British Philatelic Bulletin

British Stamp Printers

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Introduction

Stamp printers comprise a small industry that involves the convergence of many skilled people and technologies to create the 'miniature works of art' prized by philatelists and public alike.

It is perhaps surprising therefore to learn of the relatively large number of British printers of stamps since 1840. Many may be unfamiliar to readers, as the company might have only printed an occasional issue, produced test runs for tendering purposes, or were sub-contracted to print for a major producer without recognition of this on the stamp, selvedge or philatelic literature.

There have been eight British security stamp printers in living memory: Bradbury Wilkinson, De La Rue, Format, Harrison, Questa, Waddington, Walsall and Waterlow. Sales in 1970 accounted for £1.5m in foreign currency earnings (the equivalent of £14.5m today), with 20,000 million stamps produced for 225 countries. Today, two British stamp printers remain: DLR with output restricted to UK stamps and the ISP Group (comprising Walsall, Cartor and Courvoisier). Production is now supplemented with stamps emanating from The Netherlands and France.

The stamp production business is a fiercely competitive marketplace these days with price mainly influencing where production is placed. Despite the demise of most famous British printers' names, ISP shows how it is still possible to expand into fresh markets by taking advantage of new sales opportunities.

Britain can remain proud at having such a major worldwide presence in this specialised business.

Glenn H Morgan FRPSL

Stamp Production

Stamp printers have utilised just about every printing method known, sometimes combining more than one process on the same stamp, such as a gravure background design with intaglio highlights as used on the 1975 Sailing issue.

This chapter gives an introduction into the fascinating world of stamp production by briefly explaining how a stamp issue is created. It then describes the printing processes commonly used from the Penny Black with its hand-printed recess stamps, through to today's high-speed web-fed gravure production lines. It concludes by recording some of the features that can be added to a stamp.

An Issue is Born

The end-to-end process for creating a stamp involves practically the same procedures the world over.

- Subjects are chosen, artists are briefed and printers commissioned.
- Concepts are produced, designs are approved and final artwork is created.
- Pre-press work includes stepping design into sheets, adding marginal markings, ordering paper and ink, proofing, obtaining production approvals and creation of plates/cylinders.
- The production stage involves printing by sheet/web in required colours, adding security, decorative and operational requirements, perforating/diecutting, and guillotining to format.
- Post-production sees examination of stock for errors, destruction of waste, counting, packing and shipping the stamps to the postal authority.
- The Post Office Logistics Centre will validate stock received and make-up orders for individual Post Office branches and the Philatelic Bureau.
- Finally...there is the media publicity, provision of collector services, placing the stamps on sale and eventual withdrawal and destruction of unsold stocks.

Printing Processes

Digital. It will surely not be too long before digital printing has a greater impact on the world of stamp production following Australia's fast-track printing of the Sydney 2000 Olympics sheets. This process also rather scarily presents an opportunity to make each stamp printed quite literally unique, perhaps individually numbered, tariff coded or bearing hidden security features. Digital printing has been used by Britain on Smilers photo labels, but not on actual stamps as yet.

Embossing. A process performed after printing that stamps either a raised (embossed) or a depressed (debossed) image into the surface of the paper, using engraved metal dies and extreme pressure. This process can also be used in conjunction with metallic foils (by the additional use of heat) and can be applied to unprinted or printed areas of a stamp design. Process used on British stamps between the years 1847-54 and again in 1999 on a Machin head prestige book stamp. It was also used on some special stamps, primarily to emboss the Queen's portrait in the 1960/70s and again on the Nobel Prize E stamp of 2001.

Gravure (photogravure/computer-engraved). Until recently, collectors would have only encountered stamps that employed a photographic process in manufacturing the cylinders, but following the introduction of computer-engraved cylinders there was a need to differentiate, as photography is no longer a part of the cylinder manufacturing process.

Gravure printing uses fluid inks applied to the cylinder and held there in microscopic cells recessed into the plate/cylinder. Excess ink is removed with a doctor blade and the ink is transferred from the cells onto the paper. It is generally used for print runs of over ten million stamps and offers increased security due to its high set-up costs when compared to lithography. Although sheet-fed gravure is achievable, it is more normally web-fed printing that is utilised. [Photo]Gravure has been the mainstream process for British stamp production since 1934.

