10/1996

The Perkins Bacon Story
by Richard C A Payne

Today my presentation ofperhaps the most important of all adhesive stamp printers falls into two distinct categories. It is a personal look and appreciation of what has interested me most from the work of this company. It therefore may not compliment your own preconcieved ideas of Perkins Bacon but I hope will bring alive certain aspects of their work which would not normally come to your attention. If you view the twenty-five frames today and say to yourself 7 did not realise that' then I shall be happy and feel achievement in my goal of showing different highlights of their work.

There are two parts to this paper. Part One comprises the frames on display. Part Two is a written story of the background to the original founders of the company.

The pages in the frames. These fall into five distinct categories. One: Pre adhesive period and the early 1d adhesives. Two: The 1870 Halfpenny. Three: Colonial backgrounds. Four: Revenues. Five: Non-philatelic label printing.
Frames 1-6 *Illustrated is the original work of the company depicting their achievements in the twenty-one years before the postage stamp from 1819 by way of original partners' letters, vignettes, backgrounds and bank-notes thus establishing the preparatory business of Perkins Bacon before the adhesive postage label, and in early consideration of aspects covering the penny black and penny red. This area occupies the first six wall-frames. There is then in* Frames 7-12 *my specialised collection of the 1870-80 Halfpenny, a subject selected by me as having depth from the artistic aspect through the proofs to the issued stamps, the Reserve Plate 9, errors of perforation etc and with a variety of cancellations and usages covering as it did the printed paper or book rate.*

Then Frames 13-15 *move us on to the Colonial issues shewing how the various geometric backgrounds, either behind the selected head or as true backgrounds to the stamps were intermingled within the 1840's black and red and blue of Great Britain throughout the colonies and other matching backgrounds which themselves lead into my third area, the Revenues. These British Revenues* (Frames 16 - 18) *were equally important within the scheme of Perkins Bacon printing be they the Irish Registration of Deeds the rarely seen green Irish Record of Titles or the English Life Policy, melding as they do into the City of London Courts* (Frames 19 - 20) *here finishing with a detailed study of the Ceylon Revenue adhesives* (Frames 20 - 21) *which introduced the only Perkins Bacon sheets printed with mixed frankings, one whole sheet of which is on display. The South Americas in* Frames 22 - 23, *were important areas for contracts for the firm as well as the Indian sub-continent. The final two frames* (24 - 25) *show Cinderella material, not the usual exhibition souvenirs but first world war or small borough or organisations orders commencing with some work with personal cheques through to the souvenirs of the last Presidents' Dinner for our Society.*

RCAP

PERKINS BACON COMPANY STYLES 1819 - TODAY

1819 August Offices at 29 Austin Friars
PERKINS & FAIRMAN *(DYER financial only)*

1819 December 20 Offices 69 Fleet Street
PERKINS, FAIRMAN & HEATH *(Charles Heath)*
subsequently printing works established in Whitefriars Street

1822 July Offices 69 Fleet Street untill 1905
PERKINS & HEATH
following Gideon Fairman returning to US ofAmerica
and the Heath financial interest changing from Charles to George

1829 ***PERKINS & BACON***
upon death of George Heath and Jacob Perkins' son-in-law Joshua Bacon
becoming a partner. Heath family financial interest continued

1834 ***PERKINS, BACON & PETCH***
Henry Petch joined firm, he was Charles Heath's brother-in-law

1852 ***PERKINS, BACON & Co.***
following death of Henry Petch

1887 25 May company sold for £38,400 by partners
Douglas Denon Heath, Charles Maiden arid Jacob Perkins Bacon
and Limited Company Registration No. 24481 formed
PERKINS BACON & COMPANY LIMITED
Directors: Admiral Sir Leonard Heath, James Dunbar Heath,
Charles Maiden and as Secretary Jacob Perkins Bacon

1903 split within management of company
The 1903 Perkins Bacon Letterpress Co Ltd was formed
but did not operate and closed 1905

1905 Company vacated Fleet Street for Southwark Bridge Buildings south-east corner of Bridge on river (FT today)

1906 5 February company wound up voluntarily with James Dunbar Heath as Liquidator. Financial reorganisation

1906 5 February new company formed Registration No. 87518
PERKINS BACON & COMPANY LIMITED
the same name with Directors: James Dunbar Heath (MD) and Douglas Leonard Heath and Charles Rynd

1935 Company ceased to trade and went into liquidation last entry in Engraving Book December 4 'VALE' (farewell)

although the true original company had failed in 1936 the name of the firm was not allowed to die and reformed under new management as PERKINS BACON & Company having been acquired by W W Sprague, estb 1785

1939 Company constituted as ***PERKINS BACON LIMITED***
by A J Hubbard (later President of RPS,L) with offices (in 1963) at 186/8 City Road EC1

1965 taken over (with Sprague) by Metal Box who already had security printing interests in Barclays & Fry (estb 1799)

1996 Today Metal Box (now MB Clarke) have relocated from Southwark SE1 to Peterborough are still security printers but not of stamps with St Helena February 1971 issue being their last.

