ One recent example which has informed the writing of this thesis is Michael Heller, *London Clerical Workers, 1880-1914: Development of the Labour Market* (Abingdon, Oxon: Taylor and Francis, 2015).

continued in works by writers such as the political economist Harry Braverman.³⁷ From the 1980s, Joan Wallach Scott (1982), Margery Davies (1984) and Sharon Hartman Strom (1992) moved the focus in the American scholarship, onto the role female typists played in the revolution in office work. They were particularly interested in the ways that typewriters were adopted as part of the wider application of scientific management principles.³⁸ Scott and Strom took the view that there was a continuity between the work of female factory operatives in the mid-nineteenth century and the employment of female typists from the 1880s onwards.³⁹ Typing was implied to be a mechanical and monotonous profession, with little creativity required.

From the 1980s, the 'trite' view that typing was a mindless, mechanical task was countered by British historians of the office such as Meta Zimmeck and Teresa Davy. Zimmeck's studies of clerical work in London Civil Service departments demonstrated that the introduction of female typists from the 1880s was neither a simple replacement of male copyists, nor did it amount to a deskilling of office work.⁴⁰ Instead, Zimmeck showed how female typists in the Civil Service fought to present their work not as mechanical and monotonous, but as a craft in which sound judgement, knowledge, and intelligence was essential. Davy concurred with Zimmeck's views on the variation of skills and knowledge required of typists, while also highlighting the differences between factory work and office work, in contrast to American writers such as Joan Wallach Scott.⁴¹

³⁷ Charles Mills, *White Collar: The American Middle Classes* (New York: Oxford University Press, 1951); Harry Braverman, *Labor and Monopoly Capital: The Degradation of Work in the Twentieth Century* (New York: Monthly Review Press, 1974).

³⁸ See chapter 6 "Scientific Management in the Office" in Margery W. Davies, *Woman's Place Is at the Typewriter: Office Work and Office Workers, 1870-1930* (Temple University Press, 1984).

³⁹ Joan Wallach Scott, "The Mechanization of Women's Work," *Scientific American* 247, no. 3 (1982): 166–87; Sharon Hartman Strom, *Beyond the Typewriter: Gender, Class, and the Origins of Modern American Office Work, 1900-1930* (University of Illinois Press, 1992).

⁴⁰ Meta Zimmeck, "Jobs for the Girls: The Expansion of Clerical Work for Women, 1850-1914," in *Unequal Opportunities*, ed. Angela V. John (Oxford: Basil Blackwell, 1986), 153–77; Meta Zimmeck, "'The Mysteries of the Typewriter': Technology and Gender in the British Civil Service, 1870-1914," in *Women Workers and Technological Change in Europe in the Nineteenth and Twentieth Centuries*, ed. Gertjan de Groot and Marlon Schrover (London: Taylor & Francis, 1995), 67–96.

⁴¹ Teresa Davy, "'A Cissy Job for Men; a Nice Job for Girls': Women Shorthand Typists in London, 1900–39," in *Our Work, Our Lives, Our Words* (London: Macmillan Education UK, 1986), 124–44.

In 1999, R. Guerriero Wilson published a history of clerical work in Glasgow which is noteworthy for three distinctive features. Firstly, it is one of the few scholarly works on the history of clerical work in Scotland, making it of particular value to this thesis. Secondly, while Guerriero concurs with Zimmeck and Davy over the variety of skills and breadth of knowledge required of typists, Wilson is also keen to show that typing was a practical skill or trade. Wilson highlights the messiness of typing with typists using machines covered with ink and oil. In Wilson's view, the messiness of many office roles justified the wearing of protective clothing of the type worn by blue collar workers. However, the aspirations of clerks to distinguish themselves from manual workers called for a white collar or white blouse.⁴² Thirdly, Wilson reminds us that the typist's manual skills were not confined to the operation of the typewriter. Typists were trained in the use of several mechanical devices for the office, such as the rotary duplicator. Wilson does not, however, reflect much on the different sorts of typewriters used in offices, leaving the implication that most typewriters were broadly alike. In reality, as this thesis will demonstrate, there was a bewildering variety of writing machines available in this period.

Since late-1990s, typists became a focus for literary and cultural studies. Christopher Keep, Morag Shiach, Jessica Gray are among the scholars from English literature backgrounds who have studied representations of typists in plays, novels, short stories, music hall routines, illustrated advertisements, postcards and films from the 1890s.⁴³ Works of literature from the turn of the twentieth century have formed a particularly fruitful area of analysis for these academics. Examples of literature that have been analysed include the short Sherlock Holmes adventure titled *A Case of Identity* (1892), in which the plot turns upon Holmes identifying that a batch of letters written by the culprit were typed on a particular machine. This was followed by George Gissing's *The Odd Women* (1893), *The Type-writer Girl* (1897) by Olive Pratt Rayner, and *The Questing Beast* (1914) by Ivy Low. All of these works offer a

⁴² Wilson, *Disillusionment or New Opportunities? The Changing Nature of Work in Offices, Glasgow 1880-1914*, 295.

⁴³ Christopher Keep, "The Cultural Work of the Type-Writer Girl," *Victorian Studies* 40, no. 3 (1997): 401–26; Morag Shiach, "Modernity, Labour and the Typewriter," in *Modernist Sexualities*, ed. Hugh. Stevens and Caroline Howlett (Manchester: Manchester University Press, 2000), 114–29; Jessica Gray, "Typewriter Girls in Turn-of-the-Century Fiction: Feminism, Labor and Modernity," *English Literature in Transition, 1880-1920* 58, no. 4 (2015): 486–502.

critique of the female typist or 'type-writer' in British society by dealing with problems such as the sexualisation of the typist and the obscuring of masculine and feminine roles. On a positive note, these stories often highlighted the opportunities for self-realization that the expansion of clerical work presented to women. One crucial point emphasized by Christopher Keep, was that cultural representations of typists in the media did not just reflect what life was like for female clerical workers, but also played an *active* part in defining the role of the typist at the time.⁴⁴

In recent years, Arlene Young and Lena Wanggren, while also interested in the cultural representations, have moved the scholarship away from a focus on typists employed in offices.⁴⁵ Instead, they have highlighted the work of women entrepreneurs in London's typewriter trade, particularly those who established and ran typing schools and typewriting offices. These were businesses where professional typists produced typewritten documents for customers on demand. Wanggren's research made innovative use of the *London Phonographer: A Journal Devoted to Typewriting and Shorthand* which featured regular articles on pioneering typewriting office owners, as illustrated in Figure 1.7, and has been used extensively in this thesis as well. Meanwhile, Arlene Young looked at both typewriting office and typing school owners. Young neatly summed up the new perspective that her research brought to the scholarship: 'Typewriting offered more than just employment opportunities for women in the 1880s and 1890s; it offered entrepreneurial options as well.'⁴⁶ The writings of Young and Wanggren marked a shift in the historiography of the typewriter industry, which had previously viewed typing solely as an employment for women. This thesis will build upon their findings by shedding light on the pioneering female entrepreneurs in Scotland's typewriter trade.

⁴⁴ Keep, "The Cultural Work of the Type-Writer Girl," 404.

⁴⁵ Arlene Young, "The Rise of the Victorian Working Lady: The New-Style Nurse and the Typewriter, 1840-1900," *Britain Representation and Nineteenth-Century History*, 2015, https://www.branchcollective.org/?ps_articles=arlene-young-the-rise-of-the-victorian-working-lady-the-new-style-nurse-and-the-typewriter-1840-1900; Lena Wånggren, *Gender, Technology and the New Woman*, *Gender, Technology and the New Woman* (Edinburgh University Press, 2017).

⁴⁶ Young, "The Rise of the Victorian Working Lady: The New-Style Nurse and the Typewriter, 1840-1900."

THE LONDON PHONOGRAPHER.

A Journal Devoted to Typewriting and Shorthand.

Vol. II.—No. 14.]

JULY, 1892.

[PRICE THREEPENCE.



MISS FRANCES JOSEPH.

MISS LILIAN JOSEPH.

MISS ALICE JOSEPH.

MISS JENNIE JOSEPH.

(Photo by kind permission of Mr. H. S. Moschler, 4, Pembroke-court, Notting-hill, 1903.)

(See next page.)

Figure 1.7. Front cover of *The London Phonographer*, July 1892. It features the Joseph sisters who managed typewriting office in London in the early-1890s. This was one of many such articles on women entrepreneurs in the typewriter trade.

Young and Wanggren's work on typewriting offices and typing schools also showed that the commercialisation of typewriters was about much more than the manufacture and sale of

writing machines. Accordingly, in this thesis the retail sector will be looked at alongside the many types of businesses which profited from the commercial use or maintenance of typewriters including typewriting offices, typing schools, supply stockists and repairers. Except for Young and Wanggren's work, to date these businesses have been almost entirely neglected in the historiography.

As the discussion above has suggested, scholars interested in changes in the clerical workforce, or cultural representations of typists have predominantly been interested in the typists themselves as opposed to the machines they used. By contrast, writers from backgrounds in economics, technology studies and the history of the book have taken a keener interest in the ways typewriters were designed, developed and used.

Much of the academic interest in the typewriter as a technological artefact has focused on the QWERTY keyboard, which is hardly surprising considering that QWERTY remains ubiquitous across computers and smart devices in English speaking countries. The predominance of QWERTY has captivated economic historians in particular.⁴⁷ Paul David sought to answer why it was that QWERTY won out over the various alternatives, especially as QWERTY has often been acknowledged to be inferior to many layouts that have been marketed since the late nineteenth century. Studies such as David's imply that by understanding how technologies become 'locked-in', in future, we may be able to identify occasions where societies are likely to be forced into adopting inferior systems.

In response, historians of technology such as Delphine Gardey and Thomas Mullaney have criticised the preoccupation with QWERTY in the historiography, and in doing so have moved the scholarship into new and fruitful areas. Gardey's work on typists showed that the choices open to contemporary users were more complex than a binary decision between typewriters with QWERTY keyboards and machines with different layouts. Design options such as whether to buy 'visible' writing or concealed text typewriters seem to have

⁴⁷ Paul A. David, "Clio and the Economics of QWERTY," *The American Economic Review* 75, no. 2 (1985): 332–37; S. J. Liebowitz and Stephen E. Margolis, "The Fable of the Keys," *The Journal of Law & Economics* 33, no. 1 (1990): 1–25.

been of far greater consequence to customers at the time.⁴⁸ As will be discussed in chapter 4, concealed text typewriters were machines where the writing was out of the view of the operator as they were typing, whereas on visible machines the writing was immediately in sight of the typist. Meanwhile, Mullaney, in the early chapters of *The Chinese Typewriter* (2017), was keen to show that the keyboard typewriter, as we know it today, was not the only viable technological path in the development of writing machines.⁴⁹ Many of the alternatives open to customers were for machines which did not incorporate a keyboard at all (see Figure 1.1). In highlighting the variety in designs in America and Europe, Mullaney challenges the otherness surrounding Chinese typewriters which were also constructed on radically different lines to QWERTY keyboard machines.

Much of Mullaney's work focuses on 'technolinguistics', that is, how technologies shape our language and the cultures around it.⁵⁰ Mullaney's interests are shared by Martyn Lyons, a historian of the book who has written extensively on typewriters and writing practices. In an article of 2014 and a book of 2021 Lyons explores the relationship between authors and their typewriters.⁵¹ Lyons describes several instances where the design of a particular typewriter had a definite impact on the language and style of the author. In his study of author Henry James, Lyons recounts how James's inspiration dried up when he switched from a noisy Remington to a quieter Oliver typewriter. It was the loud clicks of the old Remington that had inspired the James' thoughts when dictating to his typist.⁵²

The work of Gardey, Mullaney and Lyons is a valuable reminder that typewriters cannot be treated as single homogenous devices. There was a bewildering range of brands, models and designs, the differences between which mattered to users at the time. However, the

⁴⁸ Delphine Gardey, *The Standardization of a Technical Practice: Typing (1883-1930)*, *History and Technology*, vol. 15, 1999.

⁴⁹ Thomas S. Mullaney, *The Chinese Typewriter: A Global History of the Information Age*, vol. 33 (Cambridge MA: The MIT Press, 2017).

⁵⁰ Thomas S. Mullaney, "The Moveable Typewriter: How Chinese Typists Developed Predictive Text during the Height of Maoism," *Technology and Culture* 53, no. 4 (2012): 777–814.

⁵¹ Martyn Lyons, "QWERTYUIOP: How the Typewriter Influenced Writing Practices," *Quaerendo* 44, no. 4 (2014): 219–40; Martyn Lyons, *The Typewriter Century: A Cultural History of Writing Practices* (University of Toronto Press, 2021).

⁵² Lyons, "QWERTYUIOP: How the Typewriter Influenced Writing Practices," 233–34.

focus on users means that these scholars do not engage in any great depth with the typewriter trade and the ways in which typewriters and typewriter services were commercialised. When thinking about ways that entrepreneurs made money out of typewriters, several parallels can be drawn from studies of contemporary technologies such as the sewing machine and commercial electrical systems.

The work on the sewing machine trade by business historians such as Andrew Godley and Ross Thomson has shown how American manufacturers developed new markets in the UK, in much the same way, as we shall see, that American typewriter manufacturers cultivated their retail businesses in Scotland.⁵³ However, these studies focused almost solely on the Singer Sewing Machine Company which was the dominant manufacturer on the UK market at the turn of the century. There was little investigation into the sewing machine market as a whole. This thesis, by contrast, will take a broader look at the range of typewriter manufacturers that were active on the Scottish market.

Meanwhile, studies of electrical systems by Thomas Hughes and Graeme Gooday have shown that the widespread adoption of electricity in commercial and domestic settings – as in the typewriter trade – involved more actors than simply inventors, manufacturers and users. Hughes, in his discussion of technology transfer, has shown that it was the businesses and entrepreneurs in between who were key in the promotion and adoption of electricity.⁵⁴ Meanwhile, Gooday has posited the concept of the ‘popularizer-entrepreneurs’.⁵⁵ These were individuals such as Thomas Edison who not only pioneered electrical innovations but also went to great lengths to promote their products over competitor technologies. Similarly, this thesis will show how the individuals active in the commercialisation of

⁵³ Ross Thomson, “Economic History Association Learning by Selling and Invention: The Case of the Sewing Machine,” *The Journal of Economic History* 47, no. 2 (1987): 433–45; Andrew Godley, “Selling the Sewing Machine around the World: Singer’s International Marketing Strategies, 1850-1920,” *Enterprise and Society* 7, no. 2 (2006): 266–314.

⁵⁴ See Chapter 3 “Edison’s System Abroad: Technology Transfer” in Thomas P. Hughes, *Networks of Power: Electrification in Western Society, 1880-1930* (Baltimore: Johns Hopkins University Press, 1993), 47–78.

⁵⁵ Graeme Gooday, “Illuminating the Expert-Consumer Relationship in Domestic Electricity,” in *Science in the Marketplace*, ed. Aileen Fyfe and Bernard Lightman (Chicago: The University of Chicago Press, 2007), 231–68; Graeme Gooday, *Domesticating Electricity: Technology, Uncertainty and Gender, 1880–1914* (London and New York: Routledge, 2008).

typewriters were often involved in several sectors of that trade. Typewriting teachers also made money out selling typewriters; typewriter repairers also had a trade in typewriter supplies, and so on. Crucially, in all sectors of the trade, there were businesspeople taking an active role in popularising typewriters particularly through advertising, exhibitions and in-person demonstrations. These entrepreneurs were the essential intermediaries between manufacturers and users which, as Trevor Pinch has argued, are the ‘missing masses’ of technology studies.⁵⁶

As this literature review has suggested, there are a number of lacunae within the historiography of the typewriter. Firstly, much of the scholarship has looked at developments in the United States, with the writing on typewriters in Britain mostly focusing on developments in England, and especially London. The exception was R. Guerriero Wilson’s study of Glasgow. This thesis will build on Wilson’s work and expand our knowledge of the trade in Scotland through an analysis of typewriter businesses in Glasgow, Edinburgh, Dundee and Aberdeen.

Secondly, historians of clerical work that have proclaimed to have had an interest in the development of typewriters have often been much more interested in typists, rather than the machines they used. As a result, the choices that contemporary consumers had to make between typewriters have often been marginalized by a focus on the feminization of typing, with limited discussion of the technologies themselves. While the insider and enthusiast histories have looked at the different machines available to customers, these histories have had less to say on social consequences, aside from trite comments on the role of the typewriter in the supposed ‘emancipation’ of women’s work. In this thesis, a focus on the variety of writing machines available will be coupled with a discussion of how differences in the designs available impacted the way that entrepreneurs in Scotland marketed, sold and used typewriters.

⁵⁶ See section titled “Sellers Are the Missing Masses” in Trevor Pinch, “Giving Birth to New Users: How Minimoog Was Sold to Rock and Roll,” in *How Users Matter: The Co-Construction of Users and Technology*, ed. Trevor Pinch and Nelly Oudshoorn (Cambridge, Massachusetts: MIT Press, 2005), 269–70.

Thirdly, in recent years, there have been welcome contributions from historians of technology such as Gardey and Mullaney who have emphasised the variety in typewriter designs and user practices. However, in their focus on users, these historians have neglected the role that businesses played in the promotion of typewriters. In this regard, Young and Wanggren's work has been important in citing the entrepreneurial opportunities which the typewriter afforded to women, particularly through the establishment of typewriting offices. In doing so, they also showed that the typewriter trade was about more than the buying and selling of machines. There were thriving service sector businesses as well, which this thesis will shed more light upon.

For the most part historians of typewriters have neglected the vital role that customer facing businesses played in the promotion and widespread adoption of typewriters. By looking at retailers, typing schools and typewriting offices, this thesis will redress this omission and bring the historiography of typewriters in line with the leading scholarship on sewing machines and electrical systems which has already acknowledged the importance of businesses which operated between inventors/manufacturers on the one side, and users on the other.

[Methodology for text-based sources](#)

When commencing this project there were several questions relating to Scotland's typewriter trade which guided the research: how many businesses in Scotland sold typewriters and how did this change over time? How many different brands and models of typewriter were available? How did the number and size of typewriter business differ between Scotland's principal cities? How many different sorts of businesses were involved in the trade? As mentioned, Arlene Young and Lena Wanggren had shown that in London, in addition to retailers, typewriting offices and typing schools were integral to the promotion and adoption of typewriters. Was there the same variety of typewriter enterprises in Scotland?

To answer these questions, I used the trade listings in the annual Post Office directories for Glasgow, Edinburgh, Dundee and Aberdeen to create a Typewriter Businesses Database

from the 1870s to the 1920s. Published annually from the mid-nineteenth to the mid-twentieth centuries, the Post Office directories provide the names and addresses of individuals, businesses and educational institutions within those cities and suburbs. From 1876, entries for typewriter businesses appeared with increasing regularity. Moreover, these sources also come with trades directories which classify businesses into sectors. From the late 1880s, sections were added to group together businesses which sold typewriters and typewriter services. For these reasons, the directories are an invaluable source for analysing the development of Scotland's typewriter trade.

Analysis of the Typewriter Businesses Database (see Chapter 2) will give us a sense of the number and variety of businesses involved, the chronological development of the typewriter trade as a whole and of sectors within it, and its distribution across the four cities. It also enables us to identify key players – both pioneers and long-running businesses – for further investigation in the later chapters of the thesis. For now, as the creation of the database will be so important to our understanding of the general patterns and trends of the typewriter trade, it is worth taking the time to understand how it was constructed, including the limitations from using Post Office directories in this way, and how these problems have been mitigated.

While these directories were ideal for contemporary readers who needed a simple guide to businesses in their area, as a historical source they pose several problems. Names of businesses that by all other accounts should be included, can be mysteriously omitted one year and return the next. This is understandable as the information was gathered over several months, and residents might have moved, changed their company name or died by the time the directory was printed. To offset this problem the directories published a section titled 'names too late for classification', for businesses that had missed the deadline for inclusion. However, these safeguards are not fool proof.⁵⁷ The inaccuracies are compounded by inconsistent spellings of names of individuals and businesses, with the information even harder to accurately quantify because entries for companies are

⁵⁷ National Library of Scotland, "About the Directories," 2012, <https://digital.nls.uk/directories/about-directories/index.html>.

replicated throughout the directory due to categorizing by company name, manager name, type of trade and so on.

To collate this information into a manageable format, I created four spreadsheets to record typewriter businesses in the four principal cities. Together these documents make up the Typewriter Businesses Database, with screenshots from these spreadsheets featured in Figure 1.8 and Figure 1.9. The spreadsheets include all of the typewriter businesses that were mentioned in the directories for the four principal cities from 1876 to 1930. The information recorded on these businesses includes addresses, names of managers, brands of typewriter sold, and the years the businesses were active. This allows us to identify the number of businesses involved in the typewriter trade in a given city in any given year, and to track the changes over time. Also noted are the sectors each typewriter business was involved in. I.e., whether the company sold typewriters, supplies or carried out repairs; whether they had a typewriting or copying department; or whether they provided typing tuition. In many cases, businesses were involved in several sectors, or might have moved between different sectors over time, which has also been logged.

The Typewriter Businesses Database has provided an invaluable insight into the number and variety of businesses involved with typewriters over the 50 years of this study. As well as allowing quantitative analysis of the patterns and trends in the typewriter trade, it enabled the identification of key businesses and individuals deserving more in-depth investigation. With this in mind, I went on to use a range of print based and archival sources which has brought a depth and richness to my understanding of the businesses listed in the Post Office directories. The key published sources used in this thesis include national and regional newspapers such as *The Scotsman*, *The Glasgow Herald*, *The Dundee Courier* and *The Aberdeen Press and Journal*. These sources include advertisements and opinion pieces from the leading figures in the typewriter trade. Exhibition guides were also important published sources which described the set-up of typewriter displays at Scottish International exhibitions from the 1880s onwards. Trade literature such as typewriter or shorthand journals shed light on the advice given to contemporaries on how to sell typewriters or promote the typing profession, giving us an insight into the marketing strategies of typewriter retailers, typewriting offices and typing schools. Typewriter manuals,

Figure 1.9. Second screenshot from the spreadsheet for typewriter businesses in the Aberdeen Post Office directories. Each column represents a particular year with a (1/0) to indicate whether a business was active in that year.

Methodology for using typewriter collections

This thesis makes innovative use of the historically significant collections of typewriters held by National Museums Scotland (NMS) and the Glasgow Museum Resource Centre (GMRC), which reveal the range of designs available to users in the late nineteenth and early twentieth century. A report conducted by the Scottish Transport Industrial Collections & Knowledge network, for the ‘Old Tools, New Uses’ project in 2011 identified typewriters as one of five discrete technology collections which were most frequently recurring in museums across Scotland. The typewriters section of this catalogue recorded 333 typewriters, produced by 81 different manufacturers held in 19 institutions throughout Scotland. Two thirds of the typewriters were held by NMS and GMRC with 150 of these machines manufactured pre-1926.⁵⁸

These collections are a powerful visual demonstration of the variation in typewriter design at the turn of the twentieth century. Too often the typewriter is considered as a homogenous device, at least in regard to design features such as the keyboard. For example, the Oxford Dictionary describes a typewriter as:

⁵⁸ David Woodcock, “Master Catalogue for Scotland Typewriters,” 2011, https://stickssn.org/wp-content/uploads/2018/03/Master_Catalogue_Typewriters.pdf.

a machine that produces writing similar to print. It has keys that you press to make metal letters or signs hit a piece of paper through a long, narrow piece of cloth covered with ink.

This simple description may align with what many people today imagine when they think of a typewriter, but it is totally at odds with the reality for typewriter users in Scotland, and elsewhere in the late nineteenth and early twentieth centuries. In the NMS and GMRC collections there are typewriters with keyboards like the Remington and the Underwood, but also several alternatives such as the Columbia, Hall and Mignon which use a dial or indicator for selecting a letter. The Oxford definition suggests that ribbons are also ubiquitous on typewriters in reference to hitting the paper through ‘a long, narrow piece of cloth covered with ink.’ Yet there are also several machines in these collections which use ink pads, such as the Yost or the Maskelyne. Subsequent research into the popularity of these designs shows that contemporaries considered these alternatives to be typewriters in just the same way as machines with keyboards and ribbons.

Of course, it would have been possible to learn about the variety of models on the market without having access to the NMS and GMRC typewriters. But my ability to understand and comment on contemporary accounts of these technologies would have been severely limited, and would have undoubtedly resulted in a shift in the areas of focus.

In researching these typewriter collections, I have built upon existing frameworks through which to investigate collections. One of the most influential articles on my thinking has been ‘Reading Instruments: Objects, Texts and Museums’ (2011), in which Anderson *et al.* call for historians to use technological collections in their research and offers a practical guide on how to do so.⁵⁹ I have drawn upon Anderson’s step-by-step methodology to create my own five-stage collections research model:

⁵⁹ Katharine Anderson et al., “Reading Instruments: Objects, Texts and Museums,” *Science and Education* 22 (2013): 1167–89.

Stage 1) Descriptions of the object: In this first stage, I made use of textual descriptions of typewriters in NMS and GMRC collections. These included user guides, advertisements, repair manuals and descriptions in textbooks that describe a brand or model of typewriter. I also made use of museum documentation that relates specifically to the particular object in the collection including accession registers and correspondence. This information has been particularly useful in uncovering the ‘biography’ of a particular object.⁶⁰

Take for example the Sholes & Glidden typewriter which is one of the standout objects in NMS’s typewriter collection. By looking at the accession register I discovered the machine was donated by Ethelinda Hadwen in 1904. Then by going through museum correspondence from 1904 I uncovered a letter from Hadwen to Dr Gait, head of the Technological Department at the Museum. According to Hadwen, this typewriter was ‘quite archaic now, & of no use whatever to me. It was given to me some years ago by the man who had bought it’. Nevertheless, Hadwen asserted that the object was ‘the first attempt and pioneer of what is now a great industry’, a comment which underlined her belief in the important contribution typewriters had made to commercial life.⁶¹ This was not surprising considering Hadwen’s central role in Scotland’s typewriter trade. Further research into Hadwen uncovered that she was the head of a successful typewriting office, Hadwen & Fleming, which was the first business of its kind established in Scotland back in 1886 (see chapter 5). The Sholes & Glidden typewriter at NMS was one of several objects which (with the aid of museum archives) was used to uncover new and significant stories relating to the leading businesses and individuals in Scotland’s typewriter trade.

Stage 2) Pictures/videos of the object: Here I utilized images and videos of typewriters in the collections to better understand their use in offices and domestic settings. Films were especially useful in understanding how typewriters were operated. For example, the British Pathé film linked below shows the use of rare typewriter designs in the Science Museum’s

⁶⁰ Chris Gosden and Yvonne Marshall, “The Cultural Biography of Objects,” *World Archaeology* 31, no. 2 (1999): 169.

⁶¹ Letter from Ethelinda Hadwen to Dr Gait (December 19, 1904), relating to object number T.1904.304. Document under the care of the Science and Technology department, National Museums Scotland.

Collection.⁶² In other instances, images shed light on the technical context within which typewriters were used. Take for example the advertisement David Gardiner's Typewriting Office advertisement in chapter 5 (Figure 5.12) which shows the use of Oliver typewriters alongside rotary duplicators and other 'modern' contrivances. Of equal importance were photographs of shop window displays and exhibitions which shed light on the way that these technologies were marketed.

Stage 3) Seeing the object: At this point, I moved on to investigating the typewriters in three dimensions. This gave me a better understanding of the mechanics of these technologies and a basic grasp of their operation. Here I was able to pick up on smaller details of these machines, such as serial numbers and patent labels, which often go unrecorded in museum databases. This information enabled more accurate dating of these typewriters, which in turn has led to discoveries on when certain models first arrived on the UK market.

Stage 4) Handling the object: This part of the process included the first elements of haptic engagement with the typewriters, including lifting and moving the machines, to get an idea of their weight and portability. This stage has been particularly useful in shaping my ideas surrounding the development and marketing of portable typewriters (see chapter 4).

Stage 5) Operating the machine: Where possible, I put some of the typewriters in the museum collections into operation. This stage has been limited by conservation requirements which usually prevented me from using these devices intensively. Nevertheless, partial operation through the gentle actuation of keys and levers has shed light on the basic movements and operations of these machines, which in many cases are impossible to do justice to with a description alone.⁶³

Helpfully, there are also objects in the NMS collection which have been acquired specifically for object handling and use, including Blickensderfer No. 7 (Figure 1.10). This typewriter

⁶² British Pathé, "The Word Machine," British Pathé, 1937, <https://www.britishpathe.com/video/the-word-machine/query/word+machine>.

⁶³ See filmed examples of typewriters in use at National Museums Scotland, "History of the Typewriter," 2021, <https://www.nms.ac.uk/explore-our-collections/stories/science-and-technology/history-of-the-typewriter/>.

features a Scientific Keyboard which was conceived of as a more efficient alternative to the QWERTY layout. On the Scientific Keyboard, the most frequently used characters in the English language are placed on the home row closest to the operator. At first glance, the Scientific Keyboard seems unusual and confusing for someone only familiar with the QWERTY layout. However, after a few hours of using the Blickensderfer in the handling collection, I was struck by how intuitive this alternate layout was. This was a helpful reminder of why many contemporaries judged the Blickensderfer to be an equally legitimate alternative to QWERTY keyboard designs.



Figure 1.10. Blickensderfer No. 7 typewriter with Scientific Keyboard. In object handling collection at NMS.

My approach to collections research, which combines the study of typewriters with an investigation of the archival material relating to these objects, has fundamentally shaped this project. In some cases, research into a particular typewriter led me to discoveries concerning the key figures in Scotland's typewriter trade. In other instances, interacting with collections allowed me to understand the mechanism and workings of these machines in a way that would have been near impossible with only descriptions from manuals and

user guides. In short, my access to typewriter collections at NMS and GMRC has given me the confidence to write about the development of these technologies with detail, accuracy and authority.

Thesis Outline

This thesis will look at the businesses which sold typewriters and typewriter services in Glasgow, Edinburgh, Dundee and Aberdeen. We begin with the arrival of Remington's Sholes & Glidden typewriter on the Scottish market in the mid-1870s and continue until the 1920s, by which time the typewriter trade, as well as the typing profession, were firmly established in Scotland.

Chapter two analyses the patterns and trends of the typewriter businesses gathered in the Typewriter Businesses Database recorded in the Scottish Post Office directories. This will include an exploration of the chronological development of the trade; the different sorts of businesses that were involved in the sale of typewriters and typewriter services; and the differences between the cities of Glasgow, Edinburgh, Dundee and Aberdeen. The following chapters examine the three most prominent sectors in more detail: retail, typewriting offices and typing schools. The order of these chapters is broadly chronological, in regard to the point at which each sector emerged.

Chapter three centres on the work of typewriter retailers as intermediaries between manufacturers based in America, Europe and England and their customers in Scotland. By looking at the key players in this trade we will see the types of people who were involved in the sale of typewriters and how their backgrounds shaped the nature of their businesses. This chapter also makes use of surviving contracts from the Hall and Imperial typewriter companies, which set out the commercial relationship between typewriter manufacturers and their retail partners. By analysing these contracts, we will investigate how these businesses made money out of the manufacture and sale of typewriters.

Chapter four extends the investigation of the selling of typewriters by examining how they were advertised and marketed, whether in person, in print or at exhibitions. How did

retailers persuade prospective typewriter users in Scotland to buy their products? And how did marketing tactics evolve from the 1870s to the 1920s. Through the use of printed advertisements alongside museum typewriter collections, we will see that changes in marketing often coincided with developments in typewriter design. This chapter will also investigate the significance of international expositions and office machine exhibitions in the promotion of typewriters in Scotland. These were, as we shall see, unique forums for retailers seeking to demonstrate the benefits of their products over rival technologies.

Chapter five looks at the typewriting or copying offices in Scotland's four principal cities. These businesses offered typing services to those who did not own a typewriter or employ a professional typist themselves. As such, the customers of typewriting offices were indirect adopters of typewriters. The earliest established offices, from the 1880s, were based on pre-existing typewriting offices in London and in some cases funded by nationwide organisations such as the Society for Promoting the Employment of Women. For that reason, this chapter discusses the Scottish typewriting office sector in the wider UK context before focusing on some of the pioneering women who ran these businesses. In general, there has been relatively little coverage of these businesses, which is surprising considering the scholarly interest in the relationship between typewriters and women's work. When these businesses have been mentioned there has been little discussion of how these businesses operated. This chapter will address what services these businesses provided, and how this was shaped by the different typewriters and related office technologies employed.

In chapter six, we look at businesses and institutions which provided typing tuition to meet the growing demand for trained typists from Scottish businesses and government institutions. We pay particular attention to shorthand-typing schools which were amongst the first institutions to offer typing tuition. These businesses were also distinctive because many were involved in every sector of the typewriter trade including retail, repair, supplies and typewriter copying services. By investigating the demographics of students, we will see that, perhaps surprisingly, a fairly high proportion were men. We will also investigate the sorts of people who owned and managed these schools, showing that management positions were open to both men and women in this sector of the typewriter trade. Like typewriting offices there has been relatively little scholarly discussion of the way that these

schools operated. The second part of this chapter will answer how typing was taught in these institutions, and how teaching practices evolved from the 1880s to the 1920s.

Overall, this thesis will show that the commercialisation of typewriters was about much more than the buying and selling of writing machines. Enterprising men and women in Scotland set up a variety of businesses to make money out of typewriters from typing schools to typewriting offices and from repair businesses to typewriter supplies stores. In doing so these business owners played an indispensable role in the demonstrating the value of typewriters and typewriting services which encouraged their widespread adoption by businesses, professional workers, and private individuals across Scotland. Historians of the typewriter, as well as scholars of similar consumer goods – such as the sewing machine, bicycle or telephone – should consider closely the part that retailers and commercial users play in the promotion of new technologies.

Chapter 2 The development of the typewriter trade and allied services

Introduction

In 1901, the *Aberdeen People's Journal* published the article: 'The Lady Typist. An Occupation for Girls. Its Opportunities and Advantages.' The interviewer, who was interested in 'gaining information as to the extent of the use of the typewriting machine and the demand for the service of lady typists', spoke with George McAdam the owner of McAdam's Commercial Training Institution in Edinburgh, one of the leading centres in Scotland for typing tuition.¹ McAdam had first established himself as a typing teacher in the early-1890s and by the time of this interview had expanded his business into every sector of Scotland's burgeoning typewriter trade. Alongside typing tuition, McAdam's Institution served as the Edinburgh agency for United Typewriter & Supplies, the firm which acted as the UK distributors for the American made Caligraph and Densmore typewriters. His business also offered repair services and typewriter supplies for the growing number of typewriter users in Edinburgh. Lastly, McAdam's had a typewriting department in which trained operators typed documents on demand for the commercial houses and professional institutions which populated Scotland's capital.

To deliver this wide array of services, McAdam employed '20 ladies and gentlemen, every one of whom... is an "enthusiast in the work"'.² They were based at an impressive four-storey premises at 55-57 Shandwick Place which cost £220 per annum, a sizeable investment at a time when the average yearly wage was £40.³ Shandwick Place was an important thoroughfare linking Edinburgh's West End and the New Town, the latter of which was fast becoming the hub of the capital's typewriter trade and allied services. As Figure 2.1 shows, McAdam's showroom at street level invited passers-by to inspect the typewriters and supplies he sold, while the upper floors housed McAdam's classrooms and

¹ "The Lady Typist. An Occupation For Girls.," *Aberdeen People's Journal*, November 2, 1901, 8.

² "The Lady Typist. An Occupation For Girls.," *Aberdeen People's Journal*, November 2, 1901, 8.

³ 1905 valuation roll for 'MACADAM, GEORGE' reference VR01000234-/140, Edinburgh Burgh, NRS, accessed at <https://www.scotlandsppeople.gov.uk/>

copying department. The building was a testament to the demand for typewriters at the turn of the century, and a visual representation of the range of typewriter related goods and services available.

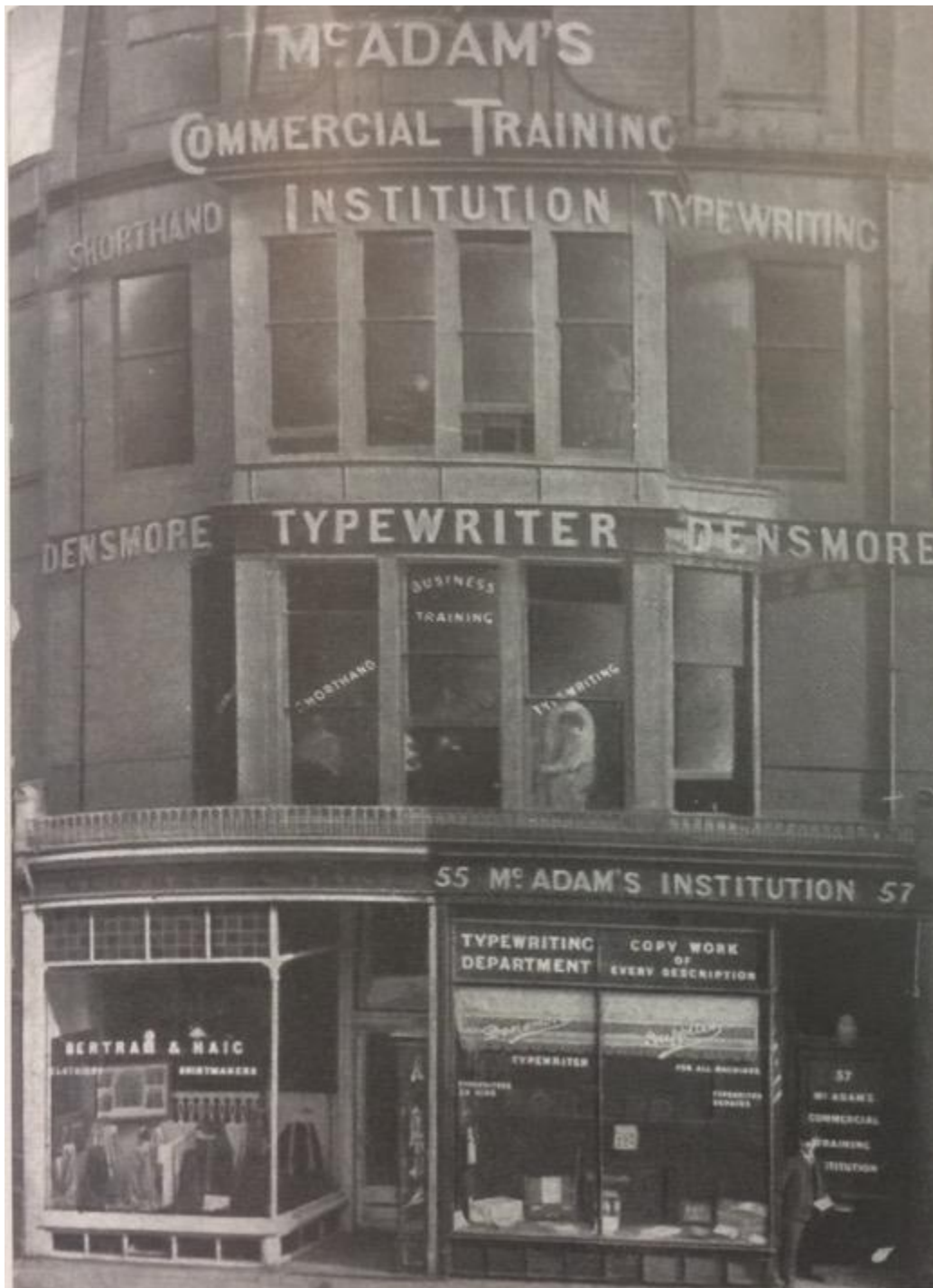


Figure 2.1. McAdam's Institution, Edinburgh, 1906.
Malcolm Cant, *Edinburgh Shops: Past and Present* (Malcolm Cant Publications, 2005), 55.

Just a quarter of a century earlier, when typewriters had first been introduced to the Scottish market, these devices were little known novelties sold in small numbers by a

handful of agents. Yet by the turn of the twentieth-century, typewriters were becoming indispensable to businesses and government institutions where they were used to meet the ever-expanding requirements for the production and duplication of written documentation. Meanwhile, typewriters also found favour with users outside of conventional office settings including authors, architects, ministers, professors, solicitors, suffragists and students.

The Typewriter Businesses Database – discussed in chapter 1 – is drawn from listings of typewriter businesses in the annual Post Office directories for Glasgow, Edinburgh, Dundee and Aberdeen. The Database reveals that the development of the typewriter trade occurred in three phases, as seen in Chart 2.1. During the first 10 to 15 years of commercial availability there was very little activity on the Scottish market. Although during this ‘pioneering phase’, there were still a few enthusiastic retailers who were pivotal in introducing the Scottish public to typewriters. Then from the late-1880s to c. 1910, the trade in Scotland entered a ‘take-off phase’ which was characterised by a rapid influx of typewriter businesses, including McAdam’s Institution. This was followed by a ‘mature phase’ in which there was a significant slowdown in growth in the years up to the First World War, after which the number of businesses plateaued into the 1930s. The three phases in the development of the trade were similar across the four of the principal cities, although the number of businesses was different in each town. Glasgow and Edinburgh (Scotland’s two most populous cities) were the clear leaders in typewriter businesses. Glasgow’s typewriter trade seems to have been supported by its concentration of commercial offices while Edinburgh’s trade was boosted by a high level of professional workers in the capital. Meanwhile, the typewriter trades in Dundee and Aberdeen – with their smaller population sizes and lower levels of industry – never challenged the number of businesses in the two largest cities.

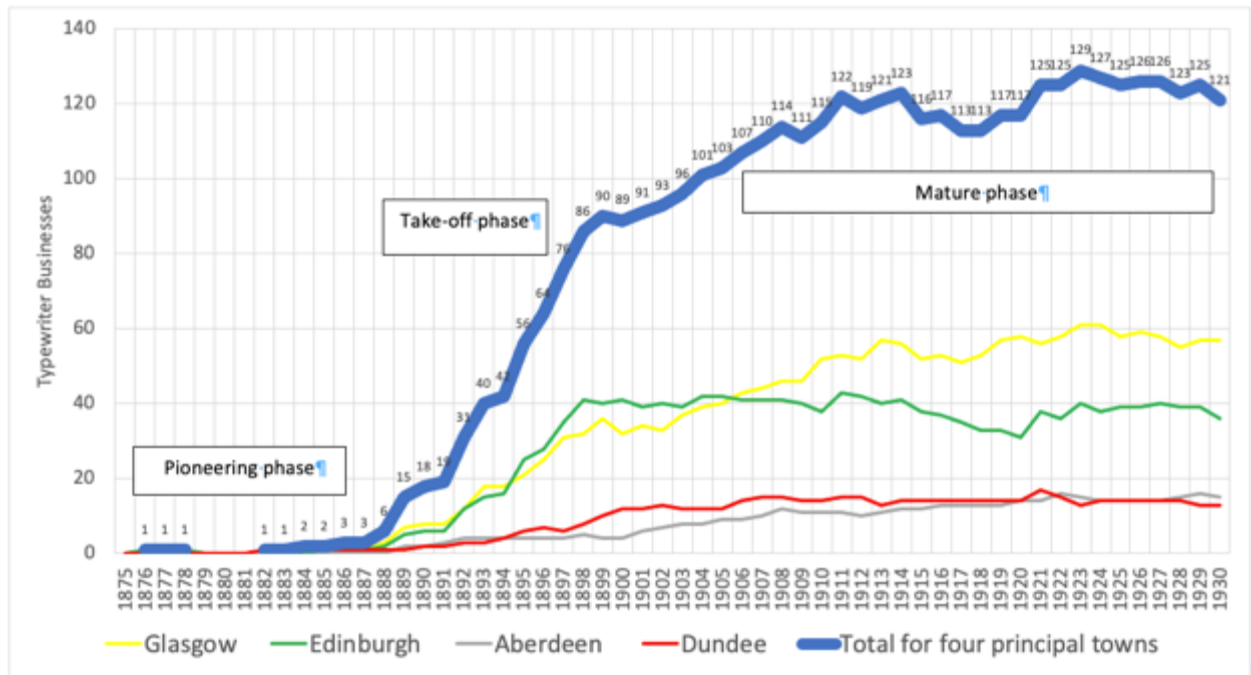


Chart 2.1. Typewriter businesses recorded in the Post Office directories for Scotland's four principal cities, 1875 to 1930.

Typewriter businesses describe an enterprise where the sale, use or maintenance of typewriters and/or supplies was a significant part of its revenue.

Five sectors of the Typewriter Trade

By 1911, there were so many typewriter-related businesses in Glasgow and Edinburgh, that the Post Office directory editors for these cities created sub-categories (see Figure 2.2 & Figure 2.3). The actual labels used were not totally consistent over the years or between the cities, but they suggest the existence of five broad categories of typewriter-related businesses: retailers, typewriting offices, typing schools, supplies specialists and repairers/second-hand dealers. While the Dundee and Aberdeen directories did not use any of these subcategories, closer inspection into these companies reveals that the same variety of typewriter businesses existed in those cities.

Mathieson, Alex. & Sons (Ltd.), 9-13 East Campbell st
Neil & Richmond, 76 Howard st
Parkinson, J. & Son, (of Shipley), 17 Oswald st
Smith & Christie, 115-127 James st. Bridgeton

TWEED (Scotch) MANUFACTURERS.

Eadie, Ireland & Co., 82 Mitchell st
Ferguson, Alex. G. 93 Hope st
Gowans, Wm., & Co., 111 Union st
Paterson, George, & Co. (real Harris agency), 218 Ingram st
Russell, Macfarlane & Co. Ltd, 42 Virginia street

TWINE MAKERS.

SEE ALSO ROPE AND TWINE MAKERS.

Acme Rope and Twine Warehouse, 9 Howard st. and 24 Adam's Court lane; P.O. tele., 5678
Belfast Ropework Co., Ltd.; repres. J. W. Thomson, 23 Dunolly gardens, Ibrox
Boase (The) Spinning Co. Ltd. 12 Waterloo lane
Lewis, W. & R. (cottons, hems, and Italians), 116 and 118 Broomielaw; Nat. tel., 854 Argyle; P.O. tel. 5854 Central
MacLennan, John & Co. (cotton and jute twines, coloured mercerised cords, calendar cords, &c., 166 Ingram st
Ogilvy, James, & Co., 74 York st
Port-Glasgow & Newark Sailcloth Co. Port - Glasgow; agents, Mungo Gray & Co. 94 Hope st
Port-Glasgow and Newark Sailcloth Co. Port-Glasgow
Robertson, George, 70 Gt. Clyde st
Robertson, W. M. & Co. ("Red Star," "Viper," and "Blue Ticket" brands), 70 Great Clyde st
Tait, Wm., & Co., Ltd., Mile-end Mills, 91-161 Fordneak st

TWISTERS.

Marshall, Andrew, & Co. 48 London street
Scott, Jno. (varn) 16 Campbellfield st. and West Arthurlie Mill, Barrhead

TYPE FOUNDER.

Glasgow Letter Foundry (and printers' furnisher); John Macgregor, prop. 39 Stockwell st

TYPEWRITER COPYING OFFICE.

Allpress, Theodora S., 77 Kilmarnock road

Arthur, F. W., & Co., 69 Bothwell st; tel. P.O. 886 Central
Bar-Lock Typewriter Co., 56 Bath st., corner of Renfield st

Campbell & Watson (Misses), 58 West Regent st

Douglas & Douglas, 113 Union st

Duncan & Co., 185 Hope st
Economic (The) Typewriting Co., 11 Bothwell street

Gardiner, David, & Co., 161 Hope st.; tele. 1905 Argyle; teta. "Visibility, Glasgow"

Lorimer, Wm., 73 St. Vincent st
Sproll's Business College, 531 Duke st; Nat., tel., 3063 Bridgeton.

The Auto Addressing Co., Ltd., 164 Howard st

The Blickensderfer Co., Ltd., 105 Hope st

The Modern Office Equipment Co. 8 Waterloo st

The Underwood Typewriter Co., 148 Queen st

The Yost Typewriter Co., Ltd., 127 Hope street

Young, A. W., L.P.S. (honours). F.I.C.S.T., Young's Commercial College, 342 Argyle st

TYPEWRITERS.

Arthur, F. W., & Co., 69 Bothwell st; Tel. No., P.O. 886 Central
Bar-Lock Typewriter Company, 56 Bath st., corner of Renfield st

Bertram & Miller, Western Typewriting & Shorthand Office, 113 W. Regent st. & 123 Wellington street, ground floor; telephone, National, 1907 Argyle

Bijou & Idial; agents, M. & S. M'Lellan, 101 St. Vincent st

Blick Typewriter, W. V. Graham, agent. 95 Bath st

Blick Typewriters, Glasgow agent, Wm. Lorimer, 73 St. Vincent st

Campbell & Watson, Misses, 58 West Regent st

City (The) Typewriting Office, Misses M. & M. Glen, 146A W. Regent street; Nat. telephone 197 Douglas

Douglas & Douglas (rebuild), 113 Union st

Duncan & Co., 185 Hope st
Economic (The) Typewriting Co., 11 Bothwell street

Elliott-Fisher Company, 151 Hope street

Empire (The) Typewriter Co., Ltd., 87 West George st
Farquharson Bros., typewriting and duplicating office, 191 Hope st

Gardiner, David, & Co., 161 Hope st., sole agents for the Oliver Typewriter; tele. 1905 Argyle, teta. "Visibility, Glasgow."

Gibson, Robert, & Sons (Glasgow), Ltd. (second-hand and re-built), 45 Queen street

Glasgow (The) Typewriting Office; Misses J. & M. Nesbitt, 173 St. Vincent st

Glen, Misses M. & M., 146A West Regent street

Harkness, Miss Hannah H., 42 Carnarvon street

M'Clew, E. & H., 101 St. Vincent street

M'Lelland, M. & S., 101 St. Vincent st

Nesbitt, Misses J. & M. 173 St. Vincent st

Oliver Typewriter Co., Ltd., sole agents, David Gardiner & Co., 161 Hope street; tele. 1905 Argyle, teta. "Visibility, Glasgow."

Remington Typewriter Co.; R. H. Hooking, general manager, 159 Queen street

Robertson, John F., C.T.P., F.I.C.S.T., Robertson's Business College, 23 Carlton place

Scottish File and Index Co., Ltd., 138a West George street

Smith, L. C. & Bros., Typewriter, agents, E. & E. Rowan, 73 West Nile st

Smith Premier Typewriter Co., 44 St. Vincent pl. (corner of Buchanan street), telephone No. 7229 City

Stearn's Typewriter Co., 69 Bothwell street; P.O., Tel. No., 886

The Commercial Typewriting Co., 144 St. Vincent st

The Glasgow Typewriting Office, Misses J. & M. Nesbitt, 173 St. Vincent street

The Hammond Typewriter Co., 126 Hope street

The Modern Office Equipment Co. (dealers in all makes of typewriters), 8 Waterloo street

The Monarch Typewriter Co., 87 Union street

Underwood Typewriter Co., 148 Queen street

Western Typewriting and Shorthand Office, 113 West Regent st., ground floor, Bertram & Miller; telephone Nat. 1907 Argyle

Whiteley's Business College, 27 Jamaica st

Williams Typewriter, 69 Bothwell st.; P.O., Tel. No., 886.
Yost (The) Typewriter Co., Ltd., 127 Hope street; tel. Nat. 515 Argyle, P.O. 4515

Figure 2.2. Trades directory for Glasgow Post Office directory, 1911, featuring various categories of typewriter businesses.

'Typewriter Copying Office' is synonymous with the typewriting offices category in my database. Meanwhile 'Typewriters' was a general category denoting typewriting offices and other sectors of the trade. Digitized by NLS.

TYPEWRITER MANFRS.

Arthur, F. W., & Co., 69 Bothwell st.; tel. No. 886 P.O.
Bar-Lock Typewriter Co., 56 Bath st., corner Renfield st.
 Blickensderfer Typewriter, 95 Bath st.; telephone, 258 Douglas and P.O. 2584
 Densmore Typewriter Repairing Depot, 8 Waterloo st
 Elliott-Fisher Company, 151 Hope street
 Empire Typewriter Co. Ltd. 87 W. George st
 Fay-Sholes Typewriter Repairing Depot, 8 Waterloo street
Oliver Typewriter Co. Ltd., 161 Hope st.; telephone No. 1905 Argyle; telegrams, "Visibility, Glasgow"
 Remington Typewriter Co.; R. H. Hocking, general manager, 159 Queen st
 Ross, S. Co., agents for Victor, typewriter manufacturers, 146 West Nile st
Salter Typewriter Co.; B. N. Starr, manager for Glasgow, 168 Hope street
Smith, L. C., & Bros. Typewriter; agents, E. & E. Rowan, 73 West Nile st
 Smith Premier Typewriter Co. 44 St. Vincent place (corner of Buchanan st.), telephone No. 7229 City
Stearns Typewriter, 69 Bothwell st.; P.O. tel. No. 886
 The Blickensderfer Co. Ltd. (Printer Blick), 105 Hope st
 The Fox Typewriter Agency, 45 Queen st
 The Hammond Typewriter Co., 126 Hope street
 Underwood Typewriter Co., 148 Queen street
 Williams Typewriter, 69 Bothwell street; P.O. tel. No. 886
 Yost (The) Typewriter Co., Ltd., 127 Hope st.; telephone Nat. 515 Argyle, P.O. 4515

TYPEWRITER SUPPLY MANUFACTURERS.

Arthur, F. W., & Co., 69 Bothwell st.; tel. P.O. 886
 Bar-lock Typewriter Co. Ltd., 56 Bath st., corner Renfield st
 Douglas, G. A. H., & Co., 172 Hope street
 Elliott-Fisher Company, 151 Hope street
 Empire Typewriter Co. Ltd., supplies for all typewriters, 87 W. George st; telephone Nos. National 7694 City; P.O., 4559
 Farquharson Bros., 191 Hope st

Gardiner, David, & Co., sole agents in Scotland for the famous F. S. Webster "Star" brand typewriter ribbons and "Multi-kopy" carbons, 161 Hope street; tele. 1905 Argyle; tels. "Visibility, Glasgow."

Graham, W. V., 95 Bath st
Hall, R. J., & Co., 82 W. Nile st
 Laidlaw, W. P. & Son, agents for Underwood's, Stephen's & Webster's ribbons, carbons, &c., for all machines, typewriter sundries and duplicator supplies, 92 St. Vincent st

Moir & Co., 81 St. Vincent st
Oliver Typewriter Co. Ltd. (typewriter supplies for all makes of machines), 161 Hope st.; tele. 1905 Argyle; tels. "Visibility, Glasgow."

Remington Typewriter Co.; R. H. Hocking, general manager, 159 Queen st

Ross & Co., 146 West Nile st
 Rowan, E. & E., 73 W. Nile st
 Scottish Typewriter and Supplies Co., 45 Union st

Smith Premier Typewriter Co., 44 St. Vincent place (corner of Buchanan st.), telephone No. 7229 City

Specialties Co.; Wm. Bamford, manager and agent, 871 Central chambers, 93 Hope st
 Supplies for Duplicators and Typewriters, "Roneos" special carbon economiser, Roneos, Ltd., 167 Hope street

The Hammond Typewriter Co., 126 Hope street

The Modern Office Equipment Co. 8 Waterloo street

The Typewriter Exchange Co., 16 Bothwell st

The Yost Typewriter Co., Ltd. 127 Hope street; telephone Nos., Nat. 515 Argyle; P.O. 4515

Typewriter (The) Repairs Co., 47 Oswald street

Underwood Typewriter Co., 148 Queen street

Webster Star Brand Ribbon Co., 161 Hope street

TYPEWRITING MACHINE REPAIRERS.

Douglas & Douglas, 113 Union street
 Dracup, A., 151 Hill st., Garnethill
Duncan & Co. sell and repair all makes of typewriters, 185 Hope st
 Empire Typewriter Co. Ltd. (all makes of machines repaired), 87 West George st

Gardiner, David, & Co., make a speciality of repairing and rebuilding all makes of typewriters and duplicators, 161 Hope st.; tele. 1905 Argyle; telegrams, "Visibility, Glasgow"

Graham, W. V., 95 Bath st
 Scottish Typewriter and Supplies Co., 45 Union street

The Modern Office Equipment Co. 8 Waterloo street

The Yost Typewriter Co., Ltd., 127 Hope street

Typewriters (The) Repairs Co., 47 Oswald street

Underwood Typewriter Co., 148 Union street

Wigley, Septimus, 45 Union st

TYRE MANUFACTURERS (India-Rubber).

Bates, W. & A., Ltd., 10 Bridge st
 Campbell, Achnach & Co. (India-rubber), Thistle Rubber Mills, 110-112 Commerce st. s.s.

Clark & Co., 100 and 106 Pitt st
 Clyde (The) Rubber Works Co., Ltd., 2 Clyde st., Port-Dundas

Continental Tyre and Rubber Co. (Great Britain), Ltd., 3 Cadogan st; tel. Nos., 1027 Argyle and 476 Central; telegrams, "Popular"

Dunlop Rubber Co. Ltd. (of Manor Mills), Aston, Birmingham (solid rubber), 61 & 63 Bath st; telephone Nat. 4898 and 4899; P.O. 1180; telegrams "Pneumatic."

Goudie, James T., & Co. (cycle, motor, cab, and carriage), 49 Queen street

Hutchinson Establishments, 60, 62 West Regent street

Macintosh, Chas. & Co. Ltd. (India-rubber), 5 Royal Exchange square

MacLellan, Geo., & Co., Glasgow Rubber Works, Maryhill; warehouse, Baltic chambers, 50 Wellington street

Michelin Tyre Co. Ltd., 138-140 West Nile street

Mitchell, Lewis A., 40 St. Enoch square

Mitchell, Robt., & Son (India-rubber), Shaftesbury street, Cranstonhill

Moseley, David, & Sons, Ltd. (India-rubber), 126 Ingram st

North British Rubber Co. Ltd. (India rubber), 62 Buchanan street

Reddaway, F., & Co., Ltd. (India rubber), 45 Hope st; works, Pendleton, Manchester

Figure 2.3. Second page of typewriter businesses in trades directory for Glasgow Post Office directory, 1911.

'Typewriter Manfrs' were retailers that represented manufacturers based in England and overseas. 'Typewriter Supply Manufacturers' were usually retailers as well, but some were also involved in the manufacture of sundries such as paper. Digitized by NLS.

The first typewriter businesses to emerge in Scotland were retailers. No typewriters were manufactured in Scotland until after 1930, so all the retailers mentioned in this thesis were importing machines from America, England and Europe for sale to private customers,

businesses and institutions. Retailers in Scotland can broadly be divided between *agencies* and *branches*. Agencies, which were much more common, were retail outlets owned by an individual or partnership based in Scotland. The agency gained the rights from a manufacturer or wholesaler to sell their typewriters in a particular city, and on occasion the agent had the power to set up subagencies in other districts. By contrast, branches were retail outlets set up and owned by a manufacturer or wholesaler usually based in London or America. For example, by the 1890s, the Glasgow branch for Remington typewriter was under the direction of the London office for the Remington, which was responsible for the wholesale import of typewriters from the Remington factory in New York and directed retail operations across the U.K.⁴ Unlike typewriter agents, branch managers were employees appointed by the company directors in London or America. In this thesis, retailers or retail outlets refer to all businesses which sold typewriters from new, regardless of whether they were an agency or a branch.

In the mid-1880s, a new sort of typewriter business appeared in Scotland. Typewriting offices, later known as copying offices, were businesses in which professional typists produced typewritten documents for a fee. The first typewriting offices had been established in New York and London in the early-1880s.⁵ By the end of the decade there were offices in several towns around the UK, including in the four principal cities of Scotland. Typewriting offices were usually found in the city centres, putting them in easy walking distance of commercial houses, government offices and professional institutions, their main customers. They offered a range of transcription services including typing-up shorthand and longhand notes; typing from dictation (either in person or via phonograph recordings); and translations into popular European languages. By 1900, many typewriting offices had adopted rotary duplicating machines allowing them to produce hundreds of copies of the same document for customers requiring circulars and leaflets. The standard price for 1,000 words of typing was 1s.3d. – out of the reach of low wage and some middle-

⁴ “New Agents for the Royal Typewriter,” *Typewriter Topics* 50, no. No (1922): 326–27. This article gives a biography of R. H. Hocking who, in 1898, was appointed by the J. W. Earle (the European manager for Remington in London) to go to Scotland and head up their operations in Glasgow.

⁵ Reference to first New York office in Russo, *Mechanical Typewriters: Their History, Value, and Legacy*, 28–29. Mention of early London office in Young, “The Rise of the Victorian Working Lady: The New-Style Nurse and the Typewriter, 1840-1900.”

income earners.⁶ With a skilled worker earning around 25 to 30 shillings a week, a document of ten thousand would have cost a third of their income or more.⁷ Yet in comparison with the price of a high-end typewriter for around £20, in addition to the cost of employing a typist at a minimum of £1 per week, typewriting offices were a cheaper alternative for getting documents typed up on an occasional basis.⁸

By the late-1880s, the provision of typing tuition had become another business opportunity. Initially, pre-existing shorthand schools expanded their curriculum to include typing but by the early-1890s, new institutions were being set up that offered typing from the outset. By the turn of the century, these businesses were catering to young men and women of school leaving age, which was raised from thirteen to fourteen in Scotland in 1901. These students often learnt typing and related commercial skills to find employment as a clerk, secretary or typist. The size and scope of these institutions varied from small shorthand-typing schools run by one or two teachers up to large commercial colleges, such as Skerry's, which took in hundreds of students each year and had branches all over the UK. Regardless of their size, typing schools were fee-paying institutions that were run for profit to capitalize on the growing demand for trained typists.

These three types of businesses – typewriter retailers, typewriting offices, and typing schools – account for the businesses which seem to have been most heavily involved in the commercial sale and use of typewriters, and they will be investigated in more detail in Chapters 3, 4, 5 and 6. However, the trade directories reveal that there were other typewriter-related business opportunities for those who could provide the various supplies that typewriter users needed, and for those who could service, repair and resell old typewriters.

⁶ "Advertisement for The Central Typewriting Office," in *The Glasgow Athenaeum Commercial College: Calendar 1901-1902* (Glasgow, 1901), 237.

⁷ Weekly wages for a carpenter and stone mason in the 1880s and 1890s at Bruce Rosen, "Income vs Expenditure in Working-Class Victorian England," *Victorian History*, 2014, <http://vichist.blogspot.com/2014/05/income-vs-expenditure-in-working-class.html>.

⁸ Average wages stated by George McAdam in "The Lady Typist. An Occupation For Girls.," *Aberdeen People's Journal*, November 2, 1901, 8.

The widespread adoption of typewriters drove demand for consumables, accessories and other supplies. By the early-1890s, the provision of typewriter supplies emerged as a distinct business opportunity, with some typewriter retailers promoting themselves as supply specialists as well. In other cases, typewriter supplies were sold by general stationers who aimed to cash-in on Scotland's expanding base of typewriter users. The supplies these businesses offered can broadly be divided between consumable supplies and durable accessories/auxiliary devices. Consumables were essential for the basic operation and maintenance of typewriters and included ribbons, ink, ink pads, oil and paper, while durable accessories were devices used alongside typewriters to increase the efficiency of typewriters or multiply their benefits. Accessories included copyholders; interchangeable typewheels and typebars; tabulating attachments; typewriter desks and chairs; travel cases; and rotary duplicators. Other auxiliary devices such as filing systems, Dictaphones and telephones – while not accessories per se – were sometimes promoted alongside typewriters by retailers presenting their vision of the modern office.

A trade in second-hand typewriters and repairs had also emerged by the early-1890s. Businesses working in this sector had two revenue streams: fees from repairing typewriters for return to their owners, and profits from buying, refurbishing and reselling second-hand typewriters. These businesses provided prospective typewriter users in Scotland with a much cheaper alternative to buying a new machine from a branch or agency. Second-hand machines regularly sold for far less than their original retail price, opening up new markets for businesses and private users who previously had been unable to afford new typewriters. The downside was that the cheapest second-hand typewriters were older machines built along outdated designs.⁹

The five sectors in Scotland's typewriter trade – retailers, typewriting offices, typing schools, supplies specialists and repairers/second-hand dealers – provide an analytical tool to examine the development of the typewriter trade in Scotland, enabling us to investigate the

⁹ In 1910, Douglas & Douglas in Glasgow were selling rebuilt Remington No. 2 typewriters which, by that time, had been out of manufacture for 16 years. See Douglas & Douglas, "Typewriters," *Kirkintilloch Gazette*, April 1, 1910, 2.

relative size and progress of each sector; the different entrepreneurs, customers and business strategies used in each sector; and the relationships between sectors. Thus, in the Typewriter Businesses Database, I have applied these labels to each business recorded. However, this was not entirely straightforward as the descriptions for categorising typewriter businesses changed over time and between cities. For example, in the 1890s, typewriting offices in the Edinburgh Post Office directory were listed under the category 'Typewriters', the original term for a typist. By 1911, the category was updated to 'Typists' reflecting the growing popularity of this new professional term. Meanwhile, in the Glasgow directory for 1911 typewriting offices were listed under 'Typewriter Copying Office' as illustrated in Figure 2.2. As my research has suggested that all of these businesses provided essentially the same kind of service, for consistency, all businesses described as 'typewriting offices' 'typewriters', 'typists' or 'copying offices' have all been recorded under one heading: typewriting office.

In other cases, the headings used in the directories could be misleading. For example, in the Edinburgh and Glasgow directories for 1911 there were several businesses listed under the heading "Typewriter Manfrs", as seen in Figure 2.3. As mentioned, there were no businesses in Scotland making typewriters in this period. Instead, these businesses were retailers that imported and sold typewriters manufactured in England, Europe or America. As such, when constructing the database, businesses described as manufacturers in Scotland have been recorded as retailers.

Another difficulty when taking data from the directories was that there were many businesses, such as McAdam's Institution, which were involved in several areas of the trade. Retailers often had typewriting office departments and typing classrooms. Typewriting offices frequently promoted themselves as centres for typing tuition. Typing schools often expanded into retail and/or the typewriting office sector. So, while it is usually possible to identify the major area activity for a particular business when transferring the raw data from the directories into the Typewriter Businesses Database, I chose to list certain businesses under multiple sector labels to provide a better picture of the number of businesses active in any one sector at any point in time.

Chart 2.2 shows the development of each sector across Glasgow, Edinburgh, Dundee and Aberdeen. This illustrates that each of the five sectors followed a pattern of development broadly similar to the trade as a whole, with early, take-off and mature phases. However, it also shows that the timing of each phase was different for each sector. The first businesses associated with typewriters in Scotland, in the mid-1870s, were retailers; but they were quickly joined by typewriting offices and then typing schools in the late-1880s; and by the early-1890s, businesses specialising in providing typewriter supplies, repairs and second-hand machines had also emerged.

Chart 2.2 also reveals that out of the different sectors of the trade, retail outlets were not the most numerous, in contrast to what we might have expected. Instead, for most of the period from the late-1880s there were more typewriting offices than any other types of business, a significant finding considering that these businesses have mostly been ignored in the historiography. Readers should be aware that because many businesses were active in several sectors of the trade, Chart 2.2 cannot be used for calculating the total number of typewriter businesses in any given year. For example, many of the businesses recorded in the retail line will also be counted in the typewriting office line. Thus, Chart 2.1 should be used for attaining an accurate figure for the total number of typewriter businesses, while Chart 2.2 (although presenting a slightly inflated figure of the number of individual businesses) allows us to track the provision of typewriter goods and services across the four principal cities, and how the provision of these services changed over time.

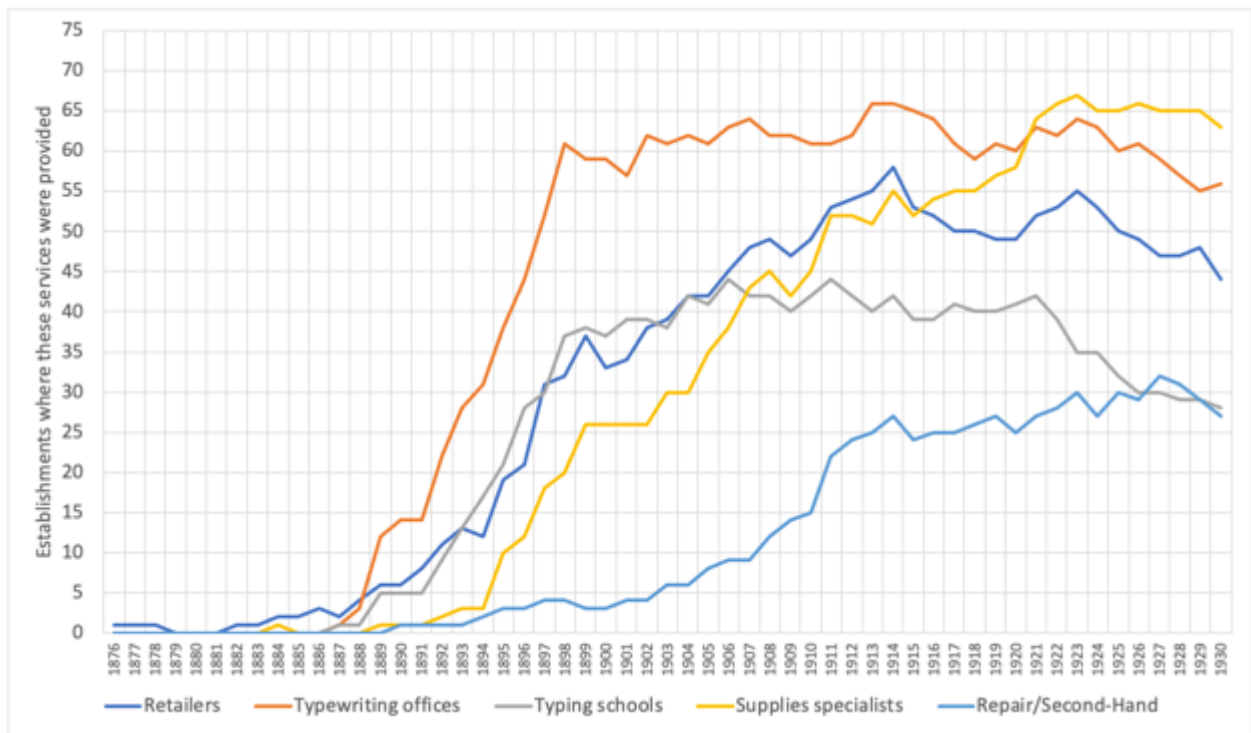


Chart 2.2. Number of businesses in each sector of the typewriter trade and allied services recorded in the Post Office directories for Glasgow, Edinburgh, Aberdeen and Dundee.