Letterpress (also known as flexography, surface-printing and typography). The stamp design is transferred onto a metal plate using a greasy ink, with the rest of the plate being etched away leaving just the raised design to print from. Letterpress stamps are easy to identify from the reverse side because the design feels raised to the touch due to the use of metal plates. The modern plastic plates now used for this process tend not to leave a raised reverse. This process had been used on British postage stamps from 1855 to 1934 and later still for postage due labels. It was revived in 1999 within a prestige stamp book.

[Offset] Lithography. With this process, the stamp image is transferred to a disposable printing plate, rollers apply ink and water to the plates and since oil and water don't mix, the oil-based ink fails to adhere to the non-image areas. The inked image is then 'offset' (hence name) to a rubber blanket cylinder, which transfers the image onto the paper as it passes between it and another cylinder beneath the paper. This is the most readily accessible form of commercial printing available today, with comparatively low set-up costs and suitability for runs up to ten million stamps. This process was first utilised on British definitive stamps in 1980.

Recess (also known as intaglio, line-engraving, copperplate/steel engraving or siderography,). The stamp design is incised into the printing plate to varying depths below the surface. Ink is applied to the plate, excess is wiped off and the paper is pressed under pressure against the plate, actually squeezing into the inked grooves, extracting it and transferring the design to the paper. A recess printed stamp has a distinct raised feel and has been philatelists' process of choice since its first use by Perkins, Bacon & Petch on the Penny Black in 1840 until 1880, but was later used for high values between 1913-77 and 1988-2003 and on occasional special issues and within a 1999 prestige stamp book.

[Silk]-Screen (also known as serigraphy). A printing process in which the ink is forced via a giant squeegee through a fine screen (once made of silk, hence name) onto the paper surface of the stamp below. A protective coating on the screen allows colour to pass through in some places (the image area), but not others (the non-image area). Invariably used when heavy ink coverage is required, it is a comparative newcomer in the field of stamp printing. Screen printing was first applied to a British stamp using a thermochromic ink on the Nobel Prizes 2nd class value of 2001.

Thermography. A finishing technique whereby slow-drying ink is applied to the paper and, while the ink is still wet, is lightly dusted with a resinous powder. The sheet of stamps passes through a heat chamber where the powder melts and fuses with the ink to produce a raised surface, giving the effect of recess printing. It is most frequently encountered by the public on invitations and business cards.

Additional Features

There are many techniques at the disposal of printers that can enhance the decorative appearance of a stamp, increase its resilience against counterfeiting or ensure that it functions in the operational environment of today's highly automated Mail Centres.

A selection of these features includes the use of aromatic inks (perhaps coffee, roses or chocolate), scratch-off areas (as on lottery cards), machine readable coding (barcodes, phosphors and fluors), special inks (such as ultra violet, heat sensitive or optically variable), covert security (scrambled indicia requiring a decoder, or micro-text) and foils (holographic, coloured or metallic). It is now even possible to add substances to the surface, such as wood fibres or rock particles, both recently used by Cartor.

Former Printers and Stamp Tendering

In the 166 years since the first postage stamp, it is perhaps not surprising that printer names have come and gone, primarily due to acquisitions, cessation of trading or a changing marketplace.

One area that has remained constant, though, from 1840 to this day is that the Post Office undertakes a print tendering process. Britain's membership of the EU means that Royal Mail is required by law to regularly undertake competitive tendering for its stamp production needs. This process guarantees even-handedness among all companies quoting and ensures that Royal Mail pays a fair market rate. Print specifications are provided and once responses have been analysed, work is allocated (increasingly on the basis of cheapest price).

It is common for printers to submit samples of work with tender responses to illustrate quality; or dummy labels may be created where a word like CRESCENT (Waddington's) or company name may appear. Britain's most famous tenders were in 1839 and 1879 and a range of collectable items exist.

Naturally, not all companies that tender are successful and this chapter records many known to have taken part without success, together with those printer names from the past that did once print stamps for the British Post Office.

J T Bigwood. During the occupation of Jersey, this printer received all stamps left on the island to overprint with a swastika and JERSEY 1940, but the Bailiff protested and the order was dropped. Bigwoods then produced local 1d stamps, with and without swastika, but these were also not issued.