PERKINS BACON FROM FOUNDING FATHERS TO LONDON CITY

Notes on the personalities behind the setting-up of the company to accompany The Perkins Bacon Story display 9th May 1996 by Richard C A Payne

"Philadelphia May 31st 1819

This day at 12 o'clock left this city for London. The steam boat 'Baltimore' conveyed us on board the Ship 'Telegraph', Hector Coffin, Esq Commander laying at Newcastle. We arrived at 5 o'clock got immediately underweigh the wind being fair we sailed at the rate of 6 knots. After a few hours sail it fell calm and obliged us to anchor."

The above extract from Jacob Perkins' Journal rather neatly sets the scene of the departure from his home country of an inventor whose changes have left a marked effect even to this day on engraving and printing techniques in Britain; and to those with an interest in bank-notes and stamp production his work is today truly engraved on our minds.

It was this party who were to arrive in Liverpool on the 29th June who set up the introduction to our shores of what was to become known as the 'Perkins Die & Mill Process' of engraving on steel and duplicating that pattern or design with exactitude.

As our narative unfolds we will meet well known names from the British Isles who at some time or other visited the United States of America in these early days.

It is therefore important for us in appreciating the history of the formation of Perkins, Bacon to first piece together the developments on the other side of the Atlantic.

Robert Scott born in Scotland was a stipple and line engraver who went to Philadelphia in 1788 and later became Chief Engraver to the United States Mint in 1793. John Draper was Robert Scott's pupil and assistant from 1795 until the founding of the firm of Murray, Draper of which he was a partner sometime before 1810 with the senior partner George Murray who had been a picture engraver.

We must also mention that William Humphrys, the engraver born at Dublin in 1794 went to America when young and learnt engraving from George Murray. In America Humphrys engraved small plates for annuals and illustrated editions of the works of Bryant, Longfellow and other poets as well as details and vignettes for bank-notes. In

1822 he returned to Britain where he was to leave his mark on philatelic engraving as we shall see later.

Gideon Fairman joined Murray & Draper in 1810, he was mainly a vignette engraver and was well versed in the work of the Englishman Charles Heath. Fairman was a Colonel in the Light Infantry Corps of the Washington Greys and also an acedemican of the Pennsylvania Academy of Fine Arts.

Gideon Fairman had met Jacob Perkins when Fairman arrived in Newburyport, just north of Boston Massachussets in 1803 to engrave maps of sea-coast towns, when Perkins was apprentice to Edward Davies, one of the town's gold and silversmiths who also made watches and clocks.

Jacob Perkins was born on July 9th 1766 in Newburyport. He married Hannah Greenleaf on November 11th 1790 and he was to die in London on June 30th 1849. Perkins was descended from English stock. His ancestor, John, had been a Gloucestershire yeoman born in Newent in 1590; he had served in the 64th Regiment and had decided in 1630 to seek a new life in Massachussets. His son Jacob was born in England in 1624 and Jacob's eldest Matthew arrived in 1665 an American citizen. Then came two more generations of Matthew, born respectively in 1687 and 1725; the latter being the father to Jacob Perkins.

Jacob Perkins was to join the Philadelphia firm with who Murray, Draper and Fairman were associated in 1816.

Prior to joining however Jacob Perkins had shown himself a mechanical and inventive genius. He was certainly no stranger to the American Patents Office at that time. In 1795 his first patent concerning the cutting of nails was registered. Mechanical water pumps came in 1801 and also in that year various other modifications to the nail cutting machine were made; we then come to 1812 when he first patented his fire-engine. The inventions and patents are too numerous to mention here as after indicating his diversification we should refer to the inventions relating to steel.

The patents of 1799 covered the bank-note check plate to prevent counterfeiting, together with the improvement Perkins added in 1810.