As a whole, the data in the Typewriter Businesses Database – presented in Chart 2.1 & Chart 2.2 – illustrates the changing levels of commercial interest and involvement in the typewriter trade, as well as the variety of goods and services provided by typewriter businesses in Scotland. These intermediary businesses played a crucial role in the popularisation of new devices, despite the fact that these sorts of businesses have regularly been excluded from histories of technology.¹⁰

The rest of this thesis takes a sectoral approach, with each chapter focusing on one particular aspect of the typewriter trade. In the remainder of this chapter, however, we will survey the chronological development of trade as a whole, from its humble beginnings in the 1870s, to the take-off years in the 1890s and through to a period of maturity from the start of the First World War onwards. This allows us to explore the relationship between

¹⁰ Retailers, for example, have been described by Trevor Pinch as the “Missing Masses” of technology studies. See Pinch, “Giving Birth to New Users: How Minimoog Was Sold to Rock and Roll,” 269–70.

the different sectors and provides the backdrop for the more in-depth analyses of retailers, typewriting offices and typing schools in the chapters that follow.

From novelties to necessities: the typewriter trade from the mid-1870s to late-1880s

In 1876, a handful of agents in Glasgow, Edinburgh, Dundee and Aberdeen gained the rights to sell the Sholes & Glidden typewriter. Most had backgrounds in the sale of consumer durable goods and usually sold typewriters as a side-line to more popular products such as sewing machines. At first, there was very little demand for typewriters and as a result most of the pioneering agents left the typewriter trade after only a year or so. Only John J. Deas, a sewing machine agent in Dundee, continued selling typewriters into the 1880s and 1890s. Years later, Deas looked back on his survival with pride commenting in an advertisement from 1893: '17 YEARS AGO when the "TYPEWRITER" came from America, there were few Sellers or Buyers. I was amongst the first that took it up, and the only man in Europe who has continued to handle it since that time.'¹¹ Deas was exceptional, but even he experienced setbacks in the early years of the trade with his short lived attempt to open a second outlet in Aberdeen in 1884.¹² In the late-1870s and early-1880s, there was not yet enough demand for typewriters to maintain a stable retail market.

The tide changed in the 1880s as new brands arrived on the Scottish market. First came the Caligraph which was imported into Scotland by John J. Deas – who had switched from the Remington around 1882. In Glasgow, A. C. Thomson served as agent for the Caligraph, but also sold the Columbia and Hall typewriters, which were lighter, simpler and cheaper designs that came without keyboards. From 1887, William Eglin & Co., an 'American Factors and Importers' based in Glasgow, sold the Hammond typewriter.¹³ Then in 1888, the Bar-Lock typewriter arrived.¹⁴ This new and popular American invention was imported into the

¹¹ John J. Deas, "17 Years Ago...", *Dundee Courier*, August 8, 1893, 8.

¹² See John J. Deas, "Advertisements," in *Post-Office Aberdeen Directory, 1884-1885* (Aberdeen: A. King and Company, 1884). This branch appears to have closed after about a year, with no mentions of Deas's "Caligraph" Office in subsequent Aberdeen directories.

¹³ See entry for Eglin, Wm, & Co., in *General Directory in Post Office Glasgow Directory for 1887-1888* (Glasgow: William Mackenzie, 1887), 239.

¹⁴ Bar-Lock showcased at the Glasgow International Exhibition in 1888. See description in James Paton, "Glasgow International Exhibition: Printing and Stationery," *Glasgow Herald*, June 16, 1888, 9.

UK by the London based company W. J. Richardson and Co., which soon set up a branch office in Glasgow.¹⁵ By this time, typewriter retail was lucrative enough that these newly established agencies and branches could specialise solely in the sale of typewriters and supplies. The import and sale of typewriters now supported six retailers based in the principal cities: three in Edinburgh, two in Glasgow and one in Dundee. Although there were no retailers recorded in the Aberdeen directory, we know that there were a small number of businesses adopting typewriters, which may have been ordered in from the other cities.

The newfound popularity of typewriters was supported by the establishment of typewriting offices. In 1884, Marion Marshall and Ethel Garrett opened the Ladies Typewriting Office in London, with the support of the Society for Promoting the Employment of Women.¹⁶ Their office catered to the typewriting needs of local businesses and professionals and set the standard for similar businesses which soon opened around the country. In 1886, Ethelinda Hadwen and Elizabeth Fleming opened the Hadwen & Fleming Typewriting Office in Edinburgh's New Town. The first typewriting office established in Scotland, their business instigated a revolution in the typewriter trade north of the border and by the end of the decade 14 typewriting offices operated in the principal cities, eight in Glasgow, three in Edinburgh, two in Aberdeen and one in Dundee.

While typewriting offices absorbed some of the demand for typewritten documentation, many businesses and government institutions – such as the General Post Office – were keen to adopt typewriting in-house.¹⁷ Trained operators were needed and in response some managers or principals of shorthand schools expanded their curriculum to include typing. At the end of the 1880s, at least four schools had begun to advertise typewriting as part of their syllabus. One of these was run by Calder M. Lawrence, in Aberdeen, who had been inspired by seeing shorthand-typewriting schools during his visit to America in 1887 and

¹⁵ For Reference to newly Bar-Lock office in Glasgow see "The Bar-Lock Type Writer," *Glasgow Evening Post*, March 7, 1889, 5.

¹⁶ Marian Marshall, "Typewriting Offices. - 1.," *The London Phonographer* 1, no. 1 (June 1891): 2.

¹⁷ The introduction of typewriters in the Glasgow Post Office was reported on widely in 1892. See "Type-Writing in Glasgow Post Office," *Edinburgh Evening News*, May 12, 1892, 3.

purchased the first typewriter for his school the following year.¹⁸ As in several areas of the typewriter trade, pioneering principals followed the example set by businesses in America.

By the end of the 1880s, therefore, three distinct sectors of the typewriter trade had emerged. Firstly, there was a small but stable base of retailers with agencies or branches in Glasgow, Edinburgh and Dundee. Meanwhile, there was a growing number of typewriting offices, concentrated in Glasgow and Edinburgh, which actually outnumbered retailers. Finally, there were a handful of shorthand-typewriting schools catering to the growing demand for trained typists. The work of pioneering agents, typewriting office managers, and typing school principals laid the foundation for the rapid expansion of the typewriter trade in the years up to the First World War.

The Take-off of the Typewriter Trade, 1890-1900

During the 1890s, the growth in typewriter businesses was staggering, increasing from 18 in 1890 to 90 in 1900. The number of retailers grew from six to 33; typewriting offices grew from 14 to 59, and institutions providing typing tuition grew from five to 37. (NB these numbers include businesses operating in multiple sectors). It was during this period that Edinburgh temporarily overtook Glasgow in the number of typewriter businesses, which was partly down to the greater number of typewriting offices in the capital. Meanwhile, as Chart 2.1 illustrates, Dundee and Aberdeen continued to have far fewer businesses across all sectors of the typewriter trade, in comparison with Edinburgh and Glasgow

The overall expansion in businesses was driven in part by the proliferation of new typewriter brands which flooded the market from the late-1880s. Most of these were manufactured in America, although a small number began to be made in England and Germany. Looking back on the take-off in manufacture in this period, early typewriter historian and collector Rupert Gould commented in reference to *Alice in Wonderland*: 'thick and fast they came at last, And More and more and more...'¹⁹ Gould estimated that by 1894

¹⁸ See description of "Women at work in typewriting office", a photograph of Lawrence's office uploaded by SCRAN at <https://www.scran.ac.uk/database/record.php?usi=000-000-498-954-C&searchdb=scran>

¹⁹ Gould, "The Modern Typewriter and Its Probable Future Development," 720.

there were upwards of 50 brands manufactured worldwide. In Glasgow, however (which had the widest range of retail brands out of the four principal cities) there were only 14 brands available from official agencies or branches. We can assume that there were also some outdated brands in circulation on the second-hand market, as well as a few cheaper brands which were not intensively advertised. Nevertheless, the discrepancy between Gould's figure of 50 brands, and the 14 brands recorded in the Glasgow Post Office directory demonstrates that not every machine that was invented and manufactured found its way onto the Scottish market. Manufacturers needed to find a retail partner in Scotland who was willing to represent their brand. However, this required not only contacts with retailers in Scotland, but also a design which Scottish retailers believed had the potential to sell.

Selling typewriters could still be a precarious business, especially for retailers of new and unproven brands. Opening a typewriting office gave agents and branch managers another source of income, which also made use of their ready supply of typewriters. In 1895, 11 out of the 19 retailers in the four principal cities also offered typewriting office services. These types of enterprises, like retail businesses generally, were male-dominated. In 1895, of the 11 retailers with typewriting office departments, all were managed by men.

In addition to these 11 typewriting offices run by retailers, there were a further 27 independent offices in Glasgow, Edinburgh, Aberdeen and Dundee. Managing an independent typewriting office was a role accessible to single and well-educated women, with 16 of the independent offices in 1895 (60 per cent) owned or managed by women. This was significantly higher than the level of women entrepreneurs across Scottish businesses as a whole. A recent study from Harry Smith *et al* found that in 1901 around 31 per cent of businesses in Scotland were run by women.²⁰ The level of employment in Smith's study is much higher than we might have expected if we were to go by previous studies of female business ownership in England.²¹ But even Smith's figure is below the estimated level of

²⁰ Harry Smith et al., "Entrepreneurship in Scotland, 1851–1911," *Journal of Scottish Historical Studies* 41, no. 1 (2021): 57.

²¹ Jennifer Aston and Paolo Di Martino, "Risk and Success: Re-Assessing Female Entrepreneurship in Late Victorian and Edwardian England," *Discussion of Papers in Economic and Social History* (Oxford, 2014), 11. This study estimated that around six per cent of business owners in England in 1900 were female.

typewriting office ownership in Scotland, for independent offices at least. Why was this? From the 1880s, women's employment organisations, such as the Society for Promoting the Employment of Women, had encouraged and funded female entrepreneurs to set up typewriting offices, which would employ still more women. There may also have been less resistance to women running typewriting offices as these businesses constituted a new service sector. This was not a previously male-dominated sector and therefore there was less drive for men to try and exclude women from the sector, especially as typing came to be viewed as a feminine occupation.

However, managerial opportunities for women in other sectors of the typewriter trade were limited, with far fewer women working as the owners of retail outlets or as typing school principals. I have also found no examples of women working as typewriter mechanics from the 1870s to the 1920s. Managing a retail outlet for importing consumer durables such as sewing machines; being the principal of a shorthand school; and working in machine repairer were all trades which had been dominated by men before the arrival of the typewriter on the Scottish market. It is little surprise that these trades – as they incorporated typewriters into their business models – continued to be viewed as masculine professions. Yet there were some notable exceptions. Annie G. Romney was a typewriting office manager in Edinburgh who also served as agent for the Remington in Edinburgh from 1889 to 1892. However, in 1893 Romney lost the agency rights to the Remington to the up-and-coming shorthand school principal James Leishman.²² The general dominance of the retail sector by men suggests that manufacturers may have preferred to give agency rights to male retailers. Meanwhile, Romney continued to manage her typewriting office in Edinburgh, independent of any retail concerns, for a further seven years.

Whether independent or as part of a retailer, the demand for typewriting offices was clear. From the late-1880s to 1920 the number of typewriting offices exceeded any other sort of typewriter businesses in Scotland. Even after this point, typewriting offices were only

²² Mrs A. G. Romney listed as manager for Remington Typewriting Office under "Street Directory" in *Post-Office Edinburgh & Leith Directory 1889-90* (Edinburgh: Morrison and Gibb, 1889), 355. Entries in later directories suggest rights to the Remington were transferred to James Leishman.

outnumbered by businesses that sold typewriter supplies, and there remained far more typewriting offices than retail outlets into the 1930s. This forces us to look at the adoption of typewriting from a different perspective, i.e., instead of buying typewriters outright, many businesses and professionals adopted typewriting by outsourcing their work to these offices. Typewriting offices can be said to have enabled others to adopt typewriting indirectly.

For businesses and institutions ready to adopt typewriting in-house, the role of typing schools in producing trained typists was indispensable. The number of typing schools went from just five in 1890 to 37 in 1900. Between the 1891 and 1901 censuses in Scotland, individuals who recorded their occupation as a 'typist', 'typewriter', 'type writer' or 'shorthand typist' rose dramatically from 58 to 2,142 (99 per cent of whom were female).²³ This figure is more likely the tip of the iceberg as there were many more office workers who used typewriters but who did not refer to themselves as typists. It is not clear how many of those who worked as typists had undergone any formal training, but the census figures still demonstrate there was a growing potential market for typing tuition.

From the early-1890s, several typing schools gained the selling rights to a particular brand of typewriter. Scottish schools were once again following the example set in America in the 1880s where commercial colleges were agencies for Remington or Caligraph typewriters, an example of which is illustrated in Figure 2.4. Post Office directory entries show that these brands were similarly popular among typing school principals in Scotland, with new Remington agents including James Leishman, in Edinburgh, 1893; William L. Battison in Glasgow, 1895; and Calder M Lawrence in Aberdeen in 1897. Meanwhile, United Typewriter & Supplies (UT&C), which supplied the Caligraph and Densmore typewriters in the UK, was also popular with Scottish principals. In Edinburgh, George McAdam signed with UT&C c. 1894; followed in 1898 by A. W. Paton, a typing school principal in Dundee.²⁴ While no signed agreements between Scottish principals and typewriter manufacturers survive, in the

²³ Occupations recorded in Scottish census records for 1891 and 1901. Search conducted by author using Findmypast.co.uk.

²⁴ Branding information recorded in the Typewriter Businesses Database, see chapter 1.

1890s it is clear that Remington and UT&C saw the usefulness of joining forces with independently run typing schools and commercial colleges.

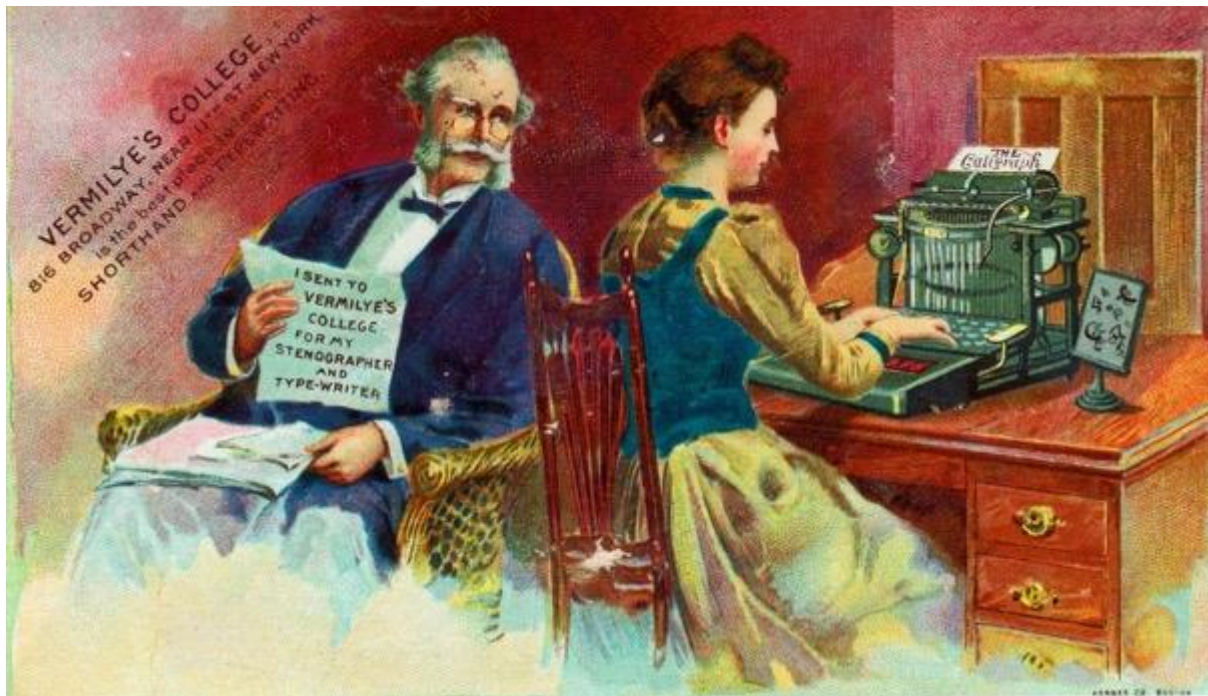


Figure 2.4. Advert for a shorthand-typing school in New York, c. 1885, which also promoted their sale of Caligraph typewriters.

These institutions served as inspiration typing schools and agencies set up in Scotland from the late-1880s. Peter Weil Typewriter Archive.

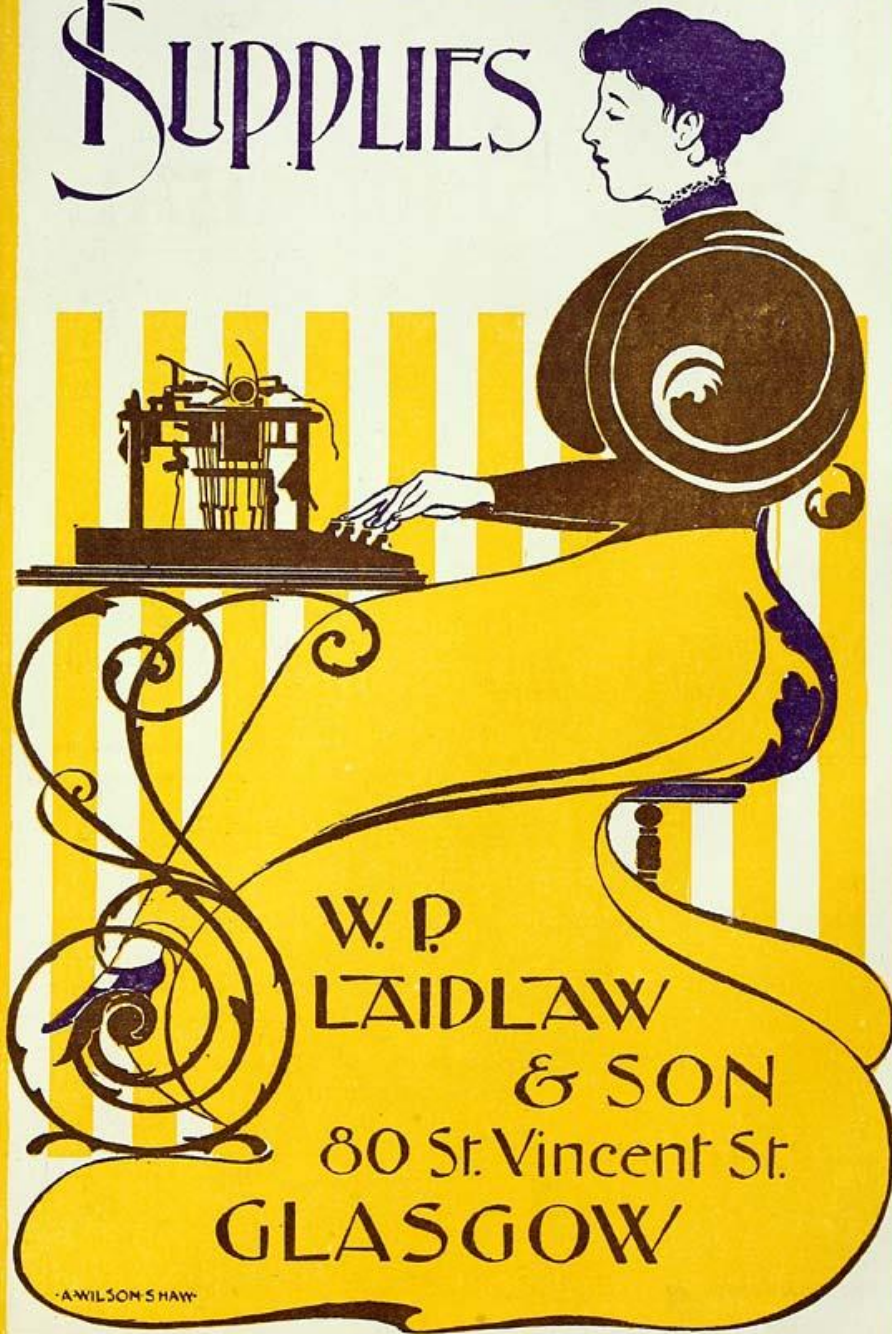
From the mid-1890s, a new sector of typewriter businesses, the supply specialists, emerged. Between 1894 and 1899, the number of businesses in the four cities advertising the supply of typewriter consumables and accessories went from three to 26 (Chart 2.2). None of these businesses specialised solely in typewriter supplies, and for the most part they were pre-existing enterprises that had expanded into the typewriter supply trade.

Stationers were one of the first groups of businesses to capitalize on the demand for typewriter supplies, with W. P. Laidlaw & Sons in Glasgow being one of the standout examples. Around 1895, Laidlaw became the agent for Underwood ribbons and carbons – an American brand that was already well known in Scotland by the early 1890s.²⁵ In 1897,

²⁵ Underwood typewriter ribbons advertised in American Writing Machine Company, *The Caligraph typewriter [catalogue]* (American Writing Machine Company, c1895), copy held at National Museums Scotland Library.

Laidlaw released a beautiful two-page Art Nouveau colour advertisement featuring a female typist under the heading 'Typewriter Supplies' (Figure 2.5). The second page listed the range of Underwood ribbons, ink pads, carbon papers and stencil papers offered by Laidlaw. Laidlaw even put together a 'catalogue of every Requisite for the Typewriter', available post free. That Laidlaw was willing to back up their sale of supplies with such costly advertisements and promotional materials demonstrates that supplying the needs of typewriter users had become a lucrative trade, distinct from typewriter retail.

TYPEWRITER SUPPLIES



W. P.
LAIDLAW
& SON
80 St. Vincent St.
GLASGOW

AWILSON SHAW



Underwood's Ribbons.

For all Typewriters, in all colors,
4/- each, 37/6 per doz.

Underwood's Yost Pads.

In all colors, 8/- each.

Underwood's Carbons.

Full and Semi, in every size and color.

The "Economic" Ribbons & Carbons.

Ribbons 2/6 each. Carbons 1/- per doz.

"State Mills" Linen Papers.

Perfect for Erasure. In every thickness.
25% under Typewriter Coy.'s prices. See
Sample Book.

Duplicator Stencil Papers, &c.

Stencil Papers, Printing Inks, &c., &c., for
every process. Ellam's Duplicator kept
in stock, all sizes.

Catalogue of every Requisite for the Typewriter, and
Sample Book of "State Mills" Papers, post free.

TRADE SUPPLIED.

W. P. Laidlaw & Son,

80 St. Vincent Street, Glasgow.

Telephone No. 3881.

Figure 2.5. W. P. Laidlaw's two-page advertisement for typewriter supplies. *Post Office Glasgow Directory for 1897-1898*. Digitized by NLS.

As well as supplies, to keep them running, typewriters also required maintenance and repair. Typewriters like the Remington and the Caligraph were liable to get out of order,

with the usual problems being the type falling out of alignment, or the paper roller wearing out. By 1887, Remington typewriter suppliers in London were offering professional repairs with 'skilled mechanics', but nothing similar was yet available in other cities around the UK from Remington or any of the other typewriter brands for that matter.²⁶ It was in this vacuum of technical support that the first typewriter repairers in Scotland emerged. Growth was modest at first, with repairers in the four principal cities increasing from just one in Edinburgh in 1890 to four businesses split evenly between Edinburgh and Glasgow by 1901. However, these figures do not include typewriter retailers, typewriting offices and typing schools who surely had a working knowledge of typewriter maintenance, but did not promote their businesses as specialists in repair.

Like the pioneering retailers, the first typewriter repairers in Scotland had a background in the sewing machine trade. William Ross in Edinburgh – the first second-hand specialist recorded in any of the Scottish Post Office directories – was listed in 1890 as 'a sewing machine maker and repairer of type-writers'.²⁷ In 1894, Ross was joined in Edinburgh by Christian L. Back a 'repairer and general agent' of typewriters.²⁸ In that year, Back was also recorded as an 'importer, dealer in cycles, sewing and knitting machines, typewriters, etc.' from his premises on Hanover Street.²⁹ The examples of Ross and Back suggest a background in the manufacture and repair of consumer durable technologies, such as sewing machines and bicycles, was conducive to work in typewriter repair. Certainly, the equipment used in sewing machine repair was ideal for use on typewriters. For typewriter restorers today, many of the essential supplies for repairing typewriters come from the sewing machine market, with sewing machine oil being a prime example.³⁰ More

²⁶ E. Howard, "The Type-Writer," in *Transactions of the First International Shorthand Congress, Held in London From September 26th to October 1st 1887* (Bath: Isaac Pitman & Sons, 1888), 401.

²⁷ "General Directory," in *Post-Office Edinburgh & Leith Directory 1890-91* (Edinburgh: Morrison and Gibb, 1890), 255.

²⁸ "Professions and Trades Directory," in *Post-Office Edinburgh & Leith Directory 1894-95* (Edinburgh: Morrison and Gibb, 1894), 652.

²⁹ "General Directory," in *Post-Office Edinburgh & Leith Directory 1894-95* (Edinburgh: Morrison and Gibb, 1894), 14.

³⁰ Richard Milton, "Secrets of Restoring Typewriters," The Portable Typewriter Website, 2006, <http://www.portabletypewriters.co.uk/secrets.htm>.

importantly, Ross and Back's mechanical expertise gave them an edge over typewriter retailers, many of whom did not come from a technical background.

By the end of the 1890s, therefore, Scotland's typewriter trade had taken off. The retail, typewriting office, and typing school sectors – which had only just emerged by the end of the 1880s – had now rapidly expanded across the four principal cities. Meanwhile, new businesses involved in the sale of supplies and repair services show that there was a significant level of adoption by the end of the 1890s. In 1901, the Edinburgh based retailer and typing school principal George McAdam stated 'It can now be said with truth that there are few important offices which do not possess at least one instrument. In some offices there are as many as one dozen.' Summing up the development of the market over the preceding years, McAdam argued that the 'typewriter Companies have been merely feeling their way in Scotland. They have been at great expense in opening up the business, and they are now looking for their return'. McAdam anticipated that 'before long five times the number of machines now employed will be at work.'³¹ The take-off in businesses during the 1890s, readied the market for the mass adoption of typewriters in the years ahead.

Widespread adoption and the continued growth of the trade, 1900-14

In the early-1900s, Scotland's typewriter trade continued to expand, but less dramatically than in the 1890s, with the number of businesses rising from 89 in 1900 to 123 in 1914 (Chart 2.1). Glasgow now re-emerged as the leading city, with 56 typewriter businesses by 1914 followed by Edinburgh on 41. Glasgow's lead was based on its high level of retailers, supply specialists, repairers and second-hand dealers. The trades in Dundee and Aberdeen remained further behind with 14 and 12 businesses respectively. Across the four cities, while retailers, supply specialists and repair/second-hand businesses all experienced strong growth, the number of typewriting offices and typing schools levelled off. However, it is unlikely this signified a plateauing in the demand for typing tuition and services as the

³¹ "The Lady Typist. An Occupation For Girls.," *Aberdeen People's Journal*, November 2, 1901, 8.

number of typists continued to increase into the interwar years.³² Thus, growing demand for typing tuition and services was probably met by the expansion of existing businesses rather than the creation of new ones. Some established institutions significantly expanded the scope of their operations in the early-1900s. For example, between 1906 and 1908, James Leishman relocated his typing school in Edinburgh from 98 Hanover Street (for which he paid £50 per year) to 56 George Street, (where he paid around £73 per annum).³³ The substantial £23 increase in rent was, we can reasonably assume, to occupy more spacious and suitable premises for his typing and shorthand classes. The move also brought Leishman's typing school slightly closer to his typewriter store at 44 George Street. Leishman was proud of his new premises, commissioning a photograph of one of his classes which was used in a promotion for his business in the Edinburgh & Leith Post Office directory in 1910, as illustrated in Figure 6.3.

The ongoing growth in Scotland's typewriter trade took place in the context of rising typewriter production. A report in *Typewriter Topics* published in July 1912 found that America was not only the clear leader in manufacture, but also that their worldwide exports had increased significantly at the turn of the century from a value of approximately \$1,500,000 in 1897 to \$12,000,000 in 1912. In comparison, the emerging manufacturing bases in Germany and the UK were paltry. Although precise export figures for Germany are not available it was certainly no more than \$1,000,000. Meanwhile, the UK's typewriter trade was even further behind with an export value of around \$132,814 in 1912. Despite the low level of manufacturing, the demand for typewriters in Britain was huge. From July to April 1897, American typewriter exports to Britain were the value of \$619,386. In the corresponding months up to April 1912, this figure had risen to \$2,137,297. This made

³² The number of female clerks and typists in Scotland in 1921 was 74,030 a 150 per cent increase on the 1911 figure of 29,067. Census figures (1911) from 'Numbers of "commercial clerks" in Wilson, *Disillusionment or New Opportunities? The Changing Nature of Work in Offices, Glasgow 1880-1914*, 37. Census figures for 1921 from 'clerks and typists' in "Occupations in Scotland: Statistics Compiled from 1931 Census," *The Scotsman*, May 31, 1934, 11.

³³ 1905 valuation roll featuring James Leishman, reference VR010000235-/261, Edinburgh Burgh; 1915 valuation Roll reference VR010000320-/241, Edinburgh Burgh), NRS, accessed at <https://www.scotlandspeople.gov.uk/>

Britain the leading importer of American writing machines, bringing in around the same value of typewriters as Germany and France combined.³⁴

The number of retailers in the principal Scottish cities continued to grow from 33 in 1900 to 58 in 1914. Glasgow was the leader in retail with 26 typewriter agencies and branches by 1914, followed by Edinburgh with 17, Dundee with nine and Aberdeen with six. Of course, the number of businesses does not account for the size of individual enterprises which we may also assume varied between cities. Glasgow's strong commercial links with America, its direct import route via the Clyde, and large customer base of existing and potential users made it ideal for foreign brands looking to gain a foothold on the Scottish market.

Consequently, as Table 2.1 shows, Glasgow also offered the widest range of brands out of the principal cities. In 1914, there were at least 20 makes of typewriter available to buy in Glasgow (and some businesses did not advertise which brands they sold). The brands available were a mixture of well-established names like Remington and Yost, alongside new and unproven makes like Imperial and Continental. In the same year, Edinburgh retailers offered at least 12 brands followed by seven in Dundee and six in Aberdeen. Brands represented outside of Glasgow tended to be from well-known firms with a long history of typewriter manufacture; for instance, Remington and Yost were available in all four cities. In many cases, the Glasgow agency or branch served as a manufacturer's headquarters in Scotland, after which sub-agencies or sub-branches were set up in Edinburgh, Dundee and Aberdeen, providing there was demand (see Figure 2.6 & Table 2.1).

³⁴ "Typewriters and Other Delicate Machinery in the Export Trade of the United States," *Typewriter Topics* 21, no. 3 (1912): 147–48.

Brand	First year of manufacture	Glasgow	Edinburgh	Dundee	Aberdeen	Representation in four cities	Notes
Remington	1874	1	1	1	1	4	
Yost	1887	1	1	1	1	4	
Smith Premier	1889	1	1	1	1	4	
Empire	1892	1	1	1	1	4	
Oliver	1895	1	1	1	1	4	
Blickensderfer	1892	1	1	0	1	3	
Underwood	1897	1	1	1	0	3	
Monarch	1904	1	1	1	0	3	
Bar-Lock	1888	1	1	0	0	2	
Bijou	1900	1	1	0	0	2	
LC Smith	1905	1	1	0	0	2	
Royal	1906	1	1	0	0	2	
Hammond	1884	1	0	0	0	1	
Salter	1892	1	0	0	0	1	
Ideal	1900	1	0	0	0	1	
Elliot-Fisher (book typewriter)	1900	1	0	0	0	1	c1900. First year of manufacture unknown
Swift	1903	1	0	0	0	1	
Continental	1904	1	0	0	0	1	
Victor	1907	1	0	0	0	1	
Imperial	1908	1	0	0	0	1	
Totals		20	12	7	6	45	Less than total for figure retailers as some retailers did not record which brand(s) they sold

Table 2.1. Brands available from retailers in Scotland, 1914, ordered by the level of representation across the four principal cities. Represented in all cities (blue), Glasgow only (yellow). Generally, brands with an earlier manufacture date were better represented across the country.



Figure 2.6. Back page from *Miss Remington Explains the New Model No 10*, c. 1910. National Museums Scotland library, reference: 681.61 REM. This page suggests the catalogue was printed at Remington's Scottish headquarters at 159 Queen Street Glasgow, with this copy distributed from the Edinburgh branch.

Whereas a typewriter was often a one-off purchase the supplies to keep it going required regular replenishing – so it is no surprise that supply specialists were booming. From 1900 to 1914, businesses recorded as supply specialists in the principal cities rose from 26 to 55. Glasgow led the way with 27 supply businesses, followed by Edinburgh on 18, with Aberdeen and Dundee behind with six and four respectively. The number of supply businesses in each city presumably reflected the extent of typewriter use in that city. That Glasgow had a notably high level of typewriter use is supported by census data which strongly suggests that by 1911 Glasgow had by far the most people employed as clerks in Scotland.³⁵

The nature of supply businesses changed in this period as typewriter retailers and general stationers – who had been the leaders in this sector in the 1890s – were joined by a new type of business known as office machine specialists. Established from around 1905, the pioneering businesses in this category included the Modern Office Equipment Company, the Office Equipment and Supplies Company, and the Scottish File and Index Company, all of which were based in Glasgow. They sold typewriters and consumable supplies such as ribbons, ink, paper and carbons as well as a range of office technologies for use alongside the typewriter such as duplicators and filing systems. These businesses also stocked office furnishings including desks and chairs specifically designed for typists.

The emergence of office machine specialists took place at a time of growing enthusiasm for streamlining office work through the application of new technologies and scientific methods of management in the US and Europe.³⁶ From 1907, business efficiency exhibitions were held in Dundee and Glasgow, where office machine specialists exhibited their goods, often in the form of mock office displays.³⁷ Established retailers responded to competition from office machine specialists by signing contracts to sell duplicators and other office technologies alongside their typewriter lines. In their advertising, some of these business

³⁵ See tabulated census data in Wilson, *Disillusionment or New Opportunities? The Changing Nature of Work in Offices, Glasgow 1880-1914*, 37.

³⁶ “The Rise of Scientific Management” Strom, *Beyond the Typewriter: Gender, Class, and the Origins of Modern American Office Work, 1900-1930*, 15–62.

³⁷ For description of early business machine exhibition in Dundee see “Here and There,” *Dundee Evening Telegraph*, August 28, 1907, 2.

owners reinvented themselves as experts in the modern methods of office organisation. For instance, when Dundee based retailer and typing teacher A. W. Paton opened a new branch in Aberdeen in 1908 he promoted his new premises as an 'office specialists and agents for Underwood visible typewriters'.³⁸ Increasingly, retailers and teachers felt the need to show off their knowledge of the modern methods for running businesses. In 1901, Paton listed his occupation as a 'Teacher of shorthand & typewriting' but by 1911 he had updated this to: 'Commercial Teacher + Business Specialist'.³⁹ By the start of the War, the typewriter trade involved more than just a knowledge of writing machines, but an awareness of the changing world of office technologies and practices.

The mass adoption of typewriters was also reflected in the demand for repairs and second-hand machines, with the number of businesses involved in this sector increasing from just three in 1900 to 27 in 1914. Repairers/second-hand retailers were concentrated in Glasgow with 18, followed by Edinburgh with seven. Meanwhile, Dundee and Aberdeen had just one business each in this category. Although we can assume there were retailers working in Dundee and Aberdeen with some knowledge of typewriter maintenance, overall the trade was smaller meaning that there were not enough machines available to sustain a specialist typewriter repair business.

The nature of repair/second-hand businesses had also changed. In the 1890s, the main players in the sector were sewing machine mechanics, like William Ross and Christian Back, who had turned their hand to typewriter repair. By the early-1900s, several retailers in Glasgow and Edinburgh were offering repairs as a standard service, while also carrying out a trade in second-hand machines. These retailers either trained their salespeople to carry out repairs or employed a mechanic on a full-time basis. In the 1901 census, there were 15 individuals recorded in Scotland as either a 'typewriter mechanic', 'typewriter repairer' or 'typewriter mechanic apprentice'.⁴⁰ They were mostly workers (as opposed to business

³⁸ For Paton entry see General Directory in *Post Office Aberdeen Directory. 1908-1909* (Aberdeen: The Aberdeen University Press, 1908), 353.

³⁹ 1901 and 1911 census reports for A. W. Paton, Dundee, accessed at Findmypast.co.uk and Scotland's People.

⁴⁰ Occupation search of Scottish census 1901, conducted by author using Findmypast.co.uk

owners like Ross and Back), who were usually in their teens or early-20s, and all of whom were males living in Glasgow or Edinburgh. We can assume that some were employed as repairers by retailers in those leading cities in Scotland's typewriter trade.

Typewriter rebuilders were another new category of business within the second-hand and repairs sector. The trade rebuilt typewriters was pioneered in America by J. E. Grady who set up the Rebuilt Typewriter Company in Chicago and New York in 1906. His business specialised in buying, refurbishing and reselling typewriters to customers and second-hand retailers at home and overseas. In America, the craze for rebuilt typewriters soon caught on and as Grady bemoaned in an interview of 1907, 'Everybody, even the smallest repairmen talk rebuilt, rebuilt, rebuilt machines when it is impossible for them to rebuild machines properly.'⁴¹ For Grady, there was a big difference between rebuilding and repairing. The overhauls carried out by his firm were, in his view, far more extensive than the basic maintenance carried out by most repairers, and Grady even claimed that his company was 'without question of a doubt turning out machines better than the so-called best machines'.⁴²

By 1910, the trend had caught on in Scotland with companies such as Douglas & Douglas in Glasgow advertising 'Factory Rebuilt Typewriters' at discounted prices.⁴³ In Edinburgh, the well-known stationery firm George Waterston & Sons heralded their typewriters as: "Rebuilt" in the most complete sense, by having all working parts—the parts that count—*renewed* where necessary by Duplicates in every way equal to those in the Original New Machine.'⁴⁴ Like Brady in America, Waterston & Sons argued that rebuilt machines were as good as new typewriters and far superior to other second-hand options, insisting in their advertisement: 'A rebuilt Typewriter is not a "Second-Hand" or "Repaired" Machine'.⁴⁵

⁴¹ "Grady and the Rebuilt," *Typewriter Topics* 7, no. 1 (1907): 65–66.

⁴² "Grady and the Rebuilt," *Typewriter Topics* 7, no. 1 (1907): 65–66.

⁴³ Douglas & Douglas, "Typewriters. Every Machine Guaranteed," *Kirkintilloch Gazette*, October 1, 1909, 2.

⁴⁴ George Waterston & Sons, "Rebuilt Typewriters At Waterstons' Business Exhibition," *The Scotsman*, January 13, 1912, 1.

⁴⁵ George Waterston & Sons, "Rebuilt Typewriters At Waterstons' Business Exhibition,"

While some rebuilt, repaired or second-hand machines were trade-ins or purchases from Scottish owners, advertisements from second-hand retailers suggest much of their stock were imports of used American machines. For example, Douglas & Co, a seller of second-hand machines in Edinburgh promoted their business as a 'typewriter importers'.⁴⁶ By the start of the War, there were several large American firms, such as the General Typewriter Exchange (GTE) in New York, which made a great deal of money out of exporting rebuilt machines. A 1912 interview with W. H. Beardsley (the general manager of the GTE) found that 'The export business of rebuilt typewriters of his concern has been steadily growing and... the future policy of the General Typewriter Exchange is to keep well ahead in developments necessary to a world-wide business.'⁴⁷

For customers in Scotland, rebuilt typewriter retailers, and second-hand dealers generally, offered a wide choice of machines in comparison with agencies and branches which usually specialised in just one or two brands.⁴⁸ Second-hand typewriters were also cheaper, sometimes selling for around a quarter of their original retail value.⁴⁹ This opened up new markets among businesses and individuals previously unable or unwilling to spend £20 on a brand-new high-end typewriter. These customer benefits were welcomed by second-hand dealers who were freed from the restrictions of an agency contract, meaning they could sell whatever brands they liked, for whatever price they chose.

As more businesses and institutions adopted typewriters and took on thousands of new typists, we might have expected the number of businesses involved in typing tuition to have increased to match. As Chart 2.2 shows, this did not happen; in fact, the number of schools plateaued at around 40 businesses from 1900 to 1914. However, growth was still taking place, but apparently by increasing the output of existing businesses, rather than by increasing the number of businesses overall. As we will see in chapter 6, there were

⁴⁶ Douglas & Co., "Typewriters," *Mid-Lothian Journal*, February 4, 1910, 1.

⁴⁷ "Interview with Mr W.H. Beardsley," *Typewriter Topics* 20, no. 4 (1912): 258.

⁴⁸ Second-hand retailers regularly claimed they sold "all makes". See for example, Ross & Co, "Typewriters: All Makes At All Prices From £2," *Perthshire Advertiser*, July 23, 1913, 4.

⁴⁹ Douglas & Douglas, "Typewriters. Every Machine Guaranteed," *Kirkintilloch Gazette*, October 1, 1909, 2. In this advertisement Remington No. 2 typewriters are advertised for £5.16s., around a quarter of their retail value in the 1890s.

examples of typing school principals in this period who chose to employ more teaching staff, invest in better equipment and relocate to larger premises.

The growth in the number of typewriter agencies, supply specialists, repairers and second-hand traders, as well as the scaling-up of shorthand-typewriting schools, demonstrates that in the years up to the First World War, there were more typewriters in use than ever before. Yet in the same period, the demand for typewriting offices was sustained and in 1914 there were still more businesses with typewriting offices, than any other sort of typewriter business. This is perhaps surprising as we might have expected many of these offices to have closed as they were rendered redundant by businesses and private individuals adopting typewriting in-house. Clearly, there remained a significant group of indirect adopters who preferred to outsource their typing needs to typewriting offices.

This period also witnessed the emergence of large typewriter businesses such as Leishman & Hughes and McAdam's Institution (Figure 2.1) which were involved in every sector of the trade. These typewriting institutions were on an unprecedented scale, transforming the city centres in which they were based with their street-level showrooms, eye-catching signage and widely circulated advertising. They signalled to the public that the typewriter trade was now firmly established in Scotland

Typewriters at War

From 1914, the period of virtually uninterrupted growth in the number of typewriter businesses that had lasted from the late-1880s came to an end. From 1914 to 1919 businesses in Scotland's four principal cities fell from 123 to 117 (Chart 2.1). While the disruption caused by the War was certainly a factor, in the years up to 1914 there were already signs that the growth in typewriter businesses was plateauing. This suggests that the market was approaching a level of saturation. While typewriters and typewriting services remained in high demand into the interwar period (and beyond), with so many well-established businesses in Scotland, the market may have been less enticing for new entrants – hence the slowdown in growth.

The number of typewriter retailers across the four cities fell from 58 in 1914 to 49 by 1919. Although it is difficult to assess the precise significance of this fall without information on the size of individual business, the trade was certainly affected by the U-boat blockade against allied merchant shipping crossing the Atlantic, which disrupted the supply of goods from America to Britain. The blockade led the government to place restrictions on imports including typewriters, and in fact, from February 1917 to June 1918 the importation of typewriters and most office equipment was totally prohibited.⁵⁰ These restrictions had a devastating impact on some American manufacturers. The Blickensderfer Typewriter Company in Stamford, Connecticut, which had branches in Glasgow, Edinburgh and Aberdeen, saw their European export markets collapse from 1914. In response, Blickensderfer turned to the manufacture of military equipment and after the US entered the War in 1917, typewriter production was put on hold entirely.⁵¹ Closer to home, manufacturing in the UK was also reduced as Salter and Imperial, who also had branches in Scotland by this time, focused their efforts on arms production.⁵²

Meanwhile, imports of German typewriters – which had begun to make some headway on the Scottish market – were banned by government legislation that prohibited trading with the enemy, which sometimes led directly to the closure of companies in the UK. In March 1916, the Board of Trade ordered the closure of the Electrical Company Ltd in London under the terms of the Trading with the Enemy (Amendment) Act, 1916. The Electrical Company were the UK agents for the Mignon typewriter made by Allgemeine Elektrizitäts-Gesellschaft (AEG).⁵³ In Glasgow, M. & S. McLellan who were agents for the Ideal and Bijou made by Seidel and Naumann were also forced to end the importation and sale of these German machines. Although McLellan's did not close entirely, from 1916 they moved out of the typewriter retail sector but remained open as a typewriting office and supply retailer.⁵⁴ The

⁵⁰ George G. Rimington, "British Office Equipment Business Will Boom – No Intention of 'Dumping' Government Typewriters," *Typewriter Topics* 41, no. 1 (1919): 27.

⁵¹ Blickensderfer and Robert, *The Five-Pound Secretary: An Illustrated History of the Blickensderfer Typewriter*, 12–13.

⁵² West Bromwich Local History Society, "George Salter & Co. Ltd," accessed January 20, 2022, <https://www.westbromwichhistory.com/people-places/george-salter-co-ltd/>.

⁵³ "To Be Wound Up," *Sheffield Daily Telegraph*, March 11, 1916, 6.

⁵⁴ See *Post-Office annual Glasgow directory* for 1916 showing that McLellan had dropped their retail lines.

restrictions on typewriter imports as a result of the Atlantic blockade, the Trading with the Enemy Acts, and the suspension of domestic manufacture in favour of arms production all contributed to a temporary dip in typewriter agencies in Glasgow, Edinburgh, Dundee and Aberdeen.

The shortage of typewriters in this period caused prices for second-hand typewriters to increase sharply. From 1914, used machines were often selling at higher prices than the pre-war listings for new models.⁵⁵ The demand for second-hand machines was apparent on the Scottish market, where in contrast to the decline in retailers of new machines, the number of repairers/second-hand dealers held steady from 1914 to 1919. Second-hand dealers, like Douglas & Douglas of Glasgow, were keen to capitalize on War restrictions with a 1917 advert from the company announcing: “Typewriter Shortage. Importations Now Stopped. We Hold Large and Varied Stock of Best Models. Prices Very Moderate.”⁵⁶

The number of supply businesses held steady through the War years, suggesting that despite the shortage of new machines, typewriter use was as high as ever. The civil service was one of the biggest users of typewriters in this period, and it was the demand from government offices that was believed to have exacerbated the typewriter shortage across the UK.⁵⁷ The stability of supply businesses may have also been because they were less susceptible to wartime restrictions, as a lot of their stock such as ribbons, paper, erasers and carbons were domestically manufactured. For example, the St Mungo Manufacturing Company in Glasgow was a world leader in the manufacture of typewriter erasers, which were becoming popular at the time.⁵⁸ In other areas, the ban on German imports encouraged British manufacturers to become more self-sufficient. In January 1919, W. J. Richardson – the director of the Bar-Lock Typewriter Company which produced Barco ribbons – explained that ‘In regard to the manufacture of ink ribbons, this country is now

⁵⁵ George G. Rimington, “British Office Equipment Business Will Boom – No Intention of ‘Dumping’ Government Typewriters,” *Typewriter Topics* 41, no. 1 (1919): 27.

⁵⁶ Douglas & Douglas, “Typewriter Shortage,” *Daily Record*, April 20, 1917, 2.

⁵⁷ George G. Rimington, “British Office Equipment Business Will Boom – No Intention of ‘Dumping’ Government Typewriters,” *Typewriter Topics* 41, no. 1 (1919): 27.

⁵⁸ “Introducing to the World’s Dealers the St. Mungo Mfg. Co., Ltd., of Glasgow, Scotland,” *Typewriter Topics* 38, no. 4 (April 1918): 260.

practically independent of German dyes. Any slight difference in the quality of the dye we have more than compensated for by improved methods of manufacture'.⁵⁹

Meanwhile, typing schools seem to have successfully capitalised on the demand for female office workers as a result of the vacancies from male clerks needed to fight on the front line. The data in Chart 2.2 show that the demand for typing tuition remained steady throughout the War years, with the number of schools holding at around 40 from 1914 to 1918. During the War, the government was one of the main recruiters, with the Board of Trade issuing a public appeal in 1915 for women to sign up to labour exchanges. One of the Board's aims in this campaign was 'to supply a large number of Women Clerks qualified to take the places of Officers who may be released for service with the Colours.'⁶⁰ By April 1916 the number of direct replacements of men by women in the Civil Service reached 73,000. By December 1918, across the UK an estimated 225,000 women and girls were working in the Civil Service and Post Office, around 80 per cent of whom were clerks.⁶¹

In Scotland by 1915, the Underwood Typewriter College in Dundee was calling for: 'GIRLS ENLIST NOW, For War-Time Vacancies in Offices, &c. Shorthand, Typewriting, Bookkeeping.'⁶² These promotions seem to have had some success as the following year the Underwood College announced in the *Dundee Courier*: 'WAR EMERGENCY. Classes at the Underwood College are drawing Large Numbers of Girls for Training in Shorthand, Typewriting and Bookkeeping.'⁶³ Meanwhile, in Aberdeen, William Webster's school asked its readers whether they were aware of 'the excellent opportunities that now exist for qualified Typists and Clerkesses?'⁶⁴ Also in Aberdeen, Robert Burnett promoted his Civil Service Institute as 'The Great Specialising Centre for Civil Service, Post Office, Army Entrance, University Preliminary, Lady Secretaries. SHORTHAND & TYPING, May Now Be

⁵⁹ W. J. Richardson, "The Demand for Typewriters Will Be Greater Than Ever," *Typewriter Topics* 41, no. 1 (1919): 96.

⁶⁰ Anne Grikitis, "Women in the Civil Service, WW1: Winning the Battle for Acceptance," History of Government Blog, 2016, <https://history.blog.gov.uk/2016/11/01/women-in-the-civil-service-ww1-winning-the-battle-for-acceptance/>.

⁶¹ Grikitis.

⁶² Underwood Commercial College, "Girls Enlist Now," *Dundee Courier*, November 17, 1915, 1.

⁶³ Underwood Commercial College, "WAR EMERGENCY," *Dundee Courier*, April 13, 1916, 1.

⁶⁴ Webster's College, "Situations for Girls," *Aberdeen Evening Express*, January 14, 1915, 2.

Joined'.⁶⁵ These advertisements complemented government campaigns encouraging women to go into office work at home and overseas (Figure 2.7).

From July 1918, the restrictions on American typewriters were eased to allow the import of 50 shipping tonnes per month (600 typewriters) by the end of the year. This was extended again in January 1919 to 100 tonnes per month to be divided between the leading British wholesale importers.⁶⁶ However, shortages continued into the post-war years, partly caused by industrial unrest in America. In mid-1919, it was reported in the UK press that there were strikes at several American typewriter factories.⁶⁷ The Underwood factory in Hartford, Connecticut (which had the largest output of any typewriter factory in the World) closed from mid-July to mid-September 1919 as a result of strike action, with a projected loss in production of around 40,000 machines.⁶⁸ This resulted in informal rationing of typewriters among UK retailers. In Edinburgh, Underwood agents Leishman and Hughes kept their customers on a waiting list for new typewriters which was finally ended in 1921.⁶⁹

⁶⁵ Robert Burnett, "Burnett's Classes," *Aberdeen Evening Express*, October 31, 1917, 1.

⁶⁶ "License to Import Typewriters into England Extended and Quantity Doubled," *Typewriter Topics* 41, no. 1 (1919): 62.

⁶⁷ "Typewriter Shortage," *Yorkshire Evening Post*, October 4, 1919, 2.

⁶⁸ "Back to Work After Nine Weeks Vacation," *Hartford Courant*, September 16, 1919.

⁶⁹ 'About the Underwood Typewriter,' *The Scotsman*, January 26, 1921, 1.



Figure 2.7. Women Clerks for Service in France, 1914-1918. The National Archives, Kew, reference: NATS1/109.

1920s revival

As the war-time restrictions eased, the typewriter trade in Scotland bounced back returning to pre-War levels by 1921 and reaching a high of 129 businesses by 1923. However, there was no return to the rapid growth of the 1890s and early-1900s. From the early-1920s, Scotland's trade moved into a settled phase, and the number of businesses actually declined gradually towards the end of the decade. Given the downturn in Scotland's economy

throughout the 1920s, particularly in the heavy industries, the slight decline in the typewriter trade might be seen as a relative success in a difficult economic period.⁷⁰

There were also some notable developments in the distribution of typewriter businesses across the four principal cities. Glasgow, as the most populous city, remained the clear leader with 57 typewriter businesses, followed by Edinburgh with 36. Meanwhile, Dundee, which had had a slightly higher level of businesses in the period from 1895 to 1915, fell slightly behind Aberdeen during the 1920s. This was, quite probably, a reflection of the ‘chronic depression’ in Dundee following the First World War, and the downturn in the jute industry.⁷¹

The retail sector was a clear beneficiary of the easing of wartime restrictions, with agencies representing new European brands driving an increase in retailers in the four principal cities, from 49 in 1919 to 55 in 1923. From 1921, German machines made a return to the Scottish market including Erika (an updated version of the Bijou), the Perkeo, the Triumph, and the Mercedes.⁷² The popularity of German brands was supported by hyperinflation which cheapened the Mark and reduced the price of typewriters to UK importers.⁷³ Meanwhile, in Glasgow in 1922, there was also an agency established for an up-and-coming Italian brand, Olivetti. While at first, the brand made little headway on the Scottish market, after the Second World War, Olivetti became a world leader in typewriter manufacture, with factories set up all around the world including in Glasgow.

British manufacturers also made great strides on the Scottish market, surpassing the achievements of the Salter Typewriter Company before the War. The Imperial Typewriter Company, based in Leicester, was the most successful brand with agents in all four of the principal cities by 1930. But in Glasgow, which remained Scotland’s retail hub, there were also retailers selling the British made Bar-Lock; Empire and Oliver typewriters. As we will see

⁷⁰ W. W. Knox, “A History of the Scottish People: Summary of Economy and Society in Scotland, 1840-1940,” 13–14, accessed January 17, 2022, http://bru.scran.ac.uk/scotland/pdf/SP2_5Income.pdf.

⁷¹ Jim Tomlinson, *Dundee and the Empire: “Juteopolis” 1850-1939* (Edinburgh: Edinburgh University Press, 2014), 105.

⁷² See entries for typewriter retailers in Glasgow Post Office directory for 1921.

⁷³ “Seventeenth Annual Trade Review and the Message by the Editor,” *Typewriter Topics* 50, no. 1 (1922): 7.

in chapter 4, these retailers capitalized on buy British campaigns, which encouraged government offices in particular to use domestically manufactured typewriters.

Despite the arrival of German and British machines, American typewriters still had a dominant position on the UK market, with the leading brands keen to partner up with successful retailers in Scotland. For example, the American made Royal typewriter – one of the most popular brands worldwide by the 1920s – was sold in Scotland by Watson's Typewriters. Watson's was a large multi-branch enterprise with outlets in Glasgow, Edinburgh and Aberdeen by the mid-1920s. Watson's specialised in Royal typewriters as well as a range of office technologies such as duplicators and calculating machines.

Turning to the other sectors in the trade, when we look at the 1920s as a whole, we find that the largest drop in businesses came in the typing tuition sector, falling from 42 in 1921 to 28 in 1930. This can partly be explained by the shift in the business model of the leading retailers. For instance, Watson's Typewriters, one of the leaders in retail during the interwar years, was not involved in typing tuition. While retailers focused on selling typewriters and office technologies, typing instruction was left to independent typing schools and commercial colleges, i.e., not also associated with a retail outlet. This was a significant shift from the early-1900s, when the largest retailers, such as McAdam's Institution and Leishman & Hughes, were also leaders in typing tuition.

The reduction in the number of schools does not seem to have resulted in a fall in typing students, and most definitely did not reflect a decline in the typing profession. The census data shows that between 1921 and 1931 the number of female typists and clerks in Scotland increased by 4.6 per cent to 77,451.⁷⁴ Although figures for male typists are not extant, we can reasonably assume that their numbers were negligible if we go by previous census returns as well as contemporary accounts which show that by the 1920s typing was firmly established as an almost exclusively female occupation.⁷⁵ As had been the case for typing schools in the years up to the War, it seems that the institutions which remained

⁷⁴ "Occupations in Scotland: Statistics Compiled from 1931 Census," *The Scotsman*, May 31, 1934, 11.

⁷⁵ Davy, "'A Cissy Job for Men; a Nice Job for Girls': Women Shorthand Typists in London, 1900–39."

increased their student capacities. For example, Skerry's Colleges increased their student output significantly during this period. In 1908, Skerry's had approximately 30,000 successful graduates across their UK colleges; by 1928 this had risen to approximately 150,000. Learning to type was no less popular in the 1920s than it had been in the early 1900s. Yet it seems that prospective typists were more likely to attend commercial colleges with large cohorts of students, as opposed to small shorthand typewriting schools or typewriting offices which might only accommodate a handful of students at any one time.

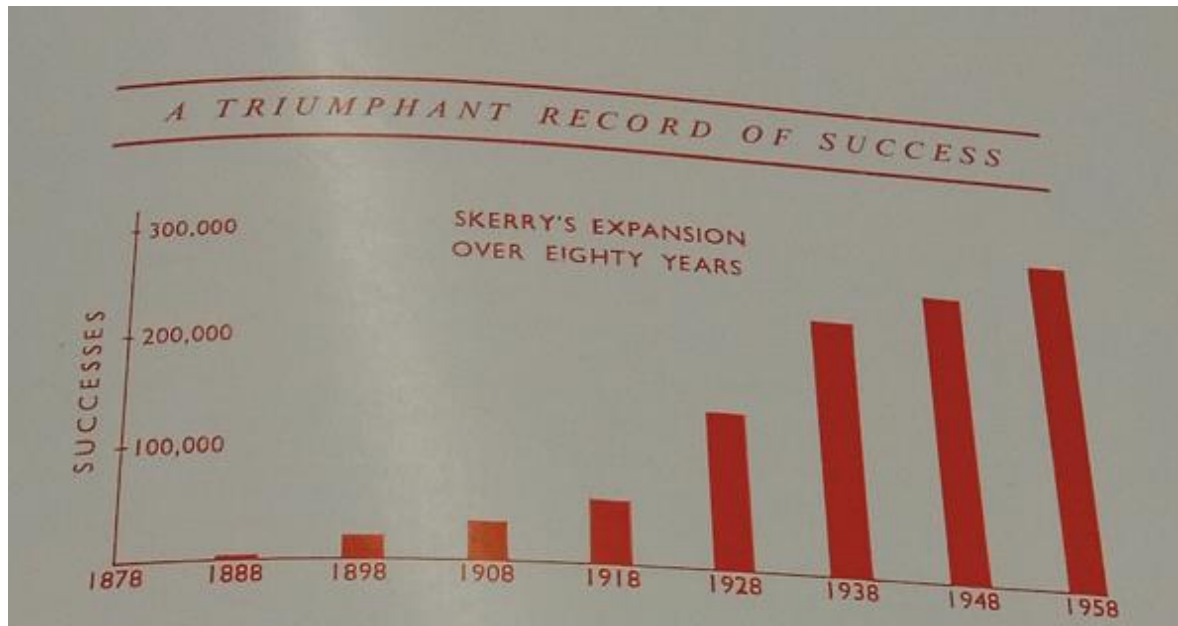


Figure 2.8. Successful graduates from Skerry's College taken from *Skerry's College Eightieth Birthday, 1878-1958*.

While figures cover successes across the country and over a range of commercial subjects, it is still clear that the 1920s was a period of growth for commercial education, including typing.

Meanwhile, the typewriting office sector was surprisingly stable hovering at around 60 businesses for the whole of the 1920s and closely matching the number of retailers in this period. In that regard, it is worth noting that while typewriter retailers during the 1920s seem to have become more reluctant to offer typing tuition, most businesses were still committed to providing typewriting office services. This is not all that surprising considering that if demand was minimal copying work could be carried out by a single typist to bring in a little extra money for the business. In the typist's free time they may well have worked as a clerk handling the day-to-day tasks for the retail side.

What is certain, is that, despite the now-widespread adoption of typewriters in businesses, typewriting offices continued to provide valued services for customers who either did not own a typewriter, or for those that needed their documents typed to a professional standard. For occasional typing needs, these offices still provided an economical alternative to purchasing a typewriter outright. While the relative price of machines had come down, and cheaper second-hand machines had also come onto the market, typewriters still were not cheap by any reasonable standard. Typewriting offices also provided specialist services which commercial businesses, government institutions and professionals relied on. As we will see in chapter 5, from 1926 to 1931 Alice Copeland's Aberdeen Typewriting Office was employed by the local government to type up Aberdeenshire's valuation rolls. For certain jobs, outsourcing typing work still had definite advantages over completing the work in-house.

The 1920s also saw the opening of typewriting offices which met demands from new demographics of customer. For instance, in Glasgow and Edinburgh university typewriting offices were opened to cater to students as well as staff. In the early-1900s, the advertising and high charges for typewriting offices suggested that university professors used these services for typing up their research or for getting exam papers typed and duplicated. By the 1920s, these services were being directed at students who needed their essays and dissertations typed up.⁷⁶ This is indicative of the fact that in a growing number of areas in public life there was an expectation that important documents would be typed rather than handwritten. This was certainly true in the publishing sector, where, by the 1920s, authors were encouraged to submit typed manuscripts for greater legibility.⁷⁷

The sectors which remained the most stable throughout the 1920s were the supplies trade which, across the four principal cities, increased from 58 businesses in 1920 to 63 in 1930, and the repair/second-hand trade which went from 25 to 27 businesses over the same

⁷⁶ Students' Representative Council, "Typewriting," *Edinburgh University: The Handbook*, no. 30 (1925): 230 (advertisements). Edinburgh University, Special Collections.

⁷⁷ Lyons, "QWERTYUIOP: How the Typewriter Influenced Writing Practices," 231.

period. The strength of these sectors suggests that while the rate of growth in new purchases slowed, cumulatively the number of machines in use continued to grow.

One of the leading businesses in the supplies, repair and second-hand trade was Sculthorps in Glasgow. This business was headed by Northamptonshire born Ernest Charles Sculthorp (1876 to 1945) who had moved to Glasgow around 1900 where he started as a travelling salesman for typewriters.⁷⁸ By 1903, he was working for the Remington Wabash Company which sold Remington-Sholes typewriters as well as a range of Wabash files, desks and office furniture.⁷⁹ Sculthorp was one of several retailers at the turn of the century who began selling typewriters alongside a portfolio of office technologies.

Little is known of Sculthorp's business until 1917 when an advertisement in *The Scotsman* announced his entry into the second-hand trade: "TYPEWRITERS, various makes, good condition; from £2. Sculthorp, 12 George Square, Glasgow."⁸⁰ The low price of £2 suggests Sculthorp was selling machines many years out of date, which probably included old upstroke designs where the text was concealed from the operator. By the mid-1920s, Sculthorps had emerged as leading specialists in the import and trade of second-hand typewriters. In 1927, Sculthorps compiled and published the *Typewriter Traders' Handbook* with detailed information on several dozen brands of typewriter including model name, serial number locations, and width of ribbons for each machine. Perhaps most useful for the trader were the standard prices for popular models which were divided between 'high grade rough' or 'ready for sale'. Rough machines were in good running order but had average enamel, plating and transfers. Ready for sale machines, by contrast, were 'in such a condition that they can be immediately sent to Customers or shipped by us direct.' The distinction made by Sculthorps in their catalogue indicates that they provided typewriters

⁷⁸ Census, Birth and Death certificate information on E. C. Sculthorp accessed at Findmypast.co.uk

⁷⁹ Entry for Remington Wabash Co in General Directory in *Post Office Glasgow Directory for 1903-1904* (Glasgow: Aird & Coghill, 1903), 525.

⁸⁰ E.C. Sculthorp, "Typewriters," *The Scotsman*, July 12, 1917, 1.

directly to customers, and to traders who bought rough models, restored them, and then sold them on to customers.⁸¹

Sculthorps' 1927 pamphlet in which 'All Information contained Is From My Own Knowledge and Sources' indicated that the company considered itself as expert in the history and development of typewriters.⁸² In fact, Sculthorps used their expertise in second-hand typewriters to capitalise on the growing collectability and historical interest in these devices. In 1934, Sculthorps secured the sale of 50 'Antique Typewriters' to the Royal Scottish Museum for the sum of £50, which they delivered with production dates and a short description cards for use when exhibiting the machines. However, there was some tension between the museum and Sculthorps as several of the machines were different models to those that were expected, and in some cases the condition of the machines was poor. Sculthorps may have sold typewriters to the museum as an opportunity to get rid of their old stock which was unsellable to the general market.⁸³

By the early-1930s, the typewriter trade in Scotland was well established with several businesses in each of the four principal cities offering the latest brands and models, as well as typewriting office services, typing tuition, typewriter supplies and repair. Customers had a choice between an array of American, British and German machines, which was quite different from the pre-War era when typewriters made in the US dominated the market. After around 55 years of commercial availability, second-hand machines were also now widely available, and in certain instances, these machines were redefined from modern mechanical contrivances into antique typewriters suitable for museum acquisition and display.

⁸¹ E. C. Sculthorp, *Typewriter Traders' Handbook* (Glasgow: E. C. Sculthorp, 1927), 7, held at National Museums Scotland Library, reference 681.61.

⁸² Sculthorp, *Typewriter Traders' Handbook*, (inside back over).

⁸³ Correspondence between Sculthorps Ltd, the Royal Scottish Museum and Rupert Gould from April to November 1934. Correspondence is under care of Science & Technology department, National Museums Scotland.

Conclusion

In this chapter we have seen that there were three phases to the development of the typewriter trade in Scotland: a pioneering phase from 1876 to the mid-1880s, in which the typewriter was still an unfamiliar and rare novelty; a take-off phase from the late-1880s to c. 1910, a period of dramatic growth; and mature phase, from c. 1910 on, in which the various typewriter businesses appear to have reached a stable level. There no doubt was expansion in the numbers of typewriters sold and used between 1910 and 1930, but it appears for the most part to have been managed within the capacity of existing businesses, rather than driving the establishment of new enterprises.

The significance of the period from the late-1880s to c. 1910 has already been suggested in histories focusing on technical innovations in typewriters. This chapter moves beyond that work in several ways. It provides a quantitative picture of the rate and scale of growth in the Scottish typewriter trade, before during and after the period of marked proliferation in typewriter innovation. And, by looking at the activities of the Scottish typewriter trade, it allows us to understand the actual options available to customers in Glasgow, Edinburgh, Dundee and Aberdeen from the 1870s to the 1920s. Technical histories have often focused on obscure manufacturers and models, which while interesting to collectors, may not have actually found their way onto the consumer market.

The data from the Scottish Post Office directories has uncovered the sheer variety of businesses involved in the commercialisation of typewriters, something that has not been a feature of most previous histories of typewriters. The typewriter trade was about more than the buying and selling of machines, but also included typewriting offices, typing schools, supply specialists and repairers. In shedding light on the variety and diversity of businesses involved in the commercialisation of typewriters we have gained a greater understanding of the process by which typewriters became widely used technologies.

The different sorts of businesses involved in the typewriter trade and allied services were both a result and a cause of the growing demand for typewriters. As we will see in chapters 3 and 4, retailers were key to promoting typewriter use, particularly through advertising and exhibitions. In chapter 5, we will see how typewriting offices demonstrated the value of

typewriting to businesses, government institutions and professionals without a typewriter of their own. This takes on an even greater significance when we consider the high level of female owners and managers in this sector. Until now there have been dozens of office histories which have addressed the impact of the typewriter on women's work. However, these studies have usually treated typing merely as a means of employment and rarely as an entrepreneurial opportunity. Lastly, in chapter 6 we will discuss the crucial (yet barely mentioned role) that shorthand-typing schools played in promoting typing as a skilled profession, as well as training students for new typing posts in commercial offices and government institutions.