Board of Inland Revenue. ~ See Office of the Director of Stamping, Inland Revenue entry.

Bong UK Ltd. Bong is Europe's largest and oldest envelope manufacturer and was founded by the Bong Family in Sweden during 1737. It appears to be 2001 when they won their first contract to print stamped airletters and pre-paid envelopes for Royal Mail following the sale of McCorquodale to Bong in 2000. The airletter contract passed to Mail Solutions in 2004.

Bradbury, Wilkinson & Co. Ltd. In 1856 Henry Bradbury formed a company with his partner and engraver, Robert Wilkinson and executed a banknote order for Montevideo in 1858. In 1871, the firm made its first engraving for stamps preparing plates for the state of Hyderabad and in 1878 engraved and printed the first Falkland Islands stamps. 1918 saw production of the British 'Seahorses' high values and they intermittently printed recess high values until the 1970s.

The company moved from London to a site in New Malden, later becoming a subsidiary of American Bank Note Company. In 1986 ABNC sold 'Brads' to DLR, who absorbed them by 1990.

James Chalmers. Chalmers was not a printer, but a bookseller from Dundee who produced stamp essays as part of the 1839 Treasury Competition. They were printed by the Mercantile Committee.

William Clowes. Responsible for printing the Mulready envelope and letter-sheet designs of 1840.

John Dickinson & Co. Founded in 1804 and renowned for the 'silk-thread' paper on 1840 Mulready stationery, Dickinson had circulated stationers with letter sheet essays the year prior to the Treasury

Competition. He then decided to concentrate on papers, believing, as did Rowland Hill, that stationery and not stamps was the way forward. The 1d black and 2d blue utilised his silk-thread paper in essays and a few issued stamps followed.

Dollard Printing House Ltd. Produced overprints on British stamps for Ireland in 1922.

Government Printing Works (France). In 1943, the French state printer produced the Jersey pictorial views under difficult wartime conditions.

Government Stamping Branch (Ireland). Produced overprints on British stamps for Ireland in 1926.

Guernsey Press Co. Ltd. When Germany invaded in 1940, 145,000 letters a week were arriving. The 20,000 remaining residents mailed 10,000 letters weekly and stamp stocks ran low. Guernsey Press offered to print stamps, but faced huge difficulties. Artwork was lost in transit to Berlin for approval and sheets had to be hand gummed, printed and rouletted one sheet at a time. Ultimately over four million stamps were produced.

Harrison & Sons Ltd. Company origins can be traced back to Richard Harrison who, in the mid-1500s, was recorded as a Freeman of 'the mystery and art of printing'. The company was founded by James Harrison in London in 1750 and the company logo changed over the years, but invariably retained the hare, rye and sun rebus.

Harrison once produced stamps for over 100 countries and its first British contract was in 1881 producing one-shilling embossed stamps for telegram forms, followed by a major contract in 1911 for definitives and from 1934 until the 1980s virtually every British stamp came from Harrison's.

In 1997, DLR purchased Harrison's and almost overnight centuries of tradition were swept away when the company changed its name to De La Rue Security Print. Machin definitives continued to use the Harrison imprint due to the expense of changing cylinders, but gradually changed over to a DLR imprint from late 1998.

His [Her] Majesty's Stationery Office Press. Around 1949, HMSO opened a printing plant at Alperton. They utilised photogravure to print the first multi-coloured 2s6d National Savings stamps. It seems unlikely that they produced postage stamps, but did produce 'printed to private order' postal stationery items (including self-adhesive) until 1973, so warrant a mention here.

House of Questa Ltd. In 1966, Questa began with a single colour Heidelberg litho press. Quality and reliability soon became by-words and three more Heidelberg's were purchased.

The company's introduction to stamps apparently came by chance, and having completed that first contract (for Trinidad & Tobago), many other countries became regular customers. In 1969, Questa expanded into a new custom-designed factory complex and in 1980 the first stamp contracts for Britain were secured - the 2p, 5p and 75p definitives and Sports commemoratives.

In 1984 Waddington acquired Questa and withdrew from printing stamps under its own name. 1996 witnessed the sale of Questa to MDC Canada (who also owned Ashton Potter) and a move to new premises in Byfleet was followed by DLRs acquisition and closure of Questa in 2002.