The two significant inventions of Perkins was the stereotype steel plate which was initially invented in 1811 when in an agreement with Gideon Fairman, Perkins started to establish himself with that company in Philadelphia, and again in 1813 we find a joint patent with George Murray for the transfer roll.

We then come to 1813 and in effect two patents were granted four days apart in June of this prolific year. One was titled 'Method of impressing all kinds of die work of steel and copper by circular dies' and the other was a 'Printing press for copper and steel engraving'; they comer essentially parts of a single invention.

We therefore see that in our field there were two main accomplishments of Perkins, he invented what were known as 'stereotyped steel plates' and the process of hardening a steel die without destroying the engraving. He also invented the transfer press and the process of transferring of engraved work from one piece of metal to another piece of metal upon the soft steel of a transfer roll to take up a relief from the hardened steel die, and after hardening the transfer roll, to transfer the engraving to a soft steel plate, thus making duplication impossible.

He called this transfer operation the 'siderographic process'. The word siderography comes from two Greek words, iron and writing, it is the art of engraving upon softened steel or iron which is as we have seen afterwards hardened without imparing the design and subsequently reproduced. We will meet this word on printers sample sheets prepared in England.

The method of Perkins for softening and hardening cast steel is given in a contempory way by an article in 'The Monthly Magazine' of May 1820. He decarbonated or softened the surface of cast steel plates, transfer rollers or dies to make them softer and fit for transferring by using pure iron filings. The iron filings should be packed round the steel plate, the depth of the steel plate which itself should not be more than three times the depth of the engraving. It should be exposed vertically to white heat for four hours, each side of the metal must be decarbonised to prevent warping in hardening.

For rehardening he used powdered charcoal obtained by burning leather packed about one inch all round the die, roller or plate and reheated gradually to a red heat and immersed it in the powdered charcoaJ for from three to five hours and plunged it vertically into cold water which would sometimes crack or break the steel. If not cracked it would usually be reheated in order to lower its temper.

Our story of the founding father of Perkins, Bacon has not yet crossed the Atlantic, and before we are to look more closely at the time of the sailing of the 'Telegraph' we must first fill our minds with details of other personalities.

Joshua B. Bacon was born in Boston on April 5th 1790. He married Perkins' second daughter Sarah Ann in 1814. Bacon was to become in effect the business manager of Perkins, Bacon in London intimately dealing with the running of the company and printing of the bank-notes and adhesive stamps. He was to die in London on October 7th 1864 at 73 years of age.

Were we to think of the first twinning of the names Perkins, Bacon was in London we would be quite wrong. The first association of Perkins, Bacon were as fire-engine manufacturers. They sold 200 in two years and when Perkins left for England he left Bacon in charge of this concern.

Charles Toppan was born in Newburyport on the 10th February 1796; he was an early pupil of Fairman and became a nephew by marriage to Jacob Perkins. In 1814 Toppan went to Philadelphia to assist Murray, Draper & Fairman. He accompanied Perkins to London as a Chief Engraver. He was later to return to the United States and lead a company which developed into a major printer of stamps on the american continent.

Joseph C Dyer 1780-1871 was an inventor. The son of Captain Nathanial Dyer of the Rhode Island Navy, he was born at Stonnington Point, Conneticut on November 15th. He had a turn for mechanics and when quite young invented an unsinkable lifeboat. He first visited England in 1802 and was a frequent visitor until he settle here in 1811 when he married Ellen Jones. He interested himself in various forms of mechanical industry in England and was responsible for introducing several American inventions which became very profitable to him and others. One of the first of these was Perkins plan for steel engraving and then followed fur shearing and nail making machines in 1810 and the carding engine one year later. Fulton sent him drawings and specifications of his steam-boat in 1811 and Dyer experienced many difficulties and discouragements in bringing the system into use in England.

When Dyer introduced the nail making machines into England in 1810 it was despite tremendous exports of British nails from the midlands especially Coventry which amounted to over 2,000 tons annually but the bulk of these were still made by hand on small home forges. His nail making plant was established at the Britannia Brewery Building off Newton Row in 1812 in Manchester. In addition to Perkins nail making patent Dyer took out the patents for Perkins inventions of copper plate printing and method of preventing counterfeiting dated April 1st 1811 and fully credited Perkins. This was clearly the mode in which Dyer worked for in 1825 he took out his first patent for a roving frame used in cotton spinning, invented by Danforth and subsequently much improved and simplified by himself. He lived at Camden Town until 1816 when he settle in Manchester. He was concerned in the foundation of the Manchester Guardian in 1821 and engaged in the promotion of the Liverpool and Manchester Railway and in later years was closely associated with the Anti-Corn Law League. In 1819 he published 'Specimens and Descriptions of Perkins and Fairmans Patent Siderographic Plan to Prevent Forgery of Banknotes'. He died in Manchester on the 3rd May in 1871 aged 90.