Of course, it was the people behind these businesses who played the pivotal role in the development of the trade. As such, this chapter has introduced a few of the leading figures in Scotland's typewriter trade including George McAdam, James Leishman and Ethelinda Hadwen in Edinburgh, William Watson and E. C. Sculthorp in Glasgow; John J. Deas and A. W. Paton in Dundee; and Calder M. Lawrence and Alice Copeland in Aberdeen. They all helped to drive the sale and use of typewriters in Scotland and, in many cases, mediated between manufacturers in America or Europe and customers in Scotland.

In the analysis which follows we will return to the key businessmen and women identified in this chapter, alongside some of their colleagues and competitors. We will look first at retailers and their trading relationship with manufacturers and distributors in the UK and abroad. Not only was the retail sector the first to emerge in the 1870s, but a reasonably sized retail base was necessary to facilitate the establishment of the typewriting offices and schools which followed.

Chapter 3 Scotland's typewriter retailers

Introduction

On March 6, 1901, the Reverend Peter Anton wrote a piece for *The Kirkintilloch Herald* titled 'Choosing A Typewriter' in which he recounted his experience of purchasing a writing machine in Glasgow. The typewriter market in Scotland's most populous city was 'a network of perplexities', a consequence of the fact that 'There is no warehouse where you can find all the different classes and kinds of machines gathered together. Each manufacturer has a separate agent, who confines himself solely to the sale of his machine'. As a result, in choosing a typewriter Anton had to traipse around 'half a score of manufacturing houses'.¹ The situation in Glasgow was repeated in the major towns and cities of the UK. In this chapter, we will look at typewriter retailers in Glasgow, Edinburgh, Dundee and Aberdeen to uncover what lay behind a system in which there was a bewildering range of typewriters available, but no single store to browse between the different makes and models.

To date, studies of typewriters have failed to consider the retail and distribution networks which shaped the market for these new technologies.² This is in contrast to histories of sewing machines, where writers such as Andrew Godley have analysed the international marketing strategies for the Singer Sewing Machine Company.³ Taking inspiration from these studies, this chapter will look at the relationship between typewriter manufacturers, distributors and sellers to better understand the actions of Scotland's leading typewriter retailers as well as the choices they offered to customers.

The focus on sellers is all the more significant as they have generally been neglected by historians of technology, even though Trevor Pinch pointed out 15 years ago that retailers are the missing masses of technology studies.⁴ Typewriter retailers were especially

¹ Peter Anton, "Choosing A Typewriter," *Kirkintilloch Herald*, March 6, 1901, 2.

² Histories which engage in the manufacture of typewriters rarely detail the ways these machines were distributed. For example, see the standard text on typewriter history: Adler, *The Writing Machine: A History of the Typewriter*.

³ Godley, "Selling the Sewing Machine around the World: Singer's International Marketing Strategies, 1850-1920."

⁴ Pinch, "Giving Birth to New Users: How Minimoog Was Sold to Rock and Roll," 270.

important in Scotland as there were no manufacturers based in the country from the 1870s to 1930s.⁵ It was left to them to make arrangements for importing typewriters after which they worked to promote and distribute these devices. As Anton attested, typewriter dealers ‘prosecute their businesses with an energy which seems to imply a profound belief in the merit of their instruments.’⁶ Nevertheless, there were several parallels between Scotland’s trade and the retail sectors in the rest of the UK, the US and Europe. As such, the following analysis sheds light on the nature of the typewriter trade generally, and how it compared with contemporary trades, such as the sewing machine industry, with which it is often considered analogous.⁷

In this chapter, we will also see how the nature of typewriter retail developed in line with the three phases in Scotland’s trade set out in chapter 2. In the pioneering phase, from the mid-1870s to the mid-1880s, retailers sold typewriters as a side-line to more popular consumer durables such as sewing machines. In this period, all of Scotland’s retailers were agents to manufacturers or wholesalers in America and London. Agents were owners of retail outlets who made agreements with manufacturers or suppliers to sell their typewriters. During the take-off phase, from the late-1880s to the early-1900s, the agreements between manufacturers and seem to have become stricter. For example, many agents were now prohibited from selling more than one brand of typewriter, a notable shift from the pioneering era. From the late-1880s we also see the arrival of branch outlets: stores owned by either a manufacturer or a manufacturer’s UK wide distributor, most of which had their headquarters in London. Branches were officially part of the wider typewriter company, making the managers of these outlets employees as opposed to independent agents. While branches were in the minority of retail outlets, their managers were often prominent in the UK’s typewriter trade as only the leading brands tended to set up a directly funded salesforce in Scotland. This period also saw the emergence of ‘teacher-retailers’: shorthand-typing school principals who expanded their institutions to incorporate

⁵ Commercial typewriter manufacturing in Scotland began with the arrival of Olivetti and Remington Rand in the late-1940s.

⁶ Peter Anton, “Choosing A Typewriter,” *Kirkintilloch Herald*, March 6, 1901, 2.

⁷ ‘Nonelectrical Machinery’ in Alfred D. Chandler and Takashi. Hikino, *Scale and Scope: The Dynamics of Industrial Capitalism* (Cambridge MA; London: Belknap Press, 1990), 196–99.

the sale of typewriters. Much of the information which survives on typewriter retailers comes from contemporary accounts of shorthand teachers in magazines pitched to professionals in the sector, such as *The London Phonographer* (1891-1895) and *The Shorthand World and Imperial Typist* (1902-1908).⁸ Then, during the mature phase from c. 1910 onwards, more retailers started to specialise in the sale of typewriters, with far less involved in tuition in typing or related subjects. Retailers did, however, see the value in marketing office technologies alongside typewriters and, in some cases, these salespeople described themselves as office machine specialists or the like. As before, most retail outlets were independent agencies representing a particular brand of typewriter, and it was in this sense at least, that the retail sector of the 1920s and 1930s remained surprisingly similar to the pioneering trade of the 1870s and 1880s.

Importantly, while this chapter focuses on managers and owners of retail outlets, we must keep in mind the important role that employees played. Canvassers, for instance, were employed by retailers to go door-to-door around businesses, professional institutions and educational establishments to secure orders for typewriters. They were also responsible for collecting payments from customers who bought typewriters on an instalment plan, and on some occasions, canvassers had to repossess machines from clients unable to keep up with their payments.⁹ Retailers also employed mechanics who provided repair services for customers and were indispensable to local retailers who were required to fulfil warranty obligations promised by the manufacturer.¹⁰ Clerks were also on hand to help with the day-to-day administration of retail businesses and may well have been called upon to deliver typing demonstrations to prospective customers.¹¹ These employees played an invaluable part in promoting and selling typewriters in Scotland, but for the most part their stories

⁸ See trades journals and magazines in bibliography.

⁹ Correspondence from Howard Robbins to Geo. Salter, 24 October 1911, D4721.D.9.3 Accounts and correspondence, Business Records of George Salter and Co., Staffordshire County Record Office, Stafford, UK.

¹⁰ W. L. Wade, "The Taxation of Land Values," *Highland News*, April 20, 1912, 7. In this article Wade cites the typewriter mechanic as a representative example of a low wage tenant, demonstrating that this was a well-established occupation; "Guarantee.," *The Imperial News* 2, no. 8 (1912): 2.

¹¹ Reference to clerks at London branch of Salter Typewriter Company in correspondence from Heathcote & Coleman (chartered accountants) to George Salter & Co, 19 February 1912, D4721.D.9.3 Accounts and correspondence, Business Records of George Salter and Co., Staffordshire County Record Office, Stafford, UK; for description of Salter's London showrooms see, "London Home of the 'Salter,'" *Typewriter Topics* 30, no. 1 (1915): 56 & 60.

have been lost. Nevertheless, as we analyse the work of retailers, we should acknowledge the employees who made these enterprises a reality.

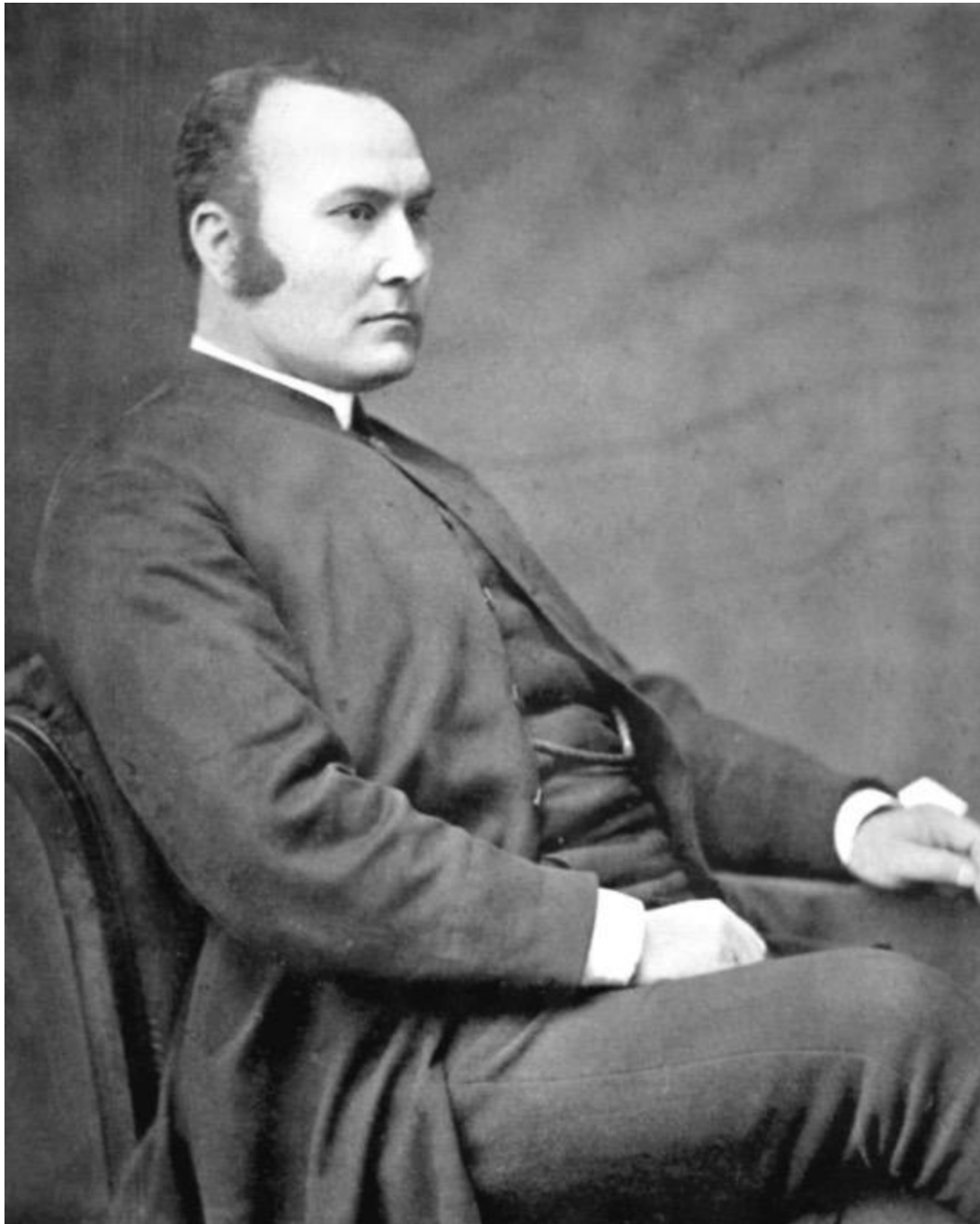


Figure 3.1. The Reverend Peter Anton¹²
Copyright Minister and Presbytery of Kilsyth Burns and Old Parish Church.

¹² John Halliday, "FEATURE: Former Dundee High School Pupil Helped Shape Rugby in Scotland," *The Courier*, 2019, <https://www.thecourier.co.uk/fp/news/local/dundee/997133/feature-former-dundee-high-school-pupil-helped-shape-rugby-in-scotland/>.

Retail during the pioneering phase

In Scotland, the pioneering phase in typewriter retail ran from the mid-1870s to the mid-1880s. The first agents, from around 1876, sold Sholes & Glidden typewriters made by American arms and sewing machine manufacturers, E. Remington & Sons. Early Scottish retailers usually sold typewriters as side-lines to more popular consumer durable goods such as sewing machines, guns or furniture, and included the arms dealer Dougall and Sons, in Glasgow; the sewing machine retailer Isaac Cole & Co. in Edinburgh; and ironmongers G.H. & G Nicoll in Dundee. The Aberdeenshire agents for the Sholes & Glidden, R. C. Annand & Co, had a slightly different background as newspaper proprietors. Nevertheless, there was a logic in printing trade businesses marketing typewriters. The Sholes & Glidden was developed by a printer, Christopher Lathan Sholes, and many of the early testimonials for the machine came from American authors and journalists including Mark Twain.¹³ Twain even wrote that in learning to use the all-capitals typewriter his background as 'A COMPOSITOR IS LIKELY TO BE A GREAT HELP TO ME'.¹⁴

Remington gave Scottish retailers the exclusive right to sell the Sholes & Glidden in a specified town or district, which is supported by contemporary advertisements from agents in Scotland. In a promotional description for the Sholes & Glidden published in the *Dundee Courier* in April 1876, readers were informed: 'Messrs G.H. & G. Nicoll have been appointed agents for the sale of the "type writer" in Dundee, in whose premises it may be seen in operation.'¹⁵ Moreover, an in-depth study into businesses recorded in Scottish newspapers and Post Office directory disclosed no instances of rival agents selling the Sholes & Glidden in the same district at the same time. In fact, by 1878 some retailers used the term 'sole agent' to promote their exclusive territorial sales rights.¹⁶ As well as enticing foreign agents to sell their products, restricting the distribution of typewriters to one agent per district may have been Remington's strategy for avoiding price wars between retailers, which could have eaten into profits.

¹³ Herkimer County Historical Society, *Story of the Typewriter, 1873-1923*, 71.

¹⁴ Mark Adams, "Mark Twain on the Typewriter," Type-Writer.org Celebrating the writing machine, 2018, <https://type-writer.org/?p=5093>.

¹⁵ "The Type Writing Machine," *The Dundee Courier and Argus*, April 5, 1876, 3

¹⁶ For example, John J. Deas, "JOHN J. DEAS Begs to Inform His Friends...," *Dundee Courier*, August 10, 1878, 1.

The reference to territorial sales rights in the advertisements above strongly suggests that written contracts were signed between Remington's sales company in New York and their agents in Scotland. While no such contracts survive, we can speculate on their nature from similar arrangements in the sewing machine trade. From the 1850s it became common practice for American sewing machine manufacturers to distribute their goods through commission agents who received the exclusive rights to sell a particular brand in a specified city or region. Agents bought sewing machines at a discount of 25 to 40 per cent off the retail value and made a profit by selling the machines to customers for the full list price, usually set by the manufacturer.¹⁷ For manufacturers looking to gain a foothold in an overseas market, selling through agents was a less risky alternative to setting up a directly owned sales force. Agents took on the costs of paying salaries, rent, and local advertising. Moreover, as they were often the owners of well-established businesses, they were able to foster trust between local communities and unknown foreign brands.¹⁸ For these reasons, new typewriter manufacturers sought out commission agents to sell their products overseas, in Scotland and elsewhere.

While most of Scotland's early retailers only stayed in the typewriter trade for a few years, as described in chapter 2, the first retailer to achieve long-term success was John J. Deas. From the late-1870s to the early-1890s, Deas was one of Scotland's leading typewriter retailers. On his death in 1903 a friend of Deas wrote of him:

He foresaw the coming of the typewriter, and at a very early stage in the history of the machine he acted as its herald in this and other quarters. There are many Dundonians scattered all over the world who will learn with regret of the death of their old friend John J Deas.¹⁹

¹⁷ See chapter on The Singer Machine Company in David O. Whitten and Bessie E. (Bessie Emrick) Whitten, *The Birth of Big Business in the United States, 1860-1914: Commercial, Extractive, and Industrial Enterprise* (Praeger, 2006), 56.

¹⁸ P. L. Payne, *British Entrepreneurship in the Nineteenth Century* (London: Macmillan, 1974), 41.

¹⁹ "Here And There," *Dundee Evening Telegraph*, August 1903, 4.

Born in Dundee in 1828, Deas was the son of a flax dresser named Thomas Deas. This job involved processing raw flax fibres into yarn after which they were woven into canvas. In the late-eighteenth and early-nineteenth centuries, Dundee had a thriving flax industry before jute became the town's dominant textile product. John J. Deas followed his father into the textile trade, but as an assistant draper – a buyer and seller of fabrics.²⁰ By the late-1850s, Deas owned a store in Dundee selling everything from flannels and blankets to hosiery and tartan handkerchiefs. In the years to come, he would call upon his experience of advertising drapery products as he moved into the sale of sewing machines and typewriters.²¹

Around 1871, Deas put his drapery business to one side to focus on the sale of Glasgow-made Kimball and Morton sewing machines. In advertising his new product, Deas claimed the Kimball and Morton 'broke the American Monopoly in Sewing Machines' adding 'he is now devoting his whole time to the disseminating of these most useful articles.'²² In 1874, he became an agent for the Howe Sewing Machine Company – an American brand with a strong presence in Scotland.²³ Howes were manufactured in Bridgeton, Glasgow from 1870 and within two years their new factory was producing 41,000 sewing machines per year.²⁴ Deas supported domestic products when it helped him to sell sewing machines, but he could be just as enthusiastic about the sale of foreign inventions, especially from America, which he enthusiastically described as 'Yankee notions'.²⁵

Not content with selling sewing machines alone, in November 1876 Deas realised his greater retail ambitions in opening Deas's Royal Machine Depot. In an advertisement for his new store, Deas explained:

²⁰ Census record (1851) for John S Deas, aged 22 (assumed that S was mistakenly transcribed from J), Cowgate, 7, Dundee, Forfarshire (Angus), Scotland, found through Findmypast.co.uk.

²¹ John J. Deas, "New Flannels...", *Dundee People's Journal*, September 24, 1859, 1.

²² John J. Deas, "Kimball & Morton's Sewing Machines," *Dundee Courier*, August 19, 1871, 4.

²³ Deas listed as 'manager, "The Howe Machine Company," in "General Directory," in *The Dundee Directory for 1874-1875* (Dundee: James P. Mathew & Co, 1874), 129.

²⁴ "Howe (& New Howe) Machine Company (Glasgow)," NeedleBar, 2013, http://needlebar.org/nbwiki/index.php/Howe_Sewing_Machine_Company.

²⁵ See promotion for The "Caligraph" Office at 92 Union Street, Aberdeen in John J. Deas, "Advertisements," in *Post-Office Aberdeen Directory, 1884-1885* (Aberdeen: A. King and Company, 1884).

Ever since I went into the Sewing Machine Business six years ago, I felt convinced that there was an opening in Dundee for an Office where any kind of a Machine could be got. With the co-operation of some of the Largest Companies in the World, this idea has at length reached fruition in the Opening of DEAS'S ROYAL MACHINE DEPOT²⁶

As well as providing the 'largest variety of sewing machines in Scotland' Deas sold knitting machines, darning machines, sweepers, gas stoves, telescope brushes, travelling companions, ladies' companions, desks, musical boxes, pen holders and pin cushions. He also returned to his old drapery lines offering Scotch tweeds, Scotch carpet and French silks. But for Deas, the most exciting of his new products were the Remington made Sholes & Glidden 'Type-writing Machines' which he sold for '£40, £26 and £21.'²⁷ These were pricey machines considering the average annual income was around £43 at the time.²⁸

Deas's 'co-operation' with the largest companies in the world gives us some insight into the agreements between retailers in Scotland and manufacturers in America. A letter from Deas published years later recalls how in October 1876 he had arranged to become the Dundee agent for the Sholes & Glidden typewriter.²⁹ Deas confirmed this deal by corresponding with E. Remington & Sons (the manufacturers in New York) and G. H. & G. Nicoll (the incumbent agents in Dundee). This was a bold move by Deas considering Nicoll had failed to sell a single typewriter in the previous nine months of their agency. Undeterred, Deas was convinced the typewriter had a future and initially at least his enthusiasm paid off. In his first month as agent, Deas sold four Sholes & Gliddens.

²⁶ John J. Deas, "A Long Felt Want Completely Supplied," *Dundee Courier*, November 25, 1876, 4.

²⁷ Deas, 4.

²⁸ Rosen, "Income vs Expenditure in Working-Class Victorian England."

²⁹ John J. Deas, "'Penelope' and the Type-Writer," *Dundee Evening Telegraph*, May 22, 1883, 2.



Figure 3.2. Portrait of John J. Deas.
Taken by John Robertson, a Dundee based photographer, c. 1880.
Image courtesy of Andrew Cronshaw.

While Deas was exceptional in the level of success he achieved, his experience in the import of consumer durable goods was similar to that of his contemporaries. As we have seen, the first agents in Edinburgh were Cole & Co, who sold sewing machines, while in Glasgow the

arms manufacturer and dealer Dougall & Sons, were the first to sell the typewriter. By the mid-1870s, Remington & Sons were world-famous manufacturers of sewing machines and guns, so it seems likely that Scottish businesses such as Cole & Co, Dougall and Deas already had connections with the distributors of Remington products and used these contacts to secure the selling rights to Remington typewriters. As such, early Scottish typewriter retailers were representative of commission agents generally who, according to business historian Peter Payne: 'often enjoyed greater accessibility to certain trades because of previous or current experience with a related line'.³⁰ With little precedent for the widespread distribution of typewriters, these new technologies were initially marketed by businesses already active in the sale of related consumer durables.

While many of his contemporaries were leaving the typewriter trade, Deas continued to develop his connections with leading figures in the industry. Perhaps the most influential was George Washington Newton Yost, who was part of the team that secured the manufacturing contract between typewriter inventor Christopher Latham Sholes and E. Remington & Sons in 1873.³¹ From the mid-1870s, Yost was a partner in Densmore, Yost & Company, followed by Locke, Yost & Bates. These New York based firms were responsible for the worldwide distribution of Remington typewriters.³² After leaving Remington around 1876, Yost began developing a new typewriter which he dubbed the Caligraph, setting up the American Writing Machine Company in 1880 to manufacture and sell the machine.³³ Around 1882, Yost sent one of his typewriters to Deas in Scotland, which was reputedly the first Caligraph to arrive in Europe.³⁴ Impressed by the new typewriter, Deas ended his contract with Remington and put his full support behind the rival Caligraph.

³⁰ Payne, *British Entrepreneurship in the Nineteenth Century*, 41.

³¹ Herkimer County Historical Society, *Story of the Typewriter, 1873-1923*, 54.

³² Herkimer County Historical Society, 82.

³³ Robert and Weil, *Typewriter: A Celebration of the Ultimate Writing Machine*, 42.

³⁴ John J. Deas, "Correspondence: Origin of the Type-Writer," *Dundee Evening Telegraph*, June 8, 1891, 2.



Figure 3.3. Portrait of George W. N. Yost.
The Caligraph Quarterly Vol 1, No. 4 (New York, December 1883).

Deas had his Caligraphs imported on steamships such as the S.S. *Devonia*, which sailed on the Anchor Line – a weekly service between New York and Glasgow.³⁵ The first Caligraphs arrived in Scotland in 1883, and by the following year Deas was importing up to 12 cases per month.³⁶ Going by surviving evidence from other manufacturers, it is likely each case held one typewriter.³⁷ With a conservative estimate of 50 typewriters imported for the year, and with Caligraphs retailing at around £17 at the time, we can approximate that Deas’s annual

³⁵ “The Anchor Line,” Dalmadan, 2014, <https://www.dalman.com/?p=167>.

³⁶ “Entries, 3rd and 4th April,” *Clyde Bill of Entry and Shipping List*, April 5, 1884, 1.

³⁷ Discussions with typewriter historian Peter Weil indicated that in his experience cases held only one machine. See also, Peter Weil, “Ephemera,” *Journal of the Early Typewriter Collectors’ Association*, no. 89 (2010): 6–8.

sales revenue may have reached as high as £850 from typewriter sales alone.³⁸ If we then assume that he received these Caligraphs for a discount of around 45 per cent (which as we will see was the discount offered to agents for the Hall Typewriter Company at the time) Deas's gross profit may have surpassed £380 annually. Several expenses would have cut into Deas's gross margins including wages for salespeople and assistants at his branches in Dundee and Aberdeen; rent and bills on his properties; transportation; and advertising about which Deas was incredibly enthusiastic. While it is difficult to estimate his net profit, there was clearly scope for a reasonable living to be made from the sale of Caligraph typewriters.

By 1884, Deas was promoting himself as 'Agent-In-Chief' for the Caligraph with his Dundee home at Ryehill House listed as the Head Office for Europe.³⁹ To help with distribution, agents for the Caligraph were appointed in London, Glasgow, Edinburgh, Aberdeen, Montrose and Manchester.⁴⁰ For the Scottish agents at least, we can reasonably assume Deas played a role in their appointment.

In Glasgow, the sale of Caligraphs was handled by stationer and printing machinery dealer A. C. Thomson.⁴¹ Unlike Deas, who focused almost entirely on the sale of Caligraphs, Thomson gained the rights to rival brands. By 1886, amongst other makes, Thomson was selling the Hall – a simpler and cheaper alternative to expensive Remington and Caligraph typewriters. While the design of the Hall is discussed in the following chapter, what is significant here is that Thomson did not import these machines directly from America. Instead, he sourced these typewriters from Witherby & Co, a London firm in the printing trade established in 1740, who were the UK wide distributors for the Hall.⁴² An 1883 contract between The Hall

³⁸ Prices for Caligraphs in "The Caligraph Quarterly," *The Caligraph Quarterly* 1, no. 4 (1883): 1, <https://www.typewritergazette.com/trade-literature-a-e>.

³⁹ John J. Deas, "The American Writing Machine Company's 'Caligraph,'" *Dundee Advertiser*, November 24, 1884, 3.

⁴⁰ Deas, 3.

⁴¹ A. C. Thomson, "Do Your Own Printing!," *Glasgow Herald*, July 1, 1884, 1.

⁴² Sarah Cosgrove, "Witherbys Rebrands and Celebrates 275 Years in Business," *Printweek*, 2015, <https://www.printweek.com/news/article/witherbys-rebrands-and-celebrates-275-years-in-business>.

Type-Writer Company and Witherby & Co sheds light on the obligations and entitlements of manufacturers in America and retailers in the UK.

The first clause of the Hall contract focuses on territorial rights with Witherby granted 'exclusive control and sale of the said Type-Writing machines' for 'the territory of Great Britain, Ireland, Isle of Man, and the Channel Islands'.⁴³ Witherby were restricted from making sales in France, Belgium, Spain and Germany, where we can assume the Hall Type-Writer Company already had an agency agreement or such negotiations were underway. While Witherby & Co were permitted to sell Hall typewriters in overseas territories without an agency, they would be obliged to cease trading if the Hall Type-Writer Company later decided to establish an agency of their own.⁴⁴ This meant the Hall Type-Writer Company could guarantee new agents the exclusive rights in a specified region, without competition from Witherby or any other foreign agents.

A significant portion of the Hall contract dealt with wholesale and retail prices. Witherby would receive each typewriter at a discount of 45 per cent off the agreed retail price, which was broadly in line with discounts offered to sewing machine agents at the time. In the 1883 contract, a 'Type-Writer, complete in Case' was listed at £8.0.0, meaning that Witherby purchased each machine for £4.8.0., leaving a gross margin of £3.12.0. Significantly, the contract required that 'the list of prices for the purpose of this contract, not to be changed without the mutual consent in writing of the parties'.⁴⁵ This requirement may have safeguarded Witherby against the Hall Type-Writer Company unexpectedly raising the retail price, thereby increasing the wholesale cost. But as it turned out, there was upward flexibility in the list price, as when the Hall typewriter went on sale in the UK in 1884 the retail price had increased to £8.8s⁴⁶

⁴³ "Agreement for the Control and Sale of the Hall Typewriting machine in Great Britain, Ireland, Isle of Man and the Channel Islands" (14/10/1883), reference LMA/4682/D/02/002, in the Witherby and Company Limited (Printers and Stationers) collection, held at London Metropolitan Archives, London.

⁴⁴ "Agreement for the Control and Sale of the Hall Typewriting machine in Great Britain..."

⁴⁵ "Agreement for the Control and Sale of the Hall Typewriting machine in Great Britain..."

⁴⁶ "The 'Hall' Type-Writer," *Illustrated London News*, September 6, 1884, 23; John J. Deas, "Last Day," *Aberdeen Journal*, March 21, 1884, 1.

The more likely reason for setting minimum retail prices was to prevent Witherby and their UK subagents from offering discounts to UK customers, as well as avoiding price competition with agents for the Hall in Europe. Like the clauses on territorial rights, price restrictions ensured a level playing field for all Hall agents operating in different countries or regions. Restricting discounts also prevented retail prices from spiralling downwards which might have eventually forced a lowering of the wholesale value, thereby cutting profits for the Hall Type-Writer Company. Minimum retail pricing remained a standard feature of typewriter contracts into the following century.⁴⁷ While manufacturers felt price restrictions-maintained profits, retailers often found these rules prohibitive. In some cases, retailers even offered unofficial discounts to customers, which went unrecorded in the company's accounts.⁴⁸

In terms of production and orders, the Hall contract placed obligations on both parties. Witherby & Co were required to purchase no less than 360 machines per year, for distribution across the whole of the UK.⁴⁹ If sales went well Witherby could demand up to 50 machines per month delivered within 30 days of the receipt of the order. These were small but not insignificant figures, considering that production of the Remington Standard No 2 in 1883 (the most widely sold typewriter at that time) was just under 4,000 units per year.⁵⁰ The minimum order clause of 360 per year constituted a reasonable guarantee for the Hall Type-Writer Company at a time when the worldwide market for typewriters was in its infancy.

The agreement obliged Hall Type-Writer Company to keep up with their manufacturing commitments, with a notable safeguard built into the contract: if Hall were unable to supply 50 machines per month, Witherby were entitled to 'manufacture under the said letters

⁴⁷ See Article 3 of "Draft contract between Imperial Typewriter Company Limited & Imperial Sales Company", May 22 1915, Box DE1535/13 "Export Contracts", Record Office for Leicestershire, Leicester and Rutland, Leicester.

⁴⁸ "Tricks of the Trade," *Imperial News* 1, no. 3 (1912): 1-2.

⁴⁹ "Agreement for the Control and Sale of the Hall Typewriting machine in Great Britain, Ireland, Isle of Man and the Channel Islands" (14/10/1883), ref LMA/4682/D/02/002, in the Witherby and Company Limited (Printers and Stationers) collection, held at London Metropolitan Archives, London.

⁵⁰ "Remington Typewriter Serial Numbers," Typewriter Database, 2020, <https://typewriterdatabase.com/remington.42.typewriter-serial-number-database>

patent, and sell such machines as if the party of the first part [Hall] had supplied them, paying to such party of the first part the sum of £1.0.0. sterling per machine so manufactured.⁵¹ However, there is no record of any Hall typewriters being manufactured by Witherby in the UK. It also seems unlikely that Witherby would have ever demanded more than 50 machines per month (600 per year) considering that production of Hall typewriters for the US, UK and all other foreign markets was around 1,000 per year from 1881 to 1894.⁵²

Regarding advertising, the Hall contract required Witherby & Co to: ‘properly advertise the said Type-Writing machines, throughout the said territory; but according to his own discretion as to what is proper.’ Witherby were even required to provide ‘printed or written instructions in its operation, where sold in said territory.’ Marketing and promotion in the UK were entirely delegated to Witherby, which was a striking difference from the more internationally integrated advertising campaigns pursued by typewriter manufacturers later in the century. It was then added that Witherby were required to use: ‘the influence and prestige’ of their ‘house’ to promote the sale of Hall typewriters.⁵³ This gives us an insight into the attractiveness of the agency system to the Hall Company as they felt that an established company like Witherby brought credibility to their products, which was all the more important considering the lack of public awareness around typewriters. The balance between local and international advertising will be discussed in greater detail in the following chapter.

One of the most striking aspects of this short four-page contract was what was not included. Crucially, there was no requirement for Witherby & Co – and presumably their sub-agents – to only market one brand of typewriter. This is what allowed A. C. Thomson in Glasgow to sell the Hall typewriter alongside the Caligraph and other brands.⁵⁴ Until the mid-1880s, the

⁵¹ “Agreement for the Control and Sale of the Hall Typewriting machine in Great Britain...”, p. 2.

⁵² “Hall Typewriter Serial Numbers,” Typewriter Database, 2020, <https://typewriterdatabase.com/hall.430.typewriter-serial-number-database>.

⁵³ “Agreement for the Control and Sale of the Hall Typewriting machine in Great Britain...”, p. 2.

⁵⁴ Thomson promoted the Caligraph, Hall and Columbia typewriters at the Edinburgh International Exhibition in 1886. See “The International Exhibition: Stationery, Printing, And Bookbinding,” *The Edinburgh Evening News*, May 18, 1886, 2.

contracts between typewriter manufacturers and their distribution partners placed several restrictions on the latter but did not yet oblige retailers to sell only one brand. Typewriters were still relatively new and obscure devices, and as such, manufacturers were content with gaining any foreign agency deals that they could lay their hands on.

From the mid-1880s, as demand for typewriters continued to grow, more retailers vied for sales agreements with manufacturers in America and Europe. This gave manufacturers leverage to demand that agents sell only their brand of typewriter and that they focus on the sale of typewriters over other products. This shift is illustrated by the story of William Eglin & Co. in Glasgow who served as the agents for Remington typewriter from around 1882 to 1887. Like the earliest retailers of the late-1870s, Eglin & Co. sold Remington typewriters alongside a range of weird and wonderful imported goods, as we can see from Figure 3.4, included “Simplex” folding chairs, “Howe” weighing machines and Harden Star hand grenades for extinguishing fires. Eglin’s commitment to the sale of Remington typewriters was further diluted when they began selling the Hammond typewriter in 1887.⁵⁵ The Hammond was an early competitor to the Remington typewriter, which like the older machine was manufactured in New York State.

⁵⁵ In 1887, Eglin & Co were listed as sole agents for the Hammond and the Remington, see “General Directory” in *Post Office Glasgow Directory for 1887-1888*, 239.

TELEPHONE No. 1095.

WILLIAM EGLIN & CO.,
 AMERICAN FACTORS AND MERCHANTS,
 124 QUEEN STREET,
 GLASGOW.

SOLE AGENTS FOR

The Remington Type Writer.—This Machine is now coming into large use, and where there is considerable correspondence it cannot profitably be dispensed with. In the course of a few weeks a smart boy or girl can write from 60 to 80 words per minute, being three times quicker than can be done with the pen. Can be seen at work, and every facility given for practice.

Cash Distributor.—Eglin's Patent, No. 12,601. This simple and handy Machine will be found invaluable in all Shops, Warehouses, Cash Desks, and Pay Offices.

The Alarm Cash Drawer.—This Till makes a perfect Day Safe. Locks by simply shutting up, and requires no key.

The "Simplex" Folding Chairs and Settees.—Calton & Eglin's Patent, No. 24,690. Inspection of this, the latest development in folding up furniture, is respectfully invited.

Inlaid and Perforated 3-Ply Veneers.—Extensively used for fitting up Restaurants, Smoking and Billiard Rooms, Waiting Rooms, Public Houses, &c. Estimates given for material alone or fitted up to Specification.

Settees, Chairs, and Stools.—Large variety for House, Office, Warehouse, or Shop use.

American Cane Furniture.—Large Stock of Chairs, Settees, and Lounges, with arms or rockers. We have secured the sole Agency of the largest Manufacturer. Lowest quotations, either for Export, Wholesale, or Retail.

Single and Double Spring Hinges, for Swinging Doors and Door Springs. Inspection respectfully invited. Can be applied either to the standards or in the floor, and effectually prevent slamming, where this is desired.

"Yale" Locks.—These are the only Locks made which cannot be picked, and where perfect security is desired should invariably be used. They are made in most extensive variety, suitable to every purpose. The key being a small flat piece of hard steel, is most durable and handy for the pocket. By the "Yale" system a master key can be adopted which will open all the doors or lock-fast places in house or office.

The "Howe" Weighing Machines.—Most reliable, durable, and accurate made.

"Spurr's" Veneers.—Can be applied with paste to Walls, Dados, and all the wood work of a room, giving all the effects of solid woods at a fourth of the cost. In order to show the handsome effect of this style of decoration, we have fitted up a room with it here, which we shall be glad to show, and to give fullest information and prices.

American Boiler Tube Cleaner.—Made in three sizes. Ten Tubes per minute can be cleaned with it.

The Harden "Star" Hand Grenade.—For extinguishing fire, small and convenient for handling. The principal Public Buildings, Warehouses, and Places of Amusement in London and Glasgow have been fitted with them. Prices and full particulars on application.

Calman's American Varnishes, American Wood Work in Doors, Mouldings, &c. American Barb Wire Fencing.

The "Audiphone."—For enabling the deaf to hear.

CONSIGNMENTS SOLICITED FOR DISPOSAL IN U.S., AND ANY BUSINESS
 TRANSACTED THROUGH OUR HOUSE IN NEW YORK.

NEW YORK OFFICE—29 CHAMBERS STREET.

TELEPHONE No. 1095.

Figure 3.4. Advert for William Eglin & Co. in *Post-Office annual Glasgow directory, 1885-1886*.

Digitized by NLS.

Eglin's promotion of the Hammond typewriter may well have troubled Wyckoff, Seamans & Benedict (WS&B) who took over had as the manufacturers and worldwide distributors for Remington typewriters in 1886, while also establishing a new office in London to oversee the sales across the UK.⁵⁶ It was possibly due to Eglin's partial representation of the Remington that WS&B transferred the agency rights to Charles H. Barclay around early-1888. Barclay was a merchant based at Waterloo Place, Glasgow, who, in return for the 'sole' selling rights in Scotland was probably compelled by WS&B to only sell Remington typewriters.⁵⁷ Barclay, more so than Eglin, put the Remington at the front and centre of his advertisements, often with an illustration of the typewriter and a more detailed description of potential users, as illustrated in Figure 3.5.

**THE REMINGTON
STANDARD TYPE-WRITER.**

The KING of Type-writers; the most durable and the most rapid Type-writing machine extant. 10,000 sold last year and sales increasing. Testimonials from Mer-



chants, Government Officials, Ministers, Authors, Journalists, Stenographers and "All sorts and conditions of men." For Price Lists and particulars apply to—

**CHARLES H. BARCLAY, Sole Dealer in Scotland,
6 WATERLOO STREET, GLASGOW.**

MSS. copied in single and manifold form at moderate charges and with despatch. Strictest confidence and neatness guaranteed.

Call and see the machines at work.
Agent for "The Shannon File Co. (Limited)."
" "All class of Insurances, Fire, Life, Marine, &c."

INTERNATIONAL EXHIBITION, GLASGOW.
Exhibited in Court 11, General Section; also in Women's Industries Section.

Figure 3.5 Barclay's illustrated advertisement for the Remington. In *Post Office Glasgow Directory* for 1889-1899. Digitized by NLS.

⁵⁶ Herkimer County Historical Society, *Story of the Typewriter, 1873-1923*, 93.

⁵⁷ Barclay promotion for Remington Standard Type-Writer in "Advertisements," in *Post Office Glasgow Directory for 1888-1889* (Glasgow: William Mackenzie, 1888), 203.

By the end of the 1880s, Remington typewriters were big business, with at least 15,000 machines manufactured annually for the worldwide market.⁵⁸ As the demand amongst agents grew, WS&B were able to impose stricter conditions on retailers, such as Barclay, who wanted to sell the Remington. For agents who did not want (or could not get) the rights to the Remington, there were a growing number of alternatives such as the Caligraph and the Hammond. Like the Remington representatives, most agents now tended to only sell a single brand of typewriter and focused on promoting typewriters over other lines.

Retailers during the take-off of the typewriter trade

In chapter 2 we saw that there was a take-off in the number of retailers from the late-1880s onwards. Between 1890 and 1910 the number of businesses selling typewriters in Glasgow, Edinburgh, Dundee and Aberdeen grew from six to 49. This period also saw a few of the leading typewriter brands follow in Singer's footsteps by establishing *branches* which were retail outlets owned either by the manufacturer or a UK-wide wholesaler. The first branch outlet in Scotland was opened by W. J. Richardson in 1889. Richardson, whose headquarters were in London, was the UK-wide distributor for the American Bar-Lock typewriter.⁵⁹ The new branch came the year after an exhibit at the Glasgow International Exhibition where the Bar-Lock, represented by Richardson's firm, was positively reported on in the press.⁶⁰ Yet it was not until the late 1890s that other leading manufacturers such as Remington, followed by Underwood and Royal, also set up branches in Scotland. However, for the most part, foreign typewriter manufacturers continued to distribute their goods in Scotland through licensing agreements with independent agents, avoiding the costs of setting up company-owned branches.

As before, most typewriter businesses were run by individuals with experience in the sale of related goods, such as the stationery trade. Yet this period also saw the emergence of a new type of seller: the 'teacher-retailer'. They were the owners and managers of shorthand-typing schools who expanded their institutions to include the sale of typewriters and

⁵⁸ "Remington Typewriter Serial Numbers," Typewriter Database, 2020, <https://typewriterdatabase.com/remington.42.typewriter-serial-number-database>

⁵⁹ "The Bar-Lock Type Writer," *Glasgow Evening Post*, March 7, 1889, 5.

⁶⁰ James Paton, "Glasgow International Exhibition: Printing and Stationery," *Glasgow Herald*, June 16, 1888, 9.

supplies. In some cases, a single person was involved in both, but with the growth of businesses, there were a few instances where one person handled the teaching side, while another managed retail. Similarly, while the teaching and retail aspects might happen on the same premises, as was the case with McAdam's Institution discussed at the start of chapter 2, in other cases, retail would be concentrated in one property with teaching in another. This was how James Leishman ran his Edinburgh typewriter agency and typing school in the early 1900s.

By 1905 around 15 out of 42 retail outlets across the four principal cities also offered typing tuition.⁶¹ Strikingly, the proportion of teacher-retailers in Glasgow was much lower than in the other three principal cities. In Glasgow in 1905, one out of 14 retail outlets were recorded as also offering typing tuition. Meanwhile, in Edinburgh it was nine out of 15; Dundee, two out of six; and Aberdeen, three out of seven. It seems in Glasgow, more than the other cities, typing tuition was provided by larger commercial colleges, such as the Glasgow Athenaeum, which were not involved in retail. The reasons behind these differences are not entirely clear. It may have been that in Scotland's smaller cities, businesses that focused solely on either retail or teaching were less viable. Instead, businesspeople in Edinburgh, Dundee and Aberdeen chose to set up businesses offering a wide portfolio of typewriters and typewriter services.

Teacher-retailers differed from pioneer retailers in that they saw their professional identity as educators who also sold typewriters. In an interview with George McAdam at his commercial college and typewriter agency in Edinburgh, most of the discussion focused on education, with only slight references to his involvement in retail. Nevertheless, there was a commercial logic in combining teaching establishments with retail as the men and women that ran these institutions had a vested interest in selling typewriters to businesses and government institutions to which they could supply trained typists. Successful typing teachers even used their good-standing to back certain brands based on their experience using typewriters professionally.

⁶¹ Figures from the Typewriter Businesses Database.

A shared trait of many teacher-retailers was their background as shorthand writers and teachers, which reflected the longstanding relationship between shorthand and typewriting.⁶² Typewriting became particularly associated with the use of phonetic versions of shorthand, such as Pitman's, with practitioners often referred to as phonographers. Shorthand societies developed and maintained the networks of teacher-retailers as well as other principal actors in Scotland's typewriter trade. In 1901, council members for the Edinburgh Shorthand Writers' Association included James Leishman, the shorthand-typing school teacher and typewriter agent; Edward Coventon, Secretary of the Typewriting Association (a branch of the Scottish Phonographic Association); and Ethelinda Hadwen, Scotland's pioneering typewriting office owner and a member of the Scottish Society of Typists.⁶³ While Hadwen seems to have been in the minority, from their establishment in the 1870s and 1880s, shorthand associations usually welcomed women members.⁶⁴

For James Leishman, Scotland's shorthand community was nothing short of life-changing. Born in West Linton in 1864, Leishman was the son of a domestic servant and received only a rudimentary education in childhood. In 1881, he moved to Edinburgh where he was employed as a clerk for the Post Office while also taking night classes in History and English literature at Heriot-Watt Training College. In 1885 he enrolled on a shorthand course organised by the Scottish Phonographic Association (SPA) finishing top in a class of 200. With this success, Leishman felt that he had found his calling and soon after he was employed by the SPA as a librarian, instructor and examiner.⁶⁵ By the mid-1890s, Leishman was a distinguished member of the SPA and at only 30 years of age he was delivering speeches at the Association's annual meetings where he met local dignitaries such as Lord Kingsburgh.⁶⁶

⁶² Holcombe, *Victorian Ladies at Work: Middle-Class Working Women in England and Wales, 1850-1914.*, 143.

⁶³ "Scottish Phonographic Association," *North British Daily Mail*, April 9, 1901, 3.

⁶⁴ "Aberdeen Shorthand Writers' Association," *Aberdeen Press and Journal*, April 26, 1879, 3.

⁶⁵ Jack Alexander, *McCrae's Battalion: The Story of the 16th Royal Scots* (Edinburgh: Mainstream Publishing, 2003), 59.

⁶⁶ "Scottish Phonographic Association's Majority," *Edinburgh Evening News*, March 12, 1895, 2.

The SPA was the springboard for Leishman's teaching and retail career. In 1892, he founded the 'Typewriting and Shorthand Class Room' on Chambers Street in Edinburgh's Old Town.⁶⁷ The following year Leishman became the Edinburgh agent for the Remington typewriter which coincided with him opening a new outlet on North St David Street, near St Andrew Square in the New Town. His new premises was situated amid several banks and public offices, which were the very types of institutions that were starting to adopt typewriters.⁶⁸ Leishman's store was less than a ten-minute walk from four typewriting offices: Hadwen & Fleming; Broun & Findlay; Jessie A. Baird; and Mrs Waller Paton's typewriting office. These businesses may well have been among Leishman's retail customers as we know that typewriter stores offered discounts on supplies of between 7.5 and 10 per cent to local typewriting offices.⁶⁹

Over the following years, Leishman's business went from strength to strength. By the time he retired from the typewriter trade in 1911, Leishman and Hughes (as his company was then known) was reportedly the largest typewriter business in Scotland.⁷⁰ Leishman then took on a new role as Chairman of the Scottish Insurance Commission, the body charged with implementing the health insurance scheme introduced by Asquith's Liberal government, and in 1914 he was knighted in recognition for his work on the project.⁷¹ From relatively humble beginnings, he had become a figure of national distinction. Leishman's rise to political and social prominence was in no small part down to the commercial success he achieved through his early engagement with Scotland's shorthand and typewriting communities.

⁶⁷ See 'Education Directory' in *Post-Office Edinburgh & Leith Directory 1892-1893* (Edinburgh: Morrison and Gibb, 1892), 686.

⁶⁸ *Black's Guide to Edinburgh, the International Exhibition and the Environs* (Edinburgh: Adam and Charles Black, 1886).

⁶⁹ *Pitman's Typewriter Manual*, Fifth Edit (London: Sir Isaac Pitman & Sons Ltd, 1904), 77.

⁷⁰ Alexander, *McCrae's Battalion: The Story of the 16th Royal Scots*, 59.

⁷¹ "Sir James Leishman, Notable Edinburgh Citizen's Death," *The Scotsman*, September 28, 1939, 8.

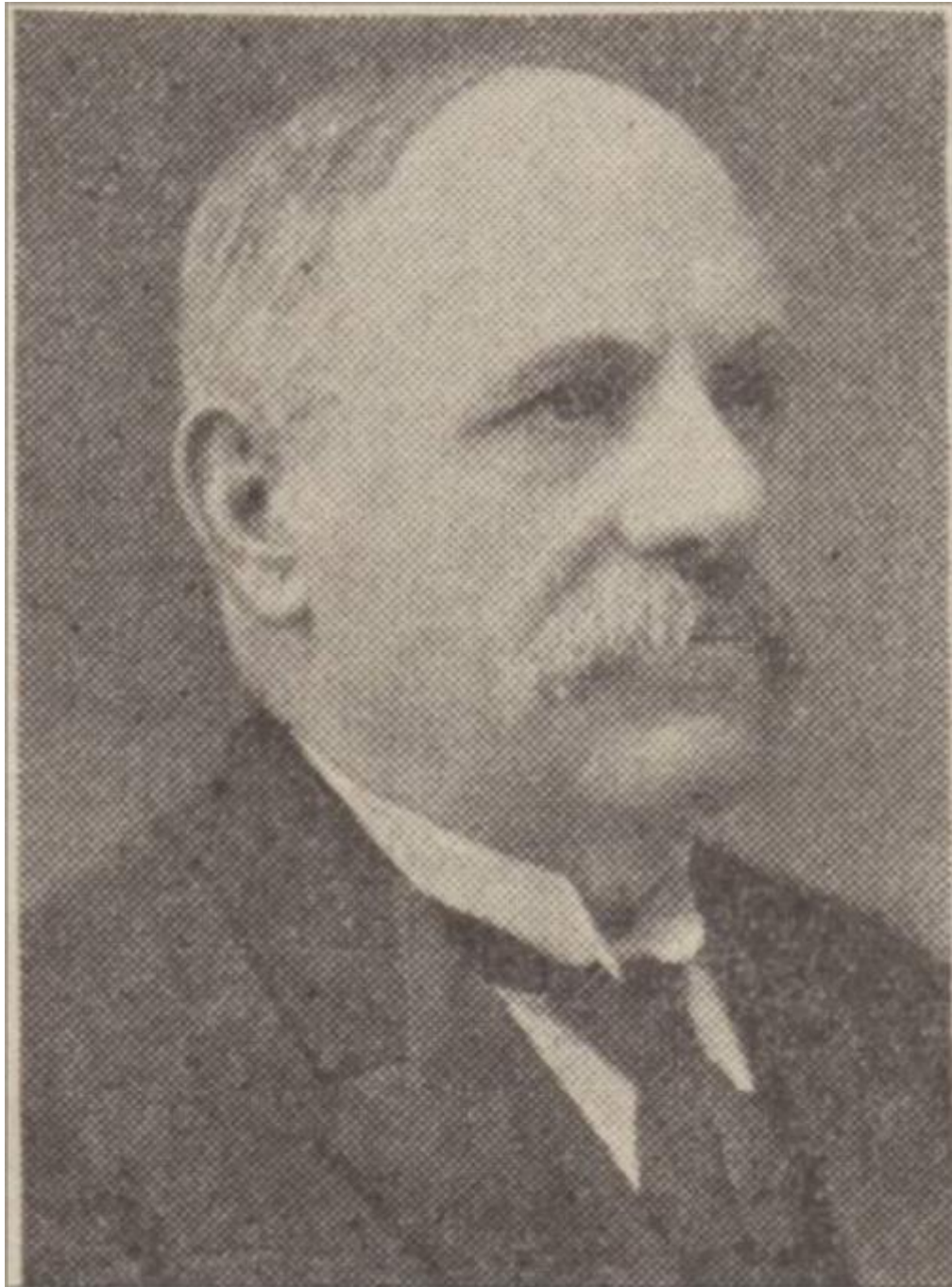


Figure 3.6. Sir James Leishman. *Edinburgh Evening News* (September 27, 1939), 8. Image copyright Johnston Press plc. Image created courtesy of the British Library Board.

Leishman was not the only retailer to use shorthand societies as a platform for promoting their commercial interests. In Edinburgh in 1907, the SPA hosted the annual meeting of the Incorporated Phonographic Society (IPS), which was attended by leading figures in Scotland's shorthand and typewriter scene including James Leishman and Frederick Whiteley.

Born in England in 1864, Whiteley moved to Scotland early in his career and entered the typewriter trade in the early-1890s.⁷² From 1892, with his wife Carrie, the pair ran a commercial school and typewriter store which sold second-hand machines, and from 1897 they were also agents for the Empire typewriter, made in Canada⁷³ The educational side of the business seems to have been particularly successful with Whiteley's Business College providing typing and shorthand tuition in Edinburgh well into the 1930s.⁷⁴

Whiteley used the SPA conference to express his discontent at the lack of engagement that the IPS had with the Scottish shorthand community. The opening address at the conference titled 'The History of the Incorporated Phonographic Society; its objects, its work, and its organisation' was delivered by Edward Cope, vice-president of the IPS.⁷⁵ Like many prominent members of the IPS, Cope lived in London where he was the chairman of the London Phonetic Shorthand Writers Association.⁷⁶ The address was followed by a discussion in which most of the delegates pushed for the amalgamation of the various shorthand societies throughout the UK. This resulted in an objection from Whiteley who argued that 'when the conference had only been held once in 16 years in Scotland, they could not expect to make much headway in that country'.⁷⁷ His complaint got at the England-centric nature of the UK's shorthand and typewriting community, which Whiteley perhaps felt was epitomised by London-based figures such as Cope.

Whiteley's criticisms may also have referenced the fact that most leading typewriter manufacturers had their UK headquarters in London, with Scottish branches sometimes categorised as provincial outlets. Crucially, this had not always been the case. Back in the 1880s American manufacturers had traded directly with Scottish agents like John J. Deas, but by the early 1900s, the UK's trade was firmly focused on London. In fact, by the turn of

⁷² Scottish census record (1911) for Fred Whiteley, aged 47, Haymarket, Edinburgh, reference 685/1 21/ 19, record accessed at Scotlandspeople.gov.uk

⁷³ See promotion for Whiteley's Business College in advertisements section in *Post-Office Edinburgh & Leith Directory, 1897-98* (Edinburgh: Morrison and Gibb Limited, 1897), 32.

⁷⁴ "Whiteley's Business College," *Linlithgowshire Gazette*, August 21, 1936, 1.

⁷⁵ "Phonographers in Conference in Edinburgh," *Aberdeen Press and Journal*, September 9, 1907, 6.

⁷⁶ Biography of Edward Cope in *The Shorthand World and Imperial Typist Volume 1 February, 1902, to January, 1903* (London: Guilbert Pitman, 1903), 172-73.

⁷⁷ "Phonographers in Conference in Edinburgh," *Aberdeen Press and Journal*, September 9, 1907, 6.

the century we find that some of Scotland's leading retailers had started their careers in London after which they were appointed to branches in Glasgow or Edinburgh in the hope of replicating their success north of the border. This may well have caused resentment among longstanding retailers in Scotland, such as Frederick Whiteley.

Arthur Ernest Morton was one such teacher-retailer who relocated from London to Edinburgh to promote his company's brand in Scotland. Born in London in 1866, Morton started as a teacher of shorthand and typewriting at the Regent Street Polytechnic in 1889. From 1890, Morton also wrote manuals on typewriting, including the popular series *Modern Typewriting and Manual of Office Procedure* published by the Smith Premier Typewriter Company. Morton gave lectures on the history and development of typewriters for the Royal Society of Arts as well as contributing articles to shorthand and typewriting magazines including the *London Phonographer* and *The Shorthand World and Imperial Typist*.⁷⁸ Around 1898, the Smith Premier Typewriter Company appointed Morton as their representative in Edinburgh where he also worked as a teacher of typewriting, shorthand and related subjects.

An 1898 advertisement, reproduced in Figure 3.8, promoted Morton's new school in conjunction with the sale of Smith Premier typewriters. Around three quarters of the advert is devoted to Morton's school and his experience in teaching. This is underlined by an impressive list of credentials including a CTP, which presumably stood for Certificated Teacher in Phonography. Also highlighted are his 1895 Silver Medal from the Society of Arts, which was a leading provider of typing and shorthand qualifications. The focus on Morton's credentials suggests he wanted to be viewed as a teacher first and foremost, whose promotion of the Smith Premier came from his expertise in typewriting matters. Morton's attempt to present his support as objective is underlined in the short description of the Smith Premier at the bottom of the advert, where it is claimed: 'Experts consider this Machine to be the most scientifically constructed Typewriter that has been placed on the market'. Here it is heavily implied that Morton is

⁷⁸ Arthur E. Morton, "Modern Typewriters and Accessories," *Journal of the Society of Arts* 55, no. 2832 (1907): 428–42.

one of these experts. In reality, while Morton's claims about Smith Premier typewriter were not unfounded, his steadfast support for the brand was of course in part down to his employment by the company.

The following year Morton moved to Glasgow where he continued to combine his teaching work with his role as a representative for Smith Premier. There, Morton worked alongside Julius V Scott – the agent for the Smith Premier Typewriter Company in Scotland. Scott was born in Greenock in 1864 and worked as a commercial clerk in Glasgow in the 1890s.⁷⁹ By 1901 Scott was the agent in Scotland for a Leeds based iron company and from his office just a couple of buildings down the road at 53 Bothwell Street he carried out his work as a retailer for Smith Premier.⁸⁰ In Glasgow, it seems that Morton looked after the teaching side of the business while Scott took care of retail.

⁷⁹ Census record (1891) for Julius V Scott, age 27, Kersland Street, Govan, Partick, Lanarkshire, Scotland, Findmypast.co.uk [accessed 17/06/2021].


⁸⁰ Census record (1901) for Julius Vencent Scott, aged 37, Glasgow, Blythswood, Lanarkshire, Scotland, Findmypast.co.uk [accessed 17/06/2021]; Entries for Morton and Scott in "Trades Directory," in *Post Office Glasgow Directory for 1901-1902* (Glasgow: William Mackenzie, 1901).




Figure 3.7. Arthur Morton, undated. Courtesy of Luminous-Lint.

Accessed at:

[http://www.luminous-lint.com/app/photographer/Arthur E Morton/A/](http://www.luminous-lint.com/app/photographer/Arthur_E_Morton/A/)

Shorthand (Pitman's). 

 Typewriting (Smith Premier).

TUITION IN ABOVE SUBJECTS GIVEN BY
ARTHUR E. MORTON, C.T.P.,

*London Society of Arts' and Silver Medallist, 1895.
Gold Medallist, London, 1892.*

Instructor at the Regent Street Polytechnic, London, 1889-96.

MR. MORTON'S aim is to lay, by an easy and improved system, a thorough foundation, whereby the Student acquires an accurate and rapid style of writing, combined with a knowledge of common-sense business-like methods.

The *Syllabus*, which is comprehensive and practical, comprises *inter alia* the Mechanical Operations of an Office, *i.e.*: **Outgoing Correspondence—Press-Copying, Indexing Letter Book, Making up for Post, Registration and Insurance of Letters, etc. Incoming Correspondence—Registering, Filing, etc. Exercises in Commercial, Official, and Private Correspondence. Methods of obtaining Multiplex Copies—Carbon, Stencil, Gelatine, and Lithography. Technical Expressions and Business Abbreviations, etc. etc.**

**EVENING CLASSES CONDUCTED AT INSTITUTIONS.
TYPEWRITING WORK DONE.**

Persons possessing a Practical Knowledge of Shorthand are taught Typewriting on Exceptionally Moderate Terms.

COMPLETED PUPILS ASSISTED IN SECURING APPOINTMENTS.

EDINBURGH DISTRICT RESIDENT SALESMAN
FOR THE

SMITH PREMIER TYPEWRITER.

IT is distinctly to the advantage of an intending Purchaser to make a trial of the **SMITH PREMIER** before placing order. Experts consider this Machine to be the most scientifically constructed Typewriter that has been placed on the market. It is stronger and of greater value than any of its competitors. The trial is perfectly free and unconditional.

Full information given upon Application.

Address Communications—252 Morningside Road, Edinburgh.

Figure 3.8. Arthur Morton advertisement promoting his school and the new Smith Premier typewriter.

Post-Office Edinburgh & Leith Directory 1898-1899. Digitized by NLS.

Teacher-retailers liked to portray themselves as industrious, enthusiastic, and enterprising individuals, and this was certainly the way they were represented in shorthand-typing journals and magazines. William L. Battison started his career as a shorthand and typing teacher in Glasgow in the early 1890s. By the early 1900s, Battison was the principal of a typing school, agent for the Remington typewriter in Glasgow, and a partner in a well-known firm of papermakers.⁸¹ A 1902 article on Battison in *The Shorthand World and Imperial Typist* praised him as having ‘teaching abilities of no mean order’ while also being an ‘out-and-out business man... Full of energy, enthusiastic, a capital extempore speaker, yet modest to a degree, our Northern phonographer stands high in the estimation of all whose pleasure it is to know him’.⁸² There was undoubtedly a great deal of truth in this description of Battison which reads like the jubilant biographies of several shorthand teachers in *The Shorthand World* and similar journals. Still, it was in the interests of the editors to praise the work of teacher-retailers, like Battison, who made up an important part of their readership.

⁸¹ Entries for William Battison in “Trades Directory,” in *Glasgow Post Office Directory for 1895-1896* (Glasgow: William Mackenzie, 1895).

⁸² Biography of “Mr William L. Battison” in *The Shorthand World and Imperial Typist Volume 1 February, 1902, to January, 1903*, 6–7.



Figure 3.9. Portrait of William L. Battison.
In *The Shorthand World and Imperial Typist*, c. 1902.

Like Battison, William K. Smith of Dundee had a similarly busy schedule. In the late 1890s, Smith worked as a shorthand and typing instructor at the Young Men's Christian Association, the Business and Civil Service Academy and the Harris Academy. Alongside his teaching commitments, Smith was the principal and manager of the Remington School of Shorthand and Typewriting, as well as the agent for the Remington in Dundee.⁸³ Teacher-retailers like Smith made their money from a broad portfolio of work which included revenue from student fees, guest lecturing, selling typewriters, and a whole range of typewriter related services.

The story of teacher-retailers in the 1890s and early 1900s often has an air of a rags to riches tale: self-taught individuals who had made it good. This slightly romanticised view of these business owners was partly down to profession specific publications, such as *The Shorthand World*, which were written by and pitched to teacher-retailers who wanted to see their work presented in an honourable light. Nevertheless, the descriptions of teacher-

⁸³ Entries for William K Smith in *The Dundee Directory 1899-1900* (Dundee: James P. Mathew & Co, 1899).

retailers were not groundless. James Leishman did start from humble beginnings from which he established a successful business and then became a leading figure in public life. Arthur Morton did spend much of his life promoting typewriters, travelling all around the UK in the process. Individuals like William Battison and William K Smith did have the energy, enthusiasm, and business acumen to maintain a variety of enterprises and teaching roles in pursuit of commercial success and social advancement.

Teacher-retailers had a dual role in the sale and promotion of typewriters. Firstly, in their capacity as teachers, they were keen to extol the benefits of typewriting generally to attract more pupils to their schools. Secondly, teacher-retailers promoted the particular brand of typewriter they sold, which they did by using these typewriters in their classrooms, as well as including descriptions and images of these machines in advertisements for their schools. In doing so they focused on their teaching experience which they felt meant they were typewriter experts instead retailers. In this way, they were able to present themselves as relatively impartial voices who sold typewriters because they believed in the societal value of these devices, instead of purely being motivated by financial gain.

Retailers during the mature phase of the typewriter trade

From around 1910, we can think of the Scottish typewriter trade as 'mature': the rate of growth in businesses levelled off, and the design of typewriters was largely standardised. This period also saw further developments in the retail sector, with one of the most notable shifts being the decline in teacher-retailer businesses. By 1930, only six out of 44 retail outlets (14 per cent) in the four principal cities also offered typing tuition. This was down from 36 per cent in 1905, at the height of the take-off phase.

The decline in teacher-retailers was partly the result of commercial colleges dropping their typewriter lines to focus solely on tuition. In the early 1900s, George McAdam headed one of Scotland's largest typewriting institutions. As discussed in chapter 2, McAdam's Institution in Edinburgh offered tuition in typing, shorthand, and related commercial subjects. In addition, the business served as the Edinburgh agency for United Typewriter and Supplies which sold the popular Densmore and Caligraph typewriters. Yet in 1921, after

downsizing his premises, McAdam put retail to one side to concentrate on teaching. McAdam's Commercial College remained a leading provider of typing tuition in Scotland's capital until after the Second World War.

In contrast to McAdam, Charles H. Webster left a career in education and became one of Scotland's most prominent, dedicated and enthusiastic retailers. Born in Aberdeen in 1887, Webster started out as a teacher of 'business subjects', a role in which it seems likely he would have taught typing.⁸⁴ By 1913, he had become the agent in Aberdeen for the Smith Premier Typewriter Company, a position he may have attained through his contacts in commercial education. From this point, Webster's advertising (which was prodigious) makes no mention of tuition in commercial subjects. It seems Webster left teaching to become a full-time typewriter retailer.

Webster represented Smith Premier until around 1920 when he became an agent for the Royal Typewriter Company, a role in which he was noted for his success. From October 1924 to January 1925 Webster took part in a sales competition amongst Royal agents and branch managers based outside of London. He won first place by attaining 194 per cent of his sales quota for Aberdeen and surrounding districts, which constituted an increase of more than 300 per cent on his average monthly sales.⁸⁵ Webster continued to sell the Royal until 1928 when he switched to the Imperial typewriter.⁸⁶ By 1930 he owned three properties: two residential and one shop. He was also renting three properties in Aberdeen including a warehouse for his typewriter business in Alford Place in the heart of the city.⁸⁷ Webster's Typewriters, as his business became known, remained one of the leading typewriter dealers in the North of Scotland until the 1960s.⁸⁸

⁸⁴ Scottish census record (1911) for Charles H. A. Webster, aged 24, Peterculter, Aberdeen, reference 231/1 4/4, record accessed at [Scotlandsppeople.gov.uk](https://scotlandsppeople.gov.uk)

⁸⁵ "High Sales Records Made in the British Isles," *The Royal Standard* 10, no. 3 (1925): 5, <https://archive.org/details/the-royal-standard-1925-3/page/n3/mode/2up>.

⁸⁶ For earliest advert promoting the Imperial see Charles H. Webster, "British Typewriters," *Aberdeen Press and Journal*, June 21, 1928, 1.

⁸⁷ Valuation roll searches for Charles H Webster (1930) accessed at <https://www.scotlandsppeople.gov.uk/>

⁸⁸ C. H. Webster, "Portable Typewriters," *Aberdeen Press and Journal*, July 20, 1968, 8.

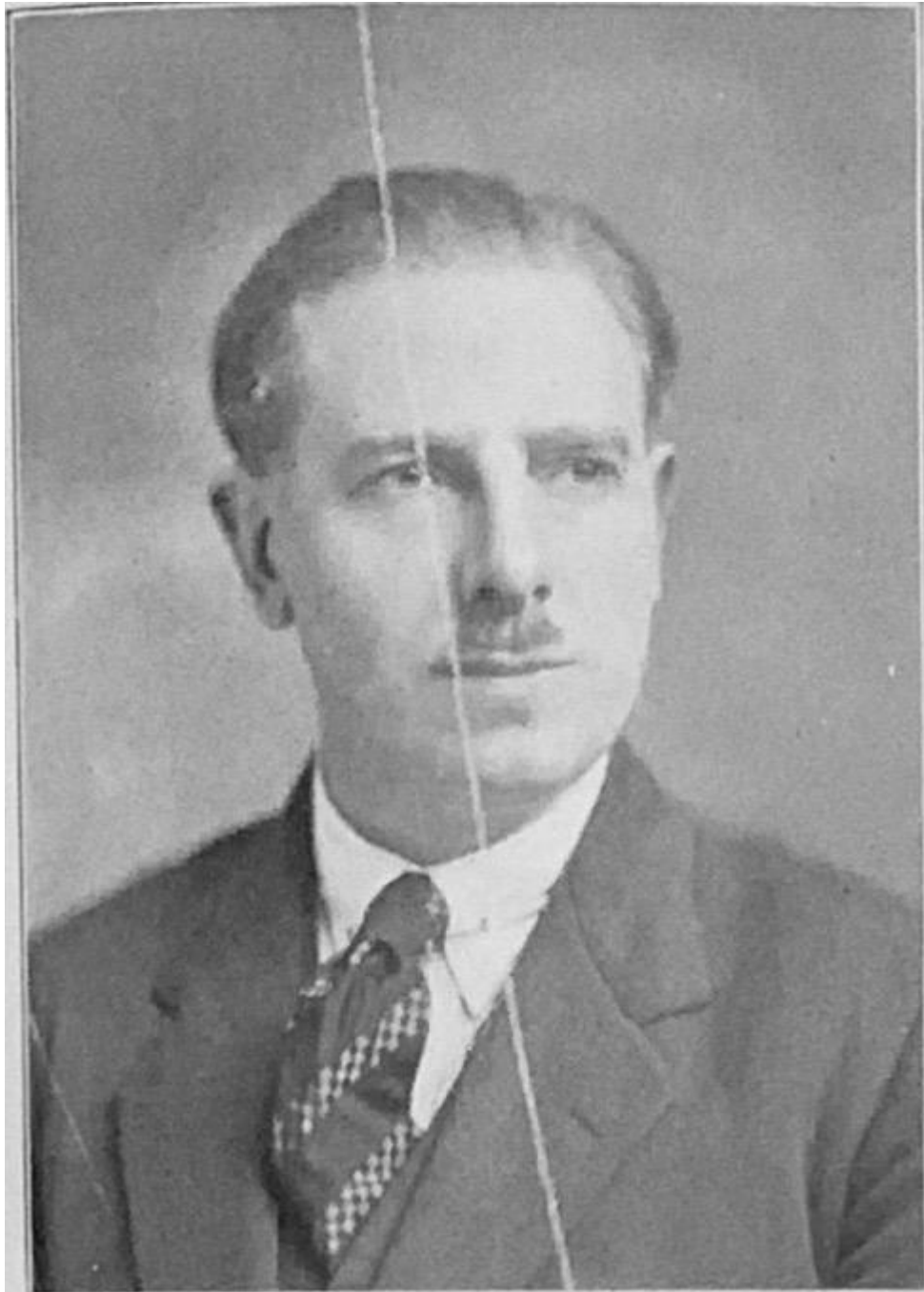


Figure 3.10. Charles H. Webster, *The Royal Standard* 10, no. 3, (1925). This was an in-house magazine for employees and agents of the Royal Typewriter Company. Accessible at archive.org

In the early 1910s, around the time Webster started his career in the typewriter trade, James Leishman's longstanding retail agency and typing school in Edinburgh was undergoing a significant reorganisation, which led to a clear split between retail and teaching outputs of the firm. These changes were part of the takeover of Leishman's business by his cousin Thomas Hughes. Born in 1874, Hughes was hired by Leishman around 1901 as a 'Traveller

for Typewriters' or door-to-door salesman.⁸⁹ Having proved his abilities as a retailer, in 1911, as Leishman was retiring, Hughes was made partner and acting manager of the business which was restyled as Leishman & Hughes.⁹⁰ At the same time, Leishman's typing and shorthand school, just a few doors down from his shop, was put under new management and renamed Leishman & Nelson. For Hughes's part, he continued as manager of Leishman & Hughes until his death in 1946.⁹¹ The business survived into the 1950s, by which time Leishman & Hughes were the Edinburgh agents for the Imperial typewriter.