Irish Free State. In 1922 a stamp design competition was held and essays were produced by Dollard, Hely Ltd., Perkins Bacon, O'Loughlin, Murphy & Boland, the Pictorial Printing Machine Co. and others, but it was the Government Stamping Branch that produced the first definitives and most other Irish stamps until 1976. Bradbury Wilkinson, DLR, Harrison and Waterlow were also utilised alongside local companies like De La Rue (Dublin) and De La Rue Smurfit. Since 1976, the majority of stamps have been printed by Irish Security Stamp Printing and BDT.

Jersey Evening Post. Faced with similar wartime problems to Guernsey, the local newspaper stepped in and printed the definitive-sized stamps until liberation again gave islanders access to KGVI stamps.

McCorquodale & Co. Ltd. Founded as stationers in 1841, printing for the railway companies started in 1846. It submitted designs for stamp production as part of the 1879 tender, but was unsuccessful. It acquired Blades, East & Blades in 1927 and Charles Skipper & East in 1937.

Its first work for the GPO was in 1878, comprising registered envelope production and in 1910 it commenced manufacture of stamped postal stationery. The next 75 years were stable, but then a series of take-overs and mergers occurred, the most recent in 2000 when Bong acquired them.

Mercantile Committee for Postage. Printers of newspaper/circular wrappers and letter sheets as part of the 1839 Tender, this Committee was a business group (led by Henry Cole, later to be Rowland Hill's assistant at the Treasury) dedicated to achieving lower rates of postage and postal reform.

Office of the Director of Stamping, Inland Revenue. Often referred to by collectors as the 'Board of Inland Revenue', 'Somerset House' or 'Stamping Department', for many years it was an ancillary supplier to the Post Office. It first produced stamps for the GPO in 1847 (embossed) and from 1911-13 generated 'top-up' stocks of various Edwardian values, especially bi-coloureds, which Harrison could not print, and the 6d value that used doubly-fugitive inks (produced at Somerset House until 1933). Stamp production control passed out of the hands of the Inland Revenue in 1934.

John W Parker. A London printer that produced letter sheets as part of the 1839 Tender.

Perkins, Bacon & Co. [Ltd. in 1887]. An unfortunate incident in 1861 when one of its owners gave away sets of specially cancelled stamps to influential friends without permission of the governments concerned caused a sensation. It resulted in the loss of around two-thirds of stamp production business and they were forced to fill this spare capacity with less prestigious commercial printing.

In 1935 they went into liquidation and were acquired by WW Sprague. 1936 saw the sale of remaining stamp stock to stamp dealers and the donation of production records to the Royal Philatelic Society. There was another take-over in 1965 by the MB Group, itself absorbed into DLR in 1993.

Perkins, Bacon & Petch. Founded in 1819, it had four different trading names before becoming Perkins, Bacon & Petch in 1834 and was the leading printer of its day, producing 'inimitable banknotes'. In 1840 it printed the Penny Black and the only surviving printing press used is on display daily at the British Library. The company reformed in 1852 as Perkins, Bacon & Co.

Questa Colour Security Printers Ltd. ~ See House of Questa entry.

Rembrandt Printing Company. The middle of the 19th century saw a new process for commercial printing known as photogravure that was rarely used at that time. In 1895 Rembrandt introduced their method of printing by this process and kept it a secret by referring to the cylinders used as 'plates' to confuse prospective competitors.

Sample labels demonstrating their capabilities and comprising designs depicting undenominated King George V Admiral's head essays, with or without borders and two types of unidentified King's head designs in differing formats were produced in the 1910s.

In 1929, the GPO issued a tender for a replacement printer for small size KGV stamps and Rembrandt produced photogravure essays depicting St George and the Dragon. They failed to submit them, though! Why will remain a mystery and the GPO was so surprised at the lack of response that they wrote enquiring, but any reply does not appear to have survived.

Royal Mint. Some believe that the Royal Mint printed stamps. They did not, but were often involved in the production of the printing plates and engraving of the master dies early in the 20th century.

Charles Skipper and East. Charles Skipper, a master printer, went into partnership with a Williams East, primarily as banknote engravers. In 1879 they submitted many designs for the stamp tender using more than one printing process. They were unsuccessful, despite a track record for production of recess revenue stamps for Peru. McCorquodale purchased CS&E in 1937.