We have dwelt on these other accomplishments of Dyer, which so readily reflect the accomplishments of Jacob Perkins to give insight into the friendship and close business association between the two. It can now easily be seen how Dyer acted as financier for Perkins and other American inventors in whom he had confidence.

Charles Heath was certainly one of the finest engravers of his time. He was born in 1785 (died 1848) the son of James Heath himself a very noted engraver; indeed James amassed a considerable fortune but lost much property by a fire in 1789. About 1822 he retired from his profession and his stock of proofs and other engravings was dispersed by auction that year. James had married about 1777 Elizabeth Thomas by

whom he had one son, George (1779-1852). Charles Heath was an illegitimate son. He married Elizabeth Petch and had three sons and a daughter. Of the sons, two Frederick Augustus (1810-78) and Alfred Theodosius (1812-96) were both engravers and worked for periods for the family firm; the other brother Henry Charles (1829-1898) was a Miniature Painter.

We have already seen how well versed Charles Heath had become in the work of Jacob Perkins and there is clear evidence that they corresponded before Perkins came to England.

It was Charles' daughter Fanny who was to marry the water colour painter Edward H Corbould 1815-1905. In 1851 Corbould was appointed Instructor of Historical Painting to the Royal Family.

A diplomatist who was later to become Governor General of Canada was Charles Bagot 1781-1843, later Sir Charles. He was Envoy Extraordinary and Minister Plenipotentiary to the United States from July 31st 1815 until 1819. Besides settling the irritating consequences of the American War 1812-1814 and improving the trade relations between the United States and the British he secured the neutrality of the Great Lakes. On 23rd May 1820 he was nominated Ambassador to St Petersburg.

Perkins was known to Bagot and the envoy would have made himself well versed in the security aspect of bank-note production. It was a well known fact that back in England bank-note forgery was becoming out of hand. Bagot would have known that a Royal Commission had been appointed for enquiring into the mode of preventing the forgery of bank-notes. In 1817 no fewer than 31,000 forged notes were detected and 32 persons were hanged for passing them although the forgers were never found.

The American company know that they had a valuable answer to counterfeiting, their steel plates and reproductive process was vastly superior to the deterents used by the English, namely the copper plate, the papermaker and the hangman.

It is easy to see how they were buoyed up by their own success and the encouragement of associates like Charles Bagot and Charles Heath and undoubtedly Joseph Dyer to decide to set sail on the 'Telegraph' for England.

There was however one very important ingredient to their successful application of their 'die and mill' process. This was the geometric lathe.

Asa Spencer was a watch and clock maker from New England. He invented a metal ruling machine for engraving clock faces and also copper and steel plates. This he patented in 1812. By 1814 he had brought a geometric engraving lathe to a point of great perfection and when Perkins visited Philadelphia in 1815 he introduced the lathe to Murray, Draper, Fairman & Co and it was adopted for use by that firm. Perkins purchased the rights in August 1815.

An important ability of the geometric lathe or rose engine as it became referred to was that of producing a engraved white line.

Perkins covered patents in England for the geometric lathe, after his agreement with Spencer. This meant that the Perkins process of recess printing from steel plates had the power to produce negative impressions for parts of the design which took the form of fine white lines or white lining on the print which was virtually impossible to imitate when engraving a recess plate by hand. Additionally the use of the complicated rose-engine geometric lathe made a pattern which one the setting of the machine had been altered could not be exactly repeated. This tool added to patents covering the engraving and roller process was all that was needed for the Americans to come to England and tender for the supply of Bank of England notes.

The partnership which had been under the name of Murray, Draper, Fairman & Co expired in July 1818 and John Draper then withdrew. The firm continued under the style of Murray, Fairman & Co.

The party aboard the 'Telegraph' consisted of Joseph Perkins, the mechanical engineer; Gideon Fairman, allegorical engraver; Charles Toppan, letter engraver; J W Carpenter, engraver and Asa Spencer, mechanical line engraver. Also in the party were two plate printers, Marcus Bull and John McCawley.

The partnership under the name of *Perkins and Fairman* was established in London in August 1819.