In the 1890s and 1900s, James Leishman had sold typewriters as a part of a portfolio of tutoring roles and other businesses ventures. But more than that, he had seen himself as an educator, whose professional connections lay more with societies of shorthand-typing teachers, than retailers or merchants. By contrast, from the outset of his career, Hughes identified as a retailer. In this sense, Hughes seems representative of the clear majority of typewriter salespeople from c. 1910 onwards who saw themselves as professional retailers, as opposed to teachers.

Unlike many other sectors of the typewriter trade, the management of retail outlets was male dominated. Nevertheless, there were examples of women who took a leading role in the marketing of typewriters in Scotland at the turn of the twentieth century. In 1912, *Typewriter Topics: The International Business Equipment Magazine* (a trade journal for typewriter manufacturers and retailers) published a feature on a 'Dandy Shop' opened in Glasgow by Elizabeth S Rowan, agent for L.C. Smith & Bros typewriters. (Figure 3.12) Rowan and her family had been connected with the typewriter trade for several years in Scotland. Born in 1868, Elizabeth started her career in the 1890s, working for her older brother John Gray Rowan, the Glasgow agent for the Hammond typewriter.⁹² In 1898,

⁸⁹ Scottish census record (1901) for Thomas Hughes, aged 27, living at 3 Valleyfield Street, Saint Giles, Edinburgh, record accessed at Findmypast.co.uk

⁹⁰ Scottish census record (1911) for Thomas Hughes, aged 34, living at 33 Comely Bank Place, St Bernard Ward, Edinburgh, record accessed at Scotlandspeople.gov.uk

⁹¹ "Deaths," *The Scotsman*, December 26, 1946, 6.

⁹² Scottish census record (1901) for Elizabeth S Rowan, aged 33, occupation "Manageress typewriter co", listed as a visitor to Rocklea, Duchal Street, Kilmalcolm, Renfrewshire, record accessed at Findmypast.co.uk

John moved to London to head the UK sales force behind the introduction of the Elliott-Fisher typewriter, a unique design for writing directly into books and bound ledgers (Figure 3.11). Elizabeth, still in Glasgow, was appointed the 'manageress' for the Elliott-Fisher company for the whole of Scotland. Shortly after John's death in 1908, Elizabeth acquired the agency rights for the L.C. Smith Bros machine, one of a new wave of visible writing typewriters, the design for which is described in the following chapter. By 1912, the *Typewriter Topics* article on Rowan's business confirmed that she had succeeded in making L.C. Smith Bros typewriters widely known in Scotland.⁹³



Figure 3.11. An Elliot-Fisher book typewriter, of the sort that was marketed in Scotland by Elizabeth S Rowan.

This example was donated to the Royal Scottish Museum in 1952 by a legal firm based in Edinburgh. The firm may well have used it for record-keeping as book typewriters were ideal for writing in bound ledgers. NMS collection, object number T.1952.52.

⁹³ "A Dandy Shop," *Typewriter Topics* 22, no. 2 (1912): 132.



Figure 3.12. Elizabeth S. Rowan's shop for the L.C. Smith & Bros typewriter on West Nile Street, Glasgow.

Featured in the *Typewriter Topics* article 'A Dandy Shop' in 1912.

While female retailers were in the minority, for single women at least, there were no set limits on the positions they could attain in the sector. In Rowan's case, between 1898 and the early 1910s she was the head retailer in Scotland for two major brands. The article in *Typewriter Topics* described Rowan's business with enthusiasm and crucially there was no suggestion that Rowan was exceptional in the role she attained. In Britain and America, several women either owned their own typewriter business or were promoted to key posts within manufacturing companies. One of the most successful was Mary Orr who became

(according to a typewriter trade journal at the time) the first woman corporate director for a large multinational corporation when she was elected to the executive board of the Remington Typewriter Company in 1907.⁹⁴ While there were clear obstacles and inequalities in the sector, typewriter retail was an area of business in which women were able to excel at the turn of the twentieth century.

Probably the largest typewriter retailer in Scotland in the interwar period was Watson's Typewriters, which was established around 1920 by several members of the Barlock Typewriter Company with William Watson as the general manager. By the mid-1920s, the company had branch offices in Edinburgh, Aberdeen and Dundee and a credit report produced by the Imperial Typewriter Company in 1927, confirmed that Watson's had 'a fairly large trade, carrying good stocks and have many hands.'⁹⁵ The company operated out of an equally impressive set of properties. Watson's headquarters at 128 St Vincent Street – a major thoroughfare in Glasgow at the centre of the city's typewriter trade – was valued at £600 per annum in 1930, far more than the rents paid by the other retailers mentioned in this chapter.⁹⁶ *Typewriter Topics* described the Glasgow store as 'one of the finest showrooms in the Provinces', with Watson's remaining successful into the 1940s.⁹⁷ By that time, a US report on world trade described the business as 'a large office equipment organization of Glasgow' and a backer of the leading Italian typewriter firm Olivetti.⁹⁸

⁹⁴ "A Woman in the Directorate," *Typewriter Topics* 6–7 (1907): 240.

⁹⁵ 'Status Report... 29 Dec 1927... As to Watsons Typewriter Ltd. St. Vincent Street, Glasgow', DE1535/14 Home and export reports., 1929 to 1931., in the Imperial Typewriter Co. Ltd collection held at The Record Office for Leicestershire, Leicester and Rutland, Leicester, UK.

⁹⁶ 1930 valuation roll for Watson's Typewriters at 128 St Vincent Street, Glasgow, ref VR010201459-/227, NRS, accessed at <https://www.scotlandsppeople.gov.uk/>

⁹⁷ "News Brevities from the British Isles," *Typewriter Topics* 51, no. 2 (1922): 194.

⁹⁸ Department of Commerce USA, "Office Equipment and Supplies (Part 13)," *World Trade in Commodities* 6, no. 1 (1948): 3, https://www.google.co.uk/books/edition/_jCkoAAAAMAAJ?hl=en&gbpv=0.



Figure 3.13. William Watson in *The Royal Standard* 10, no. 3, (1925), 5. Accessible at archive.org

On its establishment, Watson's Typewriters acquired the agency rights for the Woodstock typewriter, a reasonably successful American product which was entirely new to the Scottish market.⁹⁹ Watson's also gained the selling rights to the Marchant calculating machine, a device for adding, subtraction, multiplication and division which had gained some traction in the office market in the US. As with many retailers, Watson's saw benefits

⁹⁹ Watson's Typewriters, "Agencies Wanted – Continued," *Typewriter Topics* 44–46 (1922): 312.

in marketing office technologies which were complementary to typewriters, such as duplicators, calculating machines and filing systems.

Like Webster and Rowan, the managers of Watson's Typewriters were not always content with sticking to the same brands and were often on the lookout for new agency contracts, with the company regularly posting adverts in the 'Agencies Wanted' section of *Typewriter Topics* (.).

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TYPEWRITER TOPICS, JULY, 1920

AGENCIES WANTED—Continued

S. R. MULLIS, 8, Salubrious Passage, Swansea, Wales.

DEXTRO, LTD., 30, Arcade Chambers, St. Mary's Gate, Manchester, England, are open for agencies of all kinds of office specialties, stationery products, portable typewriter and office furniture.

WATSON'S TYPEWRITERS, LTD., 128, St. Vincent Street, Glasgow, Scotland. Sole Scottish agencies for Woodstock and Marchant. Open for office machinery of all kinds for Scotland or British Isles.

R. LEACH, 24, Richmond Terrace, Blackburn, England.

ADDRESSALL MACHINE Co., Rapid Works, Chorlton-cum-Hardy, Manchester, England. Established, 1910. Splendid organization. Specialists in high-class office equipment products.

CLAUGHTONS, Manchester, England.

ARTHUR FOOTE, LTD., 24, Brown Street, Manchester, England. Sells everything for the office.

CZECHO-SLOVAKIA

NORTHERN FRANCE.—I am open to accept agencies office equipment. J. Stevens, 41 rue des Capucins, Amiens, France.

MODERN OFFICE, 84 rue de Rennes, Paris (V), France, wish to get in touch with manufacturers of new and rebuilt typewriters, ribbons, carbon paper, duplicators, and high-class office equipment products.

HOLLAND

WANTED—Offers with catalogs for agency in Holland in behalf of well-known firm in Rotterdam of office machines such as Typewriters, Calculating Machines, Copying Machines, Addressing Machines and Duplicating Machines. Also ribbons and carbon papers and wood and steel office furniture. Address: D. Treure, Korte-kade 34, Rotterdam, Holland.

DE WOLFF, KEESING & Co., Amsterdam, Holland. Branches at Rotterdam, The Hague, Arnheim, Breda, Groningen. Agencies wanted for steel furniture, typewriters, addressing machines and other high-class office machinery.

WHOLESALE TRADE—"A. Th. van Oldenbeek," Maliebaan, 93, Utrecht, Holland, wants offers for all stationery articles and office furniture.

Figure 3.14). This magazine, which was read by manufacturers around the world, was an ideal forum for retailers to reach out to potential manufacturing partners. Watson's efforts soon paid off as in the end of 1920, they were appointed agents for the Underwood portable typewriter, which promised to revolutionise the market for portable typewriters. Then in 1922, after the lead agent for the Royal in Scotland fell ill, Watson's Typewriters took over the contract for the sale of Royal typewriters in Scotland.¹⁰⁰ For a short while Watson's marketed Royal office typewriters and Underwood portables side-by-side. However, this arrangement did not last long and in 1923 Watson's ended their licencing agreement with Underwood and began selling the Corona portable typewriter instead. Watson's sold Royal typewriters alongside Corona portables for much of the mid-1920s.

¹⁰⁰ "R.H. Hocking," *Typewriter Topics* 50–52 (1922): 168–69, babel.hathitrust.org; "News Brevities from the British Isles," *Typewriter Topics* 50–52 (1922): 194.

AGENCIES WANTED—Continued

S. R. MULLIS, 8, Salubrious Passage, Swansea, Wales.

DEXTRO, LTD., 30, Arcade Chambers, St. Mary's Gate, Manchester, England, are open for agencies of all kinds of office specialties, stationery products, portable typewriter and office furniture.

WATSON'S TYPEWRITERS, LTD., 128, St. Vincent Street, Glasgow, Scotland. Sole Scottish agencies for Woodstock and Marchant. Open for office machinery of all kinds for Scotland or British Isles.

R. LEACH, 24, Richmond Terrace, Blackburn, England.

ADDRESSALL MACHINE CO., Rapid Works, Chorlton-cum-Hardy, Manchester, England. Established, 1910. Splendid organization. Specialists in high-class office equipment products.

CLAUGHTONS, Manchester, England.

ARTHUR FOOTE, LTD., 24, Brown Street, Manchester, England. Sells everything for the office.

CZECHO-SLOVAKIA

NORTHERN FRANCE.—I am open to accept agencies office equipment. J. Stevens, 41 rue des Capucins, Amiens, France.

MODERN OFFICE, 84 rue de Rennes, Paris (V), France, wish to get in touch with manufacturers of new and rebuilt typewriters, ribbons, carbon paper, duplicators, and high-class office equipment products.

HOLLAND

WANTED—Offers with catalogs for agency in Holland in behalf of well-known firm in Rotterdam of office machines such as Typewriters, Calculating Machines, Copying Machines, Addressing Machines and Duplicating Machines. Also ribbons and carbon papers and wood and steel office furniture. Address: D. Treure, Korte-kade 34, Rotterdam, Holland.

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WHOLESALE TRADE—"A. Th. van Oldenbeek," Maliebaan, 93, Utrecht, Holland, wants offers for all stationery articles and office furniture.

Figure 3.14. 'Agencies wanted' page in *Typewriter Topics* where manufacturers could find retailers looking to sell new typewriters and related office technologies.

It is not clear how Watson's was permitted to sell the Royal alongside the Underwood and then later the Corona typewriter, as we know that some manufacturers were still uncomfortable with allowing agents to represent multiple brands.¹⁰¹ What seems likely is that Royal – who only made larger office typewriters at this time – did not see portable machines as directly in competition with their products. Portables were ideal for domestic settings or for typing on the move, but they were less suited to intensive day-to-day use in the office. It is probably no coincidence that Watson's ended their contract with Corona in 1927, a year after Royal brought out their own design of portable typewriter. From this point, Watson's sold both Royal portables and office typewriters.¹⁰²

The contract with Royal seems to have been a great boost for Watson's. In 1925 William Watson came third place behind Charles H Webster in the aforementioned sales competition between agents of the Royal typewriter working in UK towns and cities outside of London. The report on his performance concluded:

¹⁰¹ "Appointment of Sub-Agents," *Imperial News*, December 1911, 2.

¹⁰² Watson's Typewriters, "This Xmas Give a Royal Portable," *Morecambe Guardian*, December 17, 1927, 12.

Mr. Watson has already shown his mettle as a Star Salesman. His fine record of 143 per cent. of the quota assigned to him for the four months of the contest was certainly a commendable showing, and it is an assurance that Royal sales in the Glasgow district will not suffer any for want of enthusiasm.¹⁰³

During the mature phase of the trade retailers such as Thomas Hughes, Charles Webster Elizabeth Rowan, and William Watson, were united by their commitment to the sale of typewriters. While at the turn of the century teacher-retailers had divided their time between the educational and retail sides of their business, by the 1920s the leading sellers of typewriters were firmly embedded in the world of retail.

The professional networks had changed to match. Teacher-retailers had found their colleagues and competitors at shorthand and typewriting societies, such as the Scottish Phonographic Association. In the 1920s, typewriter dealers like William Watson gave talks to retail organisations such as The Sales Promotion Association of Scotland and the Incorporated Sales Managers' Association where he spoke on the ways to properly promote products adding that 'the sales manager of to-day must be thoroughly alive to the advantages of modern advertising'.¹⁰⁴ The vast majority of owners and managers of typewriter stores in the 1910s and 1920s seem to have seen themselves first and foremost as retailers putting the promotion of their products at the forefront of their work. In the following chapter, we will look in greater detail at their advertising efforts to do so.

Conclusion

By 1900, there was an extensive network of typewriter retailers in Scotland's major towns and cities selling a wide variety of brands and models from America, England and Europe. As retail agents in Scotland were usually expected to represent only one manufacturer, this meant there were few stores where prospective buyers could compare and trial typewriters from rival brands, side-by-side. For customers, choosing a typewriter could be a bewildering

¹⁰³ "High Sales Records Made in the British Isles," 5. "High Sales Records Made in the British Isles," *The Royal Standard* 10, no. 3 (1925): 5.

¹⁰⁴ "How Scots Trade Can Be Saved," *Aberdeen Press and Journal*, May 30, 1930, 8; "Hints on Modern Advertising," *Dundee Evening Telegraph*, November 13, 1929, 6.

and time-consuming task. This contrasted with the early trade in the 1880s, when prominent retailers, like A. C. Thomson in Glasgow, were able to market typewriters from multiple manufacturers. Price restrictions set by manufacturers, which prohibited retailers from offering sizeable discounts, harmed the customer as well. In an era that has often been characterised by improved customer experience, particularly through the opening of department stores, it may seem surprising that the retail system made buying a typewriter confusing, time-consuming and exorbitant.¹⁰⁵

This chapter has also introduced some of the connections between the sewing machine and typewriter trades. In the early years, typewriters were often sold by sewing machine agents. Like sewing machine manufacturers, American typewriter companies also made use of foreign agents to sell their goods. The relationship between the sewing machine and typewriter trades is hardly surprising considering E. Remington & Sons fame as sewing machine manufacturers. The influence that sewing machine designs had on the development of the typewriter manufacture will be discussed in the following chapter.

Still there were notable differences between the typewriter and sewing machine trades, such as the market share between different brands. From the 1870s to at least the First World War, the sewing machine industry was dominated by Singer Sewing Machine Company. By 1913, it is estimated that Singer manufactured around 90 per cent of all new machines sold in Europe. As sewing machine historian Andrew Godley asserted, 'Such an extraordinary dominance of world markets by one firm in what was a very visible sector is highly unusual.'¹⁰⁶ While comparable sales figures are not available for typewriter brands sold in Europe, the examples we have seen from the Scottish market do not suggest that any particular brand achieved overwhelming or long-term dominance. While Remington was probably the market leader in the late nineteenth century, it was still effectively challenged by brands such as the Caligraph in the 1880s and 1890s. From the 1900s onwards, if we go by the level and prominence of advertising in Scotland newspapers,

¹⁰⁵ Geoffrey Crossick and Serge Jaumain, eds., *Cathedrals of Consumption: The European Department Store, 1850-1939* (London: Routledge, 1999).

¹⁰⁶ Andrew Godley, "The Global Diffusion of the Sewing Machine, 1850-1914," *Research in Economic History* 20 (2001): 17.

Remington was probably overtaken by other American brands such as Underwood and Royal, as well as the British-made Imperial.

Another difference from the sewing machine trade was the relationship between manufacturers and retailers. For the entire period from the 1870s to the 1920s, most typewriter retailers were agencies – privately owned businesses with a licence to sell a particular brand. By contrast, the Singer Sewing Machine Company (which represented most of the trade) sold through branches owned and controlled by the Company. By 1900, a few of the leading typewriter brands had opened branches in some cities in Scotland, but there was no consistent policy on this. For example, in the early 1900s, while the Remington store in Glasgow was a branch owned by the UK branch of the Remington Typewriter Company, the outlet in Edinburgh was an independent agency run by James Leishman. Selling through agents was less risky for manufacturers, and as we will return to in the following chapter, well known and respected agents such as Leishman used their good standing in the local community to promote their products. However, as always, the downside to selling through agents was that manufacturers had less control over the marketing of their goods.

While these general trends highlight the differences between the sale of typewriters and similar consumer goods over the entire period of this study, there were some notable shifts in the sorts of people who sold typewriters in Scotland from the 1870s to the 1920s. During the pioneering phase, most typewriter dealers were experienced importers of consumer durable goods from America. The pre-existing contacts that retailers had with manufacturers in industries such as the sewing machine trade constituted the key links in the early distribution of typewriters.

During the take-off phase from the late-1880s, a significant minority of retailers came from backgrounds as shorthand teachers. These ‘teacher-retailers’, as I have described them, negotiated contracts to sell leading brands of typewriter such as Remington or Caligraph. It seems that manufacturers viewed teachers involved in typing, shorthand and related commercial subjects as ideally suited to promote their products, as they already ran businesses deeply involved in the use of typewriters. However, while historians of clerical

work have identified shorthand as a complementary skill learnt alongside typewriting, the link between shorthand and retail has been almost entirely overlooked. This chapter has proved that during the 1890s and early 1900s, the shorthand community in the UK was integral to the commercialisation of typewriters. Shorthand societies and organisations provided the professional networks through which Scotland's leading retailers communicated, which seems to have also been the case in the UK and America. There is much more to be discovered about the relationship between the shorthand community and typewriter marketing.

The 1890s and 1900s was also a time in which several women reached prominent positions in Scotland's typewriter trade, as they did in Europe and America. It seems that by the 1890s – as typewriter retail became a distinct profession somewhat separate from the male dominated world of the general importing and exporting of consumer goods – women were no longer automatically excluded from the trade. Like the typewriting office sector, which we will return to in chapter 5, retail offered entrepreneurial opportunities for women as well as employment prospects. That withstanding, retail remained male dominated throughout this period, with the number of women retail managers hardly approaching the levels seen for typewriting offices.

From c. 1910, as the trade entered a mature phase, the level and prominence of teacher-retailers declined. Increasingly, the leading retailers treated the sale of typewriters as a full-time profession and were not distracted by secondary roles as teachers or principals. The shift in the demographics of retailers naturally led to a change in the communities in which they operated. Some, like William Watson of Glasgow, embedded themselves in retail societies and associations. Even the magazines in which their exploits were publicised changed. In the 1890s and early 1900s, biographies of leading typewriter retailers were found in publications aimed at shorthand writers such as *The Shorthand World and Imperial Typist*. From the 1910s these descriptions came in trades journals aimed at typewriter and office machine retailers, such as *Typewriter Topics: The International Office Equipment Magazine*. Indeed, while the sale of typewriters was the focus for the managers of typewriter outlets, many retailers saw the benefits in selling complementary lines in typewriter supplies and other office technologies. In some cases, typewriter retailers, like

Charles H Webster, described themselves as office machine specialists. As we will see in the following chapter, many typewriter retailers marketed their goods at business or office machine exhibitions. These exhibitions, instituted in Scotland around 1908, provided a new forum for retailers to showcase their goods alongside colleagues and rivals.

The period from 1875 to 1930 saw the establishment of more than a hundred typewriter retailers in Scotland's four principal cities. Of course, no two business was alike with the background and experiences of owners and managers shaping the way typewriters were marketed. Nevertheless, when we look at the most prominent businesses, it is apparent there were three types of agent or manager active during the different stages of Scotland's trade: importers of consumer durables during the pioneering phase; teacher-retailers during the take-off phase; and office machine specialists during the mature phase. It really is striking that those periods during which these three types of salespeople were active aligned so closely with the three phases in Scotland's typewriter trade, identified in chapter 2. I suggest that historians researching comparable industries (such as the sewing machine or bicycle industry) should investigate whether the different phases of these trades aligned with marked shifts in the sorts of people involved in retail. Such studies might allow scholars to generalize the relationship between the growth of a trade and the demographics of retailers, in much the same way that Everett Rogers linked the market share of a technology with different phases of adopters.

The backgrounds, experiences and motivations of retailers are so important when analysing the commercialisation of a product like the typewriter. While design and production were tightly controlled by manufacturers in America, England and Europe, the marketing of typewriters, 'on-the-ground', was organised by agents or managers who had a significant level of independence. In Scotland and elsewhere, to understand the processes by which typewriters were marketed and widely adopted we must recognise the importance of the people who sold them.

Chapter 4 Marketing typewriters in Scotland

Introduction

With a few exceptions, the marketing of typewriters has received relatively little historical analysis in America and Britain.¹ While English literature scholars and human geographers have used typewriter advertisements as source material, their studies have treated marketing as an indicator of changing cultural values, such as the development of the ‘Type-Writer Girl’ in the public imagination.² Advertisements have rarely been analysed for their original and intended purpose: the promotion and sale of typewriters. The neglect of marketing strategies employed by manufacturers and retailers implies that the invention, manufacture and sale of typewriters was simply a response to a growing demand for new writing technologies for streamlining office work.³ One might be left to assume that typewriters simply sold themselves: from the factory to the agent and straight into the hands of businesses and professionals eager to do away with the inefficient pen. In reality, retailers and their manufacturing partners drove the sale of typewriters through their advertising, exhibitions and promotions. It is the marketing efforts of retailers in Scotland that forms the focus of this chapter.

The emergence of the typewriter trade coincided with the period when ‘many of the practices of modern marketing first appeared’.⁴ Typewriter dealers, like retailers of other consumer goods in this period, seem to have been especially concerned with *product positioning*, described by Jones and Richardson as ‘the place a brand occupies in consumers’ minds (perceptually) on important product attributes relative to competitors’ brands’.⁵ This

¹ For the exceptions, see Peter Weil’s ‘Ephemera’ sections in recent editions of the *Journal of the Early Typewriter Collectors’ Association*.

² English literature studies include Keep, “The Cultural Work of the Type-Writer Girl”; Gray, “Typewriter Girls in Turn-of-the-Century Fiction: Feminism, Labor and Modernity.” For a human geography example see Kate Boyer, “‘Miss Remington’ Goes to Work: Gender, Space, and Technology at the Dawn of the Information Age,” *The Professional Geographer* 56, no. 2 (2004): 201–12.

³ See discussion of typewriter prehistory in Martin Campbell-Kelly and William Aspray, *Computer: A History of the Information Machine* (Westview Press, 2004), 23–24.

⁴ Ronald A. Fullerton, “How Modern Is Modern Marketing? Marketing’s Evolution and the Myth of the ‘Production Era,’” *Journal of Marketing* 52, no. 1 (1988): 122.

⁵ D. G. Brian Jones and Alan J. Richardson, “Origins of Sports Car Marketing: Early 20th Century British Cycle-Cars,” *Journal of Historical Research in Marketing* 9, no. 4 (2017): 336.

chapter is written under the general assumption that, for retailers, the goal of advertising was to carve out a position for their products on an increasingly competitive market and hopefully persuade prospective customers to buy their products.

Marketing also sheds light on the ways technologies, such as the typewriter, were viewed by different social groups and how this changed over time. This chapter will consider advertisements through the prism of some of the core concepts from the Social Construction of Technology (SCOT) framework, developed by Thomas P Hughes, Wiebe Bijker, Trevor Pinch and others from the early 1980s.⁶ *Interpretive flexibility*, set out by Bijker in *Of Bicycles, Bakelites and Bulbs* stresses that a technological artefact has different meanings to different social groups at different times.⁷ For example, in the early-1800s, writing machines were often considered aids for people with physical impairments. From the 1870s, typewriters were reinterpreted as machines for efficiency, enabling the quick and legible reproduction of documentation for business.

The range of potential uses and functions for typewriters led inventors and manufacturers to develop a wide variety of designs. On the Scottish market, it was during the 1880s and 1890s that *design flexibility* (another SCOT concept) was at its greatest. Keyboard machines such as the Remington competed with smaller designs without keyboards, which to modern eyes bear little resemblance to what we would now consider as typewriters.⁸

Lastly, *Closure and stabilization* are the elements of the SCOT framework which describe the point at which a consensus is reached over the definition and design of a technological artefact.⁹ However, closure and stabilization can lead to new debates over design and

⁶ For a discussion of the early development of the SCOT framework see Wiebe E. Bijker, Thomas P. Hughes, and Trevor Pinch, eds., *The Social Construction of Technological Systems: New Directions in the Sociology and History of Technology, Social Studies of Science*, vol. 19 (Cambridge MA & London: The MIT Press, 1989).

⁷ Wiebe Bijker, *Of Bicycles, Bakelites, and Bulbs: Toward a Theory of Sociotechnical Change* (Cambridge MA: MIT Press, 1995), 73–77.

⁸ At a 2018 event at the National Museum of Scotland, visitors were invited to inspect a Columbia in NMS's collection, object number T.1949.3.1. Because its design was so different from keyboard typewriters most visitors did not identify the Columbia as a typewriter. Importantly, this was a walk-up stand in a multidisciplinary museum, so we were attracting general visitors rather than those who necessarily had an interest in communications technologies.

⁹ Bijker, *Of Bicycles, Bakelites, and Bulbs: Toward a Theory of Sociotechnical Change*, 84–89.

potential users. As we shall see, once the design of the ‘standard’ office typewriter stabilized in the early-1900s, new and distinct forms of writing machine emerged, such as the portable, which retailers marketed to users outside of the office.

This chapter draws on a range of primary materials including newspapers, trade directories and exhibition catalogues. These sources are filled with advertisements and promotions which illustrate how retailers promoted typewriters in Scotland. Newspapers offered a platform for retailers to advertise their products regularly, and on some occasions, they reprinted the same advert weekly or monthly for up to a year. Trade directories, published annually in many Scottish towns and cities, offered a prestigious advertising medium, with some retailers often commissioning full-page advertisements with illustrations and descriptions of the typewriters they sold. From the early-1900s, as photo reproduction techniques improved, retailers also released promotional photographs of their stores and showrooms (see Figure 2.1 & Figure 5.12).

Exhibitions and in-person demonstrations – recorded in visitor guides, catalogues and newspaper reports – were crucial to promoting typewriters. These ranged from private demonstrations at a shop or an agent’s home to stands at international exhibitions attended by thousands of people and reported on across the country. Typewriter stalls were featured at international exhibitions in Glasgow in 1888, 1901 and 1911 and Edinburgh in 1886, 1890 and 1908. From 1907, several ‘business exhibitions’ were held in Dundee and Glasgow featuring typewriters alongside the latest office technologies. International fairs and business machine exhibitions were one of the few places where prospective customers could peruse various typewriter brands side-by-side.

Retailers also issued various forms of novel advertising, including branded knick-knacks such as stationery, calendars, postcards, coins and whist counters (

Figure 4.1 &

Figure 4.2). Retailers like Thomas H. Peck in Edinburgh (

Figure 4.3) and Sculthorps in Glasgow (Figure 4.4) had their business details printed on their typewriters and supplies, further promoting the brand. In that vein, the *Imperial News* – a magazine for Imperial typewriter agents – encouraged retailers to regularly call in on their

customers to check the condition of their machines, explaining: 'it keeps the machine going at its best and will lead to many other sales'.¹⁰ A typewriter was an advertisement in and of itself.

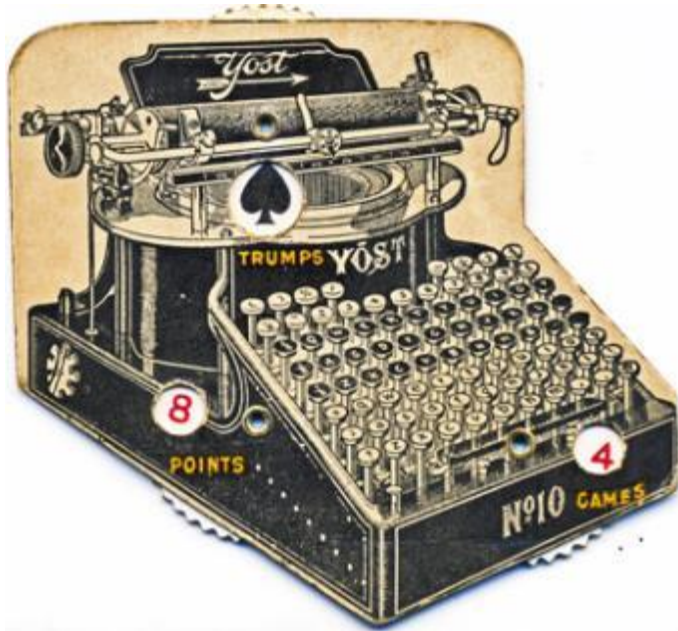


Figure 4.1. Whist marker produced by The Yost Typewriter Company. Peter Weil Typewriter Archive.



Figure 4.2. Ruler promoting the Bar-Lock typewriter, c. 1905. Peter Weil Typewriter Archive.

¹⁰ "On the Art of Selling Typewriters," *Imperial News* 1, no. No 2 (1911): 4.



Figure 4.3. Salter typewriter, c. 1910.

This example was sold by Thomas H. Peck and has a stamp advertising his store in Edinburgh. NMS collection, object number T.1988.X.14.



Figure 4.4. Typewriter ribbon sold by Sculthorps Ltd.

They were a typewriter and office supply specialist based in Glasgow in the early twentieth century. James Inglis, personal collection.

Using this range of sources, we will follow the developments in marketing in Scotland from the introduction of commercially manufactured typewriters in 1876 to the early-1930s. Initially, retailers focused on why the typewriter was better than existing writing technologies such as the pen. From the mid-1880s, as the number of brands increased rapidly, retailers began differentiating their products from rival typewriter brands. Some emphasised brand longevity while others highlighted low prices. Many retailers also described their typewriters' technical attributes, which they felt would make their products more desirable. Although the adoption of the QWERTY keyboard by the end of the nineteenth century has received significant attention in scholarly works, advertising from this period suggests the most important technical debate was actually over concealed-text and visible-text typewriters.¹¹ On concealed-text typewriters, the printing point was out of the operator's line of sight; whereas on visible writing machines, the typist could see each character as they typed. From c. 1910, the design of typewriters on the Scottish market stabilized, at least regarding 'standard' machines for office use. Consequently, retailers needed new ways to differentiate their products. Some claimed their typewriters were faster than the alternatives, citing speed typewriting contests that had become all the rage. Meanwhile, the arrival of small and compact portable typewriters gave retailers new opportunities to market typewriters to users outside the office. Finally, retailers of British-made typewriters encouraged customers to support domestic manufacturing and 'Buy British'.

Retailers in Scotland put their unique stamp on their advertising, exhibitions and promotions shaped by their experience of local marketplace and broader knowledge of the typewriter industry. In many cases, retailers were typewriter experts who held a genuine enthusiasm for these cutting-edge technologies. It was retailers, through their energetic marketing campaigns, that drove the sale and widespread adoption of typewriters.

¹¹ Examples include: David, "Clio and the Economics of QWERTY"; Liebowitz and Margolis, "The Fable of the Keys"; Neil Marshall Kay, "The QWERTY Problem," *35th DRUID Celebration Conference 2013, Barcelona, Spain*, 2013.

Early marketing, 1876 to late-1880s

The first typewriter widely available in Scotland was the Sholes & Glidden, released by American arms and sewing machine company E. Remington & Sons in 1874. This typewriter wrote in capitals only and was also the first to feature the QWERTY keyboard. By the end of 1876, around 3,600 machines had been made, with some adapted for the British market.¹² In Scotland, pioneering agents were aware that most people were unfamiliar with the invention: the typewriter might have been as small as a pen or as large as a printing press. As such, agents compared it with the sewing machine, a similarly sized consumer durable technology. In May 1876, Aberdeenshire retailers R. C. Annand & Co described the Sholes & Glidden:

In size and appearance the Type Writer somewhat resembles the family sewing machine. It is graceful and ornamental – a beautiful piece of furniture for any office, study or parlour.¹³

The description shows us that Sholes & Gliddens were not only advertised with functionality in mind but, like sewing machines, were also initially marketed as beautiful ornaments suited to domestic use and display.

Early Sholes & Gliddens borrowed several design features from sewing machines. After Remington bought the rights to the machine in March 1873, the company redesigned the typewriter in their sewing machine department. This led to three notable design changes: the addition of a cast iron stand; a treadle for returning the carriage; and beautiful decals which replaced the plain exterior.¹⁴ The contrast between the Sholes & Glidden before and after it was modified is illustrated in Figure 4.5 & Figure 4.6 while Figure 4.7 shows the similarity between the Sholes & Glidden and contemporary sewing machines.

¹² Eric Meary, "Which Sholes & Glidden?," *Journal of the Early Typewriter Collectors' Association*, no. 130 (2020): 9–15. Adaption for British market indicated by a Sholes & Glidden in National Museums Scotland's collection, object number T.1904.304, which has a £ symbol in place of the standard \$ sign.

¹³ R. C. Annand & Co., "The Pen Superseded," *Buchan Observer and East Aberdeenshire Observer*, May 19, 1876.

¹⁴ Hoke, "The Woman and the Typewriter: A Case Study in Technological Innovation and Social Change," 76–77.

The redesign of the Sholes & Glidden suggests Remington envisaged it as a domestic technology like the sewing machine. However, other features like the copyholder on the machine's left side appealed to professional users (Figure 4.8). Typewriter historian Peter Weil has speculated that the copyholder was added at the request of James O. Clephane, a court reporter based in Washington D.C., who supported Christopher Latham Sholes and his business partner James Densmore with the development of the typewriter.¹⁵ Sholes, Densmore, and their manufacturing partners at Remington did not share a unified view on the typewriter's prospective markets. In Scotland, advertisements from pioneering retailers reflected this uncertainty.

Remington continued adapting the Sholes & Glidden after its release in 1874. First, the treadle for the carriage return was replaced with a hand lever, as illustrated in Figure 4.8. Then in 1878, Remington released the 'Perfected' Sholes & Glidden typewriter. The flowery decals were replaced with a plain black and green exterior, and the carriage return was switched to a front lever similar to those on modern typewriters (Figure 4.9).¹⁶

¹⁵ Personal communication with Peter Weil on 19/11/2020.

¹⁶ Meary, "Which Sholes & Glidden?"



Figure 4.5. Sholes & Glidden prototype presented to Remington, which led to the contract of March 1873.

In Herkimer County Historical Society. *Story of the Typewriter, 1873-1923*. New York: Andrew H. Kellogg Company, 1923.



Figure 4.6. Sholes & Glidden manufactured by E. Remington & Sons c. 1874 with treadle for carriage return.

In Herkimer County Historical Society. *Story of the Typewriter, 1873-1923*. New York: Andrew H. Kellogg Company, 1923.



Figure 4.7. Frister & Rossman sewing machine c. 1870.
The cast-iron stand, the treadle and decals were design elements that featured on early Sholes & Glidden typewriters. NMS collection, object number T.1960.66.



Figure 4.8. Sholes & Glidden typewriter, c. 1876, with copyholder and side lever for carriage return.
NMS collection, object number T.1904.304.



Figure 4.9. 'Perfected' Sholes & Glidden manufactured c. 1878, with a plain exterior and front lever for carriage return.
NMS collection, object number T.1939.21.

While advertisements comparing the typewriter and the sewing machine on aesthetic grounds disappeared, the two technologies were still considered analogous as labour-saving devices. In 1884, the Dundonian retailer John J. Deas argued that the typewriter 'will, in course of time, do for the ink-bottle and the pen, what the sewing machine has already done for the needle' (Figure 4.14). Deas's view on the superiority of the typewriter over the pen was a recurring theme in early advertisements. In America, the Sholes & Glidden was

promoted as a ‘machine to supersede the pen’ from c. 1875 and in Scotland the slogan was quickly adopted by local agents. In Edinburgh, Cole & Co used the tagline in their newspaper and directory advertisements from 1876 to 1878. In Aberdeenshire, Annand & Co adapted the slogan for their 1876 advertisement, ‘the pen superseded’.¹⁷ In Dundee, G. H. & G. Nicol asserted that the typewriter would ‘supersede’ the pen.¹⁸

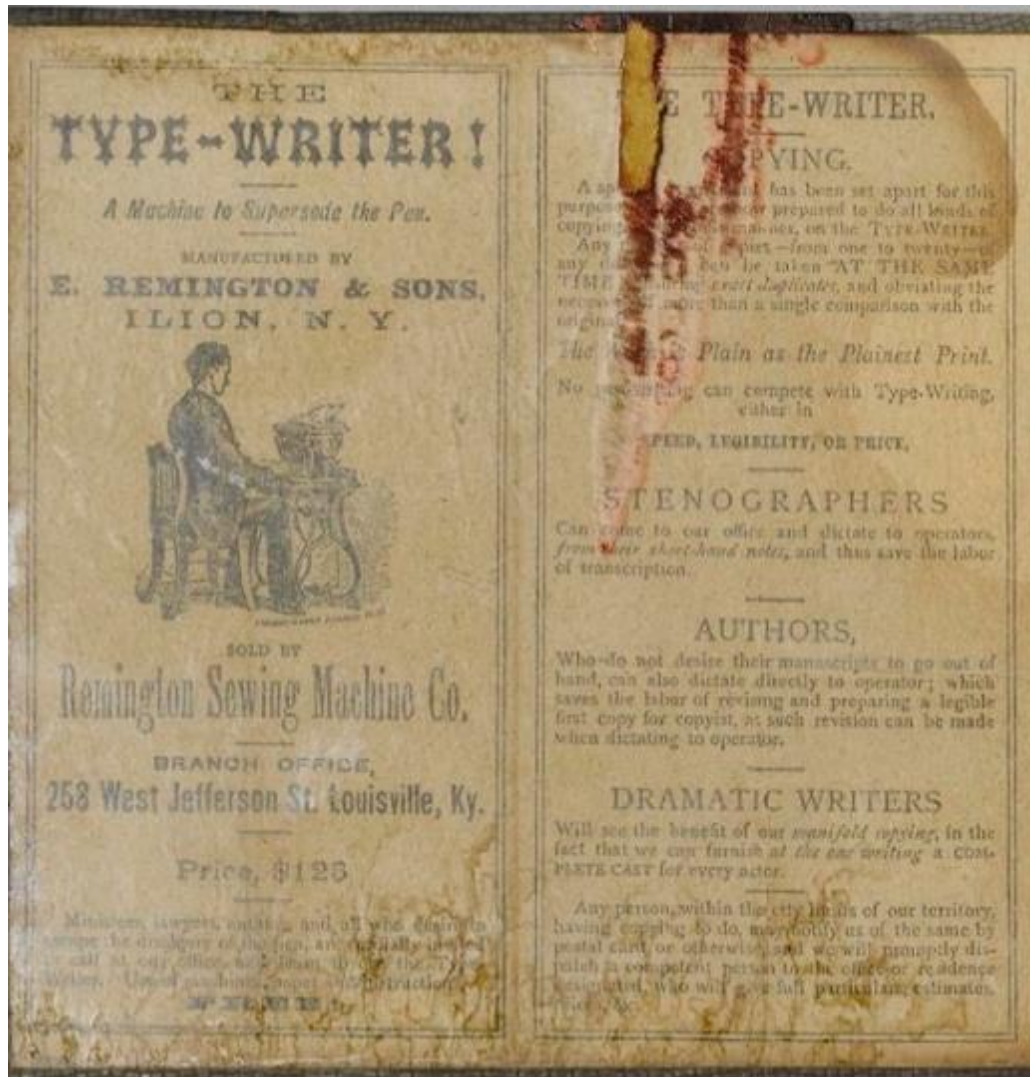


Figure 4.10. Reproduction of Remington pamphlet describing the Sholes & Glidden as ‘A Machine to Supersede the Pen’, c. 1875. NMS collection, object number T.1939.46.

Early typewriter retailers saw pen manufacturers as their competitors, which was undoubtedly the case in Scotland and particularly Edinburgh, with its thriving pen trade. In

¹⁷ R. C. Annand & Co., “The Pen Superseded,” *Buchan Observer and East Aberdeenshire Observer*, May 19, 1876, 2.

¹⁸ “The Type Writing Machine,” *The Dundee Courier and Argus*, April 5, 1876, 3

the capital, MacNiven & Cameron led the way in pen design and marketing. The firm was best known for the Waverley nib, named after Sir Walter Scott's novels, designed to give a smoother flow of ink onto the paper. As the Sholes & Glidden arrived on the market in 1876, MacNiven & Cameron advertisements already featured prominently in local directories and newspapers. Figure 4.11 shows the variety of pens sold by the company which were targeted at professionals, including engineers, businesspeople, and journalists. Like typewriters, pens were not a single homogenous device but writing technologies that were (and continue to be) redesigned, remanufactured, and remarketed.

1400 NEWSPAPERS RECOMMEND THEM.—See *Graphic*, Feb. 20, 1875.

Sample Box of all the kinds 1s. 1d. by Post.

MACNIVEN & CAMERON'S PENS.

"They are the best."—*Public Opinion*.



PENMAKERS TO HER MAJESTY'S GOVERNMENT OFFICES.

THE WAVERLEY PEN, Nos. 1 and 2.



The *Shrewsbury News* says:—"They are the best Pens invented, and it is only BARE JUSTICE to the Patentees to record the fact."

THE PICKWICK PEN, Nos. 1 and 2.



"Embodies an improvement of great value."—*Engineer*.

THE HINDOO PEN, Nos. 1, 2, and 3.



"The freest pens we ever used."—*Overland Mail*.

THE COMMERCIAL PEN FOR FINE WRITING.



"Writing made a pleasure."—*Boston Guardian*.

The *Reading Herald* says:—"The world has been endowed with one of the greatest blessings in the manufacture of these excellent Pens."

6d. and 1s.
per Box.

"They come as a boon and a blessing to men,
The Pickwick, the Owl, and the Waverley Pen."

7d. and 1s. 1d.
By Post.

"They are a treasure."—*Standard*.

Patentees: **MACNIVEN & CAMERON,**
23 to 33 BLAIR STREET, EDINBURGH. (Est^d 1770).

Shippers Supplied at Liberal Rates.

Price Lists on application from all Stationers throughout the World.

See other side.

Figure 4.11. MacNiven & Cameron advertisement in *Post Office Edinburgh & Leith directory*, 1878.

Digitized by NLS.

Retailers presented the typewriter as superior to the pen through speed comparisons. Cole & Co's advertisements from 1876 claimed the Sholes & Glidden had a top speed of '30 to 60 Words per minute'.¹⁹ For context, an experienced copyist could write around 30 words per minute.²⁰ However, Cole & Co's claims were not consistent across their advertisements or those of their fellow distributors. A Cole & Co announcement in *The Portobello Advertiser* from September 1876, reproduced in Figure 4.12, claimed 100 words per minute were attainable. In subsequent promotions in the *Advertiser*, Cole & Co amended the speed to '60 to 100 Words per Minute'.²¹ In Dundee, G.H. & G. Nicoll's advertisement declared that 'any operator, after a little practice, would have no difficulty in printing from sixty to eighty words per minute, being considerably more than double the speed of the pen'.²² In Aberdeenshire, Annand and Co simply promoted the 'rapidity' of the typewriter as one of the machine's 'chief advantages over the pen'.²³ In reality, all of the claims about typing speeds were ambitious, if not unattainable. As typewriter historian Michael Adler put it: 'The crude, defective version of the Sholes and Glidden... was barely capable of thirty words a minute'.²⁴

¹⁹ Cole & Co advert in "Post-Office Directory Advertiser," in *Post-Office Edinburgh & Leith Directory 1876-1877* (Edinburgh: Murray and Gibb, 1876), 83.

²⁰ M. H. Hoeflich, "From Scriveners to Typewriters," *Green Bag*, 2013, 403.

²¹ "Type Writer," *Portobello Advertiser*, October 13, 1876, 1.

²² "The Type Writing Machine," *The Dundee Courier and Argus*, April 5, 1876, 3

²³ R. C. Annand & Co., "The Pen Superseded," *Buchan Observer and East Aberdeenshire Observer*, May 19, 1876.

²⁴ Adler, *The Writing Machine: A History of the Typewriter*, 159.

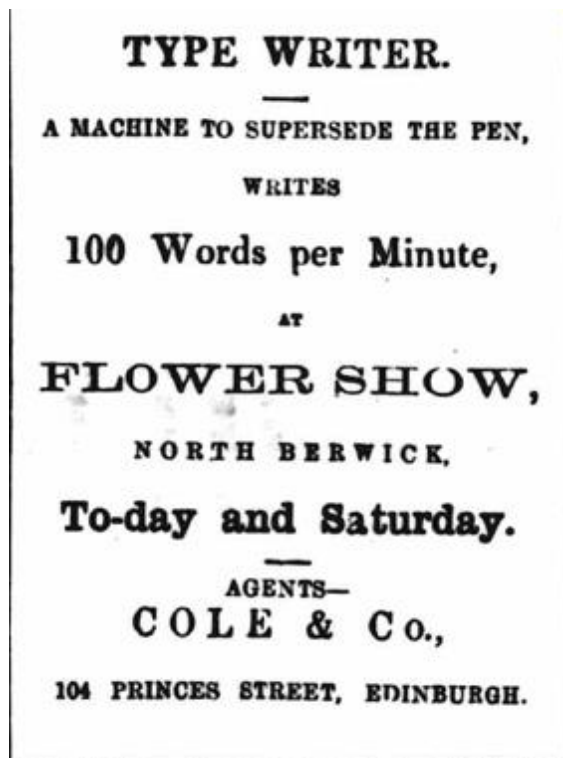


Figure 4.12. Cole & Co Typewriter Advertisement, *Portobello Advertiser* (September 15, 1876), 1.

Copyright the British Library Board.

Whether the Sholes and Glidden could *actually* write faster than the pen was less important than how agents promoted the typewriter and what people expected of the new technology. The focus on writing speeds shows that Scottish retailers were keen to present the typewriter as speedier than the pen. This was a significant shift in the product positioning of writing machines which had hitherto been seen as aids for individuals who could not use pens. Among the early Scottish-based typewriter inventors, Peter Hood's writing machines produced in the 1850s had been conceived as tools for the blind, while John Pratt's Pterotype – partly developed in Glasgow in the mid-1860s – was inspired by Pratt's problem with writer's cramp.²⁵ Advertisements for the Sholes & Glidden from the late-1870s show that the definition of writing machines was extended to incorporate rapidity. While the old motivations for manufacturing typewriters remained, in addition to

²⁵ Description of Hood's machine in Woodcock, "Master Catalogue for Scotland Typewriters," 17. Description of Pratt's machine in Donald Hoke, *Ingenious Yankees: The Rise of the American System of Manufactures in the Private Sector* (New York: Columbia University Press, 1990), 139.

those benefits, the typewriter became a machine that *should* write faster than the pen, even if these claims were exaggerated initially.

Cole & Co's advertisement in the *Portobello Advertiser* (Figure 4.12) also provides evidence that the value of demonstrating a typewriter in person was recognised early on. A flower show might seem like an unusual place to promote a typewriter, but the North Berwick event also attracted agents who sold consumer durables. In 1873, David Foulis, an ironmonger based in Edinburgh, had exhibited 'many ARTICLES of New and Approved Construction, for HOUSEHOLD PURPOSES', which included boot cleaning machines, meat mincers and washing machines.²⁶ Cole & Co's decision to exhibit the Sholes & Glidden at the flower show suggests they positioned typewriters as a domestic technology like the sewing machines they sold. However, it may merely have been that the flower show offered a large and attentive audience ideal for demonstrations of new products. Whatever Cole & Co's intentions, in-person demonstrations of typewriters at fairs and exhibitions remained central to typewriter marketing well into the twentieth century.

Despite their marketing efforts, as discussed in chapter 3, most pioneering Scottish retailers were unsuccessful, with the majority only staying in the trade for a few years. In Scotland, John J. Deas was the only early agent to successfully market typewriters long-term. After taking over as the Remington agent for Dundee in late-1876, Deas embarked on an energetic advertising campaign for the Sholes & Glidden supported by his prior experience in the sewing machine trade.

One of Deas's marketing strategies was the use of testimonials from eminent individuals. In October 1876, Deas held a private demonstration for the typewriter at his home in Dundee attended by 'Ladies, Noblemen and Gentlemen' including Lord and Lady Kinnaird and wealthy philanthropist Angela Burdett-Coutts (1814-1906).²⁷ Throughout her adult life, Coutts had been a tireless letter writer, which may have been what captured her interest in

²⁶ David Foulis, "Notice," *The Scotsman*, August 23, 1873, 1.

²⁷ John J. Deas, "An Accident Having Occurred to John J. Deas...," *Dundee Courier*, October 10, 1876, 1; "The Writing Machine," *Dundee Courier*, October 17, 1876, 2.

the new writing devices.²⁸ On her visit to Dundee, Coutts was so impressed by the typewriter that she bought the exhibited model, becoming one of Deas's first customers.²⁹ In advertisements from early 1877, Deas quoted Burdett Coutts as saying, 'The Type Writing Machine will be a great boon to your Cowgate Merchants'.³⁰ By using Coutts' testimonial and mentioning the members of the nobility he entertained at his home, Deas presented himself as a well-connected and trustworthy salesman. In doing so, he hoped to convince the public that typewriters were worthwhile inventions. Over the following years, publishing testimonials from well-known individuals, businesses and institutions became standard practice for manufacturers and retailers.³¹

During Deas's time as a Remington agent, the company developed a new typewriter: the Remington No. 2 Perfected Typewriter, later known as the Standard No. 2. Released in 1878, the major innovation on the Remington No. 2 was the carriage shift which enabled the operator to shift between upper and lower-case letters. The aesthetic was also quite different, with an open frame exposing the typewriter's inner workings (Figure 4.13). The industrial look to the Remington No. 2 perhaps reflected the growing demand for typewriters from commercial sectors instead of domestic users. In Peter Weil's view, the open design lowered manufacturing costs and reduced the sound output. On the Sholes & Glidden, the metal casing had acted as a kind of drum which may have been why many users removed the outer panels.³² The Remington No. 2 was the first typewriter that was a real commercial success and by the time production ceased in 1894 almost 100,000 had been manufactured.³³

²⁸ Edna Healey, *Coutts, Angela Georgina Burdett-; Suo Jure Baroness Burdett-Coutts (1814–1906), Philanthropist*, vol. 1 (Oxford University Press, 2004), 7, <http://www.oxforddnb.com/view/10.1093/ref:odnb/9780198614128.001.0001/odnb-9780198614128-e-32175>.

²⁹ "The Writing Machine," *Dundee Courier*, October 17, 1876, 2

³⁰ John J. Deas, "The Type Writing Machine..." *Dundee Courier*, May 19, 1877, 1.

³¹ "Testimonials," *The Imperial News* 1, no. 1 (1911): 1.

³² Personal communication with Peter Weil (14/08/2021)

³³ "Remington Typewriter Serial Numbers," Typewriter Database, 2020, <https://typewriterdatabase.com/remington.42.typewriter-serial-number-database>



Figure 4.13. Remington Standard No. 2. NMS collection, object number T.1960.34.

Remington No. 2 typewriters do not seem to have arrived in the UK until the early 1880s, with Deas still at the centre of developments. On a visit to Scarborough in 1882, he exhibited 'The New Perfected Type Writer, with Capitals and Small Letters', which Deas presented as an improvement over the Sholes & Glidden all-capitals design.³⁴ In Glasgow, Remington agents Eglin & Gardner (later Eglin & Co) described the No. 2 as 'Greatly Improved and Price Reduced'.³⁵ In these advertisements, Deas and Eglin expect prior knowledge of typewriters from their readers, who were assumed to have known the original price of the Sholes & Glidden and that it wrote in all capitals so that they would recognise the design improvements. Until rival manufacturers began to provide competition for Remington, retailers promoted their typewriters by comparing them with the older designs from the same manufacturer.

³⁴ "The American 'Type Writer,'" *Scarborough Gazette*, June 29, 1882, 3.

³⁵ Eglin & Gardner, "The Type Writer," *Glasgow Evening Citizen*, May 8, 1882, 2.

As discussed in chapter 3, in early 1883 Deas ended his contract with Remington to sell the new American-made Caligraph typewriter, marking the beginning of competition between brands on the Scottish market. In an 1884 advertisement for the Caligraph, Deas glamorized the typewriter as a new American invention, proclaiming: 'There is a vast future for this latest emanation of 'Yankee' genius.' Deas added jocularly that 'He will from time to time introduce "Yankee notions" which may strike him as being useful' (Figure 4.14). Today 'notions' refer to small accessories used in haberdashery, which perhaps linked to Deas's background as a draper. In the late-1880s, 'Yankee notions' also described consumer goods made in America. An 1883 advertisement for the Boston Store on Murraygate, Dundee announced a range of 'Yankee Notions!... never before seen in Britain' including brushes, basins, looking glasses and tea sets.³⁶ Deas's talk of Yankee notions relayed his enthusiasm for the typewriter and American innovations generally.

³⁶ "Boston Store," *Dundee Advertiser*, January 13, 1883, 2.

ADVERTISEMENTS.

JOHN J. DEAS,

REPRESENTATIVE of the AMERICAN WRITING MACHINE COMPANY, Corry, Pennsylvania, U.S.A., begs to inform the Nobility, Gentry, Clergymen, Professional and Mercantile men, and all others who use pen and ink, that he has opened that shop, **92 UNION STREET**, for the Sale of their TYPE-WRITING MACHINES, which consist of Four Kinds; 1st, the Portable Caligraph which weighs little more than Ten Pounds, and prints Capitals only; 2nd, the No. 2 Caligraph, prints Capitals and Small Letters; the No. 3 "Commercial" Machine, which prints Capitals and any combination of Fractions and Mercantile Symbols, such as = + \$ () % @ " "; 4th, the same as No. 2, with a wider cylinder to take in paper 11½ inches wide.

There is a vast future for this latest emanation of "Yankee" genius, and will, in course of time, do for the ink-bottle and the pen, what the sewing machine has already done for the needle.



The "Caligraph" Office,
92 UNION STREET,
SEVEN DOORS EAST FROM THE FACADE,
ABERDEEN.

N.B.—He will from time to time introduce "Yankee notions" which may strike him as being aseful.

Figure 4.14. John Deas advertisement in the Aberdeen Post Office Directory, 1884-1885. Digitized by NLS.

In Glasgow, A. C. Thomson sold the Caligraph from 1884 to c. 1887. Thomson's early advertisements in the *Glasgow Herald* positioned the Caligraph as another printing device he sold alongside copying machines, including the Cyclostyle and the 'Gladstone' self-inking

printing machine. He merely described the Caligraph as ‘For Printing your Correspondence. Will take a Number of Copies and One in Copying Ink.’³⁷ Thomson changed direction in 1886 with this bold statement on the commercial potential of the typewriter:

The CALIGRAPH TYPE WRITER in the U.S. has proved one of the greatest helps towards the solution of the vexed question, “What Profession can we Teach our Girls?” Thousands of young ladies are now practically independent through use of the above Machine, and are earning large Salaries from its work.³⁸

Thomson’s advertisement was one of the earliest Scottish examples to promote the typewriter as an employment opportunity for women. In this approach, Thomson was influenced by developments in America which he probably kept up to date with through trade magazines such as the *Caligraph Quarterly*. Published by the AWMC, the *Caligraph Quarterly* was a ‘trade circular... designed to promote the introduction and general use of the *Ideal Caligraph*’.³⁹ The AWMC released four issues between October 1882 and December 1883, followed in 1884 by a similar publication: *The Ideal Caligraph*.⁴⁰ By 1884 copies were being circulated in Scotland by John J Deas, who advertised: ‘All who require particulars [of the Caligraph] should send to Dundee for a *Caligraph Quarterly* a magazine devoted to Type-Writing news’.⁴¹ As a fellow agent for the Caligraph, Thomson almost certainly had access to these publications, which included articles on ‘The Caligraph for Women’.

Thomson’s advertisements promoting typewriting as an employment opportunity for women were published in the context of an emergent typewriting sector in Scotland. In 1886, Marion Marshall and Ethel Garrett – proprietors of the Ladies Typewriting Office in London – had a stall promoting their business in the Women’s Industries gallery of the

³⁷ A.C. Thomson, “Caligraph Typewriter,” *Glasgow Herald*, July 1, 1884, 1.

³⁸ A.C. Thomson, “Work For Ladies,” *Glasgow Herald*, June 2, 1886, 1.

³⁹ “The Caligraph Quarterly,” *The Caligraph Quarterly* 1, no. 4 (1883): 1, <https://www.typewritergazette.com/trade-literature-a-e>.

⁴⁰ Introduction to Paul Robert, *The Caligraph Publications* (Virtual Typewriter Museum, 2007).

⁴¹ John J. Deas, “The American Writing Machine Company...,” *Dundee Evening Telegraph*, April 15, 1884.

Edinburgh International Exhibition.⁴² Thomson had a stall for typewriters at the same exhibition.⁴³ In that year, Ethelinda Hadwen and Elizabeth Fleming also established their typewriting office in Edinburgh, the first of its kind in Scotland (see chapter 5). Through publications, exhibitions and businesses, Thomson would have been well aware of the growing number of women working in the typewriting sector.

At the 1886 Exhibition, Thomson exhibited the Caligraph alongside two new typewriters: the Hall and the Columbia. These machines illustrate how much flexibility there still was in typewriter design. Neither had a keyboard, but instead used different mechanisms for moving a pointer to select a letter, from a grid featured on the Hall typewriter (Figure 4.15 & Figure 4.16) or a dial on the Columbia (Figure 4.17). Subsequently, historians and collectors have dubbed these designs 'index' typewriters. To modern eyes, index typewriters seem bizarrely unfamiliar, but for many retailers and users at the time, these designs seemed like reasonable alternatives. This view is reflected in advertising which placed both designs on a similar footing. In Thomson's advertisement in the 1886 exhibition guide, the Columbia index machine is at the top of the page with the most prominent illustration, while the Caligraph keyboard typewriter is pictured beneath it (Figure 4.18).

It is easy to see why users might have preferred the Columbia or the Hall to the Caligraph or Remington. Index typewriters were much cheaper, with the £17 Caligraph more than double the price of the Hall at £8.8s., or the Columbia at £6.6s. Index typewriters were easier to transport. A standard Caligraph weighed around 10kg, while the Hall was 3.6kg and the Columbia just 2kg, making index typewriters more portable. As Thomson claimed in his 1886 advertisement, the Hall 'may be used in any position, on a desk or in a Railway Carriage' (Figure 4.18). Perhaps the greatest appeal of index typewriters was their simplicity, especially if we consider that users in Scotland would have been just as unfamiliar with keyboard typewriters. Before the widespread adoption of touch typing in the 1890s, we cannot assume users understood the speed advantages of keyboards over index designs. In

⁴² *International Exhibition of Industry Science & Art Edinburgh 1886: The Official Catalogue* (Edinburgh: T. & A. Constable, 1886), 108.

⁴³ *International Exhibition of Industry Science & Art Edinburgh 1886: The Official Catalogue*, 282.

the 1880s, typewriter design had not stabilized around the keyboard as a standard feature. As late as 1888, Remington typewriters were described as 'key' typewriters to differentiate them from index designs.⁴⁴ Today, a keyboard seems like a fundamental part of any typewriter, but in the late-nineteenth century, typewriter design was more open to interpretation.



Figure 4.15. Hall typewriter manufactured c. 1885. NMS collection, object number T.1940.2.

⁴⁴ Harold Hickman, *A Foreigner's Visit to the Glasgow International Exhibition and the Panorama of the Battle of Bannockburn* (Edinburgh and Glasgow: Aird & Coghill; John Menzies & Co., 1888), 32.

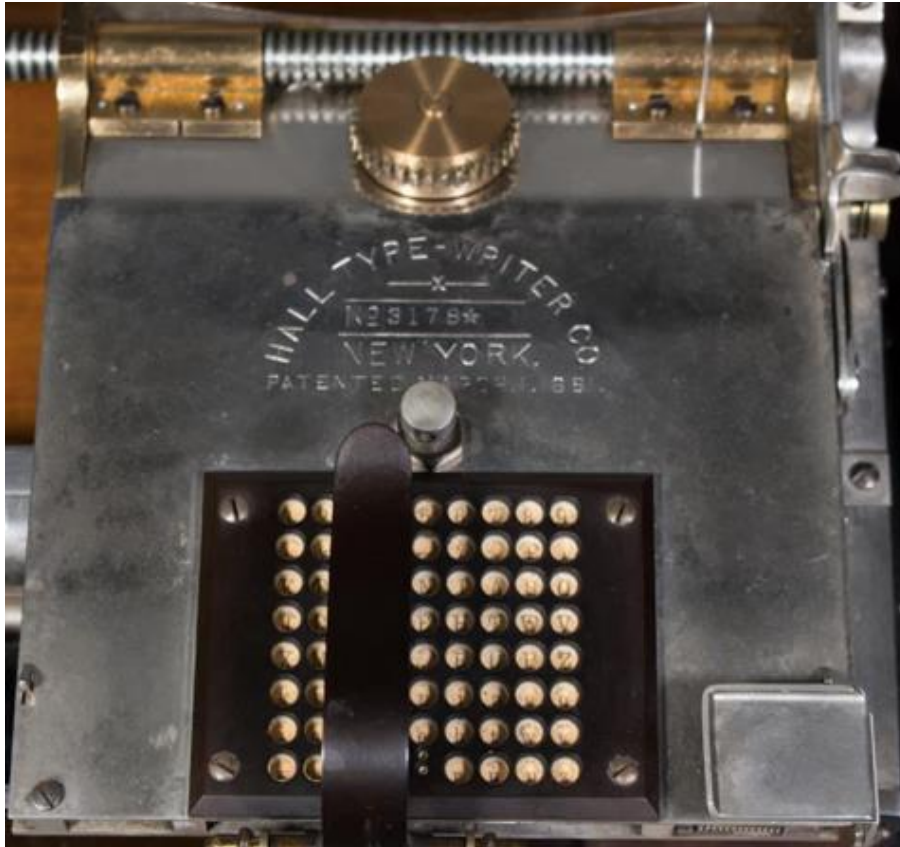


Figure 4.16. Index plate for character selection on Hall typewriter. NMS collection, object number T.1940.2.



Figure 4.17. Columbia No. 2 typewriter made in New York, c. 1885. NMS collection, object number T.1949.3.1.

The Improved No. 2
'COLUMBIA' TYPE-WRITER.
£6, 6s.
Extreme Simplicity,
Ease of Operation,
Durability.
Speed, Forty Words
per Minute.
Weight, 4½ lbs.



THE 'CALIGRAPH' WRITING MACHINE.
'Light as the sheet to write the old way.'
Most people can, in less than a week, write with the
Caligraph faster than with the Pen.
Price £17 and £20.



THE 'HALL' TYPE-WRITER.
The Times says:—'A beautiful little Machine,
weighing, with its case, less than 8 lbs., and it
may be used in any position, on a desk
or in a Railway Carriage. Speed, forty
words per minute. Price, £8, 6s.'



THE 'A.C.T.' SELF-INKING PRINTING PRESS.
An astonishing production. Is not surpassed
by any Machine three times its cost. Ask to
see it. Price £3, 10s.

THE 'A.C.T.' RUBBER STAMPS,
Apparatus, and Inks, for all Climates. Stamps
for all purposes, and in any language.

COURT 8, STALL 494.
A. C. THOMSON
18c GEORGE ST., EDINBURGH
AND
713 UNION ST., GLASGOW.

Refer to Catalogue,
page 108, Exhibit
No. 494.
Agencies arranged
for Home and
Abroad.

Figure 4.18. Thomson's advertisement for the Columbia, Caligraph and Hall in *The Official Guide* to the 1886 exhibition.

By the mid-1880s, there were at least four brands of typewriters widely available in Scotland: Remington, Caligraph, Hall and Columbia. Yet there were few signs of open

competition between retailers of rival brands. As suggested in chapter 3, this may have been due to lenient arrangements with manufacturers meaning retailers were not contractually obliged to represent only one brand. Whatever the reason, the leading retailers were less concerned with competitors and more focused on persuading the public that typewriters were worthwhile inventions. This changed towards the end of the 1880s. At the Glasgow international exhibition of 1888 and the Edinburgh exhibition of 1890, there were signs of growing competition between retailers of rival typewriter manufacturers. These were occasions where several agents exhibited, meaning the public could compare the appearance, price and technical capabilities of various typewriters from rival manufacturers.

The International Exhibition of Science, Art and Industry was held in Glasgow from May to November 1888, attracting almost six million visitors. Charles H. Barclay, the Glasgow representative for the Remington typewriter, had two stands at the event: one in the Women's Industries gallery and another in the Paper; Printing; Bookbinding and Stationery section. In the stationery section, Barclay was joined by W. J. Richardson & Co, the UK agents for the Columbia Typewriter Company. Headed by inventor Charles Spiro, Columbia was an American firm that made the abovementioned Columbia index typewriter and the latest development in typewriter design: the Bar-Lock.

Launched in 1888, the Bar-Lock was a keyboard typewriter with two innovative features. Firstly, it was a downstrike machine meaning that the typebars were arranged in front of the carriage and struck down on the printing point (Figure 4.19 & Figure 4.20). As a result, the typist could see the text by looking over the frame, which contrasted with concealed-text typewriters like the Remington and Caligraph, where the typebars hit the underside of the carriage, cutting off the operator's view. Secondly, this typewriter had a mechanism for guiding each typebar to the printing point, to keep the characters aligned, hence the name 'Bar-Lock'. Retailers promoted the Bar-Lock as a 'visible' writing typewriter with supposedly 'perfect' alignment.



Figure 4.19. Bar-Lock No. 5 was manufactured in c. 1893 for the British market. The typebars are arranged upright in front of the carriage. NMS collection, object number T.1959.41.



Figure 4.20. Typist's vantage point over the typebars down onto the printing point on the Bar-Lock No. 5.

Comparing contemporary accounts of Barclay's and Richardson's stalls sheds light on the changing attitudes towards typewriters in the late-1880s. Barclay's exhibit for the Remington received positive publicity, including a visit by Queen Victoria recorded thus in

The North British Daily Mail: 'At her Majesty's visit various members of the Royal party stopped to see the working of the typewriters, and took specimens of the work with them.'⁴⁵ Another reviewer recalled: 'I also saw in this court a lady working at the Remington key type writer – a wonderful invention this!'.⁴⁶ Having a female typist on the stall reinforced the perception that typing was an employment for women. However, these reports said little on the design, perhaps because the Remington was already the most well-known model on the market.