Somerset House ~ See Office of the Director of Stamping, Inland Revenue entry.

Stamping Department ~ See Office of the Director of Stamping, Inland Revenue entry.

Alex. Thom & Co. Ltd. Produced overprints on British stamps for Ireland in 1922.

James Truscott. Was invited to submit prices to the 1879 tender, but for unknown reasons declined.

John Waddington of Kirkstall Ltd. The first stamp fully produced by Waddington's was in 1967 for St. Christopher-Nevis-Anguilla. Previously renowned for posters and quality commercial print, they soon gained a fine reputation in the field of stamps. They had supplied many of the artwork designs for Format and also acted as sub-contractors to them and DLR before producing stamps in their entirety. The first British contract was for 4p definitives in 1980, but they ceased stamp production upon acquisition of Questa.

Waterlow & Sons Ltd. Founded in 1810 as sellers of legal documents, Waterlow's first stamps appeared in the early 1850s with a lithographed issue for British Guiana and 1913 saw their first British contract. In 1952 they celebrated a century of stamp production, but within eight years had been absorbed into DLR.

Waterlow Brothers & Layton. This company was formed in 1877 following a Waterlow family dispute and it was not until 1920 that the rift was healed enabling a merger with Waterlow & Sons, ending decades of intense rivalry and competition. In 1911 the 'Seahorses' high value stamps were printed by WL&B (using DLR plates), but in 1915 relinquished the contract to DLR.

Charles Whiting. Famous for use of the Congreve anti-forgery method of production (Whiting controlled the Patents), several essays for stamps and stationery were produced as part of the 1839 Treasury Competition and he was one of the winners.

Present-Day Stamp and Stationery Printers

There are currently three stamp and airletter printers (plus several stamped envelope producers) located in the UK and two European stamp printers used by Royal Mail. Between them they can produce any type of product required, often by means of increasingly innovative production features.

Postage Stamps

Cartor Security Printing Ltd. Formed in 1974 and originally based at L'Aigle and since 1999 at La Loupe, it has specialised in the printing of high-quality stamps since its inception. In 1995, Cartor was taken over by Gilles le Baud who provided the structure for future growth and in 2004 it became a key constituent of the newly-formed ISP group, having been bought outright by Walsall.

Its reputation has been based around the continual development and investment in new printing processes and endeavours to react rapidly to the needs and wishes of postal administrations, now also including Royal Mail following its first print job for them in 2005. It is especially known for the additional features applied to its stamps, such as foils and the use of thermography and aromatic inks

De La Rue Security Print Ltd. Thomas De La Rue & Co. Ltd. was founded in 1813, with their first stamps appearing in 1853 (revenue) and 1855 (postal – the British 4d carmine). Group origins lie in the efforts of Thomas to build a business in printing and publishing on Guernsey. He later made his way to London to make his fortune where he dabbled, among other things, in straw hat making.

De La Rue finally made good in printing and amassed a fortune from producing stamps (then in their infancy) and from his patented production of playing cards, much in demand in Victorian England. They held a monopoly on British stamp printing from 1880 to 1911, losing the low value production to Harrison's due to an excessive pricing structure.

This worldwide group is now best known for its banknotes and stamps disappeared from their product portfolio towards the end of the 20th century. Following the acquisition of Harrison in 1997, DLR was again in the business of stamp printing. The acquisition of Questa followed in 2002, with relocation of stamp production from High Wycombe to Byfleet. In 2003 DLR announced withdrawal from international stamp printing, closure of Byfleet and transfer of stamp production to Dunstable.

Royal Joh. Enschedé Stamps by.

Printer Isaac Enschedé founded the company in 1703, making it one of the oldest printing houses in Europe. Family members have been around in varying capacities to this day with the company archivist still an Enschedé.

Security printing commenced in 1796 when they realised that complicated background patterns could be made by using music type. Banknote production followed and stamps depicting King William III were added to their portfolio in the 1860s.

It currently produces stamps for over sixty countries and started printing 8p definitive stamps for Britain in 1979. Enschedé celebrated its 300th anniversary in 2003 when the Royal prefix was granted.

Walsall Security Printers Ltd. The original company, Walsall Lithographic, was founded in 1894 to print catalogues for harness and saddlers businesses and it was the purchase of a German letterpress 'seal' machine in 1913 that indirectly led to the first stamp contract for WSP fifty years later.