Reviews of W. J. Richardson's stand presented the Bar-Lock as the new and exciting typewriter at the exhibition. The contrast in coverage is striking in Cameron's guide to the exhibition, where the writer merely noted that 'The Remington type-writers are seen on a stall at the western side'.⁴⁷ The writer then spent eight lines praising the Bar-Lock by listing various advantages of the 'ingenious mechanism' including visible writing; character alignment; automatic line advancement; ease of operation; and the high speeds that were attainable.⁴⁸ The correspondent for the *North British Daily Mail* also praised the Bar-Lock's visible writing: 'The Special advantage of this writer is that the work is visible as it is being produced.'⁴⁹ For visitors with no experience of typewriters and those who had used the concealed text Remington and Caligraph machines, the demonstration of visible-text typing on the Bar-Lock would have provided an impressive visual experience.

The Columbia index typewriter at W. J. Richardson's stand received very little media coverage. The exception was a detailed report on typewriters in *The Glasgow Herald*, which praised the Columbia as an 'exceedingly simple apparatus' but added that 'it cannot be worked with anything like the rapidity of the type-bar machines', like the Remington or Bar-Lock.⁵⁰ Index typewriters were starting to be viewed as inferior, a trend that would

⁴⁵ "Type-Writer," *Supplement To North British Daily Mail*, November 14, 1888, 2.

⁴⁶ Hickman, *A Foreigner's Visit to the Glasgow International Exhibition and the Panorama of the Battle of Bannockburn*, 32.

⁴⁷ *Cameron's Guide through the Glasgow Exhibition, 1888. [With Plans.]*, Second Edi (Edinburgh: J.A. Cameron & Co, 1888), 43.

⁴⁸ *Cameron's Guide through the Glasgow Exhibition, 1888. [With Plans.]*, 43.

⁴⁹ "Type-Writers," *Supplement To North British Daily Mail*, September 4, 1888, 2.

⁵⁰ James Paton, "Glasgow International Exhibition: Printing and Stationery," *Glasgow Herald*, June 16, 1888, 9

accelerate. By 1894, Henry Charles Jenkins, an early typewriter enthusiast and inventor, stated in a lecture to the Society of Arts that index machines had helped familiarise the British public with typewriters. But he added that the Hall was no longer on sale in the UK and that the Columbia belonged to 'a period that is passing away.'⁵¹ Index typewriters continued to be made into the early twentieth century but were rarely considered typewriters in the same sense as keyboard designs.

The Edinburgh International Exhibition of 1890 saw even more typewriters on display. Local shorthand-typing teacher Fred Tyndall presented the Bar-Lock typewriter. Next to Tyndall's stall were the Edinburgh stationers George Waterston & Sons who were agents for the English typewriter, one of the earliest British invented and commercially manufactured typewriters. Also at the exhibition was the Maskelyne typewriter, another British machine in the development stage. Finally, there was a stall for the Caligraph, which, while still owned by the American Writing Machine Company, was now also made at a new factory in Coventry.⁵² One machine that was conspicuous by its absence was the Remington. Instead, Charles Barclay placed a full-page advertisement in the *Official Catalogue*, where it appeared alongside descriptions of the English and Bar-Lock. Barclay claimed that the Remington 'stands without a rival', adding that because Remingtons are 'so well and favourably known, we have decided not to enter them at this Exhibition but would refer intending Purchasers to Users of Typewriters everywhere.'⁵³

In Barclay's view, the Remington was apparently so well respected that there was no justification for its inclusion in the exhibition; only newer machines needed to be tested in such an arena. In reality, brands such as the Bar-Lock and the English were a real threat to Barclay's business in Scotland and Remington's position in the UK market. Barclay also claimed that the Remington had the 'greatest durability'. However, durability was not an attribute easy to demonstrate at a temporary exhibition. In contrast, visible writing – the

⁵¹ Henry Charles Jenkins, "Cantor Lectures: Type-Writing Machines [Lecture II]," *The Journal of the Society of Arts* 42, no. 2184 (1894): 857.

⁵² "The Edinburgh Exhibition," *Edinburgh Evening News*, June 10, 1890, 2.

⁵³ Charles H. Barclay, "Remington Standard Type-Writer," in *Official Catalogue International Exhibition of Electrical Engineering General Inventions and Industries Edinburgh 1890*, ed. S. Lee Bapty (Edinburgh: T & A Constable, 1890), 110.

key selling point for the Bar-Lock and the English – would be immediately apparent to visitors. Barclay probably feared that if the Remington was shown alongside these typewriters, his typewriter would come out the worse. Therefore, he felt it prudent to secure the image of the Remington as the first and most popular typewriter by avoiding unfavourable comparisons with newer brands, both at the exhibition and in newspaper reports that followed.

Meanwhile, reports on the 1890 exhibition positively reviewed the English typewriter. In *The Scotsman*, it was claimed that on the English, ‘no effort seems to have been spared in producing a thoroughly reliable article’ adding that ‘in all probability it will be a strong competitor to its predecessors.’ While the discussion of the English filled most of the 700-word article, the Bar-Lock was briefly recognised as ‘another exceedingly ingenious machine’.⁵⁴ The endorsement of the English typewriter revealed a desire for British manufacturers to challenge the hegemony of American brands. *The Scotsman* article was a precursor to the more blatantly patriotic language in advertisements for British-made typewriters from the early-1900s. As it turned out, the Bar-Lock was still very well received and was awarded a Gold Medal at the exhibition.⁵⁵ However, the predictions for the English were misplaced with manufacture coming to an end in 1894.⁵⁶

The 1888 and 1890 exhibitions were a turning point in the public perception of typewriters. Firstly, index typewriters were starting to be viewed as inferior alternatives to keyboard typewriters. Secondly, the arrival of the Bar-Lock and the English raised the profile of writing visibility in typewriter design. When the Remington and the Caligraph were the only typewriters on the market, writing visibility had not seemed like a major concern: this was just how typewriters worked. The arrival of visible writing typewriters in the late-1880s changed the landscape, marking the beginning of a design debate that would carry on for another 20 years.

⁵⁴ “Typewriters,” *The Scotsman*, May 17, 1890, 9.

⁵⁵ ‘Testimonials of Some of the Users of the ‘Bar-Lock’ Typewriter’ in ‘Caligraph or type-writing machines: requests from the Commissioner of Police, the...’ reference HO 45/10004/A497679, The National Archives, Kew.

⁵⁶ Greg Fudacz, “The English,” The Antikey Chop, accessed March 31, 2022, <https://www.antikeychop.com/the-english-typewriter>.

Adversarial advertising, 1890s to c. 1910

As Chart 2.2 records, the small influx of typewriter retailers on the Scottish market in the late-1880s was followed by a rapid expansion in the 1890s, both in the number of retailers and brands available. In response, retailers differentiated their typewriters from the competition by employing various marketing techniques. This included the use of slogans and taglines; a focus on competitive pricing; and the promotion of unique design features on their typewriters. The critical design issues for retailers, customers and users were writing visibility, inking method and keyboard layout, as well as product attributes such as durability and reliability.

Competitive slogans

After Remington's 'A Machine to Supersede the Pen' tagline went out of use in the late 1870s, recurring slogans do not seem to have been a major feature of typewriter advertising either in Britain or America for several years. Then from the mid-1880s, Caligraph agents in America and Canada began incorporating the tagline 'It Stands at the Head' into their advertisements.⁵⁷ The American Writing Machine Company, which made the Caligraph, soon encouraged their agents in Britain to adopt the slogan. Mr T. Davison, the UK's new head agent, used the tagline in his promotions from 1888.⁵⁸ In 1891, John M Fairfield – the treasurer of the AWMC – wrote to the Caligraph factory managers in Coventry to update them on a contract for 1,000 typewriters to the Postal Telegraph Company in America. This was allegedly 'the largest order ever given for Writing Machines' and proved that 'the Caligraph does "stand at the head"'.⁵⁹

In Scotland, John Deas used the Caligraph tagline during the early-1890s. An 1894 advertisement illustrated the 'Deas Caligraph' bordered by the caption 'It Stands at the Head' / 'Of all Type-Writers' (Figure 4.21). The slogan differed semantically from Remington's 'a machine to supersede the pen' tagline of the mid-1870s. While Remington's

⁵⁷ A. J. Henderson, "The Caligraph Writing Machine Stands at the Head," *Toronto Daily Mail*, July 3, 1885, 5.

⁵⁸ T. Davison, "It Stands at the Head," *Army and Navy Gazette*, March 17, 1888, 15.

⁵⁹ American Writing Machine Company, *The Caligraph typewriter [catalogue]* (American Writing Machine Company, c1895), copy held at National Museums Scotland Library.

slogan used the indefinite article 'a', 'It Stands at the Head' implied the Caligraph was the best typewriter of the several available. In the late-1870s, Remington agents had been concerned with explaining what typewriters were and why they were better than pens. It would have made little sense to proclaim the Remington as the preeminent typewriter while no other typewriters were available. By the early 1890s, Deas presents the Caligraph as the market leader, which he clarifies by adding 'of all typewriters' to the end of the original slogan.

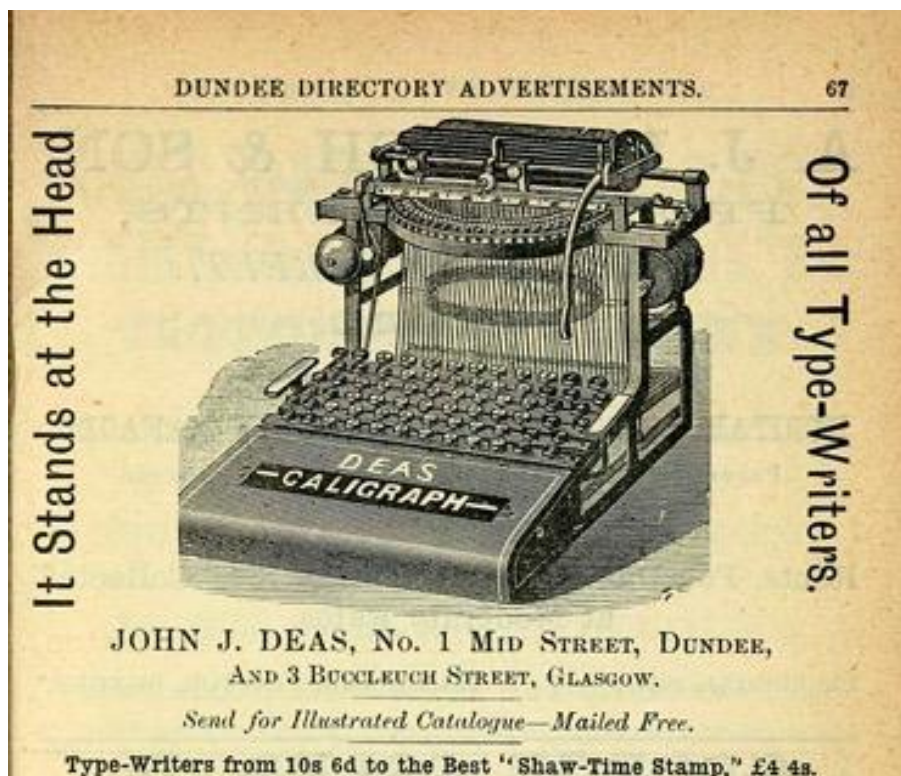


Figure 4.21. 'Deas Caligraph' advertisement published in the *Dundee Directory* (1894). Digitized by NLS.

This branding shift coincided with the release of the 'Deas Caligraph'. Made by the new AWMC factory in Coventry, the 'Deas' was probably a variation on the Caligraph No 2 but built to Deas's 'Special Instructions'.⁶⁰ According to Deas, his alterations were made to 'meet the wants of mercantile men' and that after trips to London, Birmingham, Glasgow, and Edinburgh, he had been successful in 'placing Large Numbers in those Central Hives of

⁶⁰ John J. Deas, "The Deas Caligraph," *Dundee Courier*, November 14, 1891, 1.

Industry.’⁶¹ Advertisements for the ‘Deas’ also included a promotion for the Shaw-Time Stamp, an American invention for recording the time and date of transactions, which was promoted as useful for ‘bankers, attorneys, manufactories, government, brokers... and business houses.’⁶² That Deas sold the Time Stamp alongside the Caligraph is further evidence that he targeted typewriters at offices and commercial enterprises.

The Deas Caligraph was a fascinating combination of American innovation and English manufacture, adapted and marketed by a Scottish retailer. Deas’s advertising, which included commissioning a business card showing him holding the Caligraph, demonstrated his belief in his reputation as Scotland’s longest-serving typewriter salesperson (Figure 4.22 & Figure 4.23). While Deas employed slogans used by Caligraph agents worldwide, he linked this with advertising specially catered to customers in the UK and Scotland in particular. Manufacturers guided marketing campaigns in America and Europe, but retailers still had the freedom to tailor their advertisements to a local audience.

⁶¹ John J. Deas, “Correspondence: Origin of the Type-Writer,” *Dundee Evening Telegraph*, June 8, 1891, 2

⁶² “The Shaw Time Stamp,” in *Poor’s Hand Book of Investment Securities; for the Use of Bankers, Investors, Trust Institutions and Railroad Officials: Supplementing Poor’s Manual of Railroads* (H.V. & H.W. Poor, 1892), 84.

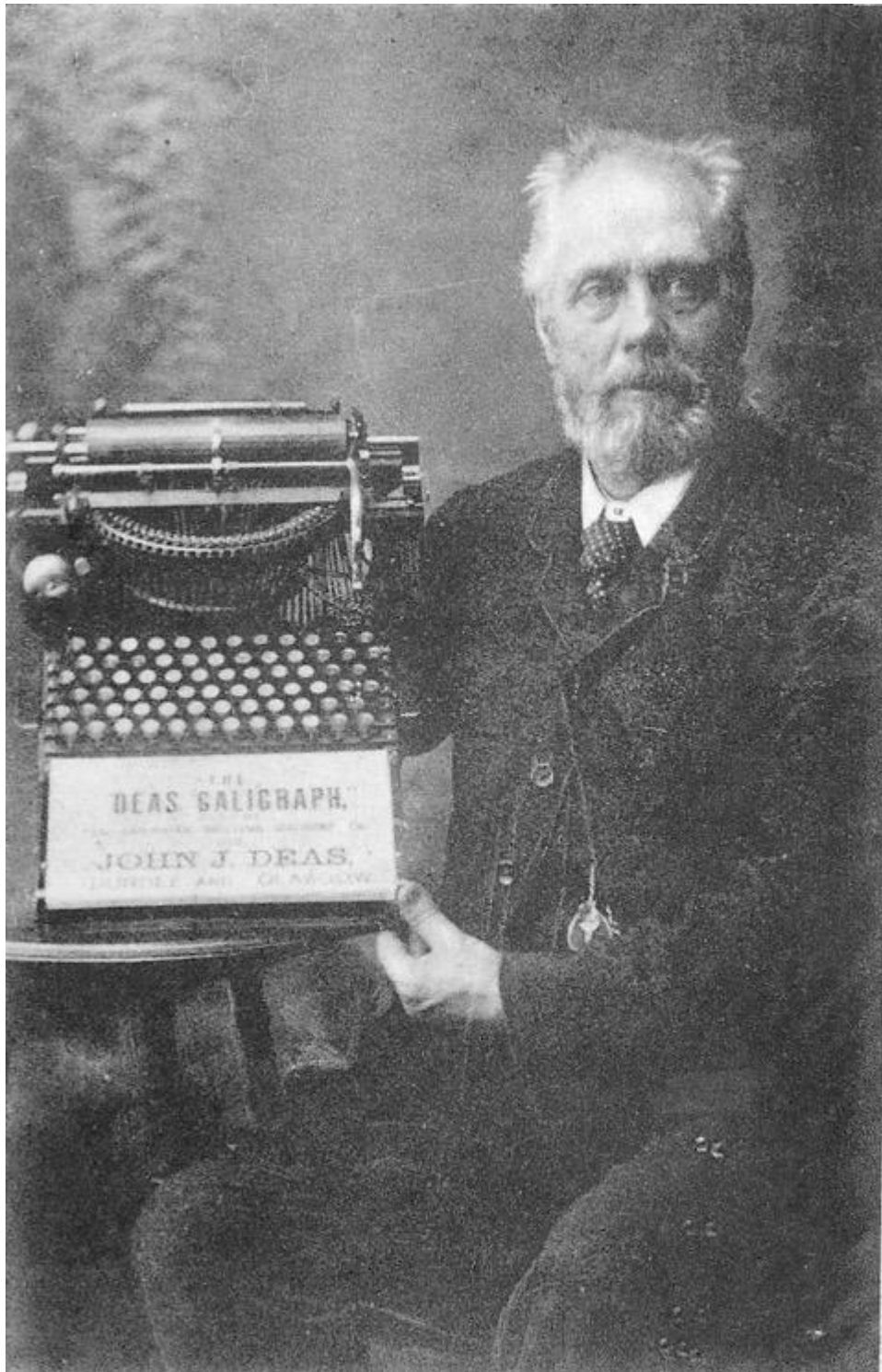


Figure 4.22. Front of business card promoting the Deas Caligraph, c. 1893. Courtesy of Andrew Cronshaw.

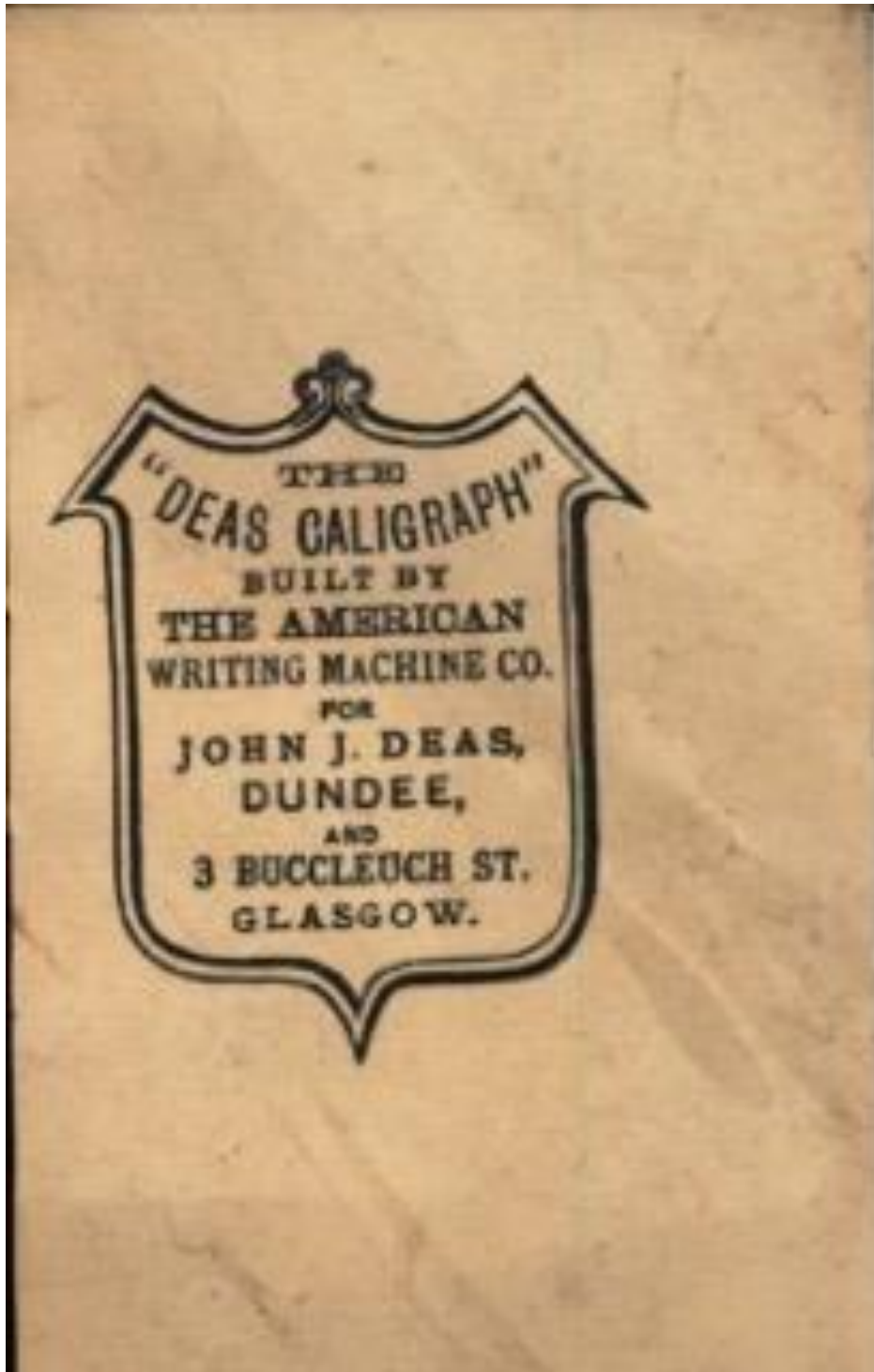


Figure 4.23. Back of business card promoting the Deas Caligraph, c. 1893. Courtesy of Andrew Cronshaw.

The Typewriter Trust

The 1890s also saw increasing tensions over typewriter prices which were severely impacted by the establishment of the Union Typewriter Company in New York in 1893, known pejoratively as the Typewriter Trust. The Trust was a merger of six American brands: Remington, Smith-Premier, Caligraph, Yost, Densmore and Brooks, all of which were sold in

Scotland at the turn of the twentieth century.⁶³ It was established just three years after the Sherman Antitrust Act was passed in the US, which had sought to prevent anticompetitive practices by prohibiting collusion between independent companies. However, businesses got around these measures by forming mergers which brought most of the benefits of cartels. Consequently, the period following the Sherman Act saw a significant rise in merger companies, such as the Typewriter Trust, which sought to monopolize a particular area of the market.⁶⁴ The Trust fixed the prices for their typewriters in America and overseas, and by the late 1890s, there was growing public awareness of this practice in the UK.⁶⁵ In the UK, there was a false impression of competition because separate selling organisations distributed the different Trust brands. In reality, it seems that agents for Trust typewriters were obliged to sell these machines at the prices dictated to them by their American suppliers.

From the mid-1890s, pricing received greater publicity as agents for cheaper typewriters highlighted the high prices of Trust brands. This was dramatically illustrated in the Edinburgh Post Office directory in 1897 when an advertisement for Remington appeared on the same page as one for the new English-made Salter typewriter. (Figure 4.24) The Gardiner Brothers – a family of stationers and Edinburgh agents for the Salter – informed readers that their £8.8s. typewriters would do ‘the work of a 20-guinea machine’. The Gardiner Brothers were taking a jibe at Remington and the other expensive Trust brands.

⁶³ Robert Messenger, “How the Union Typewriter Trust’s Tentacles Reached Australia,” *oz.typewriter*, 2014, <https://oztypewriter.blogspot.com/2014/08/how-union-typewriter-trusts-tentacles.html>.

⁶⁴ Carlos D Ramírez and Christian Eigen-Zucchi, “Understanding the Clayton Act of 1914: An Analysis of the Interest Group Hypothesis,” *Public Choice* 106, no. 1/2 (2001): 158.

⁶⁵ “The Typewriter ‘Trust,’” *Sheffield Evening Telegraph*, October 29, 1898, 5.

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Remington Typewriter.

Leadership means Superiority. Continued Leadership implies Progress.

By Special Warrants of Appointment to




Tacitly acknowledged Leadership over many Competitors shows Undeniable Merit.

H.M. The Queen. H.R.H. The Prince of Wales.
Contractors to H.M. Government.

Full information and an opportunity of testing the machine, without being committed to its purchase, given upon application.

WYCKOFF, SEAMANS, & BENEDICT, 1 N. St. David Street, Edinburgh.
LONDON: 100 GRACECHURCH STREET.

The Salter Typewriter  **Typewriter Supplies**

Made in England, Price £8, 8s.
Will do the work of a 20-guinea machine.

Ribbons, Carbons, Papers,
For Remington and all other machines.

Edinburgh Agents—
Telephone 783.

Ask for Price List.

Gardiner Brothers, Stationers, 14 Teviot Place & 66 South Bridge.

Figure 4.24. Remington and the Salter advertisements were published side-by-side in the *Post-Office Edinburgh & Leith Post Office Directory, 1897*. Digitized by NLS.

The following year, James Leishman – agent for Remington in Edinburgh – attempted to stave off the challenge from cheaper brands with a newly designed advertisement (Figure 4.25). Leishman directs the top half of his advertisement to people unpersuaded on the benefits of typewriters. He writes, ‘You cannot afford to do your writing in the old way’, harking back to the old slogan about the Remington being ‘a machine to supersede the pen’.

You cannot afford to do your writing in the old way.

Remington Typewriter.

SAVES EVERYBODY'S TIME.

The Time of the Principal; for Letters are easily Checked.
The Time of the Clerk; for the Machine is from Three to Four Times as fast as the Pen.

The Time of the Author; for the Machine keeps Pace with Thought.

The Time of the Editor; for a Typewritten Manuscript is clear as Print.

WHY THE REMINGTON?

Its Reputation is World-wide, and Extends over a Quarter of a Century.

It is Simple in Construction, and therefore Reliable.

It is Facile in Operation, Light to the Fingers.

It is made of the Best Materials, and with the Utmost Care and Precision; and therefore cheapest in the End.

TELEPHONE
No. 377.



Her Majesty the Queen.

By Appointment to



H.R.H. The Prince of Wales.

TELEPHONE
No. 377.

CONTRACTORS TO HER MAJESTY'S GOVERNMENT.

Full Particulars and Free Trial of Machines upon application to

WYCKOFF, SEAMANS, & BENEDICT,
44 George Street, EDINBURGH.
JAMES LEISHMAN, Representative.

Figure 4.25. James Leishman's response to the challenge from cheaper brands in the *Post-Office Edinburgh & Leith Directory*, 1898.

Digitized by NLS.

In the bottom half of the advertisement, Leishman turned his attention to people convinced of the benefits of typewriters but unsure of which machine to buy. Here, he seemed to be talking to prospective buyers who may have considered buying a newer and cheaper typewriter, such as the Salter. To these readers, Leishman asked, 'Why the Remington?' For Leishman, the headline selling point was that Remington's 'reputation is World-Wide, and extends over a Quarter of a Century'. The Remington was the first typewriter to achieve commercial success, and naturally, Leishman wanted to capitalize on its proven track record. His message to the undecided customer was: why risk a new machine when the Remington has been tried and tested over 25 years?

Leishman concluded his description by claiming the Remington was 'made of the Best Materials, and with the Utmost Care and Precision; and therefore cheapest in the End'. This was an effort to justify the unfortunate fact that the Remington was one of the most expensive machines on the market. At around £22, the Remington had often been considered expensive. However, as several lower-priced keyboard typewriters arrived in the 1890s, the Remington and other Trust machines seemed even more expensive in relative terms. By describing his typewriters as 'cheapest in the End', Leishman dismissed insinuations that the Remington was needlessly overpriced. In addressing these criticisms, he did not deny that the Remington's initial cost was high but insisted that the quality and reliability of these machines would pay dividends in the long run. In doing so, Leishman implied that lower-priced typewriters like the Salter were unreliable.

The conflict between Leishman and the Gardiner Brothers was replicated in advertisements across the four principal cities. Retailers for Trust brands focused on the quality of their machines with little reference to the price. Meanwhile, agents of cheaper machines like the Salter argued that their typewriters did the same work as the leading brands for a fraction of the cost.

Writing in plain sight

At the turn of the twentieth century, the debate over writing visibility (which started with the introduction of the Bar-Lock in the late-1880s) intensified as new visible writing machines came onto the market, including the Williams, Oliver and Underwood. Retailers of

visible writing typewriters were in competition with each other as well as with concealed-text typewriters such as the Remington. Below, three advertisements are presented for visible writing typewriters, illustrating how retailers differentiated their products from the competition.

Firstly, from 1899 is an advertisement from the Gardiner Brothers – previously agents for the Salter in Edinburgh – who were the first dealers for the Oliver typewriter in Scotland. Secondly, we have a 1902 advertisement for the Williams typewriter from George Higgle, a shorthand-typing teacher from Bute whose branch was a subagency to the Williams Typewriter Company in Glasgow. Thirdly, there is a Bar-Lock advertisement from Edinburgh agent and shorthand school principal Alexander Angus. These advertisements demonstrate the methods used for promoting visible writing typewriters, alongside a range of design features, including printing method and keyboard layout.

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THE OLIVER TYPEWRITER,
—→→ The Latest Evolution ←→—
STRENGTH WITHOUT UNNECESSARY WEIGHT.
WRITING ALWAYS IN SIGHT.

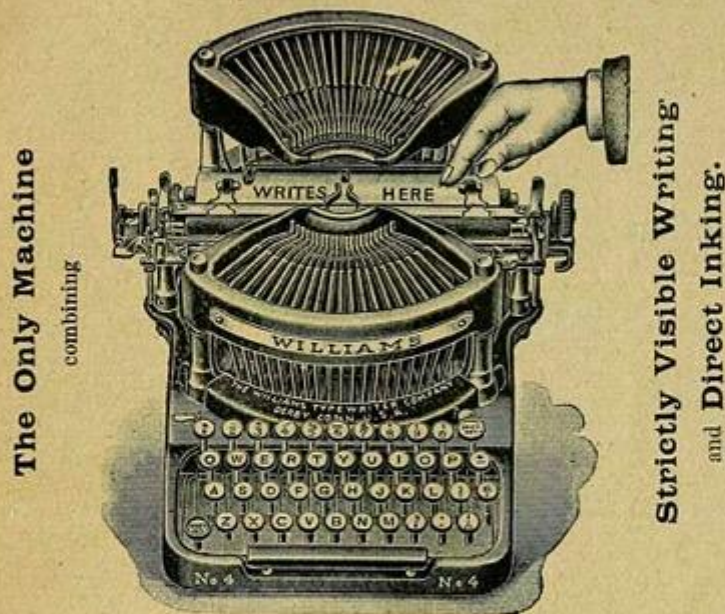
**WHOLESALE AGENTS
FOR SCOTLAND.**
TELEPHONE 783.
Also at
157a Hope Street,
Glasgow.

THE EDISON MIMEOGRAPH
is the best apparatus for duplicating typewriting.

GARDINER BROTHERS,
14 Teviot Place & 66 South Bridge,
EDINBURGH.

Figure 4.26. Gardiner Brothers advertisement for the Oliver in *Post-Office Edinburgh & Leith Directory* (1899). Digitized by NLS.

THE WILLIAMS TYPEWRITER.



The Only Machine

combining

Strictly Visible Writing

and **Direct Inking.**

Prints Like a Press.

New 1902 Models.

No Ribbon. Compact Keyboard.

New Line-Locking Device, Margin Release, &c.

Rapid. Strong. Guaranteed.

GLASGOW OFFICE, 49 BOTHWELL STREET.

DISTRICT AGENT—GEO. HIGGIE, SHORTHAND TEACHER, 22 BRIDGE STREET.

Figure 4.27. George Higgie advertisement for the Williams in the Bute County Directory (1902).

Digitized by NLS.

ALEXANDER ANGUS, Agent, . .
The Royal Barlock Typewriter.

**The lightest Key touch.
 Holds the Speed Record.**

No. 12 Model.

*20 years' experience
 culminating in the
 New No. 12 Model.*

*Write for
 'The Evolution of a Typewriter.'*

**BAR-
 LOCK**

*Automatic 2-Colour Ink Ribbon.
 " Paragraph Key.
 " Line Spacing.
 7 Interchangeable Carriages.*

**All the Writing
 Always in Sight.**

The Brunsviga . .
Calculating Machine

Is used by the leadin . .
Insurance Offices in Edinburgh.

*An Edinburgh Uni-
 versity Professor
 says: 'I cannot
 understand how
 any man with cal-
 culations to make
 would be without
 one.'*

**61 FREDERICK STREET,
 Telephone 4227 Y. . . EDINBURGH.**


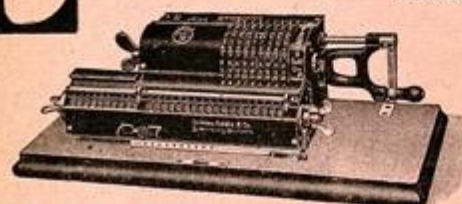



Figure 4.28. Alexander Angus's advertisement for the Bar-Lock Typewriter in the *Post-Office Edinburgh & Leith Directory* (1908). Digitized by NLS.

While illustrations featured in typewriter advertisements since the introduction of the Sholes & Glidden, images were particularly effective at showcasing visible writing typewriters, as their special design feature was visual. The Oliver advertisement used an illustration with a stylised impression of typed lines on the paper, indicating that the writing was directly in the operator's line of sight. The illustrations in the Williams and Bar-Lock advertisements went further by incorporating sample text. 'WRITES HERE' was written on

the Williams advertisement with a hand indicating the printing point. On the Bar-Lock, the words 'WRITES IN SIGHT' were typed followed by the sample text 'Dear Sir to Yours Truly'. These illustrations may well have attracted readers used to typewriters where the text was concealed. However, these illustrations were also misleading. On the Williams, the typist rolled the paper into a cylinder in front of the carriage, after which the paper transferred over the printing point into another cylinder at the back. After each line was completed, the paper scrolled back inside the machine becoming concealed from the operator. This meant that on the Williams the typing did not remain visible to the typist. In response, agents for rival machines, like the Oliver and Bar-Lock, emphasised that the writing on their machines was 'ALWAYS' visible.

The presentation of visible writing on the Oliver and Bar-Lock advertisements were similarly deceptive, which again comes down to the distinctive designs of these machines. The Oliver had two sets of U-shaped typebars, which hit down from the left and right, allowing the operator to view the writing by looking through the gap. However, the design meant that the typist's line of sight was obscured on either side of the printing point, as illustrated in Figure 4.29 and Figure 4.30. In the Gardiner Brothers advertisement, they disguised this drawback by using a bird's-eye view of the typewriter. Alexander Angus took a similar approach in his Bar-Lock promotion, with the viewpoint shown only achievable by a typist standing up at their desk. To get around this, in their shop window displays Bar-Lock retailers sometimes placed their typewriters just one foot off the ground and tilted forwards, so passers-by had an unimpeded view of the printing point.⁶⁶ Unsurprisingly, these designs came up for ridicule. A 1903 advertisement for the Sholes Visible typewriter published in America mocked: 'There are several ALLEGED VISIBLE TYPEWRITERS, in which you can see what you have written BY STOPPING AND CRANING YOUR NECK'.⁶⁷ In this way, rival manufacturers of visible writing typewriters argued that the Bar-Lock and the Oliver typewriters were just as antiquated as concealed-text typewriters, like the Remington.

⁶⁶ "Window Display," *Imperial News* 1, no. 5 (1912): 2.

⁶⁷ Daniel Roger Post, *Collector's Guide to Antique Typewriters* (Arcadia Ca.: Post-Era Books, 1981), 94.



Figure 4.29. Oliver No. 3 typewriter with U-Shape typebars striking down onto the printing point. NMS collection, object number T.1959.39.



Figure 4.30. Close up of the Oliver showing the operator's line of sight to the text, which is blocked to the left and right.

With so many visible writing typewriters on the market, retailers looked to identify unique selling points in their machines. George Higgin's 1902 advertisement states that the Williams was 'The Only Machine combining Strictly Visible Writing and Direct Inking'. On the Williams, the typebars sat on ink pads meaning that the type came directly into contact with the paper. This contrasted with ribbon printing, which featured on most concealed-text typewriters including the Remington and many visible writing machines, such as the Oliver and Bar-Lock. Direct printing typewriters were popular with users who felt these machines produced writing which resembled print, with Higgin claiming that the Williams 'Prints Like a Press'. Another popular direct inking machine was the Yost: a concealed-text typewriter which, like the Williams, was promoted for its printing quality. As a 1901 Yost advertisement explained: 'Its work, because of the types printing direct on the paper and not through a ribbon, is unsurpassed.'⁶⁸ Direct inking typewriters appealed to typists who desired their text to look traditional and aesthetically pleasing for their benefit and their correspondents.⁶⁹

Higgin's advertisement also suggested the benefit of direct inking was that 'no ribbon' was needed, which seems to have been a common view. A correspondent at the Glasgow International Exhibition of 1901 argued: 'Had the Bar-Lock a pad instead of the troublesome ribbon, it would be as near perfection as has been yet attained.'⁷⁰ Installing a new ribbon was (and continues to be) a fiddly and unavoidably messy process. Nevertheless, ink pad typewriters eventually fell out of favour with the dominance of ribbon typewriters cemented by the introduction of two-colour ribbons at the turn of the twentieth century. Manufacture of the Yost, the last direct inking typewriter came to an end in the early-1920s.

Keyboard layout was another point of contention between rival brands. The Williams advertisement referred to a 'compact keyboard' with an illustration of the QWERTY layout. This configuration, known by contemporaries as the 'Universal', had first featured on the Sholes & Glidden in 1874. By the mid-1890s, the Universal was the most common keyboard

⁶⁸ Robert Messenger, "1901 Yost Typewriter Ad," *oz.typewriter*, 2012, <https://oztypewriter.blogspot.com/2012/11/1901-yost-typewriter-ad.html>.

⁶⁹ Gould, "The Modern Typewriter and Its Probable Future Development," 723.

⁷⁰ "Students Column," *Aberdeen Press and Journal*, July 31, 1901, 8.

layout on the Scottish market but was far from being the only option. Alternatives included the Caligraph keyboard, with separate keys for upper- and lower-case, in various arrangements. There was the 'Ideal' keyboard on the Hammond typewriter, a two-row curved keyboard with more frequently used keys at the centre. Perhaps the most popular alternative was the 'Scientific keyboard' on the Blickensderfer, which placed the ten most used keys in the English language, A, D, E, H, I, N, O, R, S and T, on the row closest to the operator.⁷¹ With so many options, retailers wanted to make sure customers knew which layout they were getting. However, the manufacturers of these typewriters found it increasingly difficult to compete with the popularity of the Universal layout. From the late-1890s, Caligraph, Hammond and Blickensderfer phased out the production of their alternate layouts in favour of typewriters with Universal keyboards.

Even on Universal keyboard typewriters, there were several variations. Most typewriters, including the Williams shown in Higgle's advertisement, had a four-row keyboard with a shift key. The Oliver, by contrast, had a three-row keyboard with two shift keys meaning that each key could be used to type three different characters. Lastly, there was the full keyboard, as featured on the Bar-Lock: a Universal keyboard replicated twice providing separate keys for upper and lower-case characters. This layout featured on several typewriter brands, including the Yost and Smith Premier, which were widely marketed in Scotland. It was argued that having a key for every character, instead of a shift key, made operating a full keyboard simpler and speedier.⁷²

By the early 1900s, the support for full keyboard typewriters was waning. In a speech by J. W. Poole at a shorthand conference in Edinburgh in 1907, he announced that 'The victory of visible writing and the small keyboard model had been complete'.⁷³ At the time, Poole was the head of the Williams Typewriter Company in the UK, so it was in his interest to promote shift keyboard machines such as the Williams. Nevertheless, manufacturers were phasing out full keyboard typewriters by this time. One of the last newly released full keyboard

⁷¹ "The Scientific Keyboard" in Blickensderfer and Robert, *The Five-Pound Secretary: An Illustrated History of the Blickensderfer Typewriter*, 54–55.

⁷² Smith Premier advertisement in Post, *Collector's Guide to Antique Typewriters*, 98.

⁷³ "Phonographic Conference in Edinburgh," *The Scotsman*, November 9, 1907.

typewriters was the Smith Premier No. 10 of 1908. This well-liked typewriter was sold in Scotland and used in school board classes, as illustrated in Figure 6.4. The No 10 stayed in production until 1922, by which time Smith Premier had already started releasing shift keyboard models.⁷⁴

Underwood sets the standard

The manufacturers and retailers of the American-made Underwood played a significant part in popularizing typewriters with visible writing, ribbon printing and single-shift keyboards. Released in 1897, the Underwood was one of the first frontstrike typewriters, with the typebars sat in front and below the paper roller, as illustrated in Figure 4.31. This meant that – unlike on the Bar-Lock or Oliver – the typebars did not obscure the line of sight to the text. From 1901, sales of the Underwood took off with the release of the Underwood No 5, a model often described as the ‘first truly modern typewriter’.⁷⁵ When Underwood the No. 5 was taken off the market in 1931, four million had been manufactured.

⁷⁴ “Smith Premier Typewriter Serial Numbers,” Typewriter Database, 2021, <https://typewriterdatabase.com/smithpremier.98.typewriter-serial-number-database>.

⁷⁵ Robert and Weil, *Typewriter: A Celebration of the Ultimate Writing Machine*, 162.



Figure 4.31. Underwood No. 5 manufactured c. 1904. NMS collection, object number, T.1934.212.

In Scotland, the Underwood was first sold by G. G. Douglas & Co of Edinburgh from 1906 and by 1908, there were agents for the Underwood in the four principal cities in Scotland. Perhaps the most momentous shift came in mid-1907 when James Leishman – who had been an agent for the Remington for fifteen years – announced that he was dropping this machine to become Underwood’s new agent for Edinburgh:

I wish to announce to present and prospective typewriter users that I have arranged to market in Edinburgh and district the UNDERWOOD TYPEWRITER, which after prolonged tests I consider to be the best all round typewriter on the market.

Underwoods can be had on free trial. Cash allowances for old-style machines. The Underwood is not connected with any typewriter trust.⁷⁶

In this announcement, which was reprinted in *The Scotsman* throughout June and July 1907, Leishman gives readers his evaluation of the Underwood based on 'prolonged tests', perhaps in his typing school classes, and supported by 15 years of experience in the trade. His announcement does not include generic advertising slogans or eye-catching illustrations and, as a result, comes across as sincere and reasoned. He balances the benefits and drawbacks of different machines concluding that the Underwood is the 'best all round' typewriter.

In his announcement, Leishman targeted 'present and prospective typewriter users', suggesting there was still an untapped market of people not yet using typewriters. However, there was also the challenge of converting users of blind writing typewriters to the new Underwood, which was even more challenging considering the vigour with which Leishman had promoted the blind writing Remington. To individuals and businesses unconvinced by his testimony, Leishman offered 'free trials' allowing prospective customers to judge the benefits of the new typewriter for themselves.⁷⁷ Leishman sweetened the deal by offering discounts on a new Underwood when a customer returned their 'old-style' typewriter, a common strategy for retailers trying to get prospective customers to switch brands.

Leishman concluded his description by emphasising the Underwood was 'not connected with any typewriter trust.' Leishman was aware of the discontent surrounding Trust brands, including Remington, and was eager to dissociate himself from these manufacturers. However, while the Underwood was not a Trust brand, at around £20, it was similar in price to Trust typewriters.⁷⁸ Like most retailers of expensive machines, Leishman tried not to mention the price of the Underwood in his advertising.

⁷⁶ James Leishman, "Underwood Visible Typewriter," *The Scotsman*, June 29, 1907, 1.

⁷⁷ James Leishman, "Underwood Visible Typewriter," *The Scotsman*, June 29, 1907, 1.

⁷⁸ Letter from Secretary to the Church of Scotland to Rev J.F. Alexander, Domasi (28 July 1914) in *Church of Scotland* reference MS.7566, held in National Library of Scotland Special Collections, Edinburgh, 848.

In 1908, Remington released a frontstrike visible typewriter of their own: the Remington Standard No. 10. In Scotland, retailers set about promoting the new typewriter, which included the distribution of the pamphlet ‘Miss Remington Explains the New Model No. 10’, in which Miss Remington – an invented figure who represented an experienced Remington operator – went through the features on the No. 10 typewriter.⁷⁹ Using female figures to embody new products was not exclusive to the typewriter trade. The promoters of electrical technologies used feminine personifications of electricity, often to alleviate safety concerns.⁸⁰ Similarly, Miss Remington helped ease users’ doubts over the new typewriter, easing their transition from concealed-text Remingtons to the new visible writing designs. Yet conspicuous in its absence from the Miss Remington booklet was any explicit mention that the No 10 was Remington’s first visible writing typewriter. This was probably out of embarrassment that Remington manufacturers and retailers had spent the last twenty years discrediting visible typewriter brands.

In the years up to the First World War, typewriter manufacture and marketing stabilized around a few fundamental design principles, including visible writing, ribbon printing and the single-shift QWERTY layout. Inventors and manufacturers played a vital part in this transition, but so too did retailers who persuaded customers of the benefits of these new products. In the years that followed, as typewriter design homogenized, the new challenge for retailers would be to differentiate their products from an increasingly similar-looking range of alternatives.

⁷⁹ Peter Weil, “Miss Remington,” *Journal of the Early Typewriter Collectors’ Association*, no. 135 (2022): 10–17.

⁸⁰ Gooday, *Domesticating Electricity: Technology, Uncertainty and Gender, 1880–1914*.



Figure 4.32. Illustration from *Miss Remington Explains the New Model No. 10*. Produced in America, this copy was distributed by the Edinburgh branch of the Remington Typewriter Company. National Museums Scotland Library, shelfmark 681.61 REM.

Marketing typewriters during the mature phase, c. 1910 to late-1920s

From c. 1910, the design of typewriters for office use stabilized around the Underwood-style. In response, retailers focused less on specific design features of their products and more on why their brand was best suited to the demands of office work. Firstly, retailers marketed typewriters alongside a range of office technologies, supported by demonstrations at business machine exhibitions. Secondly, a new wave of lightweight portable typewriters came on the market allowing retailers to target users outside of the office. Finally, this period saw growing enthusiasm for British made typewriters, particularly from the Imperial typewriter company which became the leading domestic manufacturer in the interwar years.

Typewriters at business exhibitions

In the late-nineteenth century, typewriters had often featured at international fairs and exhibitions in Scotland and worldwide. From the early 1900s, retailers also began exhibiting typewriters at newly established business exhibitions. These events brought together a range of manufacturers and retailers that specialised in office technologies, including typewriters, duplicators, office furniture and filing systems. Scotland was at the cutting edge when it came to putting on these kinds of events. The Dundee Business Exhibition of 1907 seems to have been only the second event of its kind held in the UK; the first had been held in London just a few months earlier.⁸¹

At business exhibitions, professional speed typists were often invited to demonstrate the full potential of a particular typewriter. At the Glasgow Business Exhibition of 1908, the press drew 'special attention' to the Underwood exhibit, where visitors could watch 'Miss Fritz, an American lady, who holds the world's record for rapid typing'.⁸² Born in Connecticut in 1888, Rose L. Fritz won three consecutive International Typewriting Trophies from 1907 to 1909.⁸³ Fritz's visit to Glasgow was part of a tour of Great Britain in 1908.

⁸¹ For account of first London exhibition see "Business Exhibition in London," *The Scotsman*, July 5, 1907, 9; for first Dundee exhibition see "Here and There," *Dundee Evening Telegraph*, August 28 1907, 2.

⁸² "Business Exhibition in Glasgow," *Dundee Courier*, November 18, 1908, 4.

⁸³ Robert Messenger, "Rose Louisa Fritz: World Champion Typist," *oz.typewriter*, 2013, <https://oztypewriter.blogspot.com/2013/07/rose-louisa-fritz-world-champion-typist.html>.

Early in the year she had demonstrated at the Business Exhibition in London, where she spoke with the Prince of Wales who was reportedly impressed by her typing skills.⁸⁴



Figure 4.33. Underwood promotional postcard from 1908 featuring Rose Fritz. Courtesy of Peter Mitterhofer Typewriter Museum, inventory number P8-288.

In 1909, A. W. Paton – a typing school principal and Underwood retailer based in Dundee – arranged for American speed typist Emil Trefzger to perform in the city. Trefzger, who *The Dundee Courier* described as ‘the king of typists’, had proved his abilities at a typewriting championship in London the year before. According to *The Courier* article, the demonstration by Trefzger was attended by ‘merchants, professional men, manufacturers, and all classes of business men who have an interest in the speedy transaction of their correspondence’. Trefzger typed from unfamiliar matter at a speed of 117 words per minute and 211 words per minute from memorized material, leaving onlookers ‘amazed with the rapidity, precision, accuracy and excellence of Mr Trefzger’s work on the Underwood’. Also at Paton’s exhibition were the Underwood representatives W. C. Freeman and J. F. Austin who gave ‘an exhibition of ledger-posting and book-keeping by typewriter, in which

⁸⁴ “Prince Praises Miss Fritz,” *New York Times*, March 7, 1908, 1.

department he is a specialist'.⁸⁵ While Paton came from a background in commercial education, in hosting this exhibition he proved his abilities in promoting both the speed benefits of the Underwood and how these machines could be used to carry out a range of clerical tasks. A correspondent for the *Dundee Evening Telegraph* concurred, describing Paton's exhibition as a 'smart stroke of business'.⁸⁶

While typewriting competitions raised the profile of speed typists, the purpose of these events was often brand promotion. The six winners of the International Typewriting Trophy from 1907 to 1917 all used Underwoods, a feat regularly cited in Underwood advertisements.⁸⁷ Rose Fritz's success was a particular bugbear to agents of rival manufacturers. In 1912 the *Imperial News* printed a fictionalised conversation between an Imperial agent and a prospective customer who had already spoken with an 'Upperwood' agent about the achievements of 'Miss Close Fits':

[Customer] 'The 'Upperwood' man says that Miss Close Fits wrote on his machine at the rate of two hundred words in a minute. Can your machine write that fast?'

[Imperial Agent] 'Did he say whether it was the machine, or Miss Fits, that wrote that fast?'

[Customer] 'I don't remember. I think he said the machine.'

[Imperial agent] 'Indeed! And could he write as fast as that?'

[Customer] 'No, he couldn't write at all.'

[Imperial Agent] 'Then he must have meant that it was Miss Fits, and not the machine, that did the fast writing. I suppose he did not suggest that you should employ Miss Fits as an operator?'

[Customer] 'No. But I see what you mean'.⁸⁸

⁸⁵ "World's Champion Typist Gives Striking Display In Dundee Doing Wonders on the Keyboard," *Dundee Courier*, December 7, 1909, 5.

⁸⁶ "World's Champion Typist," *Dundee Evening Telegraph*, December 6, 1909, 3.

⁸⁷ Messenger, "Rose Louisa Fritz: World Champion Typist."

⁸⁸ "Tricks of the Trade," *Imperial News* 1, no. 3 (1912): 1-2.

Imperial agents reminded prospective customers that there was a big difference between the typing speeds attainable by professional speed typists and the average operator. They were also keen to point out that skilled typists could attain high speeds on their machines as well. An article in *The Imperial News* encouraged agents to broadcast the success of the 17-year-old Rose Cotta in a typewriting competition in France in 1911, where she achieved second place using an Imperial.⁸⁹ At a time when typewriter designs were becoming harder to distinguish from each other, typewriting competitions allowed retailers to position their typewriter as the most efficient machine available. However, with so many typewriting competitions and so many winners using different typewriters, agents for several brands could justifiably declare that their typewriter was the most efficient.

After a hiatus in exhibitions featuring typewriters during the War, these events returned in the early-1920s. In 1922, *Typewriter Topics* published an image of a Watson's exhibit from an event in Glasgow, with the following description: 'Mr W. Watson, [head of the firm] who has become an expert on Exhibition displays, has excelled himself this time.'⁹⁰ As Figure 4.34 illustrates, Watson's Typewriters promoted both the Royal typewriter and the Underwood portable. While retailers rarely sold typewriters from rival manufacturers, there was less of a conflict in marketing one brand of office machine together with a different make of portable. Alongside these typewriters, Watson's also exhibited desks, chairs and filing equipment. Like many retailers in this period, Watson's positioned their firm as a dealer in office technologies as well as a specialist in typewriters.

⁸⁹ "What We Said," *Imperial News* 2, no. 9 (1912): 2.

⁹⁰ "Watsons Typewriter, Ltd., Glasgow," *Typewriter Topics* 52, no. 3 (1922): 302.



Figure 4.34. Watson's Typewriters stand at an unidentified in Glasgow exhibition. *Typewriter Topics* (November 1922), 302.

Typing at home and on the move

Watson's Typewriters were one of several retailers, from c. 1910 onwards, that marketed lightweight and compact typewriters with carrying cases such as the Underwood Portable. Portable typewriters, as these machines became known, incorporated many of the standardised features of office typewriters, including keyboards and visible writing. This made portables ideal for users familiar with office machines who needed a writing machine for use in the field. Moreover, the small and sleek design of many portables made them desirable as writing tools for a domestic setting. Confirming the newfound popularity of these designs, *The Imperial News* reported in 1912, 'There seems to be a craze just now for the lightweight portable typewriter'.⁹¹

Portable typewriters were not without precedent. During the 1880s and 1890s there had been various index typewriters which were portable in a general sense. There were also several relatively lightweight keyboard machines, which were sometimes promoted for their transportability. However, what we find from c. 1910 is that the 'portable' emerged as a distinct category of typewriter, a development shaped by a shift in marketing. This shift is

⁹¹ "Portable Typewriters," *Imperial News* 1, no. 4 (1912): 2.

illustrated by the evolution of advertising for the Blickensderfer typewriter in Scotland. While in the late-1890s, this machine was promoted as a competitor to office typewriters, by the early-1910s Blickensderfers were repositioned as portable typewriters for domestic and field use.

Designed by George Blickensderfer in Connecticut, the Blickensderfer was released in 1893 and it was being sold in the UK by the late-1890s. William V. Graham, a stationer based in Glasgow, gained the contract for the Blickensderfer c. 1898 and became an active promoter of the new typewriter in Scotland. William's brother, John C. Graham, also served as a Blickensderfer agent in Aberdeen from 1901.

William Graham initially positioned the Blickensderfer as a rival to brands such as the Remington, just as the inventor George Blickensderfer had envisaged.⁹² In an advertisement from 1899, Graham argued the Blickensderfer had: 'Every advantage of the old type of Machine in addition to its own unique Improvements and Inventions' (Figure 4.35). The improvements referenced included the 'Scientific Keyboard', which was designed as a more efficient layout to the Universal. Graham also drew the reader's attention to the price of the Blickensderfer, which, at £8.10s., was less than half the cost of machines from well-established brands like Remington. Finally, Graham claimed the Blickensderfer was 'strong' and 'durable', countering descriptions in rival advertisements, such as Figure 4.25, which implied cheaper machines were poorly built.

Another 'Improvement' on the Blickensderfer was the typewheel used for printing, which had several advantages over the typebar design. Firstly, the typewheels were interchangeable, meaning the operator could quickly switch between several fonts and languages. Secondly, the typewheel struck the top of the paper roller, so the writing was immediately visible to the operator. Lastly, using a single typewheel made the Blickensderfer lightweight, with the average model weighing around three kilograms. By contrast, contemporary Remington typewriters had around 40 separate typebars and weighed over 10 kilograms. But while Graham promotes the Blickensderfer as 'light', it is

⁹² Robert and Weil, *Typewriter: A Celebration of the Ultimate Writing Machine*, 134.


clear from his advertisement that he did not see this as the most important selling point. In fact, portability is not even mentioned. For Graham, the Blickensderfer was a superior design that was ready to challenge the hegemony of the established typewriter brands.

From the early 1910s, coinciding with the 'craze' for portable typewriters, there was a decisive shift in the product positioning of the Blickensderfer as agents marketed it to the domestic market. In 1914, John C Graham's advertisement in the Aberdeen Post Office directory informed readers that the Blickensderfer: 'Makes Letter-Writing a Pleasure, The Ideal Machine for Home Use.' (Figure 4.36) There is still reference to the low price, but now this supported the positioning of the Blickensderfer as a domestic good. When buying a typewriter for private use, £5.17s.6d. probably seemed more justifiable than £20. Graham's advertisement came three years after the release of the 'Home Blick': a simpler and cheaper Blickensderfer designed for home use (Figure 4.37).⁹³ An advertisement in *The Clarion* published in 1915 aimed to put more distance between the lightweight Blickensderfer and bulky office designs: 'There are two kinds of Typewriters. The heavy, cumbersome and complicated sort, which are used in the office, and the simply constructed Blick, which does just the same work, but only weighs 5 lbs.'⁹⁴

The development of Blickensderfer advertising shows how essentially the same typewriter was marketed as an entirely different product. In the 1890s, before the stabilization of the office typewriter, agents positioned the Blickensderfer as a viable alternative to heavy and bulky machines. However, as the buyers and users of typewriters in office settings settled on Underwood style machines, the Blickensderfer struggled to compete. In response, retailers like J. C. Graham repositioned the Blickensderfer as one of several newly emerging brands of portable typewriter for home use and typing in the field. The emergence of the portable was as much down to innovative marketing as it was about pioneering design.

⁹³ Blickensderfer and Robert, *The Five-Pound Secretary: An Illustrated History of the Blickensderfer Typewriter*, 84.

⁹⁴ "My Blick," *The Clarion*, October 15, 1915, 6.



BUY A "BLICK"

You must judge a Typewriter by its weakest points. Almost any Typewriter has some good point; the one that has the most of them is the one to buy.

BUY A "BLICK"!

We know no Typewriter that has so many good points as the

BLICKENSDERFER

. . . . TYPEWRITER.

SIMPLE, LIGHT, CHEAP, STRONG, DURABLE.

DOES ITS WORK BETTER, DOES MORE WORK, AND IS EASIER TO WORK THAN OTHERS


Every advantage of the old type of Machine in addition to its own unique Improvements and Inventions.

PRICE £8 10/ (Less £1 for prompt Cash only.) **CALL AND SEE IT. SEEING'S FREE.**

THE BLICKENSDERFER TYPEWRITER CO., NEWCASTLE-ON-TYNE.

GLASGOW: Wm. V. GRAHAM, 95 Bath St.

Figure 4.35. William Graham's Blickensderfer advertisement in the *Clyde Bill of Entry and Shipping List* (February 9, 1899).
 Copyright the British Library Board.



The "BLICK"

Makes Letter-Writing a Pleasure,
 The Ideal Machine for Home Use.

£5 17s. 6d. and £10 10s.

Duplicators for Hand and Type-writing, & all Office Requisites.

J. C. GRAHAM, 17 Crown Street,
ABERDEEN.

Figure 4.36. Advertisement for the 'Blick' in Post Office Aberdeen Directory, 1914.



Figure 4.37. 'Home' Blickensderfer typewriter manufactured 1911. NMS collection, object number T.1974.124

One of the most popular portable designs was the foldable typewriter. These were lightweight machines with carriages that folded inwards, making them compact for easy transportation, as illustrated in Figure 4.38 and Figure 4.39. The Corona was the most widely brand of foldable, with around 700,000 manufactured between around 1912 and 1941. The popularity of the foldable typewriters encouraged American manufacturers of office typewriters to develop new portable designs.



Figure 4.38. Corona 3 typewriter manufactured in New York, 1923. NMS collection, object number T.1885.X.19.1.



Figure 4.39. Corona 3 typewriter in the closed position for transport.

In 1919, Underwood released a non-folding portable conceived of as a compact version of their successful line of office typewriters. In 1921 Watson's Typewriters – agents for the Underwood portable in Glasgow – announced that on their machines: 'The good points of all other makes of Portable typewriters are embodied, while the use of folding and collapsible parts, adopted by some makes for compactness, has been avoided and overcome' (Figure 4.40). The advertisement then likened folding typewriters to non-visible writing machines: 'A folding Portable is as out-of-date as the old non-visible writing machine. The Underwood Portable is so compact that it does not need to fold.' By 1921, non-visible typewriters had been out of manufacture for seven years. By equating foldables with antiquated non-visible designs, Watson's advertisement suggests that foldables would soon be defunct as well. This criticism was even more powerful when presented in an advertisement for the Underwood Portable, hence the title 'The Portable With *The Name*'. Readers may well have remembered that the Underwood had played a central role in breaking the dominance of non-visible typewriters in the early-1900s. Despite this attack from Watson's Typewriters, the company became an agent for the Corona foldable two years later. Clearly, Watson's earlier criticisms were intended to outdo the competition instead of coming from any genuine belief that foldable typewriters were inferior. While advertisements are valuable sources for shedding light on the ways retailers promoted typewriters, a critical eye is needed when reading into the value judgements made by retailers at the time.



THE PORTABLE WITH *THE* NAME

When you find big business houses and private individuals gradually discarding their inefficient Portable Typewriters and replacing them by Underwood Portables, you may be quite sure that their decision is based on the conviction that the Underwood Portable is the finest portable writing-machine obtainable.

Have it demonstrated at
STANDS NOS. 104 & 105
Avenues C & D

The good points of all other makes of Portable typewriters are embodied, while the use of folding and collapsible parts, adopted by some makes for compactness, has been avoided and overcome.

A folding Portable is as out-of-date as the old non-visible writing machine.

The Underwood Portable is so compact that it does not need to fold.

Made by the Underwood Typewriter Company, the largest Typewriter Manufacturers in the world, the Underwood Portable is equally suitable for office or home, and is capable of every writing need.

See it at the Exhibition, or write to
WATSONS TYPEWRITERS, LTD.,
128 St. Vincent Street, Glasgow.

for free illustrated Booklet No. 217.

Underwood Portable Typewriters, Ltd.,
Underwood House, 70 New Bond Street,
LONDON, W.1.

UNDERWOOD

Portable

Figure 4.40. Advertisement for the Underwood typewriter published in *The Scotsman* (Tuesday, 20 September 1921), 10. Image copyright Johnston Press plc.

Buy British

From the early-1900s, the growing rivalry between retailers of British and American brands became a significant theme in typewriter advertising. Before the First World War, sellers of English-made Salter typewriters had made the case that customers should support domestic manufacturing and buy British.⁹⁵ Despite these efforts, the Salter never sold in the numbers achieved by American brands.⁹⁶ By the early 1910s, while agents for up and coming American brands such as Underwood and Royal branched out into towns and cities across Scotland, Salter was shutting many of their UK stores, including the Edinburgh agency which closed in 1912.⁹⁷ Salter's failure was partly down to poor manufacture and design. In a letter of 1911 from Howard Robbins (one of Salter's top salespeople), to the company headquarters in West Bromwich, Robbins complained that the typewriters he received were built with inferior materials.⁹⁸ The following year he argued that the design of their machines lagged behind 'our American friends'.⁹⁹ Going forward, British manufacturers needed to produce typewriters to a higher standard along modern design principles. Retailers, meanwhile, would need to persuade the public that British typewriters could compete with American designs. In the eyes of the public, America had pioneered typewriter manufacture and still led the way in its development.

Several British brands came to prominence during the interwar years, with the Imperial typewriter the most successful. Released in 1908 and made in Leicester, the Imperial was originally a semi-portable downstrike machine working on a similar principle to the Bar-Lock, as illustrated in Figure 4.41. The company achieved some success in the years up to 1915, with manufacturing disrupted during the War. In 1921 manufacturing was resumed. However, output remained only a fraction of the leading American brands. In 1925, while

⁹⁵ "All-British Shopping Week," *Aberdeen Press and Journal*, April 10, 1911, 1.

⁹⁶ "Salter Typewriter Serial Numbers," Typewriter Database, 2017, <https://typewriterdatabase.com/salter.16.typewriter-serial-number-database>.

⁹⁷ Typewriter Businesses Database for Edinburgh, see chapter 1.

⁹⁸ Letter from Howard Robbins to Geo Salter (October 30, 1911), records for George Salter & Co Ltd, reference D4721.D.9.3 (Accounts and correspondence) at Staffordshire County Record Office, Stafford.

⁹⁹ Letter from Howard Robbins to Geo Salter (Feb 22, 1912), records for George Salter & Co Ltd, reference D4721.D.9.3 (Accounts and correspondence) at Staffordshire County Record Office, Stafford.

Imperial turned out around 25,000 typewriters, Underwood produced approximately 224,500 machines.¹⁰⁰



Figure 4.41. The Imperial model B, manufactured c. 1915. NMS collection, object number, T.1967.7.

British manufacturers were not helped by the prevailing view that their typewriters were inferior to American designs. In the House of Commons on 15 February 1926, Ronald McNeill, Financial Secretary to the Treasury, was asked to explain the use of American typewriters in government offices. McNeill's justification was that 'British workmanship had not yet produced such good articles. Preference would be given to any British typewriter of new design equal in efficiency'.¹⁰¹

A turning point in public opinion came after King George V visited the British Industries Fair on 18 February 1926. Reporting on the event, *The Times* announced: 'The most interesting

¹⁰⁰ "Imperial Typewriter Serial Numbers," Typewriter Database, 2017, <https://typewriterdatabase.com/imperial.76.typewriter-serial-number-database>; "Underwood Typewriter Serial Numbers," Typewriter Database, 2020, <https://typewriterdatabase.com/underwood.4.typewriter-serial-number-database>.

¹⁰¹ "King at Industries Fair: A Pointed Comment," *The Scotsman*, February 19, 1926, 6.

incident of the tour was at the stand of the Imperial Typewriter Company', where the King stopped to talk with N. W. Mawle, the representative for Imperial. Asking what post-war service his firm was rendering, Mawle told the King that 900 machines had been sold to the Swedish government. However, he added that each week 1,200 typewriters were imported into the UK, duty-free, and that foreign typewriters were used in all British government departments. Mawle advised that 'If we had the Government's order, we could employ one more man for a week for every machine purchased'. Outraged by this news, the King turned to Sir Philip Cunliffe-Lister – the President of the Board of Trade – to ask if this was true, who replied to the King that he would look into the matter.¹⁰² The media backlash that followed resulted in the government placing substantial orders with Imperial and other British brands. By 13 April 1926, *The Times* reported that in the two months following the protests of the King, British manufacturers were turning out 400 per cent more typewriters than the previous year.¹⁰³

These were worrying signs for retailers of American typewriters in Scotland. In Edinburgh, eight days after *The Times* report, Thomas Hughes – the manager of Leishman & Hughes agents for the Underwood – wrote a letter to *The Scotsman* in defence of American manufacturers. Referring to the 'publicity which had recently been given to the question of American typewriters in this country', Hughes said that he would like to clear up a few facts over the matter. He started by blaming British manufacturers by recounting the story of a well-known American firm that had tried to open a plant in Britain which would have supplied 50,000 machines per annum for ten years. According to Hughes, despite significant efforts from the unnamed firm, none of Britain's large engineering concerns took up the contract. He judged that 'It is therefore the fault of the British manufacturers that the contract was lost'. Hughes defended American firms by arguing that they 'employ thousands of British men and women, and they pay hundreds of thousands of pounds per annum in wages, rent, rates, and taxes, a record which is certainly not approached by the British typewriter companies'.¹⁰⁴ Part of this work came from American companies with factories

¹⁰² "British Industries Fair," *The Times*, February 19, 1926, 17.

¹⁰³ "Sales of British Typewriters," *The Times*, April 13, 1926, 12.

¹⁰⁴ Thomas Hughes, "American Typewriters," *The Scotsman*, February 27, 1926, 7.

in the UK assembling typewriters. Remington, for example, advertised on their machines 'Assembled By British Labour At The Remington Typewriter Factory London'.¹⁰⁵

Supporting American manufacturers was in Hughes's interest as an agent for the American made Underwood. Even if he genuinely believed in the benefits that American manufacturers delivered to the UK economy, he did not remain committed to that view. In 1933, Hughes ended his contract with Underwood and made Leishman & Hughes the agents for the Imperial. He then advertised the Imperial as 'British Right Through' to distinguish it from brands like Remington which were merely assembled in the UK.¹⁰⁶

A decisive step for British manufacture came in 1927 with the release of the Imperial No. 50 (Figure 4.42). The company's first frontstrike typewriter, the Imperial 50 was more in line with American designs, closely resembling the popular Royal No. 10 (Figure 4.43). There was a lot of interest in the new typewriter. From 1928 to 1929, the Imperial Typewriter Company received at least six credit applications from Scottish retailers looking to stock the No. 50. These included three agents who had previously sold Royal typewriters: T. M. Sparks in Dundee, Watson's Typewriters in Glasgow, and Charles H. Webster in Aberdeen.¹⁰⁷

¹⁰⁵ Inscription on Remington Model 5 Portable (made c. 1937) in author's personal collection.

¹⁰⁶ Typewriter Manufacturers in "Professions & Trades Directory," in *Edinburgh & Leith Post Office Directory 1933-34* (Edinburgh: Morrison and Gibb Limited, 1933), 1225.

¹⁰⁷ Credit reports in 'Home and Export reports' (1929-1931), Records for Imperial Typewriter Co. Ltd., reference DE1535/14, at Record Office for Leicestershire, Leicester and Rutland.



Figure 4.42. Imperial No. 50, which was strikingly similar in design to the Royal, even down to the glass panels on the sides.
NMS collection, object number T.1988.88.



Figure 4.43. Royal No. 10 typewriter.
Image courtesy of Stephen Fielding.

Charles Webster, who we met in the previous chapter, was described in the 1928 Imperial credit report as 'a hardworking, pushing man'.¹⁰⁸ Living up to this assessment, from late-1928 to mid-1929, he published regular personalised advertisements for the Imperial in the *Aberdeen Press and Journal*. Frequently, Webster employed the slogan 'Buy British / Buy Best' as a typographical framing for the main text of his advertisement, reflecting the confidence he had in this British-made typewriter (Figure 4.44). He also drew upon his personal experience of the typewriter trade: 'after working and selling foreign typewriters for 27 years, it is very pleasant for me to find a British one which beats them all.'¹⁰⁹ In another advertisement, Webster described his trips to the Imperial factory in Leicester where typewriters were 'Made under ideal conditions, by cheerful, healthy workers, the Imperial is produced by an apt combination of wonderful up-to-the-minute labour-saving machines, and of skilled, exact, and careful craftsmanship.'¹¹⁰ Webster's narrative presented the Imperial typewriter as a modern machine made with the latest tools and techniques, which was balanced with his nostalgic view of British craftsmanship and manufacturing leadership. According to Webster, the result was a typewriter that matched the leading American brands while providing 'cheerful' employment for British workers.

¹⁰⁸ Credit report for CH Webster, (24 May 1928) in 'Home and Export reports' (1929-1931), Records for Imperial Typewriter Co. Ltd., ref DE1535/14, at Record Office for Leicestershire, Leicester and Rutland.

¹⁰⁹ Charles H. Webster, "70 'Not Out' And Going Strong," *Aberdeen Press and Journal*, July 24, 1929, 1.

¹¹⁰ Charles H. Webster, "A Triumph of British Engineering," *Aberdeen Press and Journal*, October 25, 1928, 1.

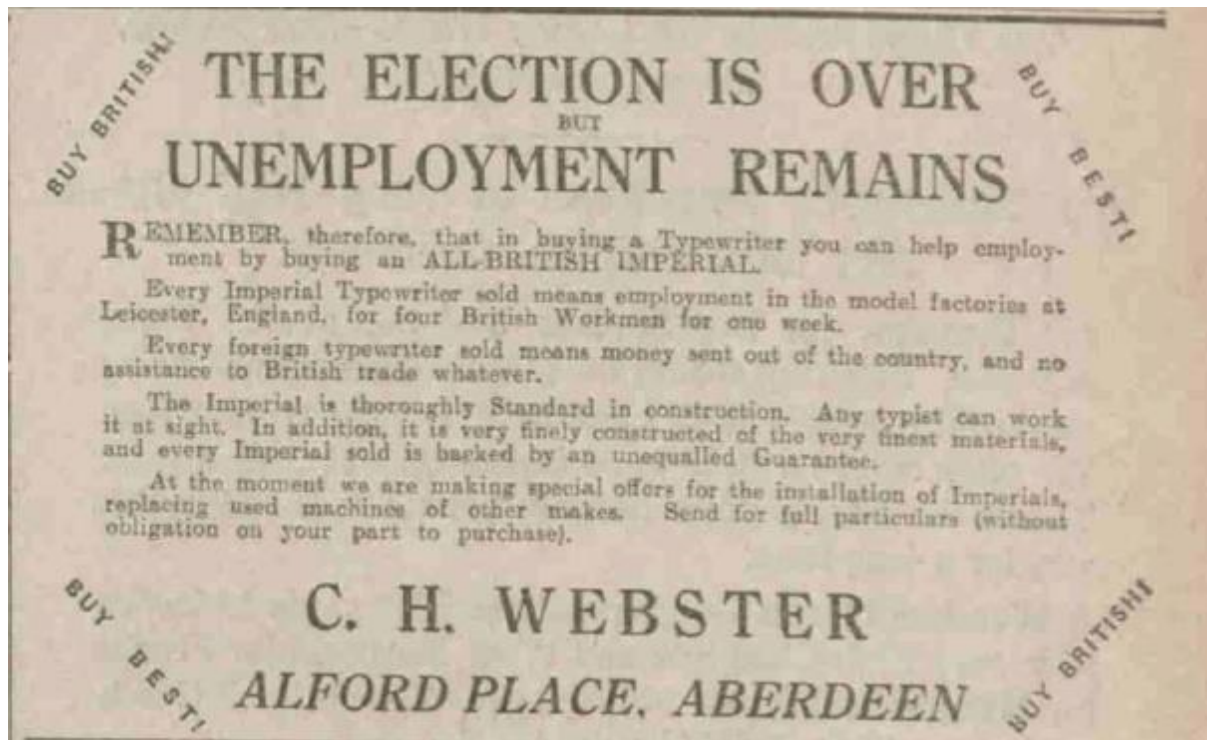


Figure 4.44. Webster advertisement for the Imperial typewriter with 'Buy British' / 'Buy Best!' bordering published in *Aberdeen Press and Journal* (June 13, 1929), 1. Copyright D. C. Thomson & Co. Ltd. Image created courtesy of the British Library Board.

For Webster, the key selling point of the Imperial was that it supported British jobs. This was especially pertinent considering the high unemployment rates throughout the 1920s, which had fluctuated at around ten to fifteen per cent over the decade.¹¹¹ In an advertisement from November 1928, Webster asserted: 'every British-made IMPERIAL Typewriter bought means employment for a British workman for one month.'¹¹² In June 1929, he reframed this claim in an announcement titled 'The Election Is Over But Unemployment Remains', telling readers that each Imperial sold meant employment 'for four British Workmen for one week.'¹¹³ The Imperial was positioned as a kind of two in one purchase: a way to help relieve unemployment while also getting 'the Finest Type-writer money can buy.'¹¹⁴

¹¹¹ James Denman and Paul McDonald, "Unemployment Statistics from 1881 to the Present Day," *Labour Market Trends*, no. 104 (1996): 6.

¹¹² Charles H. Webster, "Typewriters and Employment," *Aberdeen Press and Journal*, November 13, 1928, 1.

¹¹³ Charles H. Webster, "The Election Is Over But Unemployment Remains," *Aberdeen Press and Journal*, June 1, 1929, 1.

¹¹⁴ Webster, "A Triumph of British Engineering," 1.

Webster's approach was symptomatic of the broader question facing typewriter retailers in the interwar period: how would they differentiate their typewriters from the competition as designs became increasingly similar? In response, Webster chose not to differentiate the Imperial by citing unique design features, in contrast to advertisements from the 1890s and early-1900s. Instead, he focused on making it the reader's responsibility to support the domestic manufacturers and 'Buy British'.

Conclusion

This chapter has shown how retailers developed marketing campaigns in response to innovations in design and manufacture. While retailers had little direct control over typewriter production, they were responsible for commissioning advertisements, promotions, and exhibitions. While some promotions were adaptations of advertisements published elsewhere in the UK or America, in other instances, retailers released personalised statements to explain why they believed their products were worth buying. These advertisements were even more effective when published by well-established figures on the Scottish market who backed up their support for a particular typewriter with their years of experience in the trade. Retailers also used their local knowledge when deciding *where* to promote typewriters. This included in print-based media such as newspapers, Post Office directories and trade journals, as well as in demonstrations at trades fairs, exhibitions and showrooms.

From the beginning of commercial availability in the mid-1870s, marketing strategies varied between different retailers and across different typewriter trade phases. Pioneering retailers focused on why the typewriter was superior to the pen. However, there was little consensus over how a typewriter should be designed or to whom they should be marketed. From the 1880s, some central customer demographics emerged. Most notably, the typewriter became seen as an indispensable tool for office documentation, which would be used extensively by a new wave of female clerical workers. Concurrently, keyboard typewriters were recognised as more suited to office work than the index typewriter alternatives. Yet even as keyboard typewriters became the standard, manufacturers continued to bring out new keyboard designs, allowing retailers to target new markets.

From the 1910s, retailers advertised portable keyboard typewriters to untapped domestic markets and users who needed to type on the move.

As more machines came onto the market in the late nineteenth century, retailers chose to highlight qualities in their typewriters that could not be found in rival brands. Sellers of cheaper brands focused on the price of their machines, while agents for expensive models avoided quoting the price of their machines in their advertisements. Others focused on technical features such as visible writing, printing mechanism, keyboard layout. Lastly, there were salespeople who ignored design or price and instead identified more poignant topics. Retailers of British-made typewriters asked customers to support domestic manufacturers by purchasing their products, a compelling message during the troubled economic times of the 1920s and 1930s.

In their desire to turn a profit, retailers made claims they would later contradict. For several years, James Leishman promoted Remington – the leading brand in the Typewriter Trust. But when Leishman switched to the Underwood in 1907, he disassociated himself with The Trust and even made this a selling point in his advertisements. In the mid-1920s, Thomas Hughes, also an agent for the American-made Underwood, criticised what he claimed was a misplaced support for British manufacturers. He then reversed his position in the early-1930s after becoming the agent for the British-made Imperial. At the start of the 1920s, Watson's Typewriters described foldable portables as antiquated in their attempts to promote the Underwood Portable. However, just a few years later, Watson's became one of the most prominent agents for the foldable Corona typewriter. In their advertising, retailers did not genuinely evaluate the merits and drawbacks of their typewriters. The goal was to sell as many machines as possible, which led some to bend the truth. Nevertheless, providing the historian treats these sources with a healthy level of criticism, advertisements are invaluable for demonstrating the ways retailers drove the sale and adoption of typewriters.

Alongside printed advertisements, we have seen the importance of in-person demonstrations, which included exhibits at international expositions from the 1880s, and then at business machine exhibitions from the early-1900s. Exhibitions were one of the few

places where rival brands of typewriter were promoted side-by-side. As such, retailers were keen to demonstrate that their machine was better than the competition. Some retailers sought to capitalise on the visual aspect of exhibitions and demonstrations, which was particularly true of agents of visible writing typewriters. They sought to interest visitors in their products by demonstrating, before their eyes, that the text on their machines was instantly visible at the point of writing.

From the early 1900s, as the design of typewriters standardised, at least for office typewriters, retailers employed new tactics at exhibitions to set their products apart from the competition. Demonstrations from professional typists were a common promotional tactic used by retailers to prove their typewriter was the 'fastest' on the market. In reality, the average typist could not dream of matching the speeds set by professionals. While claims made about a typewriter being the fastest need to be taken with a pinch of salt, they show how keen retailers were to find a legitimate reason to claim their machine was the best available.

Through printed advertisements and in-person exhibitions, agents helped customers in Scotland feel that little bit closer to typewriter manufacturers who were hundreds if not thousands of miles away. They combined international marketing strategies with personalised advertisements catered to local customers. Through their marketing efforts, it was retailers, not manufacturers, who played the crucial role in shaping the public perception of typewriters and in encouraging the widespread adoption of these technologies across Scotland.

Chapter 5 Typing with ‘with accuracy and despatch’: the development of typewriting offices

Introduction

In 1894, *The Scottish Phonographer* – a journal devoted to developments in shorthand and typewriting – featured the article ‘How I Became a Canvasser: By A Lady Typist’, which followed the efforts of an unnamed typist and co-owner of a typewriting office attempting to secure new clients for her business. Unsatisfied with the low level of work in her office the typist decided that ‘a personal call would really be the best means of getting sufficient work to keep us fully employed. One fine morning I sallied forth, armed with my business calling cards, samples etc. prepared “to do or die”’.¹

In the typist’s first meeting, the owner of a law firm scorned: ‘Typewriting office... never heard of that before, and what is more, do not like lady canvassers.’ Undeterred, the typist continued around commercial houses and professional institutions. In her second meeting at an architect’s office, the manager was surprised to see a woman ‘on the road’ but received the typist’s proposal enthusiastically assuring her that ‘we have not yet adopted typewriting in our office, but we are thinking of doing so, and will be pleased to give your office a trial for any work we may have.’ The typist’s next two meetings went equally well. In her final call, however, at an office where an absent-minded boy was left in charge, she had little chance of success. The office boy had no idea what a typewriter was with the typist deciding that ‘I did not remain to tell him as I felt that life would not be quite long enough for that, but said I would call again.’²

This rich and humorous account, which has been transcribed for this thesis from the original Pitman’s shorthand (Appendix 1), demonstrates the active role that the managers and employees of typewriting offices played in introducing the public to typewriters. Up until the typist’s visit, the dismissive owner of the law firm and the absent-minded office boy had little idea what a typewriter was even though Remington-made machines had been on the

¹ A Lady Typist [pseud.], “How I Became a Canvasser,” *The Scottish Phonographer* 1 (1894): 129–30.

² A Lady Typist [pseud.], “How I Became a Canvasser,” *The Scottish Phonographer* 1 (1894): 129–30.

market for almost twenty years. Meanwhile, the architect had already considered adopting typewriting, but the typist's visit provided further encouragement. Importantly, the architect does not seem to have considered purchasing a typewriter for use in his firm. From his perspective, the indirect adoption of typewriters by outsourcing work to typewriting offices was the best available option.

Unfortunately, most histories of clerical work or office technologies have failed to mention typewriting offices in any detail, despite the important role these businesses played in the commercialisation of typewriters. In chapter 2, we saw that from the late-1880s outsourcing typewriting work to typewriting offices was a popular option for many businesses and professionals. During the 1890s, demand for typing services took off with the number of typewriting offices in Scotland's four principal cities rising from 14 to 59 by 1900 (Chart 2.2). Even after typewriters had become familiar and easily available these offices remained in demand into the interwar years and beyond. Any account of the popularization of typewriters in the UK must consider the formative role played by typewriting offices.

The disregard for typewriting offices has also reinforced the false assumption that typewriters *only* provided employment opportunities for women. The tritest examples from the historiography present typists as passive beneficiaries of jobs created by male inventors or business leaders.³ In reality, women were instrumental in the establishment, management and running of typewriting offices. As we saw in chapter 2, there were a significant number of women business owners concentrated in the typewriting office sector. In 1895, of the 38 typewriting offices in Glasgow, Edinburgh, Aberdeen and Dundee 16 were owned and managed by women. Generally speaking, male-owned offices tended to be a department within a larger typewriting business which included a retail outlet and/or a typing school. By contrast, typewriting offices owned by women focused on typewriting work and taking on apprentices to bring into the profession. These independent female-run offices will form the basis for this chapter. As we will see, it was through their entrepreneurial endeavours that women like the canvasser, mentioned in the passage

³ Zimmeck, "The Mysteries of the Typewriter': Technology and Gender in the British Civil Service, 1870-1914," 70.

above, opened up new markets for typewriters and typewriting services, creating employment opportunities for men and women alike.

In recent years, some literary scholars, including Arlene Young, Katherine Mullin, Lena Wanggren and Morag Shiach, have discussed typewriting offices as part of wider discussions of female business ownership and cultural representations of the New Woman at the fin de siècle.⁴ As Young argued, 'Typewriting offered more than just employment opportunities for women in the 1880s and 1890s; it offered entrepreneurial options as well.'⁵ However, there has yet to be a comprehensive study of the typewriting offices sector. This has meant that until now relatively little has been known about the people who ran typewriting offices and the services they provided.

Addressing the gaps in the historiography, this chapter begins with a discussion of the pioneering managers of typewriting offices in America, London and Edinburgh. Scotland's typewriting offices did not operate in a vacuum but as a part of a network of offices and typists throughout the UK. The importance of these networks was threefold. Firstly, in the 1880s some Scottish-based typists had formerly been apprenticed in London, before setting up their own offices. Secondly, the owners of typewriting offices from around the UK had contact through their involvement with typists' societies and unions, which sought to maintain professional standards. Significantly, many of the people involved in establishing typing societies were also noteworthy figures in campaigns for working and voting rights for women. Thirdly, there were several publications in circulation around the UK, pitched to members of the typewriting sector in England and Scotland. For example, the Scottish readership of *The London Phonographer: A Journal Devoted to Typewriting & Shorthand* is demonstrated by Scots who had their letters printed in the journal.⁶ Equally, Scottish

⁴ Hugh. Stevens and Caroline. Howlett, *Modernist Sexualities* (Manchester ;;New York ;New York NY: Manchester University Press, 2000); Young, "The Rise of the Victorian Working Lady: The New-Style Nurse and the Typewriter, 1840-1900"; Katherine Mullin, *Working Girls: Fiction, Sexuality, and Modernity* (Oxford: Oxford University Press, 2016); Lena Wanggren, *Gender, Technology and the New Woman* (Edinburgh: Edinburgh University Press, 2017).

⁵ Young, "The Rise of the Victorian Working Lady: The New-Style Nurse and the Typewriter, 1840-1900."

⁶ Brasileiro [pseud.], "To the Editor," *The London Phonographer* 1, no. 3 (1891): 71.

newspapers often reported on developments in typewriting offices across the UK and US. Scotland's typewriting office sector can only be understood in an international context.

The second half of this chapter will turn to the work carried out within these businesses, using examples drawn from Scottish offices as well as comparable businesses in London. This will include an overview of the types of people who worked in typewriting offices, particularly in regards to their educational background, age and gender. From here we will move to a discussion of the varied services provided and how this was shaped by the technologies used and the location of an office within a city. This approach is intended to move the scholarship beyond the current focus on the cultural representations of typists and provide an insight into the day-to-day reality for the owners, managers, employees and customers of typewriting offices.

Readers will notice from the contemporary descriptions of typewriting offices that from the mid-1890s many of these businesses were renamed copying offices, or similar. There are a couple of factors which may have led to this branding shift. Firstly, the shift towards describing typewriting offices as copying offices also represented the use of new technologies, such as the rotary duplicator, which allowed hundreds of copies to be made from a single typewritten stencil. Secondly, the growing popularity of the 'copying office' as a business title may have signalled the fact that by the end of the nineteenth century the public had become familiar with typewriters. Before this, it was important for typewriting offices to highlight their use of typewriters, to differentiate their methods from hand copying, a common occupation in offices before the introduction of writing machines.⁷ From the mid-1890s there was less of a need for offices to promote the use of typewriters in their business title as the use of these technologies was expected. A similar shift took place in the titling of businesses providing typing tuition. As we will see in the following chapter, shorthand-typewriting schools were replaced by, or simply renamed, commercial colleges. As was the case with copying offices, in commercial colleges the use of typewriters became a formality.

⁷ Zimbeck, "The Mysteries of the Typewriter': Technology and Gender in the British Civil Service, 1870-1914," 75.

For clarity, in this chapter businesses that provided typewritten transcriptions for a fee will generally be referred to as typewriting offices, regardless of whether they had rebranded as a copying office.

Pioneering typewriting offices in New York, London and Scotland

The first known typewriting offices were set up in America at the start of the 1880s, with Mary E. Orr's Manhattan Typewriting Bureaux among the most successful. By 1885, Orr's office employed around 100 typists and she was reportedly earning as much as \$3,000 per year.⁸ Orr went on to become a world record speed typist and a member of the Board of Directors for the Remington Typewriter Company, possibly the first woman to have reached such a position in a multinational company.⁹ In November 1883, the British novelist Walter Besant described Orr's office as a place where young women took commissions for 'about 2d for every hundred words, and it is as much girls' work as the sewing machine'. He went on to urge women in London to set up similar businesses: 'a clever girl, one of those girls who learn how to work the electric telegraph, can easily and without effort write from fifty to eighty words a minute.'¹⁰ Besant was apparently unaware that a typewriting office had been established in London the year before.

⁸ "A North Carolina Woman...", *Perthshire Constitutional & Journal*, May 6, 1885, 4; Russo, *Mechanical Typewriters: Their History, Value, and Legacy*, 28–29.

⁹ "A Woman in the Directorate," *Typewriter Topics* 6–7 (1907): 240.

¹⁰ Walter Besant cited in Mullin, *Working Girls: Fiction, Sexuality, and Modernity*, 25.



Figure 5.1. Mary E. Orr in 1888. In Thomas A. Russo's *Mechanical Typewriters: Their History, Value, and Legacy* (Atglen, PA: Schiffer, 2002), 28.

In 1882, Elizabeth Monchablon (1846-1928), known professionally as Madame Monchablon, set up the earliest known typewriting office in the UK at 26 Austin Friars, London. A praise-filled account of Monchablon's office, written by Marian Marshall (Figure 5.2) appeared in the first edition of *The London Phonographer* in June 1891. According to Marshall, Monchablon's office was a great success throughout the 1880s with much of her business coming from producing typescripts for local playwrights. Monchablon's office also provided tuition for aspiring typists, including Marshall, who had taken a course of eight typewriting lessons at Monchablon's office in May 1884. Soon after, Marshall, along with business

partner Ethel Garrett, opened the Ladies' Typewriting Office in Chancery Lane on October 6, 1884.¹¹



Figure 5.2. Front page of *The London Phonographer*, June 1891, featuring Marian Marshall.

¹¹ Marian Marshall, "Typewriting Offices. - 1.," *The London Phonographer* 1, no. 1 (June 1891): 2.

In raising the capital for their office, Marshall and Garrett were supported 'immensely' by the Society for Promoting the Employment of Women (SPEW).¹² Established in London in 1859, SPEW provided financial backing through interest-free loans and institutional support for female-run training programmes. The Society originated from concerns around 'superfluous women' in the wake of the 1851 census which showed that only seven per cent of middle-class women were listed as having an occupation. In most cases, these women worked as underpaid governesses or seamstresses.¹³ Initially, SPEW trained women in bookkeeping and accounts to give them the necessary skills to become clerks. But then, as Michelle Tusan described 'the question of what to do with the "superfluous" woman led the early organization to focus on opening non-traditional employments for middle and lower-middle-class women.'¹⁴ As SPEW's secretary described at the turn of the twentieth century 'The objects for which the society was established and for which it still works are the opening up of new employments for women... the first plan tracing office for women, the first typewriting office, the first shorthand class for women were all started by the society.'¹⁵ Marian Marshall concurred, writing in 1891 that SPEW had supported her Ladies' Typewriting Office from a desire to 'aid in developing a new industry for educated women'.¹⁶ Marshall's co-manager, Ethel Garrett, had an even closer connection with SPEW, with her aunt, the noted suffrage campaigner Millicent Garrett Fawcett, sitting on the general committee of SPEW from the 1860s.¹⁷

In line with the wider vision of SPEW, Marshall and Garrett promoted typewriting offices as an employment opportunity for women across the UK with a stall in the Women's Industries Section of the Edinburgh International Exhibition of Industry, Science and Art in 1886. The visitors' guide to the Women's Section of the exhibition stated that the objective was 'to

¹² Marshall, "Typewriting Offices. - 1.," 2.

¹³ Helena Wojtczak, "British Women's Emancipation since the Renaissance: The Society for Promoting the Employment of Women," *History of Women*, 2009, <http://www.hastingspress.co.uk/historyofwomen/spew.html>.

¹⁴ Michelle Elizabeth Tusan, "'Not the Ordinary Victorian Charity': The Society for Promoting the Employment of Women Archive," *Workshop Journal*, 2000, 223.

¹⁵ Tusan, 223–24.

¹⁶ Marshall, "Typewriting Offices. - 1.," 2.

¹⁷ "Echoes From Merry England," *Fifeshire Journal*, November 29, 1883, 3; Gerry Holloway, *Women and Work in Britain since 1840* (New York: Routledge, 2005), 44.

show what Women are doing in the industrial world of Great Britain... At a moment when many are suffering from want of employment, information which can facilitate the efforts of those who wish to gain a livelihood must be eagerly read.’¹⁸ The description for the Ladies’ Typewriting Office read: ‘Miss Garrett has, with another lady, established this business, and undertakes work at her office, or sends out workers with a machine to employers. Three months are required to learn. No premium. The work is paid by the piece – average earning 18s. a week.’¹⁹ Thus, the guide detailed how money could be made from typewriting work and encouraged readers to visit the stall for further information. The exhibit was less of an advertisement for Garrett and Marshall’s Office (which was hundreds of miles away in London) and more of a stimulus for women interested in setting up their own typewriting businesses in Scotland.

In managing their office, Marshall and Garrett were equally enthusiastic about preparing their employees to establish their own offices. Marshall stated in her account of the Ladies’ Typewriting Office:

Many of my pupils – among whom are the Misses Farren, Dickens, Ethel Taylor, in London; Fleming in Edinburgh; Burnblum, Oxford; Perkins, Liverpool; Maling, New Zealand; &c. – have been running offices on their own account for years, to their own credit and that of the office I hope they will ever consider their *Alma Mater*.²⁰

From the Ladies’ Typewriting Office grew an international network of typists, who built upon the business model of the early offices in New York and London.

One of Marshall and Garrett’s successful students was Elizabeth Fleming, referred to in the above quotation as ‘Fleming in Edinburgh’. In 1886, Fleming along with her business partner Ethelinda Hadwen established the first typewriting office in Scotland at 8 York Buildings,

¹⁸ Preface in *Women’s Industries: International Exhibition of Industry Science & Art Edinburgh 1886* (Edinburgh: T. & A. Constable, 1886).

¹⁹ *Women’s Industries: International Exhibition of Industry Science & Art Edinburgh 1886*, 30.

²⁰ Marshall, “Typewriting Offices. - 1.,” 3.

Edinburgh.²¹ Within a year Hadwen and Fleming's typewriting office was reported to be 'flourishing'.²² Fleming and Hadwen continued to run their office together until May 1896, when Fleming left for Birmingham and married, with Hadwen remaining as the sole owner.²³ Like many women in the typewriter trade, Fleming departed the firm upon marrying, as had Ethel Garrett who had left the Ladies Typewriting Office to Marshall ten years earlier.²⁴ Despite the enthusiasm for women to take up typing roles, as in many occupations, there was still an expectation that women would leave the sector upon marriage. The exceptions were the wives of typewriter businessmen. For example, an 1896 advertisement for Whiteley's Business College and Typewriting Office in Edinburgh announced that the owner, Frederick Whiteley, was 'assisted in the Shorthand and Typewriting Department by Mrs. Whiteley, who has had practical experience in one of the largest business houses in Scotland.'²⁵ Women desiring a long-term career in typing either had to remain single as Marshall and Hadwen did or marry into the business.²⁶

While relatively little is known about Elizabeth Fleming, there is far more information about her partner and successor Ethelinda Hadwen. Hadwen was born in 1863 into a well-off merchant family in Lancashire.²⁷ By the 1870s, she was studying at the Institut Fenelon, Lille, where she obtained a first teacher's certificate from the French government, allowing her to teach for money in France. After gaining what Hadwen described as some 'commercial experience', she moved to Edinburgh around 1886 where she set up her typewriting office with Elizabeth Fleming.²⁸

²¹ See entry for Edinburgh Type-Writing Office in "General Directory," in *Post-Office Edinburgh & Leith Directory 1887-1888* (Edinburgh: Morrison and Gibb, 1887), 82.

²² Date of office's establishment given by Miss Reynolds, "Paper on Type-Writing," in *Transactions of the First International Shorthand Congress, Held in London From September 26th to October 1st 1887* (Bath: Isaac Pitman & Sons, 1888), 145.

²³ "Notice of Dissolution of Copartnery," *The Edinburgh Gazette*, June 2, 1896.

²⁴ Marshall, "Typewriting Offices. - 1.," 3.

²⁵ "Advertisements: Whiteley's Business College," in *Post-Office Edinburgh & Leith Directory 1896-97* (Edinburgh: Morrison and Gibb Limited, 1896), 32.

²⁶ Marian Marshall's marital status is unclear. In the 1891 and 1901 census she is listed as married. However, on both occasions she is recorded as the head of the household, apparently with no spouse in residence.

²⁷ In the 1871 census Hadwen's father, Gaylard, was recorded as a cotton spinner in Lancashire employing 350 hands.

²⁸ "Lady Candidate For Edinburgh School Board," *Edinburgh Evening News*, March 5, 1906, 4.

Alongside her business endeavours, Hadwen became a popular figure in local politics and a leading member of the Edinburgh National Society for Women's Suffrage. It was with the support of this Society that in 1898 she was elected to the Parish Council by the largest majority in the city.²⁹ After her victory, *The Woman's Signal* reported Hadwen as saying she had:

proved the error of the idea that women would find going into the turmoil of an election or of political life extremely disagreeable... no woman need shrink from entering into an election on the ground that she might find it disagreeable... the Woman's Suffrage question ought to appeal to every woman who was interested in the welfare of her fellow women.³⁰

In 1906, Hadwen was elected to the Edinburgh School Board after a campaign in which she capitalized on her twenty years of business experience in the typewriting sector. Before addressing a meeting of electors at Regent Road School, Hadwen was introduced as 'a business lady' who was 'well qualified to be a member of the School Board.'³¹ Like James Leishman whom we met in chapters 2, 3 and 4, the typewriter trade gave Hadwen valuable experience in public life which she applied to her political career. But unlike Leishman, Hadwen's gender restricted her to roles in local government.

Hadwen also wrote extensively on women's education. In January 1900, a letter from Hadwen published in *The Scotsman* criticised the education of girls in Merchant Company Schools, which managed the Edinburgh Ladies' College now known as the Mary Erskine School. She suggested that the Merchant Company should 'march with the times' and provide 'girls a knowledge of commercial law, especially of the laws affecting women, and of simple book-keeping such as is given in French schools'.³² Hadwen was drawing on her experiences of the French education system and of taking on apprentices in Edinburgh,

²⁹ "Lady Candidate For Edinburgh School Board," *Edinburgh Evening News*, March 5, 1906, 4.

³⁰ "Edinburgh National Society For Women's Suffrage. Annual Meeting," *The Woman's Signal*, December 29, 1898, 405.

³¹ "Edinburgh School Board Election: Mrs Hadwen's Candidature," *The Scotsman*, March 15, 1906, 7.

³² Ethelinda Hadwen, "Commercial Education," *The Scotsman*, January 23, 1900, 8.

many of whom she felt lacked a fundamental knowledge of business. In Hadwen's view, competent shorthand typists required more than the ability to use a typewriter, but the business acumen to put their typing skills into a commercial context.



Figure 5.3. Ethelinda Hadwen in the *Edinburgh Evening News*, March 5, 1906, 4. Copyright the British Library Board.

After Fleming departed from the business in 1896, Hadwen ran the Edinburgh Typewriting Office until she emigrated to Canada around 1910, apparently selling the business, or at least the name, to James Leishman.³³ The brand was still valuable enough that Leishman advertised under the Hadwen and Fleming name from his premises at 44 George Street in 1911 (Figure 5.4). Leishman already knew Hadwen from their membership of the Edinburgh Shorthand Writers' Association (see chapter 3) as well as their time on the School Board from 1906.³⁴ Despite already owning a typewriting office, Leishman probably felt that using the Hadwen & Fleming title, for a time, would support Hadwen's clientele through the

³³ "Obituary: Hadwen – Miss Ethelinda," *The Victoria Daily Times*, September 6, 1940, 15.

³⁴ "Edinburgh School Board Election," *Edinburgh Evening News*, March 15, 1906, 7.

transition period to new ownership, as well as preventing these customers from settling with rival offices.

[1035]

TYPISTS
SHORTHAND
WRITERS

~~~~~

OLDEST  
ESTABLISHED  
OFFICE

✧

**HADWEN & FLEMING**  
(JAMES LEISHMAN)  
*Edinburgh* \* *Typewriting* \* *Office*  
44 GEORGE STREET

TELEPHONE  
377

~~~~~

Largest
Quantities
of Law Work
in Shortest Time

✧

Figure 5.4. Advertisement for Hadwen & Fleming Edinburgh Typewriting Office in the *Post Office Edinburgh & Leith Directory 1911-1912*.

By this time the business was under the management of James Leishman from his premises at 44 George Street. Digitized by NLS.

The pioneering managers of typewriting offices, such as Orr in New York; Monchablon, Marshall and Garrett in London; and Hadwen and Fleming in Edinburgh broke new ground with their businesses. In doing so, they formed the basis for a wider network of typists across the UK and internationally. In the 1880s, Marshall had learnt typing, in part, from lessons at Monchablon's office, just as Fleming went on to learn the trade from Marshall. It is not clear how Hadwen learnt typing: she may well have developed these skills through operating instructions, typewriting manuals, and trial and error, as we can assume a lot of early users did. Nevertheless, we do know that Hadwen had contact with the pioneering London managers. In 1889, she was present at the inaugural meeting of the Society of Typists in London where Marshall was the convener with Monchablon and several other figures from the UK's typewriting office sector in attendance.³⁵ Significantly the meeting was held at the rooms for SPEW at 22 Berners Street. This underlines the passion that these business leaders shared for promoting women's working and political rights.

By the early 1900s, the landscape had shifted. There were now dozens of typewriting offices in Scotland's major towns and cities which paralleled developments around the UK. Moreover, as we will return to in the following chapter, the typing profession had formalised with the instigation of qualifications by bodies such as the Royal Society for the Encouragement of Arts, Manufactures and Commerce (RSA). While the RSA first instituted typewriting examinations in 1891, there had been just 99 entrants in the opening year across the whole of the UK. It took another 10 or so years before the number of entrants surpassed 1,000, with this figure increasing to around 7,000 by 1925 (see chapter 6). By this time, typists were expected to have received formal tuition and on-the-job experience. As a result, we find that later owners and managers of typewriting offices – before setting up their businesses – had attained typing qualifications.

One of the most outstanding examples of this new generation of managers was Alice Copeland (1892-1977). Copeland's earliest recorded job was for the Aberdeen law firm

³⁵ "A Trade Combination for Typewriters," *The Queen*, June 1, 1889, 65; for confirmation of Hadwen's attendance at 1889 meeting see Ethelinda Hadwen, "Letters to the Editor: Wages of Women as Typists," *Edinburgh Evening News*, September 2, 1902, 2.

Adam, Thomson and Rose where she worked as a typist from January 1915.³⁶ At the same time, she was enrolled in evening classes at Calder M. Lawrence's Aberdeen School of Shorthand, Typewriting and Business Training, and soon became one of his most successful students. Lawrence, who we met in chapter 2, was one of the first shorthand teachers in Aberdeen to add typewriting to his curriculum from the 1880s, remaining a well-respected figure in Scotland's typewriter trade into the 1900s.³⁷ Under Lawrence's tuition, in 1915, Copeland was the winner of the certificate for the fastest shorthand time at the school with a speed of 170 words per minute.³⁸ The following year she improved upon this with a speed of 190 words per minute using Pitman's shorthand.³⁹ To put this achievement into context, *Pitman's Typewriter Manual* advised that a competent clerk in a typewriting office should take shorthand at around 100 words per minute.⁴⁰ Her skills were well regarded by Lawrence who employed her as a typist in his typewriting office by the late-1910s (Figure 5.5).

³⁶ "Result of Shorthand Examination," *Aberdeen Evening Express*, January 9, 1915, 4.

³⁷ See list of attendees for the semi-jubilee celebrations for Lawrence's school, "Semi-Jubilee of School: Interesting Presentations," *Aberdeen Press and Journal*, December 19, 1908, 6.

³⁸ "Result of Shorthand Examination," *Aberdeen Evening Express*, January 9, 1915, 4.

³⁹ "Miss Alice Copeland, Typist With...," *Aberdeen Evening Express*, August 9, 1916, 2.

⁴⁰ *Pitman's Typewriter Manual*, 77.



TYPEWRITING OFFICE.

Figure 5.5. Typewriting Office in Calder M Lawrence's Aberdeen School of Shorthand and Business Training, c 1910. Copyright Aberdeen City Council.

Copeland's business experience, commercial education and contacts from her association with Lawrence gave her the skills to set out on her own and on 13 December 1920 she established the Typewriting Copying Office at 5 Union Terrace, Aberdeen. In Copeland's 'Opening Announcement' published in the *Aberdeen Press and Journal* two days in advance she described herself as having: 'considerable experience in copying Authors' MSS., Specifications, Medical and Legal Papers, Tabulated Statements, Balance Sheets, Testimonials, etc.' The advertisement also promoted her work at Lawrence's Typewriting Office and her 'Certificated 200 words per minute, R.S.A. (Lond.), and other Examinations.' To engender trust between herself and potential customers, Copeland combined her practical experience of typewriting, formal qualifications, and association with Lawrence. Typewriting offices relied on a loyal customer base not least because of the sensitive information they sometimes transcribed. Establishing trustworthiness was even more

important for new businesses that needed to quickly attract clients. As Copeland put it: 'I hope to merit, by prompt and personal attention to business, a share of public patronage'.⁴¹

One of Copeland's biggest orders came in 1926 when her office was hired to type up the entirety of Aberdeenshire's valuation rolls. Valuation rolls recorded the address and use of the property, the owner (proprietor) and occupier (tenant) and the value of the property for local taxation. It took Copeland's business five years to complete the job which comprised of 1,900 pages with around 103,000 entries.⁴² Following this order, she ran her office successfully in Aberdeen for more than 40 years.

Like Hadwen, Copeland also took an active interest in promoting women's employment rights, which included becoming one of the founding members of the Aberdeen Soroptimist Club in 1929. Soroptimism was an international women's movement started in California in 1921 which campaigned for women's right to work, equal opportunities and the fostering of an international understanding between women.⁴³ Copeland attended conferences all over the world on behalf of the Aberdeen Soroptimists Club and in 1938, she toured America and Canada which coincided with her attendance at the national conference of Soroptimists. On this trip, she learnt about American soroptimists' plans for women's work in commercial businesses and the professions, as well as their schemes for social welfare.⁴⁴ Copeland remained an active member of the Aberdeen Soroptimists until after the Second World War. She died in 1977 and was remembered fondly in the local press, with her typewriting office described as catering to 'professional people in all walks of life'.⁴⁵

⁴¹ Alice Copeland, "Opening Announcement," *Aberdeen Press and Journal*, December 11, 1920, 1.

⁴² "Alice Copeland Dies," *Aberdeen Evening Express*, August 4, 1977, 7.

⁴³ "90th Celebrations," Soroptimist International Great Britain and Ireland, 2019, <https://sigbi.org/aberdeen/gallery/>.

⁴⁴ "Americans' Welcome Soroptimists of the World: Delegate Tells of U.S. Visit," *Aberdeen Press and Journal*, November 10, 1938, 9.

⁴⁵ "Alice Copeland Dies," *Aberdeen Evening Express*, August 4, 1977, 7.



Figure 5.6. Alice Copeland in the *Aberdeen Evening Express*, August 9, 1916, 2.
Copyright D. C. Thomson & Co. Ltd. Image created courtesy of the British Library Board.

The pioneering typewriting offices set up by Monchablon, Marshall, and Garrett in London in the mid-1880s generated a network of businesses around the UK, including Hadwen & Fleming's first Scottish office in Edinburgh, and Copeland's later firm in Aberdeen. These pioneering managers had strong ties to political movements which promoted women's electoral, educational and employment rights. The few examples in this section are, I believe, the tip of the iceberg. Further research into the managers of typewriting offices is likely to reveal more connections between the typewriter trade, business ownership and women's movement campaigns at the turn of the century.

Employees

To deliver work on a large scale most typewriting offices relied on a small number of skilled typists. Although there are no surviving company records for Scottish typewriting offices, trade directory descriptions, newspaper advertisements and photographs – alongside accounts of similar London offices – have been combined to build up a picture of the varied workforces in these businesses and the relationship between managers and employees. When considering this relationship, the exceptions were typewriting offices operated as single-person enterprises. It is worth noting these freelance typists have still been recorded as typewriting offices in the Typewriter Businesses Database (see chapters 1 and 2) and in some cases they went on to expand their business by employing a small staff of typists.

From the earliest typewriting offices of the 1880s, employees were generally hired as apprentices. Although, as we have just learnt from Alice Copeland's employment in C. M. Lawrence's office, from c. 1900 typists were sometimes hired with training and credentials as well. Regardless of their typing experience, employees were often young women who had left school with a decent level of primary education, and some secondary schooling. As apprentices, they joined an office for a few months or more to learn the typing on the job. According to *Pitman's Typewriter Manual* of 1904 apprenticeships were especially valuable for typists looking to start their own business:

There are many ways of learning the typewriter: one can teach oneself, or learn the subject at a school, or serve a term of apprenticeship in a copying office. For the purpose in view [managing a typewriting office], the last-named course is undoubtedly the best, since neither home training or school training can possibly afford such general experience of the kinds of work to be done as a course in a copying office under practical supervision.⁴⁶

Apprentices were hired based on experience: applicants with some knowledge of typing worked free of charge for three to six months before receiving a wage, while candidates

⁴⁶ *Pitman's Typewriter Manual*, 76.

without 'even elementary knowledge' paid a fee from £3.3s. to £5.5s. in total.⁴⁷ A vacancy posted by the Oliver Typewriting Company for their Glasgow typewriting office confirmed that this was the practice in Scotland. 'APPRENTICE Pupil Wanted to learn Shorthand and Typewriting; small premium'.⁴⁸ After paying the premium and completing the apprenticeship, we can assume that students stayed on as paid employees or were helped to find work in a nearby office.

An 1899 announcement for Hadwen & Fleming's typewriting office outlined the attributes that Hadwen sought in her apprentices: 'Misses Hadwen & Fleming, 7 N. St David Street, the oldest established Typewriting Office, have Vacancies for well-educated Girls, over 17 years of age, as Pupils for their Edinburgh and Leith Offices'.⁴⁹ The age of the candidates sought shows Hadwen was looking for apprentices who had completed compulsory education to the age of 14 and had probably continued with two or three years of further education, perhaps even at a typing school. By the turn of the century, there were several typing schools in Edinburgh which taught boys and girls aged 14 and over, with successful students earning certificates in typewriting, shorthand and other clerical subjects like bookkeeping.

From the outset, the pioneering managers in London had considered a solid educational background a vital attribute of their employees. In 1891, Marian Marshall recalled, in her description of the establishment of Madame Monchablon's typewriting office in the 1880s, that 'finding the right sort of girl to manufacture into a typist clerk caused her [Monchablon] much anxiety; but slowly, yet surely educated girls began to see that here was a better opening than the done-to-death "governess" field'.⁵⁰ Marshall argued that more and more women were choosing a career in typing over traditional employments such as school teaching, an occupation which she suggested was beneath them. Hadwen was equally perturbed by women being blindly pushed into teaching.

⁴⁷ *Pitman's Typewriter Manual*, 76.

⁴⁸ Oliver Typewriting Co., "Vacant: Apprentice Pupil Wanted...", *Daily Record*, August 27, 1915, 7.

⁴⁹ Ethelinda Hadwen, "Misses Hadwen & Fleming," *The Scotsman*, March 31, 1899, 10.

⁵⁰ Marshall, "Typewriting Offices. - 1.," 1.

In her aforementioned letter criticising the policies of the Merchant Company Schools in Edinburgh, published in *The Scotsman* in 1900, Hadwen complained that ‘the only profession which is aimed at is apparently that of the schoolmistress.’ She then insisted it was time that the Merchant Company ‘modernise their education’ by offering girls subjects valuable in a commercial setting such as book-keeping.⁵¹ A few years later, the Dundee-based shorthand-typing principal A. W. Paton capitalised on the drudgery associated with school teaching in a 1906 prospectus for his commercial college: ‘Shorthand and Typewriting now open out a career which, without excessive expenditure or a constant grind as in Teaching, is most attractive to our Daughters’.⁵² While typing was one of many white-collar professions open for women at the fin de siècle, these roles particularly appealed to those who may have otherwise been forced into teaching.

From the late-1880s, various typists’ societies and unions were established to maintain educational standards and wages in typewriting offices. The earliest was the Society of Typists (SOT) which, as mentioned above, was set up in 1889 by Marshall, Monchablon, Hadwen and other leading typewriting office managers from across the UK. A report on the inaugural meeting set out the three goals for the society: to set a standard scale of prices for typing work, to regulate tuition fees for apprentices, and to grant certificates of efficiency to pupils.⁵³ In 1892, the SOT was superseded by the National Union of Typists (NUT). Unlike the SOT, the NUT welcomed both typewriting office owners, employees and typists employed in offices outside of the typewriting sector. The NUT carried forward the work of the SOT with the aim of ‘fixing and maintaining a minimum scale of charges for typewriting’ and ‘raising and maintaining of the qualifications and status of its Members’.⁵⁴

Typewriting offices which did not stick to regulations set out by typists’ societies were liable to come under public criticism. In the mid-1890s, May H. Ashworth established an office based in the Palace of Westminster for the use of MPs. The prices she set for this office were twenty per cent lower than those advised by the NUT. Ashworth argued that the

⁵¹ Ethelinda Hadwen, “Commercial Education,” *The Scotsman*, January 23, 1900, 8.

⁵² A. W. Paton, *Making the Most of Life. 1. Choosing a Calling* (Dundee: Paton’s College, 1906), 9.

⁵³ “A Trade Combination for Typewriters,” *The Queen*, June 1, 1889, 65

⁵⁴ *The National Union of Typists Rules* (London, 1892), reference FS 7/17/785 at The National Archives, Kew.

reduction was down to the fact that, unlike most typewriting offices, she was not required to pay for 'rent, rates, taxes, cost of fire and oil, services of messenger, office charges etc' which usually amounted to around 'thirty-five per cent of the gross takings in a copying office'.⁵⁵ However, the Secretary of the NUT, J. Charles Casson did not agree writing in the *Phonetic Journal* in 1895 that Ashworth's 'excuse... is a very weak one, and will not bear scrutiny.'⁵⁶ Despite his protests, Ashworth maintained high salaries for her employees with experienced typists earning a yearly salary of roughly £80.



Figure 5.7. May H. Ashworth's portrait on the front cover of *The London Phonographer* 1, Vol 1, no. 4, September 1891.

⁵⁵ "Type-Writers in the British House of Commons," in *The Illustrated Phonographic World*, vol. 10 (New York: E. N. Miner, 1895), 264.

⁵⁶ "Type-Writers in the British House of Commons," 264.

The tariffs set by typists' societies certainly influenced the charges in Scottish typewriting offices. The earliest record of a standard rate of charges was released by the Incorporated Phonographic Society (IPS) in 1904 and is illustrated in Figure 5.8. The IPS had absorbed the NUT into a 'Typists' Section' of their society around the same time.⁵⁷ Comparing the IPS tariff with price lists from A. W. Paton's copying department in Dundee c. 1900 (Figure 5.9 & Figure 5.10) and the Central Type-Writing Office in Glasgow in 1901 (Figure 5.11) demonstrates that businesses in Scotland followed the nationwide guidelines. In both offices general copying at 1 ½ *d.* per folio of 72 words; authors' MSS at 1*s.*3*d.* per 1,000 words; and typing from dictation at 2*s.*6*d.* per hour were set at the same level as the IPS tariff. There were some discrepancies between the Scottish typewriting offices and the recommended prices. Addressed wrappers and envelopes, for example, were set at a lower price per 1,000 copies than recommended by the IPS tariff. This discrepancy may have been down to Paton's and the Central Type-Writing Office's price lists being released around 3 to 4 years before the NUT's absorption into the IPS in 1904. Their tariffs may well have precisely matched the NUT tariff in 1900 but unfortunately a price list from that year is yet to be found.

During the 1890s and early 1900s, the SOT, NUT and Typists' Section of the IPS sought to maintain proper standards in the typing profession by setting standard tariffs for typing services and tuition, as well as instituting examinations for typists. As we will return to in the following chapter, securing the reputation of the typewriting sector became even more important in light of criticisms that the profession was being inundated with poorly educated women who accepted jobs at lower wages. According to Ethelinda Hadwen, the result of typewriting offices hiring poorly skilled typists at lower rates (or offices undercutting the UK-wide tariffs) was a depreciation in the wages and standards across the board.⁵⁸ In this sense, typewriting offices were more than just individual enterprises but were also part of a network of interdependent businesses. Poor quality work produced by one office not only looked bad for the business in question but also undermined the sector

⁵⁷ Shorthand or phonographic societies such as the IPS had close connections with the typewriter trade, as discussed in chapter 3.

⁵⁸ Ethelinda Hadwen, "Letters to the Editor: Wages of Women as Typists," *Edinburgh Evening News*, September 2, 1902, 2.

as a whole. Hadwen and other leading business owners felt that it was the responsibility of each office to uphold high standards from their typists to maintain public confidence in the sector.

TYPEWRITING CHARGES.

General and Legal Copying, per folio of 72 words, 1½d.
Balance Sheets and Tabular

Statements	...	...	"	"	"	"	"	"	2d.
Engrossments	...	...	"	"	"	"	"	"	2d.
Medical and Scientific Work	"	"	"	"	"	"	"	"	from 2d.
Facsimile Copies	...	"	"	"	"	"	"	"	2d.

All carbon copies, two-thirds the price of top copy.

Authors' MSS., 3,000 words and over,	per 1,000,	1s.	3d.
Scientific MSS.,	"	"	1s. 6d.
Prompt Books and Plays	...	per page, 4to,	4d.
Actors' Parts	...	"	4d.
Typewriting from Dictation	...	per hour,	2s. 6d.

" " " with one
carbon copy " " 3s. od.

Typewriting in French or German, twice the price
of English work.

All Red Ruling extra throughout.

Addressing Envelopes by Contract,

									per 1,000, from 10s. 6d.
Hire of Machine and Operator,	per day (10 to 5)	10s.	6d.						
" " " " " "	" week,	£2	10s.						
Shorthand-Typist, with or without Machine,									per day, from 12s. 6d.
" " " " " "	per week,	"	£3	3s.					
" " " Foreign Language,									per day, " £1 1s.
Typist with Foreign Language	"	"	"	15s.	od.				
Transcribing Shorthand Correspondence,	per folio,	3d.							
" " Authors' MSS.,									per 1,000 words, from 3s. od.
" " Legal and Scientific,									per folio, 6d.
Reporting Meetings, Attendance Fee									£1 1s.
Transcribing Verbatim Report									per folio, 8d.

REPRODUCTIONS BY DUPLICATOR (FCAP).

10 copies	...	...	...	2s.	6d.
20 "	...	...	...	2s.	10d.
50 "	...	...	...	3s.	10d.
100 "	...	...	...	5s.	6d.

Cutting Stencil 3d. per folio, Minimum Price, 1s.

Figure 5.8. Typewriting Charges recommended by the Typists' Section of the Incorporated Phonographic Society.

In *Pitman's Typewriter Manual* (London, Sir Isaac Pitman & Son, Ltd, 1904), 78.

COPYING.

We have pleasure in directing special attention to our Copying Department.

Copying Work of all descriptions executed in the very best style on the shortest notice consistent with accuracy.

Documents entrusted to us are treated in a strictly private and confidential manner.

Professional and business men waited on at their offices by expert Shorthand Writers and Typists.

. . . PRICES . . .

INCLUDING PAPER.

Legal and General Documents, per folio of 72 words	...	0	1½
Duplicate Copies (Carbon), per folio of 72 words	... ..	0	1
Tabulated Work, Balance Sheets, Accounts, &c., per folio of 72 words	... ..	0	2
Foreign Language MSS. per folio of 72 words	... ..	0	3
Authors' MSS. (2000 words and over) per 1000 words	... ..	1	3
Medical and Scientific MSS. (2000 words and over) per 1000 words	... ..	1	6
Plays, per Act of 15 pages	... ..	5	0
Plays, after first 15 pages, per page	... ..	0	3
Actors' Parts, per page	... ..	0	2
Envelopes and Wrappers Addressed, per 1000. from	... ..	8	0
Business Letters, &c., from dictation in office, per hour	... ..	2	6
Business Letters, &c., from dictation out of office, per hour	... ..	3	6
Business Letters, &c., from dictation out of office, per day	... ..	10	6
Business Letters, &c., from dictation out of office, per week	... ..	42	0

Figure 5.9. First page of price list for A. W. Paton's 'Copying Department' in Dundee, c. 1900. Pamphlet in a collection of publications by A. W. Paton held at Dunfermline Carnegie Library & Galleries.

MIMEOGRAPH COPYING.

For Circulars, Notices, &c. Clearer, Cheaper, and more effective than printing. Special care exercised in securing perfect accuracy and clear, sharp copies

COPIES,		INCLUDING PAPER, QUARTO.		INCLUDING PAPER FOOLSCAP.
25	...	2/6	...	3/6
50	...	4/-	...	5/-
100	...	5/6	...	6/6
150	...	7/-	...	8/-
250	...	10/6	...	12/6
500	...	15/-	...	20/-
1000	...	25/-	...	30/-
2500	...	55/-	...	65/-
5000	...	100/-	...	120/-

Extra price for Foreign Languages.

TERMS FOR TRANSLATION.

						INCLUDING PAPER per folio
German	...	...	...	...	...	1/-
French	...	...	...	...	...	1/-
Russian	...	...	...	...	...	2/6

Special Quotations for other Languages.

HIRE TERMS FOR MACHINES.

Typewriter, per Day or Week	..	...	...	...	...	5/-
Typewriter, per Month	...	...	...	...	...	15/-
Typewriter (after first month), per Month	...	...	...	...	...	12/6

◆
TERMS—CASH.

Figure 5.10. Second page of price list for A. W. Paton's 'Copying Department' in Dundee, c. 1900.



Figure 5.11. Advertisement for the Central Typewriting Office published in The Glasgow Athenaeum Calendar, 1901-1902.

Held at the University of Strathclyde, Archives & Special Collections, Glasgow.

Even more so than education, the uniting factor amongst the vast majority of typewriting office employees was gender. Some offices, like Marshall and Garrett's Ladies' Typewriting Office in London, precluded men from applying in the very title of their business. This is not surprising considering that the office was funded by the Society for Promoting the Employment of Women. The owners of Scottish typewriting offices often did little to encourage male applicants. As we have seen, advertisements for Hadwen's office called on 'girls' to start as apprentices.⁵⁹ Like Marshall and Garrett, this reflected Hadwen's passion for promoting employment opportunities for women. Meanwhile, male-owned typewriting offices were also dominated by female employees as illustrated in photographs of David Gardiner's Edinburgh office in 1909 (Figure 5.12) and C. M. Lawrence's Aberdeen office in c. 1910 (Figure 5.5). These examples align with census returns from 1901 which indicated that by that time 99 per cent of people employed as typists were women. In the typewriting office sector, while a significant minority of the owners and managers of these businesses were women, almost all employees were women regardless of the management.

⁵⁹ Ethelinda Hadwen, "Misses Hadwen & Fleming," *The Scotsman*, March 31, 1899, 10.

The photographs of Lawrence's and Gardiner's typewriting offices also suggest the average size of the workforce, with three and six employees in each assuming there were not multiple typing rooms. Yet we also know that there were typewriting offices with fewer employees. Entries for typewriter businesses in the Scottish town Post Office directories suggest that there were several single-person enterprises. In 1891, Helen Dora Shaw, aged 29, was working as a teacher in Edinburgh.⁶⁰ Then in 1895, amid a take-off in typewriting offices in the capital, Shaw started work as a typist from her home at Warrender Park Terrace.⁶¹ She was one of many freelance typists who promoted their small business as a typewriting office. On the other end of the scale, we know that in London there were offices which employed ten typists or more by the late 1880s. In 1887, Marshall and Garrett's Ladies' Typewriting Office had at least 11 typewriters in use.⁶² This suggests they employed at least as many typists if they were to make the most out of their fixed assets which represented a retail value (from new) of at least £200. If we take Shaw's and Marshall's offices as the extremes, an estimate of a little less than half a dozen employees for the average typewriting office seems reasonable.

⁶⁰ Scottish census record (1891) for Helen Shaw, aged 29, Grosvenor Street, St George Edinburgh, St George, Midlothian, Findmypast.co.uk

⁶¹ Entry for Shaw in "General Directory," in *Post-Office Edinburgh & Leith Directory 1895-96* (Edinburgh: Morrison and Gibb, 1895).

⁶² "Ladies' Column," *The Northern Whig*, February 8, 1886, 2.

TYPEWRITING HEADQUARTERS.

Sole Scottish Agents for

The 'Oliver' Typewriter

The 'Revol' Duplicator

The 'Kalamazoo' Perpetual Ledger

The Webster 'Star Brand' Typewriter Ribbons

AND 'Multi-Kopy' Carbons.



FRONT VIEW OF SHOWROOMS.

Typewriters

of all Makes (New or Second-hand) ON SALE, HIRE, or HIRE PURCHASE.

RIBBONS

For every Make of Machine.

We keep a large Staff of Experienced Shorthand-Writers and Typists.

We undertake all Classes of Typewriting and Duplicating Work.

MODERN METHODS A SPECIALTY.

We Guarantee Promptness with Exactitude.



All Documents treated in a Strictly Confidential Manner.

INTERIOR VIEW OF SHOWROOMS.

DAVID GARDINER & CO., Offices—Showrooms and Copying Office: 98a George St. (Next Freemasons' Hall), EDINBURGH. Telephone: 793 Central.

Branches— 161 Hope Street, GLASGOW. 173a Union Street, ABERDEEN. 4 India Buildings, DUNDEE.

Figure 5.12. Advertisement for David Gardiner & Co in the *Post Office Edinburgh and Leith directory, 1909-1910.*

Digitized by NLS.

Early descriptions of London typewriting offices shed light on the working relationship between managers and employees in larger businesses. Ethel Dickens (1864-1936) was the granddaughter of Charles Dickens, a former student of Marian Marshall, and the owner of a typewriting office on Strand, established in 1887.⁶³ In 1891, *The London Phonographer* featured an interview with Dickens which described her business. During the interview, Dickens was interrupted by ‘one of her scarlet-aproned girls’ who had come in ‘to consult her on a point of difficult handwriting’ from a client. Dickens commented ‘If people only knew what trouble they give by illegibility they would take more pains’. After Dickens had deciphered the word, she sent the typist on her way ‘with a smile’. Later in the interview, Dickens explained ‘Nothing goes out of the office without being looked over and completely read through by myself’.⁶⁴ A similar policy was followed by May H. Ashworth at her typewriting office in the Palace of Westminster, mentioned earlier. In an interview for *The Illustrated Phonographic News* Ashworth guaranteed that all work that left her office was ‘perfect’ and that clients were refunded for any mistakes in their documents. The time taken to proofreading, in addition to her other managerial responsibilities, meant that Ashworth regularly worked fourteen-hour days.⁶⁵

⁶³ Heidi Pennington, “Featured New Women: Ethel Kate Dickens,” *Journal of New Woman Studies*, accessed July 26, 2022, <http://www.thelatchkey.org/Latchkey10/featured10.htm>.

⁶⁴ “Typewriting Offices – 2. Miss Ethel Dickens,” *The London Phonographer* 1, no. 2 (1891): 1–3.

⁶⁵ “Typewriting in the English House of Commons. A Glimpse of Miss Ashworth and Her Assistants...,” in *The Illustrated Phonographic World*, vol. 10 (New York: E. N. Miner, 1895), 217.



Figure 5.13. Ethel Dickens on the front cover of *The London Phonographer*, Volume 1, No. 2, July 1891.

While we do not know if Scottish typewriting offices followed Dickens's or Ashworth's procedures, it is clear that the accuracy of typed work was taken seriously. In the 1894 account from the Lady Typist in *The Scottish Phonographer*, she affirmed that work in her office was 'executed in our best style and in the words which all the typists have before them, "with accuracy and despatch"' (Appendix 1). This sentiment was widely shared. The Edinburgh-based typist Ella J. M. Mangan declared in her prize-winning essay of 1903 that:

'The Typist's Motto could easily be summed up in one word – "Accuracy"'.⁶⁶ Advertisements also suggest that, in addition to accuracy, customers looked for offices which could type their documents with speed and confidentiality. E. & H. McClew's 1901 promotion for their Glasgow office promised readers that typing was carried out with 'STRICTEST CONFIDENCE' and 'PROMPTLY EXECUTED' (Figure 5.11). A few years later, David Gardiner's advertisement combined accuracy, speed and secrecy. Readers were assured that 'We Guarantee Promptness with Exactitude' and 'All Documents treated in a Strictly Confidential Manner' (Figure 5.12).

To summarise, the employees of typewriting offices were usually young women who were taken on as apprentices but were expected to have already been educated to a good standard. Except for freelance typists, most employees worked in offices of up to a dozen typists. These employees reported to the owner or manager who checked the accuracy of their work, encouraged the quick turnaround of projects, and ensured that the client's documentation was handled with discretion. The hierarchy in typewriting offices was therefore vital in quality control which in turn maintained a satisfied customer base. The most aspiring employees absorbed all the experience they could perhaps with the view of opening a typewriting office of their own. As *Pitman's Typewriter Manual* encouraged apprentices: 'Once the office is selected, and preliminaries settled, the pupil should take every opportunity of mastering the business.'⁶⁷

Typewriting office services

In 1896, *The Illustrated Phonographic World* published a poem titled 'The Woes of a Typewriter Girl':

The life of a 'Copying Office' girl
Is varied enough to keep her in a whirl;
She's writing this document, then writing that,

⁶⁶ Ella J. M. Mangan, "Shorthand Writer and Typist. How to Attain Success," *The People's Journal*, January 31, 1903, 3.

⁶⁷ *Pitman's Typewriter Manual*, 76.

Until really she doesn't know where she is at.

First in comes the lawyer, so dainty and trim,
He wants her to copy this paper for him,
The next is the architect, full of frustration,
He asks her to write out his specification.

[...]

Then opens the door. Ah! Heaven protect us!
And in comes a man with a mining prospectus.
Another one comes, 'tis the shrewd engineer,
He vows his report at once must appear.

[...]

If she's able to do this, she'll make a success;
But hard 'tis to do it, this I will confess.
But despite all these woes, quite happy I ween,
She can be, and mix pleasure and hope in between.

ONE OF THEM⁶⁸

Written by an American typist, this poem playfully portrays the varied tasks carried out by the employees of typewriting offices and the range of clients served. The full version also mentioned customers including a businessman, a reporter, and a youth who wanted 'a love-letter'.⁶⁹

In Scotland, the services provided by typewriting offices were just as diverse. Around 1900, A. W. Paton's 'Copying Department' offered to type up 'General Documents' as well as products for specific professions such as 'Legal' work, 'Tabulated Work, Balance Sheets, Accounts', manuscripts in foreign languages, authors manuscripts, play scripts, medical and scientific manuscripts and business letters (Figure 5.9). Paton's business was typical of most

⁶⁸ "The Woes of a Typewriter Girl," in *The Illustrated Phonographic World*, vol. 10 (New York: E. N. Miner, 1895), 114.

⁶⁹ "The Woes of a Typewriter Girl," 114.

typewriting offices in Scotland's four principal cities which offered 'all kinds of work copied' or words to that effect. Noticeably, Paton's marketing employed the term *copied* as opposed to *typed*. As mentioned in introduction to this chapter, this paralleled a branding shift across the sector with many typewriting offices renamed as copying offices from the mid-1890s onwards.

As we consider the range of services offered by typewriting offices, it is clear that the typewriters and associated technologies had a decisive impact. The earliest offices used all capitals typewriters, like the Sholes & Glidden later rereleased as Remington No. 1. When Madame Monchablon set up her first office in 1882 she started with three all capitals typewriters: the No. 1 and No. 4 Remingtons, which Marshall described as 'noisy' and 'lumbering'.⁷⁰ When Marshall and Garrett opened their office in 1884 they started with a slightly more up-to-date set of machines: 'three double-type Remingtons, and one old-fashioned "all capitals" brief machine, and the bare necessities in the form of chairs and tables'.⁷¹ The double type Remington's were probably Standard No. 2 (Figure 4.13) the machine which had revolutionised typewriter design with the shift key innovation.

The all-capitals brief machine may have been the Remington No. 1 (Figure 4.8 & Figure 4.9), the No. 4, or possibly all capitals Caligraph. It may be slightly surprising that Marshall would choose to use an old-fashioned all-capitals model at least two years after shift-key typewriters were introduced to the UK market. But, as mentioned in chapter four, all-capitals machines were still useful, particularly in the transcription of telegraphic messages which were not case sensitive. In fact, Remington continued to manufacture the all-capitals No. 4 typewriter until 1902 by which time almost 35,000 had been made. Even more importantly, for a fledgling business, all-capitals machines were cheaper. While the Standard No. 2 sold for around £20, the No. 4 was nearer £15, with the price of a second-hand Remington No. 1 lower still.⁷²

⁷⁰ Marshall, "Typewriting Offices. - 1.," 1.

⁷¹ Marshall, 2.

⁷² For prices in dollars see "Remington Typewriter Serial Numbers," Typewriter Database, 2020, <https://typewriterdatabase.com/remington.42.typewriter-serial-number-database>

By 1887, Marshall had at least 11 typewriters in use.⁷³ A letter mentioning Marshall's typewriting office in London, published *The Dundee Evening Telegraph*, stated that her office used Remington typewriters and the newer Hammond which was 'light to carry about'.⁷⁴ Lighter typewriters were probably used for typists on call-out work but the other advantage of the Hammond (Figure 5.14) was it came with an interchangeable segment (Figure 5.15) as opposed to the fixed set of typebars on the Remington. This meant that the font and even language could be changed in a matter of seconds, making it ideal for typing translations. It is reasonable to assume that Scottish typewriting offices also used the Hammond which by the turn of the century was available to buy in Glasgow and Edinburgh. By this time many offices offered translations as well as typists sent out on call, for a premium.



Figure 5.14. Hammond No. 1 Ideal typewriter released in 1884 of the style used in Marshall's typewriting office. NMS collection, object number T.1934.182.1.

⁷³ "Ladies' Column," *The Northern Whig*, February 8, 1886, 2.

⁷⁴ "To Correspondents," *Dundee Evening Telegraph*, November 19, 1887, 2.



Figure 5.15. Interchangeable type segment for use on Hammond typewriters. This design made Hammond typewriters much lighter and more portable than Remingtons which had separate metal typebars for each key. NMS collection, object number T.1934.182.2

The quality of work produced by typewriting offices was sometimes implied to be associated with the brand of typewriters used. An 1890 advertisement for C. M. Lawrence's office in Aberdeen stated, 'Copying Work of every description done speedily and carefully by Remington or Bar-Lock Type-writers.'⁷⁵ While the Remington had been on the market since the 1870s, the Bar-Lock had only been available in Scotland for around two years. In Lawrence's advertisement, it does not seem to matter which machine is used, suggesting the Bar-lock had been accepted by the public. This corresponds with the positive reception of the Bar-Lock at the Glasgow International Exhibition of 1888 and the Edinburgh exhibition of 1890 (see chapter 4). Notably, Lawrence's 1890 advertisement, released during the early years of the trade in Scotland, is one of the few examples where a particular brand of typewriter is mentioned explicitly. As the design of office typewriters standardised from around 1900, it seems that customers were less concerned about which brand was used.

⁷⁵ "Advertisements," in *Post Office Aberdeen Directory, 1890-1891* (Aberdeen: A. King and Company, 1890), 559.

Alongside typewriters, there were many other technologies employed in typewriting offices, with devices for duplicating documents amongst the most important. Up to the late nineteenth century, there were several processes for duplicating writing, such as the use of the letterpress or carbon paper. However, these techniques only allowed a handful of copies to be produced from a single document. The revolution came with the introduction of rotatory duplicators from the late-1890s onwards, with the Gestetner (Figure 5.16), Ellams and Roneo some of the biggest brands in the sector.⁷⁶ The duplicating process began with the typist inserting a waxed piece of paper into the typewriter and then typing out the document to produce a stencil, which was then attached to the drum of the duplicator. To make a copy the operator turned the handle which squeezed the ink through the stencil onto a blank piece of paper which passed under the drum. From one typewritten stencil, the typist was able to produce several hundred copies in a matter of minutes. The process is illustrated in Figure 5.17, the duplicating office at the headquarters of the Women's Social and Political Union in London in 1911. Like the office organisers in the WSPU, typewriting office managers incorporated rotary duplicating into their working practices to great effect. *Pitman's Typewriter Manual* asserted that duplicating 'pays, perhaps, better than any other' service provided by typewriting offices.⁷⁷

⁷⁶ For an overview of the development and processes behind rotatory duplicating see W. B. Proudfoot, *The Origin Of Stencil Duplicating* (London: Hutchinson, 1972).

⁷⁷ *Pitman's Typewriter Manual*, 76.

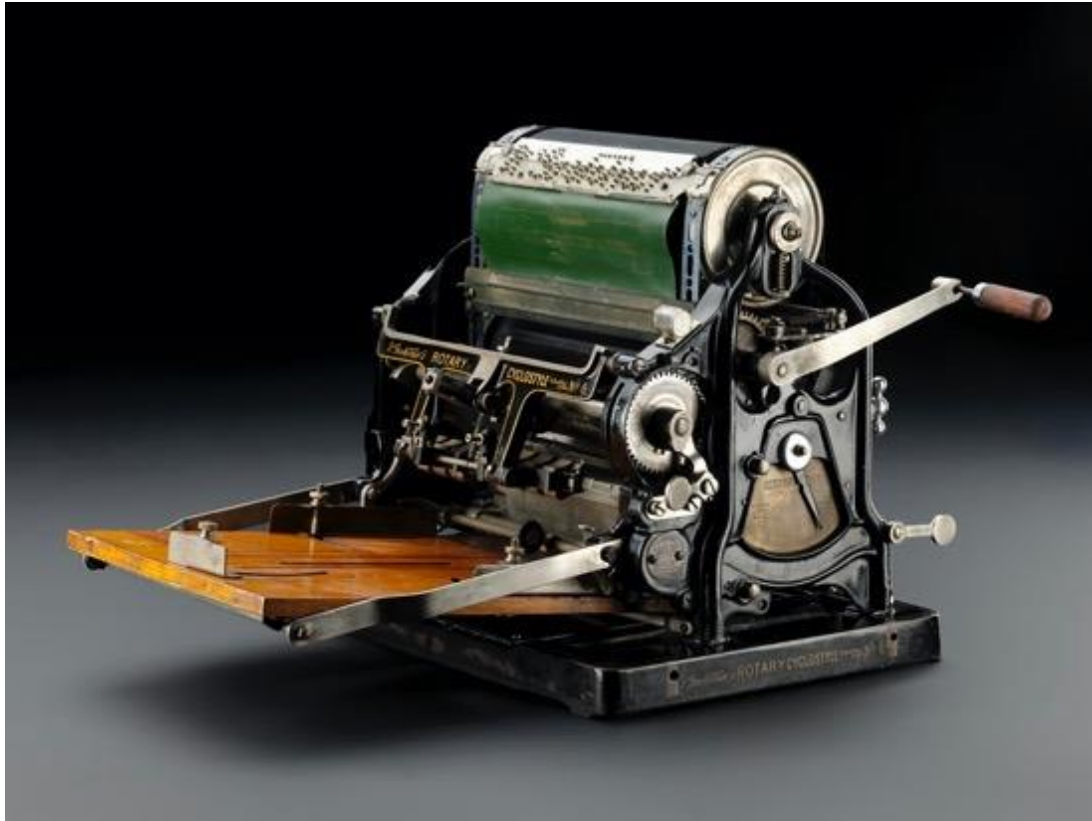


Figure 5.16. Gestetner duplicator, the 'Rotary Cyclostyle No 6', made in London, c. 1910. Held in NMS collection, object number. T.1979.X.57.