In 1963, Tonga had a requirement for stamps embossed on gold foil and DLR recommended Walsall for the job. The next non-Tonga contract came from Sierra Leone for self-adhesive free-form stamps and WSP still specialise in self-adhesive stamps.

Walsall Security Printers Limited was established in 1966 to concentrate on the specialist skills required for stamp printing and by 1969 was producing stamps for the Crown Agents and IGPC. In 1987 WSP was appointed a supplier to Royal Mail and in 1989 produced 14p and 19p definitive stamps for stamp books.

Expansion of this family-owned business continued with the installation of a new photogravure stamp printing press in 1997 and the establishment of ISP* in 2004.

*International Security Printers (ISP) was the idea of Adrian Aspinall, Chairman of WSP, to unite some of the biggest and best names in stamp production, including Walsall, Cartor and Courvoisier, and to link-up with overseas state printers. ISP acts as an umbrella and marketing name facilitating the combining of resources, improvements to collective buying power and the sharing of expertise and technologies, enabling the group to provide a large range of products and services.

Stamped Postal Stationery

Royal Mail sells a range of ten 1st and 2nd class pre-stamped, self-seal envelopes, with or without glassine windows that are valid for 60g or 100g contents and these are produced by a range of British commercial envelope manufacturers.

The items are no longer sold from Post Offices or from Tallents House (as single copies to collectors) but are sold in boxes of 100. For large orders Royal Mail will add company logo's and modify the design of the envelope including size, paper and colour. Waterproof Special Delivery, International Signed-For, Airsure and Airpack plastic packs also exist in a range of 18 items.

In addition, the following company produces the stamped airletters available nationwide.

Mail Solutions Ltd. International pre-paid airletter products are currently printed by Mail Solutions of Telford. Its first Royal Mail commission was in 2004, when they were awarded a three year licence to use a specialised security printing technique to print the pre-paid indicator directly on to the stationery. In excess of 8 million per annum are sold by Royal Mail, including Welsh language versions.

British Printers of Overseas Stamps

The printers listed here produced stamps, overprints or surcharges for countries outside the UK. The only printer established solely to print stamps that never produced anything for the British Post Office was Format.

This listing is limited to those printing for national postal administrations and others listed in major catalogues, but excludes those that produced local stamps – e.g. the many companies producing railway letter stamps (1891 to 1920s and again since 1957). Note that Moore & Matthes (printers of the *Bulletin*, 1984-91) at one time printed local stamps for Summer Isles (Scotland).

Details below include what is believed to be the first year, type of stamp produced and country that the printer initially worked for, together with interesting snippets of information.

Alden & Mowbray Ltd. A&M was introduced to stamp printing in 1967 by dealer John Lister, who had a connection with Anguilla's newly independent government. They completed a dozen orders, sub-contracting perforating. Security lapsed when proofs were illegally sold in Woolworth's cafeteria, Oxford. The Philatelic Squad at Scotland Yard became involved and A&M ceased stamp production.

A Alexander & Sons Ltd. 1910: stamps for Newfoundland. Sub-contracted via Whitehead, Morris.

Barclay & Fry Ltd. 1893: stamps for Municipal Post of Shanghai. Established in 1799, they were lithographers and letterpress printers (and inventors of offset-lithography) eventually becoming the MB Group, which in 1965 took over Perkins, Bacon.

Blades, East & Blades Ltd. 1883: stamps for British North Borneo Company Administration. Renowned for its facsimile printing, it was acquired by McCorquodale in 1927.

Chambon Ltd. Louis Chambon (1861-1832) was a pioneer in multicolour rotary stamp printing. His stamp presses and perforating machines were used at its London premises to print stamps or test designs for various countries, invariably as essay or proof runs prior to export of the printing machine. An example is an Australian Kingfisher design printed in photogravure for the Commonwealth Bank.

Clarke & Sherwell Ltd. Produced first stamps when a sub-contractor to DLR in late 1960s.

W S Cowells Ltd. 1968: stamps for Yemen PDR. Primarily book printers.

Dando, Todhunter & Smith. 1860: stamps for Liberia. Engravers and lithographers.