Figure 5.17. Duplicating typewritten documents with Roneo machines at the Women's Social and Political Union headquarters, London, 1911. Copyright the Museum of London.

By the turn of the century, Scottish typewriting offices were adding duplicating work to their promotions. A. W. Paton's price lists included a page for 'mimeograph copying' which offered up to 5,000 copies of the same document for £6 on foolscap paper, with the costs scaled for discounts on larger purchases (Figure 5.9). By the 1920s, there is also evidence that duplicators allowed typewriting offices to capture some of the market of jobbing printers. A 1922 advertisement for the copying office at Excelsior College in Dundee announced:

All Kinds of Typewriting and Duplicating Work Undertaken. Accuracy, Discretion and Punctuality Guaranteed. Moderate Charges Testimonials, Price Lists, Correspondence, Sermons, Advice Cards, Programmes, Notices, Lectures, Authors' MSS., Labels, Circulars, Specifications, &C. Envelopes, & c., Addressed. Matter may be Dictated Direct to Operator. Translation from, or into, French or Spanish.⁷⁸

In this promotion, Excelsior offered traditional typewriting services such as correspondence, authors' manuscripts and translations. In addition, customers could purchase programmes, labels and circulars. These were items, usually sold in batches, had previously been the domain of small printing houses. But now, with the aid of the rotary duplicator, typewriting offices could offer these products with minimal time and expense.

The phonograph was another technology which expanded the services offered by typewriting offices. Invented by Thomas Edison in 1877 it was introduced into Britain in the late-1880s by Colonel George Edward Gouraud to much public applaud. Gouraud was quick to promote the phonograph as a means for recording and transcribing dictation in conjunction with the typewriter, a practice that was then adopted by some newspapers. An article on this technique published in the *Dundee Evening Telegraph* in July 1888 stated that 'Instead of the shorthand writer's phonography, the *Pall Mall Gazette* has employed Edison's phonograph to report an interview with Colonel Gouraud, who has charge of the

⁷⁸ "Advertisement for Excelsior College," in *The Dundee Directory 1922-1923* (Dundee: James P. Mathew & Co, 1922), 110.

instrument in England.’ The article made clear that ‘the interviewer used neither pen nor pencil, the phonograph “dictating” the interview to a type-writer.’⁷⁹ This distinction was important for readers especially because a phonographer, at that time, was also the name for an individual who wrote in phonetic shorthand, such as Pitman’s.

At least as early as 1894, typewriting offices in Scotland promoted the phonographs, including Frederick Tyndall’s and Hadwen and Fleming’s offices in Edinburgh as well as J. & M. Nesbitt’s office in Glasgow.⁸⁰ The phonograph brought several advantages to typewriting offices and their clients, many of which were described in a report on the introduction of the phonograph into the offices of the *Dundee Courier* in 1895. Fittingly, this article was ‘dictated through the Edison Bell phonograph, and written up by means of the Yost Typewriter’, as illustrated in Figure 5.18.⁸¹

Many of the advantages of the phonograph came from the wax cylinders used to make recordings. As they were small, portable, and playable on different machines of the same type, clients could record their dictation when and where they wanted and have the recordings posted to a typewriting office with a phonograph. As the *Courier* article explained these ‘postal cylinders’ can be ‘spoken into one [machine]’ and ‘read off on any other’.⁸² Another advantage of the phonograph was that recordings could be paused and replayed so that ‘If a word is not plainly understood [by the typist] the phonograph can be made to repeat it for any number of times.’ The pause feature also allowed for more flexible working practices: ‘The transcriber can break off in the middle of his work and can return to it when time permits’. The playback speed was also manipulable allowing the typist to run the recording at a pace which matched their typing ability. There were similar benefits for the dictator who could record at a speed which suited their level of dictation. As the *Courier* article explained: ‘If he is a fluent composer the cylinder will never pull him up, and ask for

⁷⁹ “An Interview Recorded By The Phonograph,” *Dundee Evening Telegraph*, July 26, 1888, 2.

⁸⁰ “Shorthand, Typewriting and Phonograph,” *Edinburgh Evening News*, September 15, 1894, 4; J. & M. Nesbitt, “The Glasgow Type-Writing Office, 173 St. Vincent Street,” *Clyde Bill of Entry and Shipping List*, February 2, 1895, 4; “Hadwen & Fleming, Edinburgh Typewriting Office,” *Mid-Lothian Journal*, November 15, 1895, 6.

⁸¹ “The Phonograph in Dundee,” *Dundee Courier*, November 19, 1895, 6.

⁸² “The Phonograph in Dundee,” 6.

repetition'. On the other hand, 'if he is halting and wishes to pause between his sentences to arrange mentally the exact form of expression, he can, by depressing a button marked "Off,". By continuing the recording left no sign that 'the composition has been laboured.'⁸³

Together these advantages brought economies for customers, particularly for those with limited typing requirements. In the 1890s, for a business to employ a typist full time would have cost in the region of £50 per year. By contrast, that same business could purchase a phonograph for around £5 and outsource their correspondence to a typewriting office.⁸⁴ While the wax cylinders cost one shilling each and could only record around 1000 to 1200 words, money could be saved through the reuse of these cylinders which could be recorded over around 50 times.⁸⁵ The regular cost would come from the fees charged by typewriting offices, which went up with the number of words for transcription or the length of the dictation. Still, for customers who needed typing done occasionally, the use of the phonograph offered a potentially cheaper alternative. But understandably, for businesses and institutions whose typing needs were more extensive, employing a typist full time became the norm.

⁸³ "The Phonograph in Dundee," 6.

⁸⁴ "History of the Cylinder Phonograph," Library of Congress, accessed August 5, 2022, <https://www.loc.gov/collections/edison-company-motion-pictures-and-sound-recordings/articles-and-essays/history-of-edison-sound-recordings/history-of-the-cylinder-phonograph/#:~:text=The Edison Concert Phonograph%2C which,the large cylinders for %244.>

⁸⁵ "The Phonograph in Dundee," *Dundee Courier*, November 19, 1895, 6.



Figure 5.18. Typist transcribing from a phonograph recording. Included in the article 'The Phonograph in Dundee' *Dundee Courier*, 19 November 1895, 6. Copyright British Library Board.

Alongside the technologies used, location was often a deciding factor in the work carried out at typewriting offices. As *Pitman's Typewriting Manual* asserted: 'the locality of an office to some extent determines the general nature of the work therein done. For instance, an office in the neighbourhood of the Law Courts will almost certainly be occupied largely with legal work'.⁸⁶ The importance of location had been demonstrated in London's early typewriting sector, particularly in regard to demand from authors and playwrights. When describing her first typewriting office, Marshall recalled how two days before opening 'a messenger [from Drury-lane theatre] burst in upon us, requesting us to send a lady to take

⁸⁶ *Pitman's Typewriter Manual*, 76.

down shorthand notes upon the stage the same afternoon'.⁸⁷ The demand from authors and playwrights was sustained and as a result, in 1887 Marshall relocated her office to 126, the Strand to keep in touch with her 'theatrical clients' who were always her 'warm supporters'.⁸⁸ One of Marshall's most notable clients in her new location was Oscar Wilde. For several months from early-1894, her office worked on a typescript for Wilde's play *An Ideal Husband* (Figure 5.19).⁸⁹

⁸⁷ Marshall, "Typewriting Offices. - 1.," 2.

⁸⁸ Marshall, 3.

⁸⁹ Catherine Angerson, "An Introduction to Oscar Wilde's Play *An Ideal Husband*," British Library, 2018, <https://www.bl.uk/romantics-and-victorians/articles/an-introduction-to-oscar-wildes-play-an-ideal-husband>.

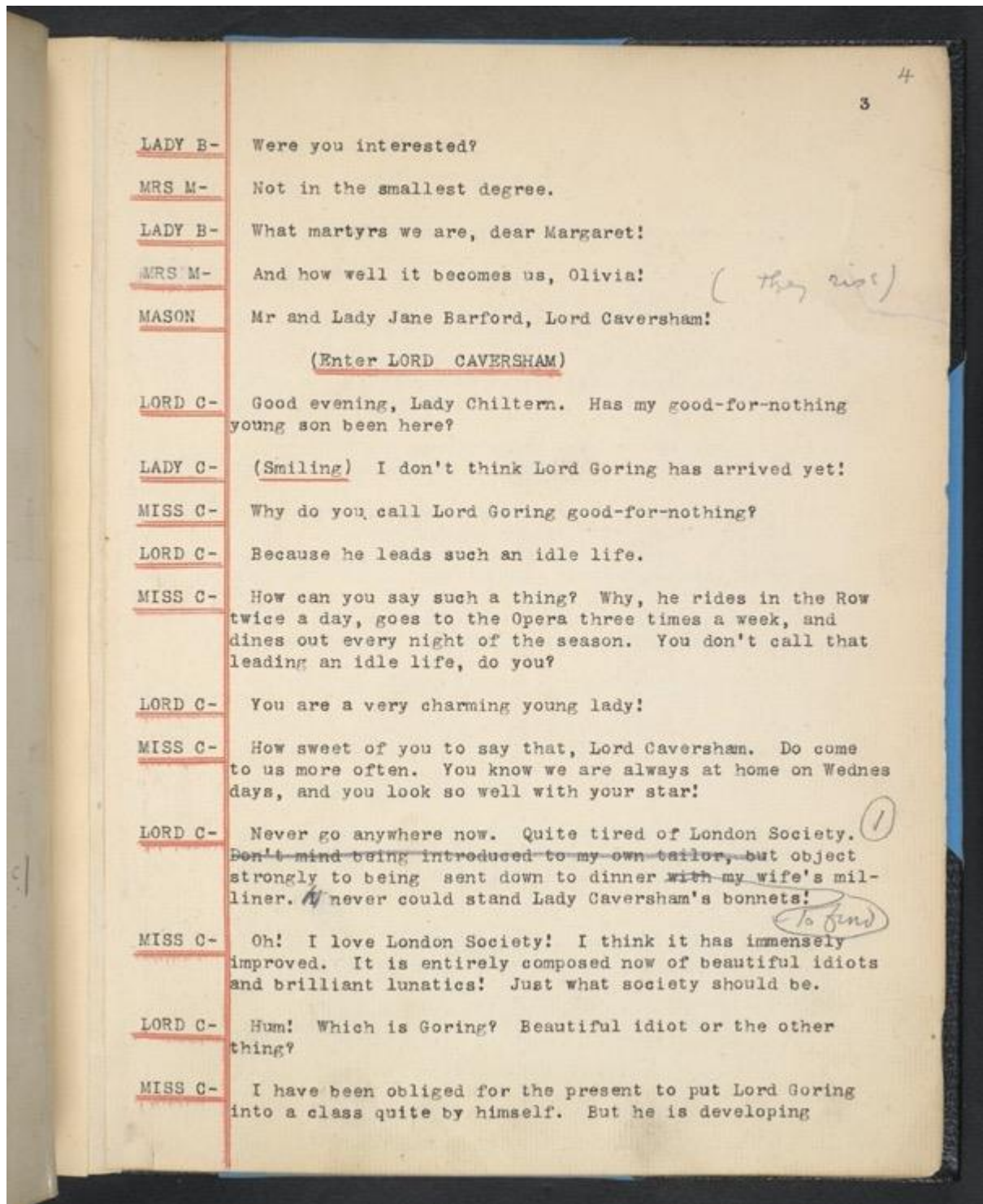


Figure 5.19. Page from a typescript of Oscar Wilde's *An Ideal Husband*, produced by Marian Marshall's Type Writing Office, 126, Strand, London, March 10, 1894).

Held at British Library and copyright of Oscar Wilde Estate.

In Scotland as well, by 1900, we find businesses which specialise as medical, legal or architectural typewriting offices. However, while these specialised offices were only established in Edinburgh and Glasgow, with no such examples in the smaller cities of

Dundee and Aberdeen. Only in Scotland's two largest cities did the high concentrations of commercial and professional workers provide a market for specialised offices. As in London, location was important for offices with a speciality. Ethelinda Hadwen had her Edinburgh typewriting office off St Andrew Square in Edinburgh's New Town within easy walking distance of several banks and commercial institutions. Then in 1903, eager to capitalize on the demand for legal typewriting, Hadwen opened a branch office 'For the convenience of Solicitors and others' which was 'open while the courts are sitting'.⁹⁰ Located at 13 Bank Street, this office was based in the Old Town in the heart of Edinburgh's legal district. In certain cities and contexts, typewriting offices could now be sustained by catering to a particular demographic of customers, instead of attempting to appeal to anyone and everyone.

The varied services provided by typewriting offices were dependent on several factors including the typewriters and office technologies employed and the location of an office within a particular city. But perhaps most important was the skill and education of the owners, managers and employees. The typewriting offices employed typists who, in addition to being skilled in the operation of typewriters and related devices, were also well versed in a range of subjects from architecture and medicine to law and languages. As *Pitman's Typewriter Manual* aptly put it:

good typewriting involves very much more than the mere ability to produce impressions on paper. The qualifications for success in the copying office are a varied acquaintance with literature, the names of authorities, classical quotations, and expressions in current foreign languages; a thorough knowledge of punctuation, spelling, and composition; and a mastery of literary and legal technique.⁹¹

⁹⁰ "Hadwen & Fleming Advertisement," in *Post-Office Edinburgh & Leith Directory 1903-1904* (Edinburgh: Morrison and Gibb Limited, 1903), 851.

⁹¹ *Pitman's Typewriter Manual*, 55–56.

Conclusion

Typewriting offices played an indispensable yet poorly recorded role in the popularization and mass adoption of typewriting by showing businesses, government institutions and professionals the value of these new devices in the production of documentation previously copied by hand or sent for printing. In some cases, it seems that organisations adopted typewriting by outsourcing their work to a typewriting office before eventually purchasing a machine (and hiring a typist) for typing their work 'in-house'. That said, typewriting offices were not simply interim businesses on the way to fully fledged adoption. The specialist skills and knowledge held by the owners and employees of typewriting offices meant that these businesses provided a service which could not always be met by employing a typist full time. And of course, for businesses with occasional typing needs, the typewriting office remained the most economical option. Thus, typewriting offices provide us with a new perspective on adoption, which perhaps can be applied to analyses of similar technologies. For example, can we also say that the customers of tailors or dressmakers indirectly adopted the sewing machine? Moreover, what effect did indirect adoption have on the way people used technologies? In this chapter we have seen that customers were worried about the confidentiality of the documents they sent to typewriting offices. In fact, this followed similar concerns over the security of telegraph messages, which had been brought into focus during the American Civil War.⁹² What is clear is that adoption does not always require the adopter to personally use the new technology.

The story of typewriting offices also has important implications for the history of the women's movement in the late nineteenth and early twentieth centuries. The earliest typewriting offices were set up with the support of the Society for Promoting the Employment of Women (SPEW), which in turn had strong connections with national suffrage societies. In the case of Ethelinda Hadwen, we can identify a direct link between her association with SPEW, the experience she gained as a manager of a typewriting office and her exceptional success in local politics as a representative of the Edinburgh National Society for Women's Suffrage. Similarly, in the 1920s, as the franchise was being extended

⁹² Richard B. Kielbowicz, "The Telegraph, Censorship, and Politics at the Outset of the Civil War," *Civil War History* 40, no. 2 (1994): 95–118.

to women, Alice Copeland drew on her experience as a typewriting office manager in her work as a member of the Soroptimists, which supported women business owners like her. Encouragingly, we know that there were many more women working in the typewriting office sector with links to organisations like SPEW who have yet to have been studied in much detail. Thus, research into women entrepreneurs in the typing sector, and their involvement in social and political movements is only just beginning.

While this chapter has focused mostly on the development of typewriting offices from the 1880s to 1910, it is worth clarifying that the diverse (and skilled) services offered by these businesses remained in demand through to 1930 and beyond. However, their role in training women typists through apprenticeships was disappearing by c. 1914 – a typewriting office manager could now hire ready-trained staff. This was thanks to the growth of schools and colleges which provided formal tuition in typing which prepared students for examinations for which they received widely recognised credentials. It is to these institutions that we will now turn.

Chapter 6 Typewriter training in Scotland

Introduction

By the late-1880s, the importance of typewriters to Scotland's commercial life was growing. In 1889, there were at least six typewriter agencies based in Scotland specialising in the sale of typewriters, with many more businesses selling and exchanging typewriters on a less formal basis. At the same time, there were no fewer than a dozen typewriting offices in Edinburgh, Glasgow, Dundee and Aberdeen which catered to the call from businesses and individuals for professionally typed manuscripts. This was just the beginning, and there was a tremendous increase in typewriter retailers and typewriting offices in urban Scotland during the 1890s.

Meanwhile, a growing number of Scottish businesses, government institutions and professionals were seeing the value in employing trained typists. Having an in-house typist prevented the need to outsource work to typewriting offices, especially convenient for organisations with large amounts of documentation to process. Moreover, employing a typist gave managers greater control over their typist's work, alleviating concerns about the divulging of sensitive information. As we saw in the previous chapter, there were worries about the confidentiality of the work sent to typewriting offices.

But where would businesses find trained typists? Until the late-1880s, there were no educational institutions in Scotland offering courses in typing. Up to that point, we can reasonably assume typists taught themselves with the aid of user manuals that came with most machines, and exercise books that were published from around 1880 onwards.¹ As we saw in chapter 4, retailers demonstrated typewriters at public and private exhibitions, showing prospective users the basics of typing, but little more.

¹ For early exercise book see Edward F Underhill, *Hand-Book of Instruction for the Type-Writer, Containing Inductive Exercises, Arranged with a Typical Guide to the Correct Use of the Fingers* (New York: Evelyn T. Underhill, 1880).

In the absence of formally recognised typing classes, courses or qualifications, some employers asked applicants to send in examples of their typewriting. In 1886, Burns, Crawford & Co – a Glasgow-based importer and exporter of fancy goods – advertised for ‘Clerk Wanted (male or female), expert at shorthand and the use of the type-writer – Apply by letter, with specimens’.² This ad-hoc system for employee selection may have functioned at a time when few people in Scotland knew how to type and there were a limited number of typing jobs available. As vacancies and applications increased from the late-1880s this system became unsustainable. Employers needed a reliable way to judge the abilities of prospective typists. As such, managers started looking for typists with recognised training and qualifications.

In response, there was a proliferation of schools, colleges and institutions providing typing tuition. To prove the abilities of their students, many of these institutions became affiliated with national examination programmes, such as those organised by the Royal Society for the Encouragement of Arts, Manufactures, and Commerce in London (RSA). The rise in entries for the RSA’s typewriting examinations reflected the growing demand for typewriter training in this period. The Society’s first examination in 1891 attracted just 99 students from across the UK.³ By 1914, this had increased dramatically to 2,806, by which time several Scottish institutions were putting candidates forward.⁴ After a slight decrease during the War, there was another rise in entrants, reaching 7,174 by 1925. In that year, the RSA’s typewriting examiner declared that the rise in students ‘forcibly illustrates the increased adoption of the typewriter in office equipment during the last quarter of a century’.⁵

In Scotland, the demand for training was met by an increase in privately run shorthand-typing schools, commercial colleges and typewriting offices. As illustrated in Chart 2.2, the number of private institutions offering typing tuition across the four principal cities rose

² “Advertisements & Notices,” *Glasgow Herald*, June 21, 1886, 2; “Burns, Crawford & Co,” Glasgow West-end Addresses and their Occupants 1836-1915, accessed May 11, 2020, http://www.glasgowwestaddress.co.uk/1888_Book/Burns_Crawford_&_Co.htm.

³ “Journal of the Society for Arts,” *The Journal of the Society of Arts* 40, no. 2067 (1892): 777.

⁴ “Examinations, 1914,” *Journal of the Royal Society of Arts* 62, no. 3227 (1914): 916–17.

⁵ “Royal Society of Arts Report on the Society’s Examinations 1925,” *Journal of the Royal Society of Arts* 73, no. 3806 (1925): 1061.

from five in 1890 to 40 in 1900. In addition, from the early-1890s Scottish school boards instigated typing classes, including evening continuation courses for leaving-age students. Readers should note that institutions hosting school board classes are not recorded in the figures for businesses providing typing tuition in Chart 2.2.

To investigate the development of typewriter training, this chapter will firstly look at the wider context of educational reforms and the expansion of commercial education. This will be followed by an overview of shorthand-typing schools and colleges from the late-1880s to the 1920s, with a focus on the premises used for typing classes. With this context in place, we will turn to the students at these institutions by looking at contemporary debates over the education of typists; the presentation of students in advertisements; and data on the actual students who attended these institutions. The final section of this chapter will investigate what was involved in learning to type. Examination papers and reports from the RSA will be considered alongside user guides and exercise books to shed light on changes in the ways that typing was taught in schools and colleges.

The terms shorthand-typing school and commercial college will be used interchangeably to describe privately run institutions that offered typing courses. Usually, shorthand was taught as an essential complement to typing, with many schools also offering classes in a range of clerical or commercial subjects from bookkeeping to business training. It should also be noted that the title 'shorthand-typewriting school' or similar was more popular in the late-1880s and 1890s. Then from the 1900s, principals of these kinds of institutions preferred to use the term 'commercial college', or the like. This change reflected a shift in the public perception of typing. In the late nineteenth century typewriting was a new skill which was rapidly gaining in popularity. For schools and colleges that taught typewriting, it made sense for them to make this abundantly clear in the title of their businesses. As typing became a standard skill for many clerical workers, it was expected that commercial colleges would offer typing classes, alongside other essential skills for the modern office worker such as shorthand and bookkeeping. As such, there was less need to promote typing in the business title.

In this chapter, the decision to focus on privately run shorthand-typing schools and colleges, as opposed to state-sponsored classes, has been made for two reasons. Firstly, historians of commercial education have paid less attention to these institutions even though, as Michael Heller admits in his study of clerical workers, there were so many of these institutions in London and its suburbs that they formed ‘a significant private sector in commercial education’ in the early twentieth century.⁶ Secondly, typewriting was not a fundamental component of the curriculum of most state-managed schools. By contrast, for many private shorthand-typewriting schools, typing was central to their offer. In many cases, these institutions were part of a larger typewriter business which sold typewriters and supplies, provided repairs and offered typewritten transcription services. These businesses and the ‘teacher-retailers’ that owned them (see chapter 3) drove the commercialisation of typewriters in Scotland, making them particularly relevant to the wider topic of this thesis.

Typing and the expansion of commercial education

The emergence of formalised typewriter training took place in the context of wide-reaching educational reforms which opened up clerical roles to boys and girls from skilled working-class and middle-class families. Going back to the 1860s, while Scotland’s educational system compared favourably with some of the most advanced nations in Europe, there were still glaring deficiencies. The Argyll Commission Report of 1865-8 found that almost 90,000 elementary-age children – one-fifth of the child population – were not attending school. Meanwhile, access to secondary education was even more limited, with most secondary schools charging fees of between £3.10s and £13 per year.⁷ However, it is worth recognising that there was no clear distinction between elementary and secondary education in this period, especially regarding the age at which students were meant to attend.⁸

⁶ Heller, *London Clerical Workers, 1880-1914: Development of the Labour Market*, 169.

⁷ Marjorie Cruickshank, “The Argyll Commission Report 1865-8: A Landmark in Scottish Education,” *British Journal of Educational Studies* 15, no. 2 (1967): 133–47.

⁸ Robert Anderson, “Secondary Schools and Scottish Society in the Nineteenth Century,” *Past & Present*, no. 109 (1985): 176–203.

The first major reform of the period came with the Education (Scotland) Act 1872 making schooling compulsory for children aged 5-13, with some exemptions. To oversee this expansion in education provision, 987 local school boards were established that administered the work of all elementary schools across Scotland, apart from Catholic and Episcopalian institutions. The boards also took a smaller role in delivering secondary education.⁹ Then in 1883, the leaving age was raised to 14, and in 1892 all elementary and most state-funded secondary education was made free.¹⁰ By the turn of the twentieth century, many more children were leaving school with the literacy and numeracy skills required for clerical work. These were the ‘young ladies and gentlemen’ who were targeted by shorthand-typing schools and colleges in their advertisements.¹¹

The expansion in elementary and secondary schooling occurred alongside initiatives to improve commercial education, within which typing became key.¹² This was driven by anxieties over Britain’s perceived economic decline, relative to America and Germany. Commercial teaching in Germany - epitomised by leading schools such as the Munich Mercantile School - was particularly well regarded in Britain. German clerks were considered more competent than their British counterparts, with Britain’s informal system of commercial education held to blame.¹³ In Scotland as well, business leaders argued that the formal education of clerical workers was the key to maintaining the country’s economic competitiveness.¹⁴

Until the late nineteenth century, office work in Britain was a male-dominated sector taught mostly through apprenticeships. Young boys started in offices in their early teens and

⁹ Jane McDermid, “Education and Society in the Era of the School Boards, 1872–1918,” in *The Edinburgh History of Education in Scotland*, ed. Robert Anderson, Mark Freeman, and Lindsay Paterson (Edinburgh: Edinburgh University Press, 2015), 190–91.

¹⁰ W. W. Knox, “A History of the Scottish People: The Scottish Educational System 1840-1940,” 2000, https://www.scran.ac.uk/scotland/pdf/SP2_1Education.pdf.

¹¹ See advertisement for McAdam’s Institution in *Post Office Edinburgh and Leith directory* (1900), 804.

¹² “Commercial Education and the Clerk” in Heller, *London Clerical Workers, 1880-1914: Development of the Labour Market*, 155.

¹³ Anderson, *Victorian Clerks*, 89–90.

¹⁴ “Supplying the Needs of Office” in Wilson, *Disillusionment or New Opportunities? The Changing Nature of Work in Offices, Glasgow 1880-1914*, 99–104.

worked their way up to positions as clerks and hopefully onto managerial roles.¹⁵ As we have seen, typewriting offices also adopted the apprentice system, giving their trainees first-hand experience in every practical element of the trade.¹⁶ In Glasgow, both E. & H. McClew's Central Typewriting Office and Maxwell's Commercial Typewriting Office offered typewriting tuition from as least as early as 1890.¹⁷ From this point typewriting apprenticeships proliferated, with many of the leading typewriting offices in Scotland, such as Hadwen and Fleming's business, offering on-the-job experience by around 1900.¹⁸ The apprenticeship system worked well for typewriting offices as they always had a core group of experienced typists available to train new apprentices. After completing their course, apprentices were either taken on full-time or helped to find typing work around Scotland or occasionally abroad.

As typewriting offices tended to be smaller enterprises catering to a handful of apprentices and permanent employees, they were unable to meet all the demand for typing tuition. In response, a wide range of educational institutions either added typing to their curriculums or were newly established with the express purpose of teaching typing and related subjects. The first to emerge from the late-1880s were privately run shorthand-typing schools and commercial colleges. Then from the early-1890s, school boards in Scotland instituted typing classes in elementary and secondary schools, as well as in evening continuation classes for leaving-age students.

It is worth briefly looking at the classes provided by Scottish school boards before moving onto an analysis of privately run shorthand-typing schools and commercial colleges, which will form the focus of this chapter.

¹⁵ "Recruitment and apprenticeship" in Anderson, *Victorian Clerks*, 11–15.

¹⁶ "How to Establish a Copying Office," in *Pitman's Typewriter Manual: A Practical Guide to Commercial, Literary, Legal, Dramatic, and All Classes of Typewriting Work*, Fifth (Bath and New York: Sir Isaac Pitman & Sons Ltd, 1904), 75–79.

¹⁷ "Typewriting," *Glasgow Herald*, November 11, 1890, 2.

¹⁸ "Typewriting Hadwen & Fleming," *The Scotsman*, March 29, 1904.

School board typing classes

From the 1890s, typing was not a mandatory subject in Scottish schools but instead was introduced at the discretion of school boards which oversaw the activities of elementary as well as some secondary and further education. From the available source material, it is not clear exactly when and where typing classes were first introduced in Scotland. That said, we can get a sense of the early interest in the provision of typing for school children in a May 1893 newspaper article from the town of Falkirk. It was reported that the local school board had appointed a committee to investigate shorthand and typewriting teaching in the secondary school and five elementary schools under their jurisdiction. While shorthand was already being taught in two of the primary schools as well as at the secondary school, typewriting was not being taught in any of their institutions. The school board committee concluded that shorthand and typewriting should be taught alongside each other and that the members 'should endeavour to introduce type-writing into the schools because they were likely to become very shortly most useful branches of instruction'.¹⁹ While the Falkirk school board recognised the growing importance of typing tuition, they were only willing to invest in a small number of machines: two typewriters for the secondary school, two for the Northern elementary school, and one each for the remaining elementary schools. Intake figures for these institutions show that this equated to one typewriter per 200-300 students.²⁰ This was a hesitant first step toward the introduction of typing classes by the school board.

By 1900, the scene had shifted with the provision of typing relatively well-established as an option for adolescents of school leaving age and above. Evening continuation classes were particularly popular as they allowed students to work during the day, ideally in a related occupation.²¹ These classes were usually a part of post-primary education, for students 14 years and over, offering an alternative to conventional secondary education. While secondary schools tended to gear students towards university, evening continuation courses

¹⁹ "Teaching of Shorthand and Type-Writing," *Falkirk Herald*, May 17, 1893, 4.

²⁰ Sandy Stevenson, "Old Photograph Northern School Falkirk Scotland," *Tour Scotland*, accessed July 25, 2020, <https://tour-scotland-photographs.blogspot.com/2017/05/old-photograph-northern-school-falkirk.html?m=0>.

²¹ Wilson, *Disillusionment or New Opportunities? The Changing Nature of Work in Offices, Glasgow 1880-1914*, 108.

focused on technical, commercial and domestic subjects, such as typing, which prepared students for more practical roles.²²

By this time, there is also evidence of typing classes being instituted by the school boards in Scotland's principal cities. In 1901, the Edinburgh school board 'adopted the Remington Typewriter, exclusively as the instrument to be used and taught'.²³ Then in 1908, the board updated their stock of typewriters with the purchase of 28 Underwoods. The Glasgow retailer which supplied the machines promoted this as a 'record order for Scotland'.²⁴ However, the order brought the condemnation of rival Edinburgh retailers including David Gardiner (agent for the Oliver typewriter), Alex Mitchelson (the Williams), George McAdam (the Monarch), J. D. Purves (the Yost), William O. Webster (Smith Premier), Thomas H. Peck (the Hammond), and G. H. Wheeler (company unknown). In a joint statement published in *The Scotsman* in January 1908, these 'agents and representatives of typewriter companies held at Edinburgh' asserted that 'it is the first consideration of the school board to obtain a selection of machines that are in most general use'.²⁵ The agents felt that the board should have purchased an equal share of typewriters from each of them instead of placing a single order with Underwood.

The real point of contention over the 1908 contract centred around James Leishman, who was a member of the school board; the convener of the Board's purchasing committee; and the new agent for the Underwood in Edinburgh. In their protests, Leishman's rivals implied he had influenced the board's decision in favour of Underwood because of his association with the company. In response, Leishman strenuously denied he had influenced the purchase or benefitted from the outcome.²⁶ While it is difficult to judge Leishman's complicity, this dispute demonstrates that by the early-1900s school contracts were big

²² "Evening Schools" in A. W. Paton, *British Association: Handbook and Guide to Dundee and District* (Dundee: David Winter and Son, 1912), 254–56.

²³ "Teaching Typewriting in Edinburgh Schools," *The Edinburgh Evening News*, October 19, 1901, 3.

²⁴ "Edinburgh School Board. Complaint Regarding Typewriter Contract," *The Scotsman*, January 21, 1908, 7.

²⁵ "Edinburgh School Board. Complaint Regarding Typewriter Contract," 7.

²⁶ "Edinburgh School Board. Complaint Regarding Typewriter Contract," 7.

business, with local agents keen to capitalise on the significant role Scotland's school boards were playing in the provision of typing tuition.

The Development of Shorthand Typing Schools

Having dealt with the context of commercial education as well as the provision of typing tuition in typewriting offices and school board classes, we can now turn to their competitors: privately run shorthand-typing schools and commercial colleges. The emergence of a market for these institutions can be seen in the rebranding of shorthand schools as shorthand-typewriting schools in the late-1880s. In Glasgow in 1889, James G. Hendry's Glasgow School of Shorthand, established in 1874, was restyled as the Glasgow School of Shorthand, Typewriting and Commercial Academy.²⁷ In the same year, Sykes Whiteley, a shorthand teacher based in Jamaica Street, expanded his teaching output to include typewriting.²⁸ In Edinburgh, Fred T. Tyndall's School of Shorthand, established in 1879, was changed to the School of Shorthand & Type-Writing Office. Finally, there was Calder M. Lawrence, the Aberdeen-based shorthand school principal discussed in chapters 2 and 5. After a trip to America in 1887, where Lawrence had seen shorthand typing schools in operation, he purchased a typewriter for his school the following year.²⁹ But it was not until 1889 that Lawrence's business was promoted as a typing school in the local Post Office directory.³⁰ Similarly, it seems likely that Hendry, Whiteley and Tyndall had also used typewriters in their institutions before officially adding typing to their syllabus.

By the 1890s, shorthand and typing tuition were inextricably linked, in the private sector and in school board classes as we have seen. In the years that followed, more shorthand schools began to teach typing while newly established typing schools almost always offered shorthand as an essential part of the curriculum. In Edinburgh, James Leishman set up a school of shorthand and typewriting in 1892 and was followed by George McAdam who

²⁷ "Advertisements," in *Glasgow Post Office Directory for 1889-1890* (Glasgow: William Mackenzie, 1889).

²⁸ "Trades Directory," in *Glasgow Post Office Directory for 1888-1889* (Glasgow: William Mackenzie, 1888).

²⁹ His trip to America is recorded in the image description for "Women at Work in Typewriting Office," SCRAM: Learning Culture Heritage, accessed June 17, 2022, <https://www.scran.ac.uk/database/record.php?usi=000-000-498-954-C&scache=2mbmh2nuyc&searchdb=scran>; for description of first use of typewriters in Lawrence's school see "Semi-Jubilee of School: Interesting Presentations."

³⁰ "General Directory," in *Post Office Aberdeen Directory, 1889-1890* (Aberdeen: A. King and Company, 1889).

founded a similar institution in 1894. In Dundee, J & J. F. Fairweather established themselves as teachers of shorthand and typewriting in 1895. The proliferation of shorthand-typing schools reflected the widely held view that typing and shorthand were 'twin arts'. A 1902 article of that name in *The Shorthand World and Imperial Typist* explained 'Teachers of shorthand find that they are required to teach typewriting, and shorthand schools everywhere give instruction in both subjects.'³¹

The success of many shorthand-typing schools encouraged expansion in the size of their premises as well as the number of employees. In chapter 2, we saw that in 1899, George McAdam upgraded from a £75 per annum property at 12 Maitland Street to an impressive four-storey premises at 55-57 Shandwick Place (Figure 2.1), accommodating more than 20 employees and costing around £220 a year. Around the same time, James Leishman relocated his school from Nicholson Street in the Old Town to a more desirable location on George Street in the New Town. Here Leishman joined the growing number of typewriter businesses in the area. Then in 1902, Leishman took a slightly different route to McAdam. Instead of housing all the elements of his typewriting business in a single building, Leishman rented a new property at 98 Hanover Street for his shorthand and typewriting classrooms, while the sale of typewriters continued from his shop on George Street. A few years later, he upgraded his school again to a more expensive property on 56 George Street, just a few doors down from his typewriter store (see chapter 2).

In Glasgow, James Hendry had followed a similar path to Leishman. In 1894, while he kept his headquarters in Gorbals on the south bank of the Clyde, Hendry opened a city branch in Glasgow's West End at 12 Renfield Street.³² Hendry's new premises were just a stone's throw away from prominent retail outlets such as the Bar-Lock Typewriter Company at 22 Renfield Street and the Remington Typewriter Company which was a four-minute walk away on Hope Street. As in Edinburgh's New Town, it seems the owners of shorthand-typing schools were attracted to Glasgow's West End by the concentration of typewriter

³¹ "The Twin Arts: A Typists' Section of the I.P.S.," *Shorthand World and Imperial Typist* 1, no. 8 (1902): 225.

³² "Trades Directory," in *Post-Office annual Glasgow directory, 1894-1895* (Glasgow: William Mackenzie, 1894), 1274.

businesses in the area. By contrast, no examples have been found of typewriter businesses in Aberdeen or Dundee setting up multiple branches. Only Edinburgh and Glasgow had large enough populations to create the demand for larger, multi-branch institutions.

When relocating, the managers of typing schools and commercial colleges sometimes required work to be done on their new property. This is illustrated in a 1906 lease document for George Stewart, the head of Skerry's Colleges, who was relocating his Dundee branch to 2 Meadow Place Buildings.³³ The lease confirms that the new building would cost £150 per annum, a relatively high price for a commercial college at the time. In return, the proprietors agreed to carry out certain renovations for Stewart, including the removal of a partition wall between two rooms to increase space. Stewart also requested the installation of glass panels and new wallpaper on the walls and ceilings to create a lighter and airy atmosphere. Additionally, the owners agreed to install electric lighting and permitted Stewart to install 'an Electric Sign over the Entrance Door' as well as various other signs and lighting around the exterior of the property.³⁴ An example of the extravagant signage used by Skerry's Colleges is featured in an illustration of their Glasgow branch from the early-1900s (Figure 6.1). The use of electricity inside and outside of the property, still a modern convenience at the time, indicated to prospective students that the teaching at Skerry's College was carried out along modern lines.

³³ Lease drafted by J. & E. Shepherd and signed by George Stewart, February 27, 1906, at Dundee University Archives, reference MS 66/2/10/49 (32).

³⁴ Lease drafted by J. & E. Shepherd and signed by George Stewart, February 27, 1906.

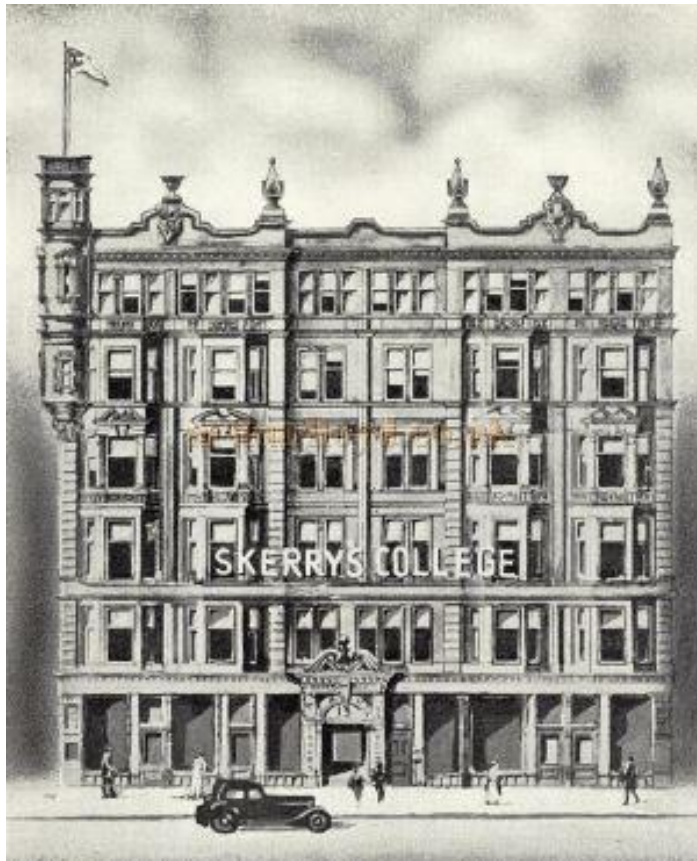


Figure 6.1. Skerry's College at 13 Bath Street, Glasgow. From *Skerry's College (1878-1958): landmarks of eighty years' work & success* (London: Skerry's College, 1958).

Stewart was not alone in promoting the modern methods used in his colleges. In 1917, the shorthand-typing teacher William O. Webster moved his Aberdeen Business College from a property on Bon-Accord Crescent which he rented for £50 a year, to new premises he purchased at nearby Bon-Accord Square valued at £84.10s per annum.³⁵ Webster's new college, which marked a significant investment in his business, was a short walk away from the busy thoroughfares of Union Street and Crown Street, both of which were home to several typewriter stores. In August of that year, a generous review of the upgraded establishment in the *Aberdeen Evening Express* claimed Webster was 'nothing if not up-to-date' and celebrated his school as 'the last word in business colleges'. The report continued with a description of the new typewriting room:

³⁵ 1915 Valuation Roll for William O. Webster, tenant at 16 Bon-Accord Crescent, Aberdeen, reference VR008600076-/849, NRS, accessed at <https://www.scotlandspeople.gov.uk/>; 1920 Valuation Roll for William O. Webster, owner of 13 Bon-Accord Crescent, Aberdeen, reference VR008600076-/849, NRS, accessed at <https://www.scotlandspeople.gov.uk/>

large, lofty, lit by French windows opening to the garden, and panelled in chintz. There are 33 machines all of the latest visible writing models of Remington, Smith Premier, Underwood, Royal, Yost and Oliver. Each stands on a separate table with drawers and slide for notetaking, and the rest of the furnishing consists of up-to-date filing cabinets, teachers' desks, etc... Thoroughly competent teachers preside over each room, the staff numbering seven.³⁶

This enthusiastic description of Webster's classroom highlights the modern methods employed from the lighting and wallpaper to the typewriters and teachers.

This account was probably sponsored by Webster as a promotion for his school, partly in response to newspaper coverage of rival colleges. A few years earlier, the *Aberdeen Evening Express* reported on the new premises for Robert Burnett's Civil Service and Business Institute, describing them as 'in every way superior for the purpose to the old ones, the rooms all being commodious and splendidly lit and ventilated'.³⁷ These newspaper announcements tell us that the owners of shorthand-typewriting schools were keen to show the public that they ran modern institutions.

By the 1910s, typing was a well-established subject in commercial colleges. To demonstrate to the public that they were still ahead of the curve, principals drew on the various attributes of their institutions which made them modern. This included demonstrating to the public that they operated from up-to-date premises; invested in the latest typewriters and related technologies; and offered pupils the latest in teaching methods.

After the First World War, the nature of the shorthand-typing school sector changed. There was a decline in schools and colleges which were also involved in retail and other sectors of the typewriter trade. For example, in the early 1900s, McAdam's Institution had offered courses in typing and other commercial subjects while also selling typewriters and supplies,

³⁶ "Webster's Business College, Opening Of New Premises," *Aberdeen Evening Express*, August 6, 1917, 4.

³⁷ "Civil Service and Business Institute. Opening of New Premises.," *Aberdeen Evening Express*, November 28, 1914, 5.

carrying out repairs, and providing copying services. Then in the early-1920s, McAdam refocused his business solely on commercial education. In doing so, he downsized from his large premises at 55-57 Shandwick Place (Figure 2.1) to a smaller and cheaper location on North Charlotte Street.³⁸ The change of business model for shorthand-typing schools and commercial colleges coincided with the rise of large, multi-branch office machine retailers such as Watson's Typewriters. As we saw in chapter 3, these businesses were focused on retail and were less involved in teaching.

The trajectory of McAdam's Institution, and other schools and colleges which dropped the sale of typewriters, reflected a shift in contemporary attitudes toward typewriters. In the 1890s, the typewriter was arguably *the* outstanding and most exciting new tool for office work. In 1900, McAdam was able to build a successful business focused upon typewriters, their use, sale, maintenance, and repair. But from 1900 onwards, typewriters were increasingly viewed as one of many office technologies in an increasingly mechanized workplace. By the 1920s, typing had been reimagined as one important part of a larger world of office work. In response, schools such as McAdam's chose to re-focus on commercial education, of which typing was a part.

Typing Students

With the development and management of shorthand-typing schools and colleges outlined, we can now turn our attention to the sorts of people who attended these institutions. We will begin with the contemporary concerns that the typing profession was overwhelmed by poorly educated typists. From here we will turn to the shifting presentations of gender in advertisements for schools and colleges. This will be followed by an analysis of the backgrounds of students who attended A. W. Paton's Commercial College in Dundee, for which there are surviving graduate lists from 1907 and 1911. Hence, the discussion that follows will balance the *imagined* or target audience for typing schools, with *actual* data on the students who attended these establishments.

³⁸ 1925 Valuation Roll for George McAdam, tenant at 5 & 6 North Charlotte Street, Edinburgh, reference VR010000499-/132, NRS, accessed at <https://www.scotlandsppeople.gov.uk/>

'Half-Trained' typists?

In the last two decades of the nineteenth century, typing went from a niche occupation carried out in a few commercial houses and typewriting offices, into a popular livelihood employing several thousand people in Scotland. As discussed in the previous chapter, in the 1880s pioneering typists often came from well-educated middle-class backgrounds. However, by 1900, some commentators felt that the profession was being overwhelmed by poorly educated typists, leading to lower standards and wages.

These concerns were exposed in an exchange of letters published in the *Aberdeen People's Journal* in 1903. The debate started with an essay on the profession written by Edinburgh-based shorthand writer and typist Ella J. M. Mangan. In this essay, Mangan lamented that in the typing sector 'Half-Trained Girls who will "take anything to get a start" are ever on the increase'.³⁹ The following month, a respondent calling themselves, 'One Who Knows' complained of the downward pressure on wages caused by the influx of supposedly poorly trained typists: 'the cities are overrun with these girls, while a domestic servant cannot be got.' The writer also claimed that many typists, 'cannot spell', suggesting these 'girls' would be better suited as 'a housemaid, or dairymaid'.⁴⁰ Within a week a response came into the *People's Journal* from 'One Who Knows Better', who criticised the 'One Who Knows' as 'depreciating the type-writing profession'. One Who Knows Better rejected the claim that most typists could not spell, adding 'there are so many thoroughly trained girls to be had, although I do not agree that the cities are "over-run" with them.'⁴¹ While the One Who Knows had not identified their gender, the reply from the One Who Knows Better referred to the former as 'he'. The assumption that the One Who Knows was male probably came from their condescending and insulting description of 'girl' typists, particularly those from working class backgrounds.

³⁹ Ella J. M. Mangan, "Shorthand Writer and Typist. How to Attain Success," *The People's Journal*, January 31, 1903, 3.

⁴⁰ One Who Knows [pseud.], "Girls as Typewriters: Wages and Shortcomings," *The People's Journal*, February 21, 1903, 2.

⁴¹ One Who Knows Better [pseud.], "Girls as Typewriters: Good Wages and Suitable Work," *The People's Journal*, February 28, 1903.

While all three writers agreed there had been a dramatic increase in young women taking up typing roles, they had vastly different views on the abilities of these typists and what this meant for the profession. Mangan took issue with 'Half-Trained' typists but suggested this was from improper education in typing classes and commercial colleges. The One Who Knows went further by implying that many young women were fundamentally unsuited to being typists. Finally, the One Who Knows Better countered these views and added positively that typing was lifting young women out of underpaid jobs. There was truth in all three accounts. Of the many thousands of typists in Scotland, we can be sure that there was a wide variation in skills and experience. This was reflected in differences in length and depth of typing courses; disparities in the qualifications attained by typing students; and the range in pay for typing roles.⁴² That withstanding, we should be sceptical of the criticisms of the One Who Knows as their statement strayed into generalisations and exaggerations about the alleged deficiencies of female typists from working class families and the supposedly sorry state of the profession.

Principals of typewriting schools and commercial colleges shared some of these concerns over educational standards, on occasion conflating these worries with the social background of prospective students. In 1906, A. W. Paton published an essay on further education which also served as an advertisement for his college. He stated that commercial training was for 'the great middle-class population of our country', adding that 'my words of necessity are primarily addressed either to the artisan or middle-class members of the community'. He then remarked insultingly that 'The lower labouring class (and I speak in all respect) are either so engrossed in the dull routine daily toil of making ends meet, or are so lost in ministering to personal interests or pleasures as to unfit themselves to fix their eyes on the future, along which prospects of advancement must lie.'⁴³ In reality, we may assume that Paton admitted students from *any* social background providing they had adequate primary and secondary education, as well as the money to pay his fees. Paton's published

⁴² The range in wages for typists of different skills and abilities was recorded by contemporaries in Ella J. M. Mangan, "Shorthand Writer and Typist. How to Attain Success," *The People's Journal*, January 31, 1903, 3; "The Lady Typist. An Occupation For Girls.," *Aberdeen People's Journal*, November 2, 1901, 8.

⁴³ Paton, *Making the Most of Life. 1. Choosing a Calling*, 3–4.

statements were probably made to create the image that his school was a place for well-to-do and enterprising individuals.

In Edinburgh, George McAdam was also keen to attract the right kind of student to his commercial institution. In an advertisement from 1900, McAdam called for 'Well-educated Young Ladies and Gentlemen' (Figure 6.2). The following year, he explained in a newspaper interview that to exclude 'undesirable' students he required prospective pupils to enrol for a 'trial month' during which time 'we have sufficient opportunity of gauging the ability of the candidate.'⁴⁴ McAdam needed his students to be capable of completing their courses, passing examinations and ultimately finding remunerative employment, to maintain the reputation of his institution. The requirement for a trial month also suggests McAdam's Institution did not provide quick turnaround enrolments, like those held at some rival institutions.⁴⁵ It seems McAdam's pupils studied with him for between six months to a year, or possibly more.

Students at McAdam's school completed their studies by taking RSA examinations in one or more commercial subjects such as typewriting or shorthand. An 1897 report from the Society gives us a valuable insight into the ages of students at McAdam's Institution.⁴⁶ In that year, McAdam put forward 12 students for typewriting or shorthand examinations, with some pupils taking both. Of these, eight passed either one or both examinations with their ages recorded. Seven out of eight successful candidates were aged 17-23, with one older graduate at 28. Thus, not all of McAdam's students were enrolling straight after finishing their mandatory schooling at 13. We can also reasonably assume that a large portion worked while studying, which McAdam's Institution catered for by offering evening classes.⁴⁷

⁴⁴ "The Lady Typist. An Occupation For Girls.," *Aberdeen People's Journal*, November 2, 1901, 8.

⁴⁵ For example, the Glasgow Athenaeum Commercial College offered short intensive typing courses of one or two months, see Calendar for Glasgow Athenaeum Commercial College for 1901, 61., held at University of Strathclyde, Archives and Special Collections.

⁴⁶ "Examinations, March, 1897. Prizes and Certificates Awarded to Candidates," *The Journal of the Society of Arts* 45, no. 2324 (1897): 13.

⁴⁷ George McAdam, "Evening Classes," *Mid-Lothian Journal*, March 11, 1898, 1.

The report on McAdam's students also showed that they passed with different levels of qualification: elementary, intermediate or advanced. While we do not have figures specifically for Scotland, we know that across the UK, the majority of entrants went for the elementary or immediate examinations. In 1905, for example, there were 1,044 papers worked for the elementary typewriting paper with 618 passes; 933 for intermediate with 626 passes; and 375 for the advanced with 247 successes.⁴⁸ Hence, most students going for RSA certificates attained either elementary or intermediate levels and probably left their school or commercial college at that point. While fewer students went on to take the advanced paper, the success rate for these entrants was higher. These results reinforce the point that the skills and abilities of typing graduates varied widely, which undoubtedly impacted whether they found work as typists and, if they did, the level of pay received.

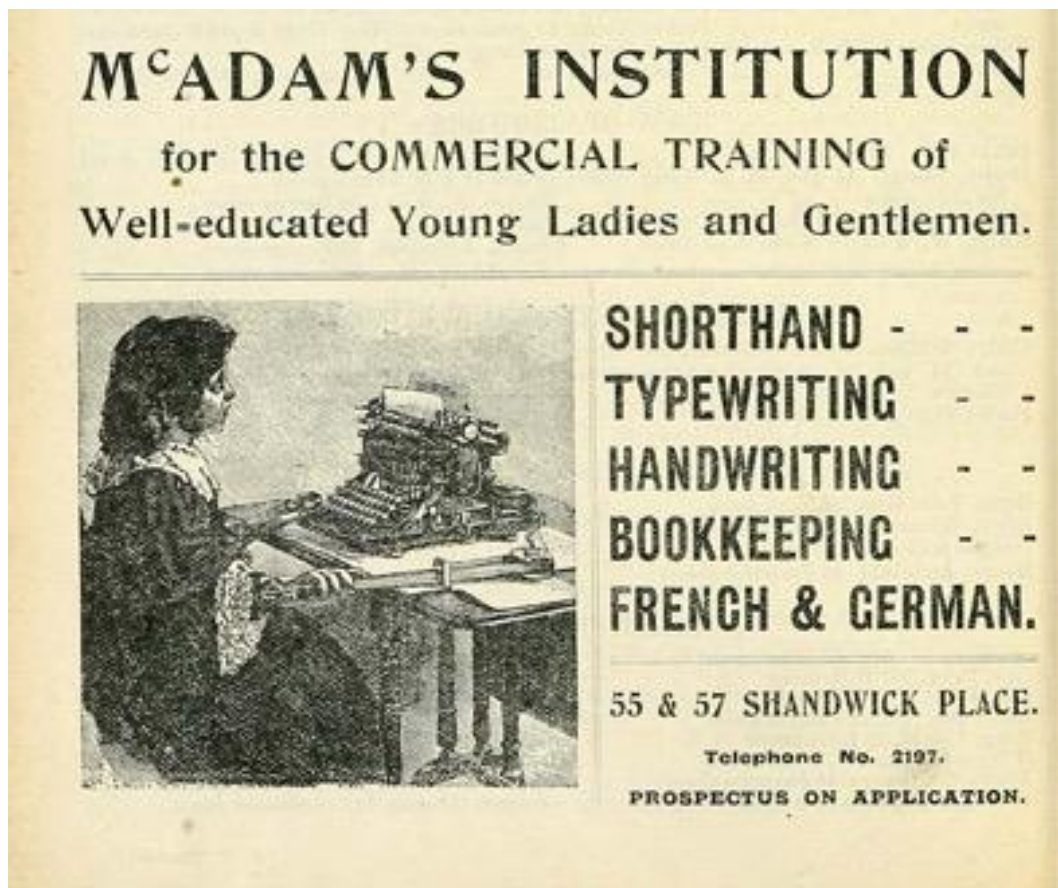


Figure 6.2. Advertisement for McAdam's Institution in the Edinburgh and Leith Post Office directory, 1900.
 Digitized by NLS.

⁴⁸ "Table Showing The Detailed Results of the 1905 Examinations Held at 383 Centres," *Journal of the Society of Arts* 53, no. 2760 (1905): 1111.

Typing as women's work

Returning to McAdam's Institution, many of his advertisements featured young female typists including his promotion of 1900 (Figure 6.2). This reflected McAdam's publicised views that typing was a woman's role. In a 1901 interview, he declared: 'The very nature of the occupation makes it in a peculiar way almost exclusively woman's sphere'.⁴⁹ His assessment of typing was backed up by the statistics. In chapter 2 we saw that in the Scottish census of 1901 roughly 99 per cent of the respondents who put typist (or similar) as their occupation were women.

Considering McAdam's views on typing and gender it may seem surprising that in Figure 6.2 he calls for both 'young ladies and gentlemen'. There are however a few possible reasons behind this apparent contradiction. In his phrasing, McAdam may have taken inspiration from earlier advertisements, as when the first shorthand schools opened in the late-1880s, both men and women were targeted. An advertisement for James Hendry's Glasgow School of Shorthand and Typewriting invited 'LADIES and Gentlemen' to attend his classes for 'The most efficient method of instruction. Shorthand and Type-writing'.⁵⁰ In the same year, C. M. Lawrence offered places at his shorthand-typewriting school in Aberdeen for 'male and female' students on an equal footing.⁵¹

Back in the late-1880s, typing was already recognised as a female occupation. But the pioneering typing school principals, like McAdam and others who followed, saw no need to exclude well-educated men who would pass their examinations and, more importantly, pay their tuition fees. McAdam's Institution was a privately run business, and as such, we can assume his priorities lay in making a profit. In that vein, Figure 6.2, also employs product placement by illustrating the typist with a Densmore typewriter – one of the machines McAdam sold at the time. While historians often treat advertisements as indicators of

⁴⁹ "The Lady Typist. An Occupation For Girls.," *Aberdeen People's Journal*, November 2, 1901, 8.

⁵⁰ "Glasgow School of Shorthand, Type-Writing and Commercial Academy," in *Post Office Glasgow Directory for 1889-1890* (Glasgow: William Mackenzie, 1889), 233.

⁵¹ "Type-Writing," in *Post-Office Aberdeen 1889-90* (Aberdeen: A. King and Company, 1889), 551.

cultural values, such as the presentation of gender roles, Figure 6.2 is a helpful reminder that the intended purpose of these promotions was to sell goods and services.

Returning to the contradiction between McAdam's call for 'Gentlemen' students and the female-dominated nature of the profession, it should also be remembered that learning to type did not confine the graduate to a career as a typist. Even as men shirked the typing profession, McAdam recognised that typing remained a valuable skill for men and women going into clerical roles. He was not alone in this view. In 1908, James Leishman published an illustrated advertisement for his school showing that at least a handful of young men were taking typing classes. Of the 18 typing students pictured in Figure 6.3, four are men. While we cannot take this photo as precisely indicating the proportion of male students, Leishman happily promoted his typing courses as coeducational.



Figure 6.3. Advertisement for Leishman's commercial training classes, 1910. Published in the Edinburgh and Leith Post Office directory. Digitized by NLS.

Another example of coeducational typing teaching is illustrated in Figure 6.4, a photograph of a typewriting class at the Royal High School in Edinburgh c. 1914. At the time the High School was an all-boys institution. Therefore, it is likely that this was a school board continuation class, for leaving-age students, perhaps on an evening or weekend. What is

striking is the proportion of male to female typists: around half of the 30 students in frame are young men. If this photographic evidence is anything to go by, there were certainly a lot more men learning to use typewriters than suggested by the census data on people employed as typists. As we shall now see, this was supported by actual data from graduate lists from a prominent commercial college.



Figure 6.4. Typewriting class at the Royal High School, Edinburgh, c. 1914. Image held in Scottish Life Archive at NMS.

Paton's prospectuses

One of the best surviving records of a student body at a typing school or commercial college can be found in prospectuses for A. W. Paton's college in Dundee. Two of these contain 'incomplete' lists of students who had graduated from the college in the 'previous session' and had gone onto 'good appointments'.⁵² Paton published a list of 39 successful graduates in his 1907 prospectus, with a similar list of 65 former students issued in 1911. These lists

⁵² A. W. Paton, *Making the Most of Life: 2. Choosing A College* (Dundee: Paton's College, 1907), 8–9; A.W. Paton, *Noble Ambition: A Lay Sermon* (Dundee: Paton's College, 1911), 8–10.

provide valuable information on the demographics of students attending his college and, we may reasonably suppose, similar commercial schools.

It should be recognised that the exact subjects each student enrolled on were not recorded. Like most shorthand-typewriting schools and colleges, Paton's institution taught a range of commercial subjects. That withstanding, it is clear from the timetables in his prospectuses that typewriting, shorthand and bookkeeping were the most popular subjects offered. These three courses could be taken individually, in daytime or evening classes, costing 10s.6d. per quarter or 25s for a full session of three quarters. Paton also offered a 'Combined Evening Course' with all three subjects at the discounted price of 63s for a full session.⁵³ Elsewhere in his prospectus, he stated that his students usually attended the college for a maximum of six months, after which most found a good position. According to Paton, this compared favourably with rival institutions where students attended for two to three years and, at the end of it, were 'still looking, sometimes in vain, for an appointment'.⁵⁴ While we should be sceptical of Paton's attempts to put down other colleges, this still shows that his college offered courses with a relatively quick turnaround.

In conjunction with census data, the 1907 graduate list sheds light on the ages and family backgrounds of students attending Paton's College. Because of limitations on census searches, which have been compounded by vague addresses recorded by Paton, only 21 out of the 39 students on the 1907 list were traceable. This data has been illustrated in Chart 6.1 and Table 6.1, with graduates ranging from 15 to 27 years of age. If Paton's courses were six to 12 months, as his prospectus calendars outlined, it seems that his youngest students came straight from leaving school at 14. Chart 6.1 also shows us there were two students aged 16 years old and another six aged 17. The high number of 16 and 17-year-olds suggests that some students had completed one or two years of secondary education, beyond the compulsory age minimum of 14 before attending Paton's College. Some students, especially older entrants, would have taken Paton's courses while working. One of these students, Nelly Brown, aged 27 in 1907, had worked as a builder's clerk in 1901. The skills that Brown

⁵³ Paton, *Making the Most of Life: 2. Choosing A College*, 15–16.

⁵⁴ Paton, 7–8.

learnt at Paton's College seem to have been put to good use as by the 1911 census she was working as a typist for a carpet manufacturer in Dundee.⁵⁵

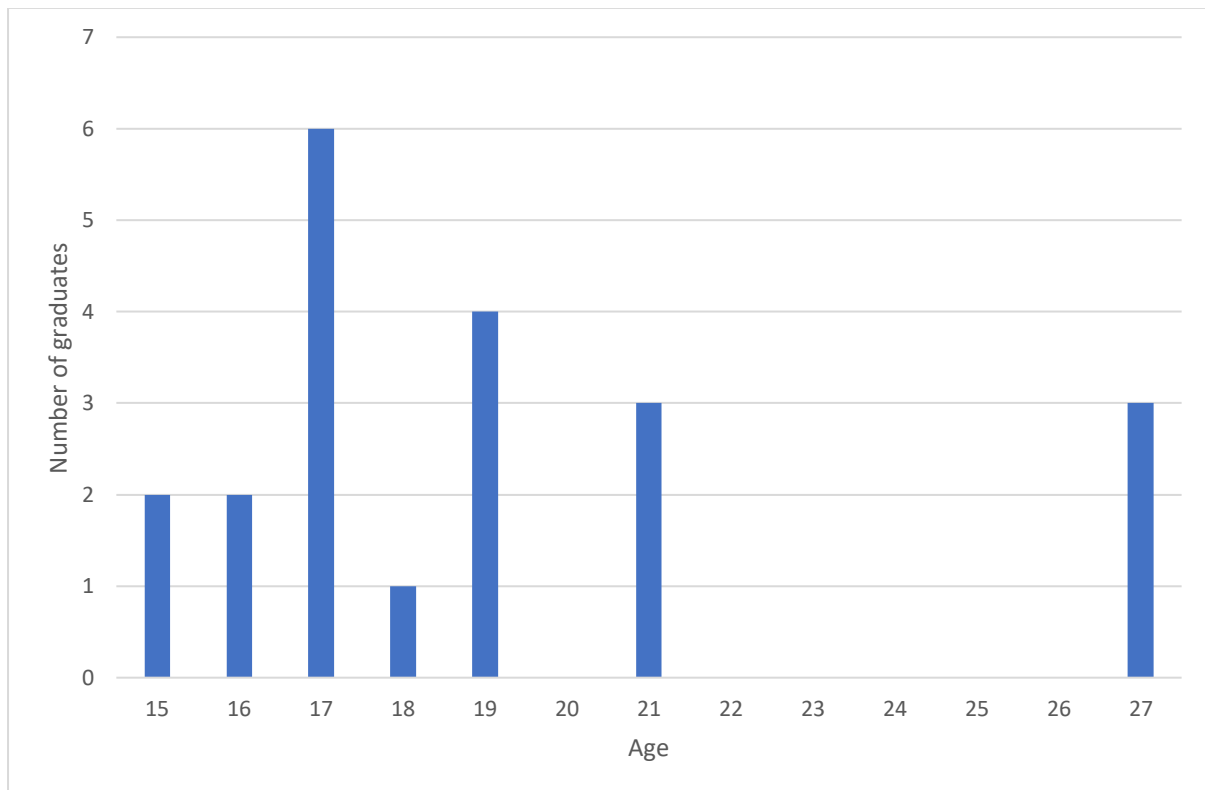


Chart 6.1. Ages of successful graduates from A. W. Paton's college recorded in his 1907 prospectus.

Paton's graduate list also reveal the gender make-up of his college. Of the 39 graduates in the 1907 list, three were men. In 1911 this figure had risen to 11 out of 65. Thus, over the two years we have records for roughly 13 per cent of the 104 successful graduates from Paton's College, were male. While in the minority, the proportion of male graduates was significantly higher than the one per cent of men recorded as typists in the 1901 census. Hence, the figures from Paton's College support the photographic evidence from typing classes in Edinburgh, which suggested that while many men were learning to type hardly any were going on to find employment as typists. Supporting this, two out of the three male graduates in Paton's 1907 list, went into clerical roles but not specifically as typists.⁵⁶ There

⁵⁵ Census record (1911) for Nellie G Brown, aged 31, 78 Parker Street, Dundee, Scotland, accessed via Scotlandspeople.gov.uk

⁵⁶ Information on the third graduate could not be found in the 1911 census records.

was James Mann who by 1911 had found work as a shipping clerk and Randall Grant, who was employed as a mercantile clerk. At Paton's College, typing courses were part of a wider curriculum which trained students for clerical roles involving typewriters but not necessarily with the title, 'typist'.

The social background of typing students is also revealed by the data from Paton's college. This section will take two criteria for judging this: father's occupation and the number of live-in servants, as presented in Table 6.1. Of the twenty students for which we have records of their father's occupation (and in one instance their mother's) there was an even split between pupils from middle-class and upper-working class backgrounds. Roughly 11 students had fathers who had worked in skilled trades such as masonry and instrument making, or as a supervisor in a factory setting including a 'Jute Bleaching Overseer' or a 'Linen Factory Overseer'. Regarding students from professional or business backgrounds, most had fathers working in lower-middle-class occupations, such as a 'cashier and secretary' or 'bookseller'. There were, however, a few from well-off middle-class homes. For instance, Dorothy Mess's father worked as a chartered accountant which allowed him to employ two servants at their home in 1901. The Mess family seems to have been wealthier than most at Paton's College. Table 6.1 shows that only one other student came from a household with two live-in students, with only four more having one servant. Thus, most students at Paton's College came from families who could not afford domestic help but had enough disposable income to pay for the tuition fees. Entry into Paton's College was a medium-term investment for which students would be rewarded with a well-paid position after as little as six months. This was a welcome additional income for students from relatively modest backgrounds.

First name	Surname	Age on April 1, 1907	Father's occupation at the time of the 1901 census	Live-in servants (1901 census)
May	Arklie	19	Cashier and Sect to Ltd Company	1
Mina	Bloch	17	Died by 1901, Art Dealer from Russia	0
Kate	Beaton	17	Jute Bleaching Overseer	0
Nelly	Brown	27	No record	0
Nelly D	Clark	27	Linen Factory Overseer	0
Nelly	Dyer	15	Stone mason	0
Edith	Duthie	19	Deceased. Father was recorded as a wine merchant's clerk in the 1891 census.	0
Bella	Feathers	21	Nautical Instrument Maker	0
Gladys F.	Fairweather	18	No record. Mother is a restaurateur in Cupar.	2
Lucy	Gouick	17	No record. Listed as an ironmonger's traveller in the 1891 census.	1
Randall	Grant	16	Deceased. Was a merchant for East India Company	0
Mary	Gray	17	Bookseller	0
Frances E	Gray	19	Ironmongers Manager	0
Lizzie	Kermack	21	Factory Overseer	0
Robert	Lindsay	27	Mason	0
Dorothy	Mess	19	Chartered Accountant	2
James	Mann	15	Whinstone Quarrier	0
Helen	Paterson	17	No record. Recorded as Machineman Papermill in 1891 census.	0
Agnes D	Shaw	16	Elementary School Teacher	1
Leonora	Saunders	21	Not recorded. Listed as a Letterpress Printer in the 1891 census.	0
Martha	Wilson	17	Not recorded. Listed as a Blacksmith in the 1891 census	1

Table 6.1. Ages and backgrounds of students from Paton's graduate list published in 1907. The 21 names listed here are the only ones out of the 39 for which census data could be found.