John Dickinson & Co. Ltd. 1939: postage dues for Newfoundland. Tendered for British stamp production in 1839 and produced printing plates for Soruth in 1877.

J W Dunn (Printers) Ltd. 1986: surcharges for Bermuda. Commercial and colour printers.

Eyre and Spottiswoode Ltd. In 1724 George Eyre and William Spottiswoode became Royal printers, producing the 1611 Authorised Version of the Bible from 1769 until recently.

Samples depicting a group of printers or a wigged gentleman exist. Both designs resemble 19th century USA issues and may have been an attempt at entering that market. An employee's claim that they produced stamps c1890-1905 for overseas governments is unproven.

Format International Security Printers Ltd. Format was established in 1967 by three men with a successful fine art printing company called Questa Colour. Wishing to expand and seeing stamps as an ideal market, they worked with people in the print, ink and paper industries to develop the lithographic 'Format Process'. The first stamps were for Sharjah and the business flourished.

It was sold to new owners in the 1980s and problems started, culminating in 1992 with a complex fraud and conspiracy case that involved stamps with deliberately created errors. After a trial lasting three months defendants were acquitted, but Format, with finances already precarious since before the trial due to monies owed, ceased trading.

Hanbury, Tomsett & Co. 1932: postal seals for the British Forces in Egypt.

Holders Press Security. 1987: stamps for Tanzania.

Howitt & Sons Ltd. A sub-contractor to DLR sometime during the 1960s.

Kynoch Press. 1974: stamps for the Cayman Islands.

Maclure, Macdonald & Co. 1866: stamps for Uruguay. This Scottish company invented a revolutionary power-driven litho printing press in 1853 and later printed 3d telephone stamps by intaglio. Styled Maclure, Macdonald & Macgregor at its non-Scottish plants.

Edward Matthews. 1872: stamps for Guatemala. Awarded contract to print Guatemala's stamps, although as they were stationers supplying paper and pencils to the Embassy, they sub-contracted to a local printer. Quality of printing was apparently poor.

Nissen & Arnold Ltd. 1890: stamps for Municipal Post of Shanghai. Primarily banknote printers.

Nissen & Parker Ltd. 1861: stamps for Nevis, plus others. Name later changed to Nissen & Arnold.

Charles Skipper & East. 1887: Stamps for Haiti. Tendered for British stamp production in 1879 and was acquired by McCorquodale in 1937.

T F Todhunter. 1863: stamps for Liberia.

Whitehead, Morris & Co. Ltd. This company produced government bonds for Newfoundland and later won the stamp printing contract. They appear to have sub-contracted the intaglio printing to A. Alexander. When lithographic stamps were ordered, Whitehead, Morris produced these, although not very well and later stamp commissions were passed to DLR.

Charles Whiting. 1861: stamps for Prince Edward Island. Tendered for British stamps in 1839.

Williams, Lea & Co. Ltd. Not security printers, but did print intaglio stamps for Hong Kong, Johore, Bermuda and Bahamas (at least) using DLR plates after their premises had been bombed late in 1940.

Further Reading

In a booklet of this size, only a taster about each printer can be given - the output of DLR alone comprises literature inches thick. Readers are therefore invited to visit Glenn Morgan's website www.stampprinters.info where hundreds more pages, links, bibliographies and illustrations for worldwide stamp printers since 1840 are to found.

The *Waterlow Study Circle* exists for collectors specialising in the stamps of Waterlow and Waterlow Brothers & Layton. Visit www.waterlow.stamps.org.uk or write to WSC, 9 Oaker Avenue, West Didsbury, Manchester M20 2XH for membership details.

Other Publications in this Series

The Early Days of the Postal Service (1986)

British Special Stamps 1985-86 (no. 1 1993)

British Stamp Design 1993 (no. 2 1994)

Burns Bicentenary 1996 (no. 3 1996)

British Victorian Stamps (no.4 1997)

An Introduction to Thematic Collecting (no. 5 1998)

British Empire Exhibition Stamps, 1924-25 (no. 6 1999)

New Technology for Stamp Collectors (no. 7 2000)

Alternative Ways of Collecting (no. 8 2001)

The Wildings: The First Elizabeth II Definitives (no. 9 2002)

The Travelling Post Office 1838-2004 (no. 10 2004)

The First Elizabeth II Castle High Value Definitives (no. 11 2005)

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