Unfortunately, examples of graduate lists similar to Paton's have not been found for the years after 1911. Still, we can be sure that typing tuition, as well as commercial education as a whole, remained in high demand. As discussed in chapter 2, during the First World War commercial colleges trained women to replace the roles left by men who had joined the armed forces. Even during the troubled economic times of the interwar period, the number of typists continued to rise, although more slowly than before. By 1931, there were almost 80,000 women employed as typists in Scotland and many more in clerical occupations where typing was necessary.⁵⁷

More than ever before typing was considered a role exclusively for women which was reflected in a shift in advertising for commercial colleges.⁵⁸ A 1927 announcement for McAdam's Institution read: 'For the training of young ladies of good education'. Unlike in his earlier advertisements, he made no attempt to attract male students. The employment prospects that followed were gendered as well with McAdam promising his graduates jobs as 'LADY SECRETARIES'.⁵⁹ When the first commercial colleges and shorthand-typing schools were set up in the late-1880s, the typing profession was already dominated by women. However, men were not actively excluded. By the 1920s, the boundaries between male and female clerical roles had become even more stringently defined.

Learning to type

Now that the sorts of people enrolled in typing schools and colleges have been outlined, two further questions can be addressed: what did typing students learn in these institutions and what methods did teachers employ to instruct them? Key sources in answering these questions are examination papers and examiner reports from the Royal Society of Arts. The RSA was one of the leading providers of typewriting qualifications in the UK from 1891 and by the mid-1890s, their typewriting examinations were taken by students at Scottish schools

⁵⁷ "Occupations in Scotland: Statistics Compiled from 1931 Census," *The Scotsman*, May 31, 1934, 11.

⁵⁸ Davy, "'A Cissy Job for Men; a Nice Job for Girls': Women Shorthand Typists in London, 1900–39."

⁵⁹ "McAdam's Institution," *The Scotsman*, August 6, 1927, 1.

and colleges including McAdam's Institution in Edinburgh; the Young Men's Christian Association in Glasgow; and Robert Gordon's College in Aberdeen.⁶⁰

Examinations will be considered alongside manuals and typing guides including Arthur Morton's *Modern Typewriting and Manual of Office Procedure* and Maxwell Crooks' *Touch Typewriting for Teachers*. Morton's popular *Manual* was released in several editions between 1902 to 1930. In the preface, he declared that the text was used 'as a reference in typewriting offices, and as a text-book by the leading Commercial Training Colleges, Technical Schools, Evening Continuation Classes etc., both in the United Kingdom and the Colonies'.⁶¹ Published by the Smith Premier Typewriter Company, for whom Morton was employed as a retail agent (see chapter 3), his *Manual* regularly plugged Smith Premier typewriters and accessories. From around 1903, Morton also served as the chief examiner for the RSA's typewriting papers, so it is more than likely his *Manual* was designed to aid students in passing these examinations.

Crooks' *Touch Typewriting for Teachers* was first published in 1928 and reissued until 1965. As well as serving as a general guide for teachers, this publication promoted Crooks' innovative use of gramophone records in the classroom by helping students maintain a steady rhythm when typing. Published by Isaac Pitman and Sons, Crooks' textbooks were probably used by Scottish schools and colleges which hosted Pitman's examinations, of which there were examples in the principal cities. Like examination papers, student guides reveal the skills and knowledge expected of typists, while manuals for teachers, such as Crooks' handbook, shed light on methods of instruction as well.

Using the sources outlined, the following section will look at how students were taught to operate the typewriter, with a particular focus on touch typing. This will be followed by a brief discussion of maintenance procedures carried out by typists to keep their machines in working order. Importantly, these practical skills should be considered in the context of the

⁶⁰ "Examinations, March, 1897. Prizes and Certificates Awarded to Candidates," *The Journal of the Society of Arts* 45, no. 2324 (1897): 13.

⁶¹ Arthur Morton, *Modern Typewriting and Manual of Office Procedure ... Fifth Edition*. (London etc.: Smith Premier Typewriter Co. & Sir Isaac Pitman & Sons, 1910), 5.

wider education typists received in commercial and academic subjects. Many typists had expertise in other subjects, which was often invaluable in carrying out their work.



Figure 6.5 Maxwell Crooks demonstrating the gramophone method of typing instruction in *Touch Typewriting for Teachers* (London, Isaac Pitman & Sons, 1938). Accessible at archive.org

Touch typing: its adoption and methods of instruction

Being able to efficiently operate a typewriter was, as it remains, a fundamental skill for a professional typist. Today, using a computer keyboard at high speed is often seen to go hand-in-hand with touch typing, defined by the Oxford online dictionary as ‘the practice or skill of typing using all one’s fingers and without looking at the keys.’⁶² However, as keyboard typewriters became widely available from the mid-1870s, there was no consensus on the most efficient method of operation. Touch typing was not widely employed, as it seems most typists went for some variation on the ‘hunt and peck’ method – locating the

⁶² Definition of touch-typing provided by Oxford Languages through Google.

desired key by sight and striking it with your strongest finger.⁶³ Learning to type in these early years must have been an idiosyncratic endeavour, with each user devising their own approach to working the machine.

By the late-1870s, operators and instructors were looking for more efficient typing methods. In a manual by the American stenographer Edward F. Underhill in 1880, he advised typists to use their index, middle and ring fingers on each hand. Underhill's diagram in Figure 6.6, shows that the left hand operated the keys on the left side of the keyboard and vice versa for the right. Having fixed positions for both hands reduced the amount of distance covered by the fingers, which was intended to increase speed and accuracy. Curiously, the thumb was not used for spacing with Underhill advising 'The space bar should be uniformly touched with the right third finger.'⁶⁴

⁶³ Lyons, "QWERTYUIOP: How the Typewriter Influenced Writing Practices," 224.

⁶⁴ Underhill, *Hand-Book of Instruction for the Type-Writer, Containing Inductive Exercises, Arranged with a Typical Guide to the Correct Use of the Fingers*, 6.

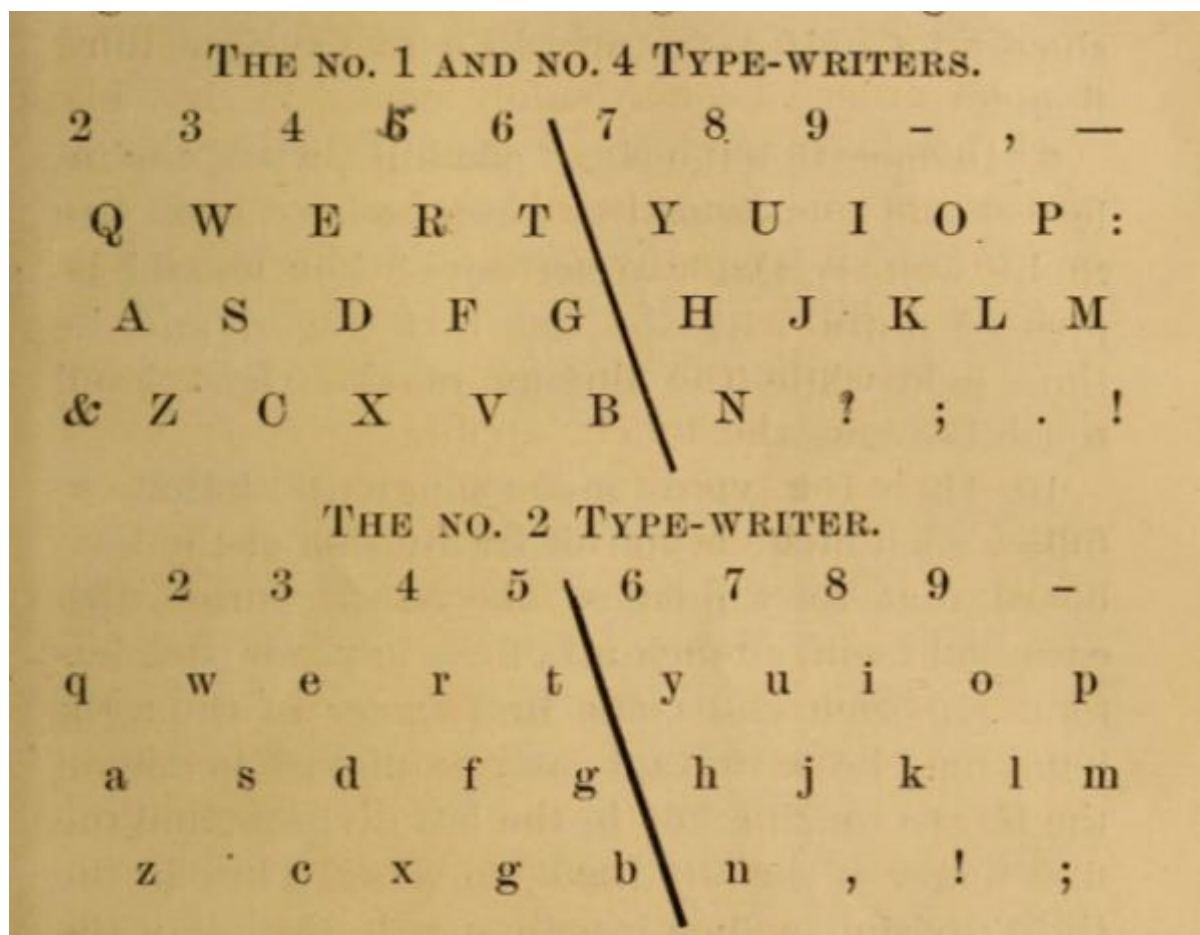


Figure 6.6. Keyboard diagrams for the Remington No. 1, No. 2 and No. 4 typewriters from Underhill's *Hand-book* of 1880.

The keys are divided between those for the left and right hands. Accessible at archive.org

Two years after Underhill's *Hand-Book*, Mrs L. V. Longley, the owner of Longley's Shorthand and Typewriting Institute in Cincinnati, proposed the use of all ten fingers for typing, with the thumbs for the spacebar. However, Longley's technique differed from modern touch typing as she did not suggest that users look away from the keyboard. Initially, her method failed to catch on, with commentators seeing no value in typing with the weaker little fingers. Then in 1888, the ten-finger system was given a boost by court stenographer Frank E. McGurrin, who promoted the method in typing demonstrations and contests. Crucially, he memorised the QWERTY layout meaning he could look away from the keyboard and concentrate on the work to be copied. From that point, the touch system gained popularity in America and Europe.⁶⁵

⁶⁵ Bruce Jr. Bliven, "When Typing Was in Flower," *The Atlantic*, 1954, <https://www.theatlantic.com/magazine/archive/1954/05/when-typing-was-in-flower/641274/>.

In Britain, the uptake of the touch method by commercial colleges and typing schools seems to have lagged behind America. Looking back on these early years Maxwell Crooks recalled: 'The development of Touch Typewriting has apparently been slow' adding that 'eventually the so-called Typewriting schools offered instruction in Touch Typewriting – instruction which was often limited to the provision of a typewriter and a small book of brief instructions and exercises'.⁶⁶ However, Crooks did not record the precise point at which touch typing was widely adopted by UK typing institutions.

Evidence from national examination papers for typewriting suggests the decisive change came at the end of the 1890s. A question on the RSA paper for 1898 asked students to 'Give proper fingering of the following words'.⁶⁷ This shows that students were taught a multi-finger method where certain digits corresponded with particular keys. In the following year's examination students were asked to: 'Make a rough drawing of right and left hands... and indicate upon each finger the type keys to be struck by them on the Universal Key board. State what Type-writer you use.'⁶⁸ Asking students to illustrate the keys for 'each finger' shows that the RSA were almost certainly recommending a ten-finger method. Meanwhile, the request to draw a diagram for the 'Universal' or QWERTY keyboard shows that by 1899 this layout was dominant in the UK market, despite the many alternatives (see chapter 4). Nevertheless, the fact that students were asked to state the model they used reflected the variation in Universal layouts. At this time, double keyboard typewriters which came with two QWERTY keyboards for upper- and lower-case letters, were popular and remained so for many years.⁶⁹ A few years later Arthur Morton's *Modern Typewriting*, written for users of single and double keyboards, included a hand diagram showing the distribution of characters across the left and right hands (Figure 6.7). This diagram may well have resembled the drawings made by students of the 1899 RSA examination.

⁶⁶ Maxwell Crooks, *Touch Typewriting for Teachers*, 2nd ed. (London: Sir Isaac Pitman & Sons Ltd, 1938), 4.

⁶⁷ 'Society of Arts Examinations 1898. Type-Writing' in 'RSA Programme of Examinations (1896-1901) and Examination Papers (1895-1900)' held at RSA, reference RSA/PR/ED/100/17/8.

⁶⁸ 'Society of Arts Examinations 1899. Type-Writing' in 'RSA Programme of Examinations (1896-1901) and Examination Papers (1895-1900)' held at RSA, reference RSA/PR/ED/100/17/8.

⁶⁹ See Figure 6.4, an Edinburgh typing class from c. 1914, featuring examples of double keyboard typewriters including Smith Premier models.

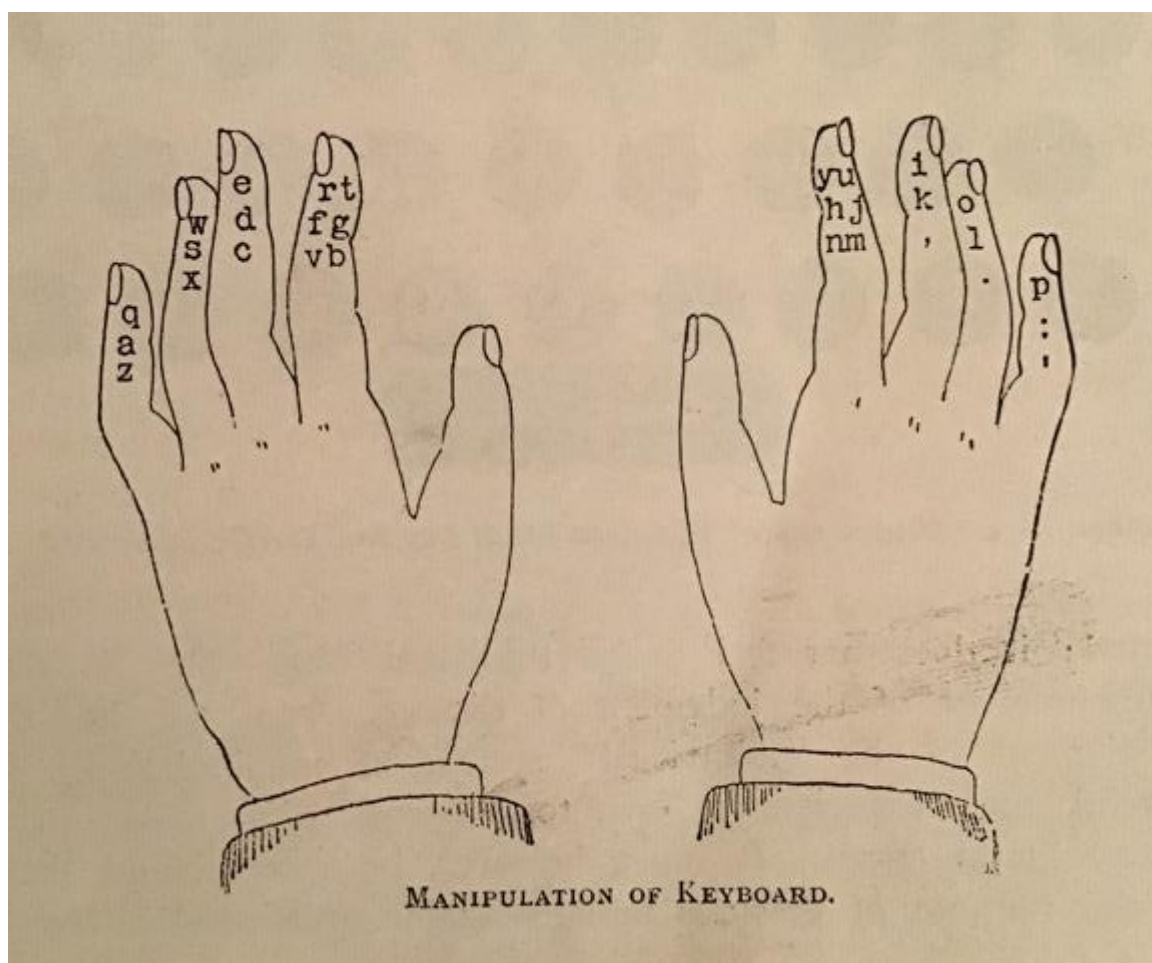


Figure 6.7. Diagram showing which keys to type with each finger from Arthur Morton's *Modern Typewriting and Manual of Office Procedure* (1910), 13.

The first evidence of Scottish institutions promoting touch typing comes from 1901. In the Post Office directory from that year, Neville George Tunmer - a 'typewriter expert' based at 118 George Street, Edinburgh - described himself as a 'Professor of Touch Typewriting'. That same year, the Smith Premier School of 'Touch' Typewriting and Shorthand opened in Edinburgh.⁷⁰ Arthur Morton, who worked in Edinburgh and Glasgow as a Smith Premier representative at the turn of the century, became a key proponent of touch typing. In the fifth edition of *Modern Typewriting*, he asserted:

⁷⁰ See 'Educational Directory' in *Post-Office Edinburgh & Leith Directory 1901-1902* (Edinburgh: Morrison and Gibb Limited, 1901), 858-59.

The location of individual keys should be so thoroughly learned as to render the operator almost independent of visual assistance; the eyes should be on the “copy” – thereby avoiding the loss of time caused by continually glancing from the keyboard to the copy, while the speed will be increased, liability to error minimised, and visual strain diminished.⁷¹

In classes, teachers had their students perform finger exercises to train them to type without ‘visual assistance’. This practice is indicated in a copy of Morton’s *Modern Typewriting* held by the National Museum of Scotland’s library, which came with a paper

⁷¹ Arthur Morton, *Modern Typewriting and Manual of Office Procedure ... Fifth Edition*. (London etc.: Smith Premier Typewriter Co. & Sir Isaac Pitman & Sons, 1910) p. 14.

insert for 'FIRST YEAR STUDENTS', illustrated in

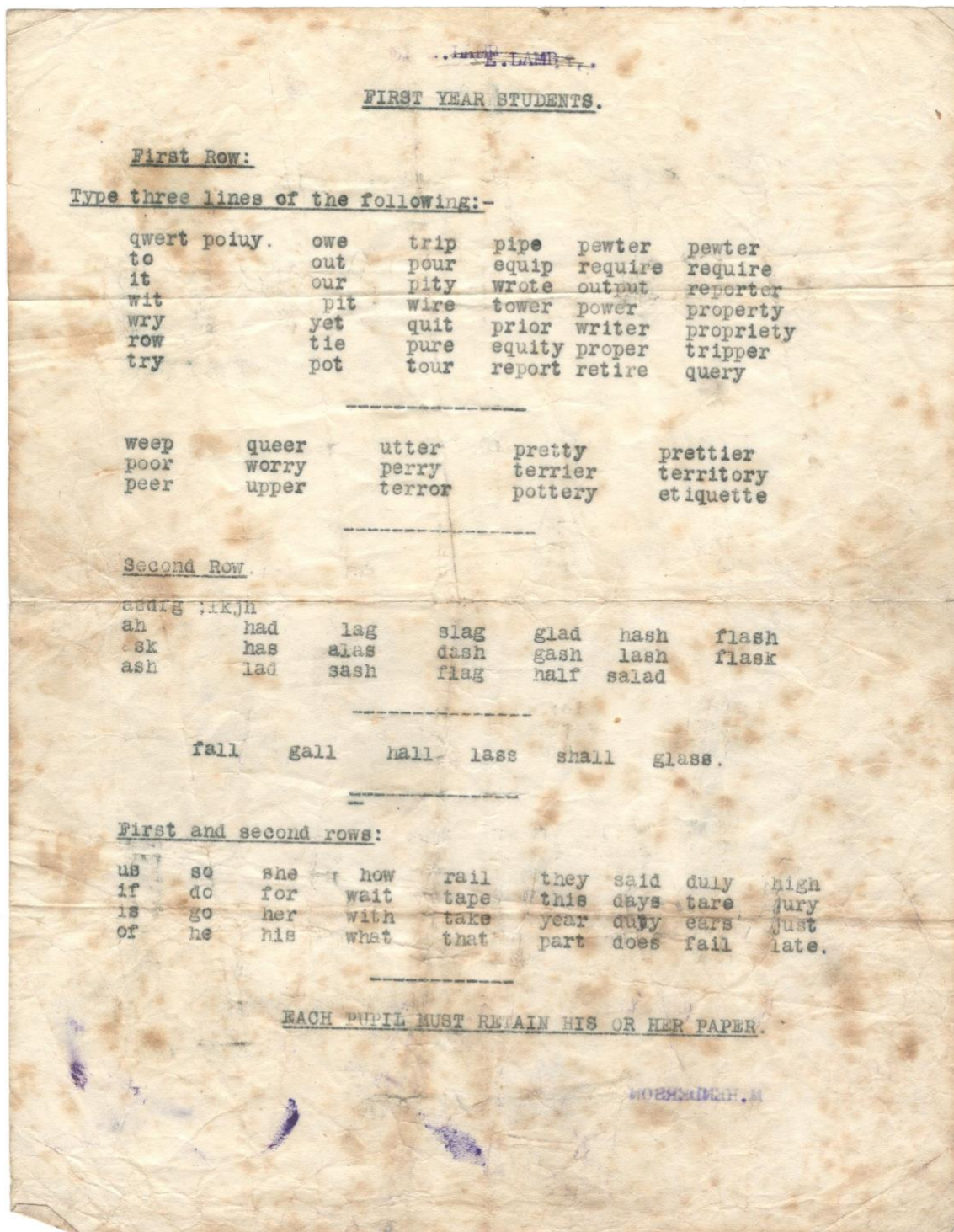


Figure 6.8. The worksheet has a list of typing exercises which are abridged versions of tasks set out in Morton's *Manual*. The order of words matches Morton's text, although some of the exercises have been shortened. In Morton's guide students are advised to type three lines of the following:

qwerty yuiop qwert yuiop; poiuy trewq poiuy trewq⁷²

In contrast, the paper handout for first-year students only asked for three lines of 'qwerty yuiop'. The teacher who made this worksheet has adapted it from Morton's original exercise, either for time constraints, or because they felt that less practice was needed on such a basic exercise. The worksheet had other variations from Morton's example, which can be seen through a comparison with

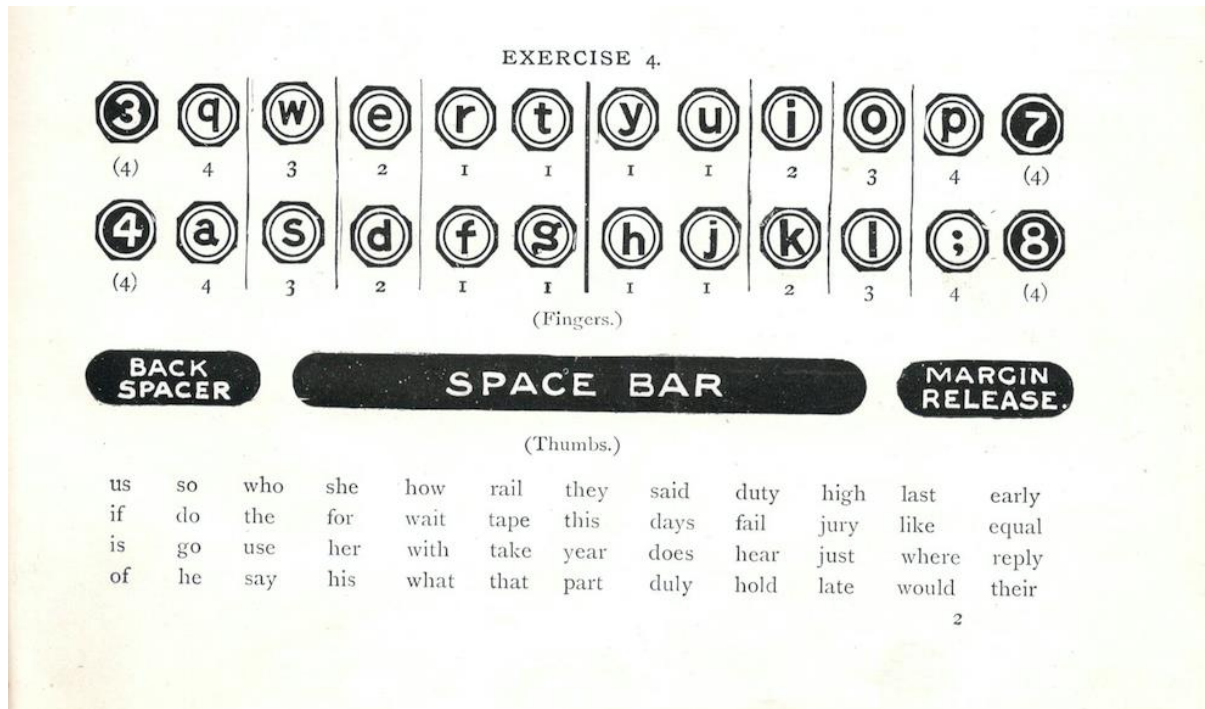


Figure 6.9. While these are admittedly minor adjustments, they highlight a wider point that teachers were free to apply their creativity and autonomy in adapting typing exercises for their classes.

⁷² Morton, 16.

~~...LAMB...~~
FIRST YEAR STUDENTS.

First Row:

Type three lines of the following:-

qwert	poity.	owe	trip	pipe	pewter	pewter
to		out	pour	equip	require	require
it		our	pity	wrote	output	reporter
wit		pit	wire	tower	power	property
wry		yet	quit	prior	writer	propriety
row		tie	pure	equity	proper	tripper
try		pot	tour	report	retire	query

weep queer utter pretty prettier
poor worry perry terrier territory
peer upper terror pottery etiquette

Second Row.

ash	had	lag	slag	glad	hush	flash
ask	has	alag	dash	gash	lash	flask
ash	lad	sash	flag	half	salad	

fall gall hall lass shall glass.

First and second rows:

us	so	she	now	rail	they	said	duly	high
if	do	for	wait	tape	this	days	tare	jury
is	go	her	with	take	year	duty	ears	just
of	he	his	what	that	part	does	fail	late.

EACH PUPIL MUST RETAIN HIS OR HER PAPER.

MOBHEADEN.M

Figure 6.8. Worksheet found in NMS's copy of Arthur Morton's *Modern Typewriting and Manual of Office Procedure*.

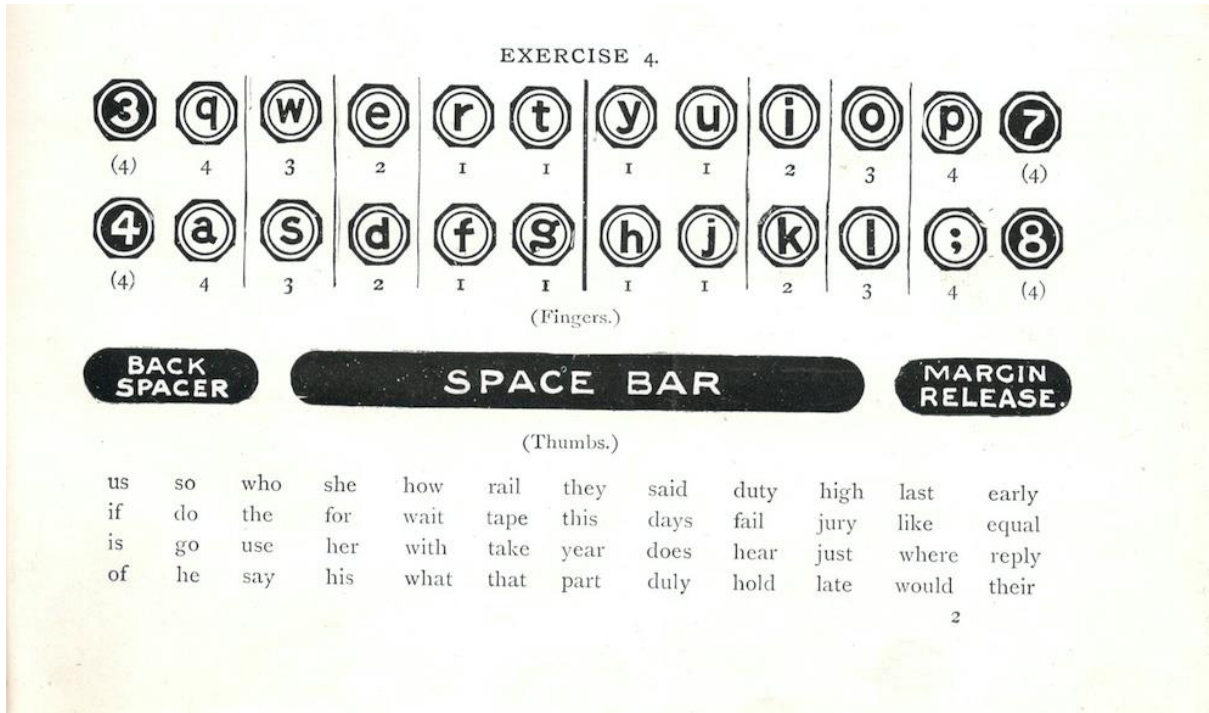


Figure 6.9. Typing exercise from the 1910 edition of Morton's *Manual*.

This was probably the inspiration for the 'FIRST YEAR STUDENTS' worksheet in

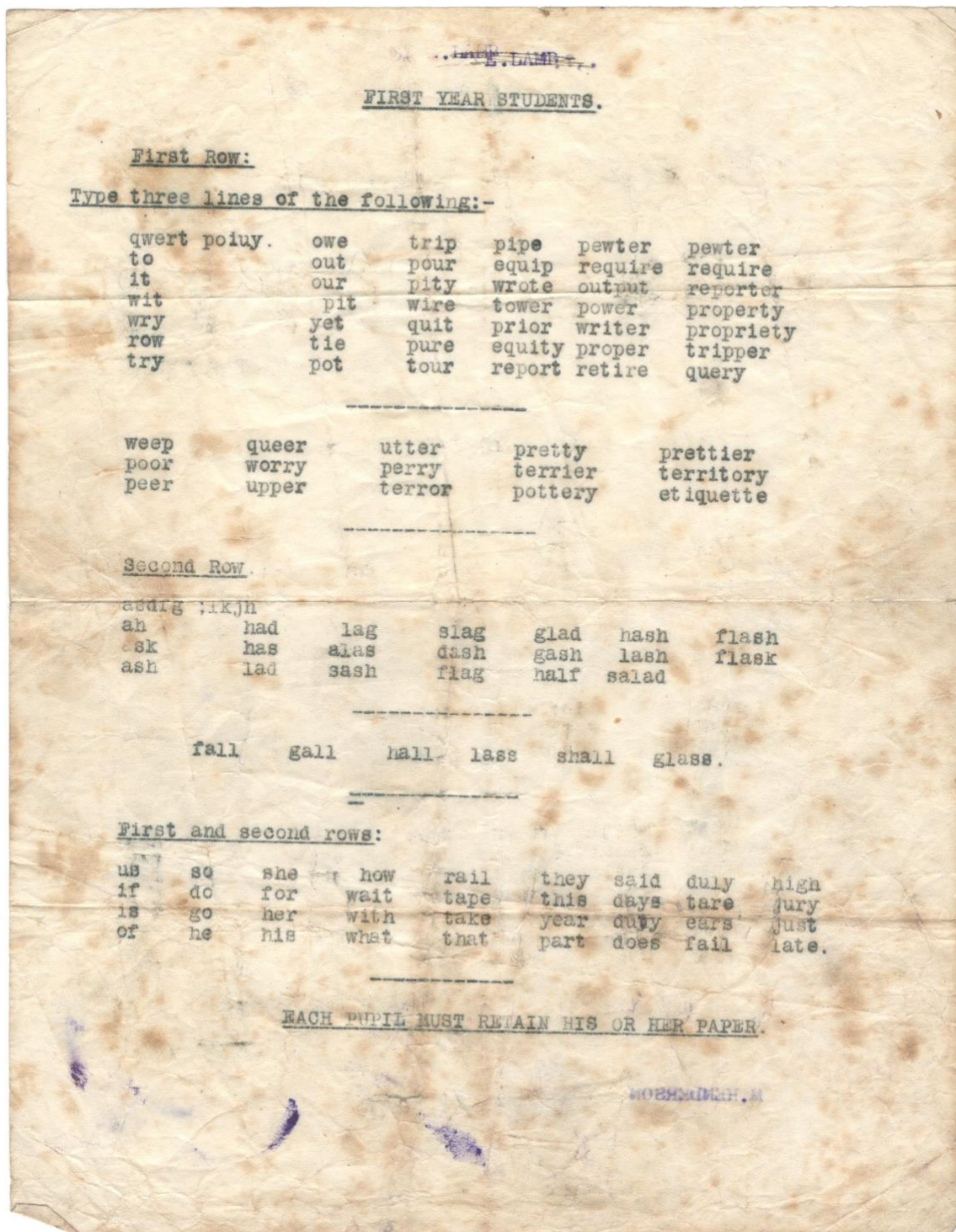


Figure 6.8.

Another tool students used to familiarise themselves with character layouts was the practice keyboard. These were simple devices which did not print but simply allowed users to practice hitting the keys in their correct locations. James Wright, a shorthand-typing

teacher in Kirkaldy, developed the 'Wright' practice keyboard. Sold by McAdam's Institution in Edinburgh in the early-1900s, a major advantage of the Wright keyboard was its low price. At 6s.6d it was a fraction of the cost of standard keyboard typewriters which regularly sold for £10 to £20. This made the Wright an economical alternative for typing students wishing to practice at home. A 1907 advertisement for the Wright keyboard shows it was also being promoted as 'Suitable for DAY or EVENING CLASSES in connection with School Boards and other Educational Authorities' (Figure 6.10). There are records from the late-1890s showing that some Scottish school boards supplemented their stock of typewriters, with cheaper practice keyboards, for use in the classroom.⁷³

Leading manufacturers such as Remington had released practice keyboards from the 1890s.⁷⁴ However, according to an article on Wright's invention in the *Fifeshire Advertiser* his keyboard 'differs in point of construction in at least one important respect from those previously produced... he has introduced a novelty by giving each separate key-top its own individual metal spring.'⁷⁵ The result was that 'the "Touch" approaches very closely to that of the actual Typewriter' (Figure 6.10). The importance Wright placed on the haptic feedback from his practice keyboards underlines an important nuance in the touch typing method.

⁷³ "Denny School Board: Committee Reports," *Falkirk Herald*, August 14, 1897, 5.

⁷⁴ "Can You Use The Typewriter? If Not, Procure The Remington Practice Keyboard," *Forres Elgin and Nairn Gazette, Northern Review and Advertiser*, February 9, 1898, 4.

⁷⁵ "Local News," *Fifeshire Advertiser*, February 22, 1908, 4.

HOME PRACTICE IN THE ART OF TYPEWRITING.



THE "WRIGHT
PRACTICE —
— KEYBOARD

Now makes it possible for Students to have Practice at home in Typewriting as well as Shorthand. The "Wright" Keyboard is substantially built, and will stand any amount of fair usage. Each key-top is fitted with an individual metal spring, and the "Touch" approaches very closely to that of the actual Typewriter.

Where a Student can obtain the occasional use of a Typewriter, this Keyboard will be found to be of distinctive advantage.

Suitable for DAY or EVENING CLASSES in connection with School Boards and other Educational Authorities.

PRICE, 6s 6d.

THE APPARATUS CAN BE SEEN AT
M'ADAM'S COMMERCIAL TRAINING INSTITUTION,
55-57 SHANDWICK PLACE, EDINBURGH.

Figure 6.10. Advertisement for the "Wright" Practice Keyboard.
Fifehire Advertiser Saturday, 5 October 1907, 8. Copyright British Library Board.

Touch typing was about more than finding the keys without looking. Unlike the electronic keyboards of today, manual typewriters respond to slight changes in the force with which each key is hit, as well as the snappiness and rhythm of the keystrokes. Typing required a precise touch to print characters which were clear and consistent. This was all the more important as the force placed behind each character needed to be adapted: a full stop needed to be struck more softly than an 'M'. In fact, hitting a full stop with too much power had the tendency to cut right through the paper. For typists using their weaker little fingers, as well as their strong index fingers, the regularity of the impressions was harder to achieve and needed practice to build up the strength required. Typists also had to adapt to different typewriters. As Morton described in a section of his *Manual* titled 'Touch', 'Every machine has its distinctive touch, i.e. the amount of force necessary to produce a clear impression.

This difference in touch extends not merely to every make of typewriter, but to every individual machine'.⁷⁶

Maxwell Crooks, in his manual published in the 1930s, went further in describing the different aspects involved in touch typing: 'There is much more implied by the term [touch] than the capacity to use all the fingers and to touch the right keys, without looking at them... Touch Typewriting may therefore be said to involve three separate habit-developed processes'. These were 'key finding', 'The act of Touch or Key Depression' and 'Manipulation'. The last of these included not only the actuation of the keys but also the manipulation of other mechanisms on the typewriter such as the carriage return or the paper feed.⁷⁷

By the 1920s, there were new ways of learning to touch type. One of the most novel techniques was the use of gramophone records with students typing along, in rhythm, to a piece of music. In the UK, Mr W. Abbott, a teacher at Blackburn Technical College, seems to have been amongst the first to employ this method. In 1925 Scotland's *Sunday Post* reported that in Abbott's classes 'students are being taught to use the typewriter on the rhythmic plan... Specially clear and distinct records are selected, and the effect on the class is remarkable. Keys are struck in precise unison, and the carriages are brought back in the same way'. According to Abbott, 'The system not only increased speed, but also efficiency, and you get the class spirit which is not possible in any other way.'⁷⁸ By 1930, it seems gramophone records were being used in Scottish typing classes. In a lecture of that year from Kirkcaldy-based music teacher, D. C. Walker, he argued 'What we do rhythmically we do most easily'. This 'great truth... was now modernised on even the teaching of typewriting to gramophone accompaniments, as well as many useful devices in industry'.⁷⁹

⁷⁶ Morton, *Modern Typewriting and Manual of Office Procedure ... Fifth Edition.*, 15.

⁷⁷ Crooks, *Touch Typewriting for Teachers*, 7–9.

⁷⁸ "Teaching Typewriting to Music: Surprising Results with Gramophone," *Sunday Post*, March 1, 1925, 10.

⁷⁹ "A Teacher's Class in Singing: Lectures by Mr D.C. Walker," *Fife Free Press, & Kirkcaldy Guardian*, July 12, 1930, 7.

To capitalise on this trend Isaac Pitman & Sons released ‘Pitman’s Gramophone Course of Typewriter Keyboard Instruction’ compiled by Maxwell Crooks in 1931.⁸⁰ The course consisted of popular pieces of classical music accompanied by a metronome clicking track and occasional narration, presumably delivered by Crooks. Part two of the recording, for instance, tells students to ‘begin after six taps’ and also instructs listeners when to operate the ‘carriage return’. The course came with several tunes with each successive track played at a slightly higher tempo. While the introductory track ran at approximately 70 beats per minute, by ‘Part Six’ this had increased to around 120 bpm.⁸¹ By typing along, students built up their speed while maintaining a consistent rhythm. The same year these recordings were released, Skerry’s College in Edinburgh demonstrated ‘The Gramophone as an adjunct to Typewriting Rhythm and to proper Intonation in Languages’ at their ‘Office Training Exhibition’. Included in the audience for this exhibition were not just potential students but ‘parents, guardians and all who are interested’.⁸² The use of the gramophone in typing classes was a relatively new and unproven practice. Parents needed to be convinced of the value of these modern teaching techniques before enrolling their children in Skerry’s College.

Maintenance and repair

Regardless of a typist’s competency in operating the typewriter, to produce high-quality documents, they needed to keep their machine in good working order. For early users, manufacturers provided basic guidance on maintenance. For example, Remington typewriters came with the following instruction on the paper feed: ‘Keep the machine free from dust. Put no oil on back rod except to clean it. Wipe the front rod with a greasy cloth once a day’ (Figure 6.11). Manuals also provided users with instructions on maintenance and, on occasion, how to carry out substantial repairs. A Bar-Lock typewriter manual from 1891 boldly suggested that with some experience the operator, ‘with caution’, should be able to ‘take a great part of the machine to pieces if required at any time.’ These

⁸⁰ “Typewriting to Music,” *Hastings and St Leonards Observer*, October 10, 1931, 11.

⁸¹ For online recordings of the collection see Maxwell Crooks, “Pitman’s Gramophone Course of Typewriter Keyboard Instruction,” 1931, https://archive.org/details/Pitmans_Gramophone_Course_of_Typewriter_Keyboard_Instruction-9069/Pitmans_Gramophone_Course_of_-_03_-_Part_Three.mp3.

⁸² “Skerry’s Office Training Exhibition,” *The Scotsman*, August 19, 1931, 1.

instructions were especially important for users who did not have ready access to trained typewriter mechanics: 'The directions are given chiefly for the benefit of users in foreign countries where the Typewriter Company, Limited, have not an office.'⁸³



Figure 6.11. Paper feed for Remington Standard No. 2 typewriter, manufactured in 1887. NMS collection, object number T.1960.34.1.

RSA examinations also interrogated students' knowledge of maintenance. The 1895 paper included three questions on the topic:

3. Give some reasons for the occasional "sticking" of a Typewriter, for example: Why does the carriage sometimes fail to get into position, automatically, for printing a fresh letter?
4. What would you do when the key and carriage action seem sluggish?
5. Give a general description of the proper treatment necessary to keep a Typewriter in good order.⁸⁴

⁸³ *Instructions on the Bar-Lock Typewriter* (London: Isaac Pitman & Sons, 1891), 15.

⁸⁴ Theory section for Society of Arts 'Type-Writing' examination (1895) in 'RSA Programme of Examinations (1896-1901) and Examination Papers (1895-1900)' held at RSA, reference RSA/PR/ED/100/17/8.

While we do not have the examiner's answers it seems that students were expected to carry out minor maintenance. This might include oiling, dusting, or perhaps changing the tension on the keys, a relatively simple task. In contrast to the earlier Bar-Lock manual which encouraged users to mend their machines, the emphasis from the RSA's examinations was to 'keep a Typewriter in good order.'

From this point, RSA examinations devoted less attention to maintenance procedures. In the March 1915 examinations, there was only one question on the topic featured in the theory section of the Elementary Level paper, where students were asked to 'Describe briefly the treatment necessary to keep a typewriter in good working condition'.⁸⁵

Examinations papers from after the War show that students still required basic knowledge of maintenance. The elementary paper for March 1929 asked, 'What parts of a typewriter require oiling, and how often'.⁸⁶ However, the theory sections on the intermediate and advanced papers did not include questions on this topic. It seems typing students of all levels were taught the rudiments of typewriter maintenance but as they gathered experience, they were not expected to expand their repair skills. Supporting this, typewriter guides from the interwar period warned typists from carrying out fixes themselves. The Underwood typewriter manual released in 1938 instructed operators to call upon a mechanic for everything bar the most basic maintenance routines.⁸⁷

The shift away from users carrying out repairs was partly in response to the establishment of the repair sector from the late nineteenth century onwards (see chapter 2). But the warning against typists carrying out repairs also carried a gender dimension. By the interwar period, the role of the typist was seen as an exclusively female role, while employment as a typewriter mechanic was a male position. For women typists to involve themselves in repair would have constituted an infringement upon, what was by then, the firmly entrenched gender divisions in the typewriter trade.

⁸⁵ 'March Royal Society of Arts Examinations 1915 Stage 1. Elementary Typewriting' held at RSA reference RSA/PR/ED/100/17/12.

⁸⁶ 'March Royal Society of Arts Examinations 1929 Stage 1. Elementary Typewriting' held at RSA reference RSA/PR/ED/100/17/18.

⁸⁷ Albert James Sylvester and E. H. Newnham, *Underwood Typewriter Manual* (London, 1938).

In the preceding sections, typing has been described mostly as a practical skill. Yet there was more to being a typist than knowing how to efficiently operate and maintain a typewriter. As Maxwell Crooks argued, one of the chief benefits of touch typing was that while ‘the machine is under the control of his subconscious’ the typist had ‘more room for the exercise of the intelligence upon the important details of the correspondence and other typewritten work of the office.’⁸⁸ For lower-paid roles, this might have involved transcribing shorthand notes, as well as correcting spelling, grammar, and punctuation on handwritten texts. For higher salaried positions typists may have translated texts from foreign languages or had to proofread scientific or legal documents with specialist terminology. Thus, Crooks’ description of touch typing – as a method of freeing up thinking space – highlights the fact that typists often had expertise in various subjects which went above and beyond the ability to operate a typewriter. While we do not have the space in this thesis to discuss the range of commercial subjects typing students learnt, readers should take notice of the following analogy from Arthur Morton: ‘Typewriting is anything but a trifling subject... the person who can do little more than “press the keys” is no more entitled to be designated “a typist,” than the person who manages to strum a few tunes on the piano is entitled to be considered “a musician.”’⁸⁹

Conclusion

In the last decade of the nineteenth century, a range of institutions in Scotland began offering typing courses in response to the growing demand for formal training. The pioneers in this sector were the owners and principals of shorthand schools who added typing to their curriculums from the late-1880s. From the mid-1890s these schools prepared students for typewriting examinations administered by educational societies with a UK-wide reach, such as the RSA. At the same time, school boards in several Scottish towns and cities began funding typing courses, taken by pupils of school leaving age or above.

⁸⁸ Crooks, *Touch Typewriting for Teachers*, 9.

⁸⁹ Arthur E. Morton, “How to Prepare for the Society of Arts Typewriting Examination,” *The Shorthand World and Imperial Typist* 1, no. 2 (1903): 29–32.

Many of the leading figures in this chapter were previously cited in chapter three as ‘teacher-retailers’. These were business owners, managers and principals involved in both the provision of typing tuition and the sale of typewriters and included George McAdam and James Leishman in Edinburgh; Arthur Morton in Glasgow; Calder M. Lawrence in Aberdeen; and A. W. Paton in Dundee. These individuals were at the core of Scotland’s typewriting community, promoting the commercialisation of typewriters to their shared benefit. Despite their common interests, rivalries still emerged. A. W. Paton, in promotions for his college, was keen to put down what he characterised as the meagre results from students in competing institutions. Even more intense was the dispute between James Leishman and George McAdam. Ostensibly, their disagreement was over the purchase of typewriters for Edinburgh school board classes. Yet as the owners of two of the largest typewriting institutions in Scotland, we can reasonably suppose that their rivalry ran deeper.

This chapter has also shed light on the sorts of people that enrolled in typing schools and went onto careers as typists. Importantly, the distinction was made between media representations of typists in advertisements and newspaper reports, with actual data on typing students in school prospectuses, examination reports, and photographs. In the media, typing was often presented as an occupation peculiarly suited to and overwhelmingly dominated by women. From this trend, some commentators went further by criticising the supposed poor education of ‘girl’ typists. However, their disapproval seems to have been wrapped up in concerns, from a patriarchal perspective, that too many women were abandoning traditional roles in areas such as domestic service. In short, we should be sceptical of the attitudes of contemporaries who were all too eager to brand the majority of women typists as poorly educated.

The actual data on students showed that a significant minority of men enrolled on typing courses, perhaps as much as ten per cent of all entrants. However, while many men were learning to type, and probably used typewriters in their day-to-day work, very few went on to be officially employed as typists. This manufactured division of roles was not exclusive to the typing profession but was apparent in other elements of the typewriter trade. In this chapter we have seen that typewriter repair came to be regarded as a male role, with women typists discouraged from carrying out basic fixes on the machines they used daily. As

with men who knew how to type, we can speculate that many women typists knew more about the working, maintenance and repair of typewriters than contemporary sources suggest.

The data on typing students from A. W. Paton's college also revealed the social backgrounds of aspiring typists, most of whom came from upper working-class or lower-middle-class families. While they were not hugely wealthy, they had enough disposable income (either from their work or from their families) to pay for tuition fees. The goal for Paton's students seems to have been to quickly complete a commercial course, with typing, in six months or so, and then go straight into the clerical work. Going forward, it would be useful to find data on rival institutions to see if students enrolling on longer courses came from more privileged backgrounds.

The final section of this chapter looked at the way typing was taught. Teachers and students in Scotland took inspiration from the authors of typewriting textbooks such as Arthur Morton and Maxwell Crooks. Morton's manuals were adapted by teachers who produced exercise sheets for their students, while Crooks' promotion of gramophone records as a means to teach typing encouraged the adoption of this method of teaching in schools and colleges from the late-1920s.

The novel use of gramophone records in typing classes brings us to an underlying theme in this chapter: the preoccupation typing school principals had with presenting their institutions as *modern*. In the pioneering years from the late-1880s shorthand-typewriting schools seemed modern simply by virtue of using typewriters in their classes. For that reason, principals were keen to incorporate 'typewriting' into the title of their business to show they were ahead of the curve. Later, as typing courses became widespread, advertisements for schools and colleges featured descriptions and illustrations of the latest typewriters they used and sold. As well as fitting out their schools with up-to-date typewriters, principals looked to hold their courses in spacious, bright and airy spaces, with some installing electric lighting. This modern convenience was even more important for institutions which relied on income from evening classes.

Shorthand-typing schools and commercial colleges turned out thousands of students that went into careers as typists or related clerical roles. In these jobs, typists and their employers relied on the manufacturing, distribution and retail networks for typewriters discussed in chapters 2 and 3. In addition, typists' regular and intensive use of their machines cemented the widespread demand for supplies and repair services. Typing schools shaped the nature of the clerical work from the late nineteenth century, while driving the commercialisation of typewriters in Scotland and elsewhere.

Chapter 7 Conclusion

This thesis has investigated the businessmen and women who played pivotal roles in Scotland's typewriter trade during the first 55 years of commercialisation. To date, most scholars interested in the historical significance of typewriters have concentrated either on innovations in manufacturing or on the impact that typewriters had on female employment.¹ As Trevor Pinch has argued, marketers and salespeople are the 'missing masses' of technology studies.² By looking at the businesses which mediated between manufacturers on the one side and users on the other, this thesis has drawn attention to the marketing, sale and use of typewriters in Scotland. It has therefore been able to recover the substantial agency and creativity exercised by the owners, managers and employees of typewriter businesses, and offers a new perspective on the history of technology. It also shifts our understanding of the relationship between typewriters and gender. Typewriters did not only offer employment possibilities for women as typists. Male students also learned to type; and male entrepreneurs were key to the promotion and adoption of typewriters. More significantly, we have seen that typewriters also provided entrepreneurial opportunities for women, particularly in the opening of typewriting offices but also in the teaching and retail sectors as well.

Promoting typewriters

In neglecting the role of intermediary businesses involved in the sale of typewriters and related services, historians have implied that writing machines were invented and sold in response to pent-up demand for a more efficient method of writing from office owners and professionals. This suggests that retailers were simply channels through which goods passed seamlessly from manufacturers to consumers. Typewriting offices and typing schools, if mentioned at all, have been assumed to be little more than passive beneficiaries of commercial manufacturing.

¹ For examples, see literature review in chapter 1.

² Pinch, "Giving Birth to New Users: How Minimoog Was Sold to Rock and Roll," 270.

Typewriters did not simply sell themselves. Demand for typewriters was generated by retailers in Scotland who were the active agents in the marketing of these technologies. Pioneering retailers such as John J. Deas used pre-existing contacts with American manufacturers to arrange for the import of writing machines, after which they enthusiastically promoted these 'Yankee' contrivances by investing in printed advertising and exhibitions. As typewriters came into widespread use in the 1890s, and manufacturing expanded, retailers took on a new role as the promoters of the latest innovations in typewriter design. In the early-1900s, James Leishman used his reputation as a shorthand typewriting teacher, retailer and local politician to back the Underwood, which soon became one of the most widely sold brands in Scotland. After the design of typewriters for office work standardized from c. 1910 onwards, retailers were faced with an arguably tougher task: persuading prospective customers that the brand they sold was better than the range of barely indistinguishable alternatives on the market. In the 1920s, Charles Webster used his status as a longstanding dealer in typewriters to promote the British-made Imperial which he claimed was a match for American brands. While the Imperial was little more than a copy of the already popular Royal typewriter, it was desirable to UK customers because it was a well-made machine, which supported domestic manufacture at a time of high unemployment. The value of technologies to prospective customers was wrapped-up in tangible design characteristics *and* social, cultural and economic influences.

The actions of retailers in Scotland were always guided by factors beyond their control including: the brands available and the competition this entailed; retail prices, which were usually dictated by manufacturing partners abroad; and developments in design. Nevertheless, Scotland's retailers had the power to choose which brand they wanted to represent, after which they invested their time and money into promoting typewriters in their own personal style. In doing so they profoundly impacted the way these technologies were disseminated.

Like retailers, the owners and managers of typewriting offices did not simply wait for customers to come to them. Advertisements for their services featured regularly in newspapers and directories and some offices were promoted at international exhibitions. Their employees went canvassing door-to-door for new clients among local business owners

and professionals, many of whom had little idea of what a typewriter was or what typewriting could bring to their operations. Perhaps most important was that managers ensured the work from their offices was done quickly and accurately, keeping customers happy while maintaining confidence in the typewriting sector as a whole. In this way, typewriting offices offered a unique perspective on the value of typing to contemporaries. While sellers could show how typewriters operated and explain the potential benefits to prospective customers, typewriting offices, in their day-to-day operations, demonstrated the long-term commercial viability of incorporating writing machines into the office.

The principals and teachers of typing schools and colleges endorsed typewriters with a similar energy, which was often tied up with their enthusiasm for modernising office work. The principals of typing schools liked to keep their premises up-to-date with spacious airy rooms and electric lighting. Meanwhile, they purchased the latest models of typewriters and related technologies, to prepare their students for working life. Finally, principals embraced modern typing techniques, with the introduction of touch typing probably the most important development in this area. Through their enthusiasm for modern methods and techniques, teachers promoted typewriters as essential devices for businesses and institutions looking to run their offices efficiently.

Entrepreneurs as users

As we looked more closely at the businesses involved in the sale of typewriters and services the lines between suppliers and users blurred. To many business owners, typewriters were not only a commodity to be sold, but also a way of providing services for purchase. Retailers opened typewriting offices and typing schools in which the brands they sold were used by their employees and students. This was convenient for retailers who had a ready supply of typewriters from the manufacturer which they could acquire at the wholesale price. But of equal importance, was the fact that the copying department or classroom itself became a showroom for typewriters and related devices stocked by the retailer (see Figure 5.12).

Epitomising the blurred lines between the different sectors of the typewriter trade were the teacher-retailers, with Calder M. Lawrence of Aberdeen and James Leishman and George

McAdam of Edinburgh amongst the most prominent. In the late-1880s/early-1890s, all three expanded their shorthand schools to include the teaching of typewriting as well. From here they expanded their businesses to incorporate the sale of typewriters alongside teaching services. In their daily lives Lawrence, Leishman and McAdam were continually crossing the boundaries between teacher and salesperson.³ Yet the businesses they owned were not in this constant state of flux. From the 1890s to at least the early-1910s, Lawrence, Leishman and McAdam's businesses used typewriters for profit while *simultaneously* promoting the sale of those same devices.

This thesis has also raised the concept of 'indirect adoption' when considering individuals and organisations who incorporated typewriting into their working practices, without purchasing a typewriter for personal use or for use by an employee. The most striking example of indirect adopters were the customers of typewriting offices. From architects to authors and from solicitors to students the users of these offices adopted typewriting without ever needing to go near a typewriter.

Indirect adoption can be applied to a whole range of technologies. Take sewing machines for example, the early manufacture, sale and use of which has been considered analogous to typewriters. People paying for clothes alterations and repairs benefitted from the application of sewing machines *through* their use by dressmakers and tailors, without having to use these machines themselves. Shedding light on indirect users reveals some of the beneficiaries of technologies beyond the operators and owners of these devices. However, with a few notable exceptions histories of the sewing machine have tended to treat dressmakers and the like as passive consumers, separate from the sewing machine industry.⁴ In contrast, this thesis has demonstrated that service providers who made money out of using new technologies need to be considered as active agents in commercialisation. A reappraisal of consumer durable goods contemporary to the typewriter, such as sewing machines, would be an excellent place to start.

³ This analysis was partly inspired by the discussion of "Boundary Shifters" in Trevor Pinch and Frank Trocco, *Analog Days: The Invention and Impact of the Moog Synthesizer* (Harvard University Press, 2002), 313–14.

⁴ Notable exceptions can be found in Barbara Burman, ed., *The Culture of Sewing: Gender, Consumption and Home Dressmaking* (Bloomsbury, 1999).

A diversity of designs

In analysing the businesses involved in the typewriter trade, this thesis has explored which brands and designs were marketed in Scotland, and how this changed over time. It has been shown that the concept of the typewriter was not stable but went through many iterations from the late-nineteenth to the early-twentieth century. As late as the 1880s, writing machines without keyboards were marketed on par with larger and more complex keyboard typewriters. In the 1890s, upstroke typewriters where the writing was completely obscured by the machine were regarded as perfectly reasonable alternatives to the visible writing typewriters which eventually became the standard. Portable typewriters, which are the designs which most of us come across in charity shops and second-hand stores today, only arrived on the market from the early-1900s. By the 1920s, the popular conception of the typewriter was totally different from the 1880s.

But too often historians have implied that all typewriters were basically alike and went largely unchanged from their introduction in the 1870s. Most academic writers have left research into the different brands and models of writing machines to typewriter enthusiasts. But trivialising the differences between typewriters in this way is problematic because many of these design issues were important to contemporary retailers and users. Retailers eagerly promoted features, such as writing visibility, printing method and keyboard layout, which they felt were major selling points. However, the array of machines available on the Scottish market could sometimes lead to confusion for prospective customers. This was compounded by most retailers only being permitted to sell one brand at any one time. By 1900 a prospective typewriter purchaser was faced with a bewildering array of machines to choose from but no single location from which to browse through all the different brands available.

Businesses involved in the use of typewriters for profit were also concerned with design characteristics. Typing schools sometimes bought a selection of machines with different keyboard layouts, helping students prepare for the world of work, and whatever design of typewriter they might be asked to use. Similarly, typewriting offices bought lighter machines

for typists on call out jobs, as well as machines set up to type in different languages for translation work. The differences in the brands and models of typewriters cannot be dismissed as the preserve of enthusiasts or collectors. Scholars investigating the social and cultural impacts of typewriters should be alert to the technical developments in writing machines.

The collections at NMS and GMRC have been invaluable in answering my research questions around design. Firstly, these collections are a tangible reminder of the diversity of brands and models that were available to contemporaries. Secondly, using historic examples of typewriters has given me a greater understanding of how these devices were operated. While it would have been possible to write a thesis on the history of typewriters without engaging with collections, the areas of focus would have shifted. Seeing and using these typewriters has allowed me to understand and comment on contemporary accounts of these typewriters with confidence. Historians researching similar consumer durables should, as a matter of course, familiarise themselves with examples of these technologies which are held in museum collections. From here they can properly consider what these objects can bring to their project.

[New perspectives on typewriters and gender](#)

This thesis has also challenged traditional views on the relationship between typing and gender. When typing is considered as paid employment, we have seen those positions involving the use of typewriters were not always as female dominated as we might have thought. From the late-1880s advertisements for typing schools targeted both men and women. Recently discovered prospectuses from a Dundee typing school, as well as photographs from typing classes in Edinburgh from the early-1900s suggest that in some cases up to a quarter of typing students were male. However, as we have also seen, by 1901 in Scotland approximately 99 per cent of people officially employed as a typist were women. To reconcile these contradictory figures, we can assume that there was a relatively high number of men who learnt typing, and used typewriters in their work, but who were presumably employed in a role not designated as 'typist', such as a clerk, or possibly a more senior role. Meanwhile, female office workers were much more likely to be employed as a

'typist'. As previous scholars have suggested, this was probably done to facilitate the division of men and women in the workplace and to allow for the introduction of separate pay grades, enabling managers to pay female office workers less than their male counterparts.⁵ What the findings from this study suggest is that while the role of the 'typist' had been feminized by 1900, the *use* of typewriters in the workplace continued to be the domain of men and women.

Of even greater significance has been the discovery that a significant proportion of the managers and owners of typewriter businesses were women, shifting our understanding of the impact of typewriter adoption even further: women have usually been considered as typists (and employees) rather than as entrepreneurs (and employers). This matters because the extensive literature on typewriters and gender has almost completely ignored the role of women business owners, despite their prominence on both the American and European markets.

Typewriting offices offered the greatest entrepreneurial opportunities for women, with my analysis of the Scottish Post Office directories revealing that at least one-third these businesses were owned and managed by women. At first glance, these figures align with recent research into business ownership in the UK which has shown that around one third of businesses in Scotland were owned by women in 1900, much higher than previously thought.⁶ However, most female owned businesses were single person enterprises, such as dressmakers. In contrast, the women owners of typewriting offices were also employers. In most cases their businesses employed a handful of typists. But we also know from example of Mary Orr in America that the most successful female run typewriting offices employed up to one hundred typists (chapter 5). And typewriting offices were not the only businesses which offered managerial opportunities for women. While running retail outlets and typing schools remained male dominated there were several examples of businesswomen working in these sectors, with Elizabeth S. Rowan's work as the manager for the Elliot-Fisher typewriter, for the whole of Scotland, a standout example. (chapter 3).

⁵ Zimmeck, "'The Mysteries of the Typewriter': Technology and Gender in the British Civil Service, 1870-1914."

⁶ Smith et al., "Entrepreneurship in Scotland, 1851-1911."

Management roles could lead to further engagement in public life. Ethelinda Hadwen used her experience as a typewriting office owner to support her successful election to the Edinburgh Parish Council, which was part of a wider campaign to elect women to local government positions to support campaigns for women to get the vote in national polls. In Aberdeen, Alice Copeland started out in the typewriter trade and went onto be a prominent supporter of women's working rights, with her campaigns taking across the world. As with many facets of the typewriter trade, developments in Scotland paralleled those in London, where several typewriting businesses were set up with the support of the Society for Promoting the Employment of Women. Yet with all the historical analyses published on the impact of typewriters on women's employment, over the last fifty years it is shocking that, with a few notable exceptions, female business owners and managers have been ignored.⁷ This thesis is a step towards redressing this omission, but further research is needed on women working in the typewriter trade around the world to shed light on the important work of these pioneering business leaders.

The men and women involved in typewriter retail, typewriting offices, typing schools and related businesses saw new opportunities in typewriters – not only in the buying and selling of these machines – but also in using these devices to provide innovative writing services. The role they played in Scotland's typewriter trade has been recorded through a variety of materials including advertisements, trades directories, exhibition catalogues, newspaper reports, professional journals and user manuals. In a few exciting cases, evidence of their involvement in the trade is preserved in surviving examples of typewriters they used and sold. Throughout this thesis, the analysis of these sources has demonstrated that the owners, managers, principals and employees of typewriter businesses were the key agents in introducing and extending the sale and use of typewriters and typewriting services across Scotland.

⁷ For notable exceptions see work by Arlene Young and Lena Wanggren discussed in literature review in chapter 1.

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Museum Collections

National Museums Scotland, Edinburgh

Office equipment collection which includes over 100 typewriters and related devices under care of the Science and Technology department, most of which are held at the National Museums Collection Centre, Granton. The department also cares for a collection of letters pertaining to acquisition of typewriters and other technology objects.

Glasgow Museum Resource Centre, Glasgow

GMRC looks after a collection of approximately 30 typewriters from pre-1926.

Private collections

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Appendix

Appendix 1 'How I Became a Canvasser (by a Lady Typist)' in *The Scottish Phonographer* edited by Al. Munro-Peebles, Vol 1 January – December 1894 (John Menzies & Co., Edinburgh & Glasgow): 129-130.

Translated by Hilary Easson (National Museums Scotland) & Mary Sorene (Incorporated Phonographic Society).

Twenty years ago such a thing as a lady canvasser, or “commercial” was “unknown to history”, but nowadays it is a common sight to see her on her rounds, carrying her samples and booking as many and as profitable orders as a gentleman. When first the gentle sex went abroad in this capacity all sorts of things were predicated and the comical papers made much of mishaps that were to happen to them, but today they are accepted as a matter of course, and indeed often enough are received with greater courtesy than their brethren who have been much longer on the road.

I have now been at it for a couple of years, and during that time have had a varied experience of men and manners, but one which there has been no cause to regret in any way, as it has been fruitful of good business to a certain extent. It is repeatedly said that woman’s place is at home, but we know that in many cases, necessity drives her forth to earn her own living, perhaps to help her widowed mother, and to aid in bringing grist to a mill for which there never can be enough. Or again, it may be from choice; she may prefer the regular outside life to acting the “lady at large”, and remaining at home. Girls in these days are showing a decidedly independent spirit, and seem to be far more in favour of working for themselves than in days of yore. When first I commenced to canvass for typewriting work I did not like it; it went against the grain and saved too much gas burner man or the insurance canvasser, but still there was no [indecipherable] for it. I had a share in the business and the other “boys” had a still greater horror of “going round” than I, but the difficulty had to be solved, as we were not satisfied with the slow style in which work dropped in. On opening our office we had paved the way with circulars, and had addressed in that manner all the various firms and gentlemen in the district likely to be of use to us. This, however, was not having the desired effect, and we felt that a personal call would really be the best means of getting sufficient work to keep us fully employed. One fine morning I sallied forth, armed with my business calling cards, samples etc. prepared “to do

or die". The first call I made was on a gentleman connected with the law, but when I saw his face I felt I might have saved myself the trouble of mounting the stairs. On being ushered by the office boy into the private sanctum, he turned round and said grumpily "well what do you want"? "Good morning Sir" I replied, "I represent Misses Black and Whites Typewriting Office, and have called to see if they can be of any use to you". I felt extremely nervous, but managed to bear a brave front. "Typewriting office", he returned, "never heard of that before, and what is more, do not like lady canvassers". "Robert", he called, show this lady out", and before I could utter another word, I found myself, to my great astonishment being shown to the outside door by a smirking youth (who not only knew his master's ways, and had been lurking auspiciously in the neighbourhood of the keyhole) with the mental resolve uppermost that he would not have the opportunity of doing so again. Thus ended my first call; should I give it up, or should I beard another lion in his den? No, I won't give it up; it would never do to be disheartened with the result of this one reception. That creature – a minion of the law – surely did not know what afraid was, and thusly comforting myself I wended my way to make call number two – on an architect this time. He received me courteously, and motioning me to a seat enquired blandly what he could do for me. His face was a study when I stated my reason for calling. "So", he said, you ladies are going on the road now as well as your brothers, what next"? "Still", he resumed "we have not yet adopted typewriting in our office but we are thinking of doing so, and will be pleased to give your office a trial for any work we may have.

Now this was something like the thing and I took my departure from that office, very much happier than when I made my exit from the door of number one. These two places were close together, and I had been followed into each by a poor woman selling matches, and strange to say, just as I was about to enter office number three, which was a little further off, who should appear but the match seller. "Good Gracious", I thought, am I always to be shadowed by that woman? But poor soul! she likewise was doing her own travelling, and what was more, carrying her own stock, and perhaps I had brought her luck, therefore making her determined to follow me up. Calls three and four were as equally successful as the last, but not so number five. The office boy only was in charge, and he stared blankly when, as the chief was not in, I ventured to ask if they used the typewriter. "The

typewriter”, he repeated, dreamily “what is that for”? I did not remain to tell him as I felt that life would not be quite long enough for that, but said I would call again.

The above is a specimen of what I go through in my daily rounds. Of course we are always trying to break new ground, and it is with the prospective clients that the trouble is. So many explanations require to be given as to what the typewriter is capable of, and if it will suit the requirements of their business etc. But every information is at once cheerfully afforded, in the hope that it is “bread cast upon the waters to return after many days”, in the shape of handsome orders to be executed in our best style and in the words which all the typists have before them, “with accuracy and despatch”.

THE SCOTTISH PHONOGRAPHER. 129

HOW I BECAME A CANVASSER.
BY A LADY TYPIST.

TWENTY

The page contains approximately 20 lines of shorthand notation. Each line consists of a series of small, stylized symbols and characters, some of which are connected to form words or phrases. The notation is written in a cursive, flowing style. The symbols include various loops, curves, and straight lines, some with small dots or dashes. The overall appearance is that of a highly condensed and efficient writing system. The page is framed by a double-line border.

Handwritten phonetic notation on a page with horizontal lines. The notation consists of various symbols, including letters, numbers, and decorative flourishes, arranged in approximately 25 rows. The symbols are often connected by lines, suggesting a continuous sequence of sounds or a specific phonetic system. Some symbols resemble letters like 'a', 'e', 'i', 'o', 'u', 'p', 'q', 'r', 's', 't', 'v', 'w', 'x', 'y', 'z', but are often modified or combined with other elements. There are also numbers like '1', '2', '3', '4', '5', '6', '7', '8', '9', '10', '11', '12', '13', '14', '15', '16', '17', '18', '19', '20', '21', '22', '23', '24', '25', '26', '27', '28', '29', '30', '31', '32', '33', '34', '35', '36', '37', '38', '39', '40', '41', '42', '43', '44', '45', '46', '47', '48', '49', '50', '51', '52', '53', '54', '55', '56', '57', '58', '59', '60', '61', '62', '63', '64', '65', '66', '67', '68', '69', '70', '71', '72', '73', '74', '75', '76', '77', '78', '79', '80', '81', '82', '83', '84', '85', '86', '87', '88', '89', '90', '91', '92', '93', '94', '95', '96', '97', '98', '99', '100'. The notation is dense and fills most of the page.