The History of Envelopes

by Maynard H. Benjamin

1840 - 1900

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James Logan

A Tribute to James Logan

The G.M.

I chose James Logan for the cover of this first *History of Envelopes* to honor the tremendous contributions he made to the envelope manufacturing industry and to the preservation of the heritage of that industry. It was James Logan whose words will echo throughout this book. Mr. Logan documented much of the early history of this industry and took the time to research the histories of the inventors contained in this book. James Logan was the spirit of the envelope manufacturing industry for many years. He was a visionary, putting together the first multi-plant envelope company at a time when the industry was still a collection of small, independently-owned companies. He, like other great industrial captains of the period, recognized the benefits of factory consolidation, pooling and marshaling his industrial strength for the interstate economy that the 20th century would produce.

To his employees at the United States Envelope Company, Logan would always be known as the G.M, as he was the first general manager of the company that still calls its chief operating officer the general manager today. James Logan was born in Glasgow, Scotland, on May 6, 1852. He came to America in the fall of 1852 with his parents. At the age of nine, he went to work in the Parkhurst Woolen Mill in Valley Falls, Massachusetts. He worked in a variety of different woolen mills until he was about fifteen years old, when he started to learn bookkeeping. His first permanent job was with A.Y. Thompson & Company (dry goods dealers) for about two years; then with G.N. & J.A. Smith (woolen mill), Cherry Valley, Massachusetts, until 1873; then he came to the Sanford & Company Bookstore in Worcester, Massachusetts.

James Logan began work in the envelope manufacturing industry on June 1, 1878, at the G. Henry Whitcomb & Company. He rose quickly at Whitcomb, learning the business in every detail. In December 1882, he started in business with George H. Lowe, of Boston, under the firm name of Logan & Lowe Envelope Company, using the Leader envelope folding machines popularized by Berlin & Jones. Logan & Lowe did very well together; however, Henry Whitcomb & Company made him a flattering offer and he returned to work there in 1883, dissolving the Logan & Lowe partnership. In January 1884, the Logan, Swift & Brigham Envelope Company was organized. His partners were Henry D. Swift, D. Wheeler Swift and John S. Brigham, all of whom had been with the Whitcomb Company. The factory at 16 Union Street, Worcester, was equipped with Leader and Reay machines, but these were soon superseded by new machinery designed by the Swifts, who had invented all the envelope folding machinery used by the Whitcombs. In 1889, their new factory was built at 75 Grove Street, which for some time was the largest envelope factory in the United States. In 1898, the company became part of the United States Envelope Company and Mr. Logan was elected its first vice president and general manager. Mr. Logan relocated to Springfield, Massachusetts, where the offices of the company are still located today. He remained with the company for 25 years, serving three terms as mayor of Worcester, Massachusetts. Mr. Logan was also a lecturer on business topics at the Tuck School of Administration and Finance of Dartmouth College, and in 1904 received a Master of Arts degree from Dartmouth. Mr. Logan passed away in 1928 and all of Worcester mourned the loss of one of its finest citizens.

James Logan was truly the inspiration for this book.

Portions adapted from History of Worcester And Its People by Charles Nutt, Lewis Historical Publishing Company, New York City, 1919. †

FOREWORD

This first volume of *History of Envelopes* began as a journey that was started at childhood. I was never coordinated enough to play baseball well. I learned to ride a bicycle after my peers had already mastered this instrument of torture for me. My mother, who emigrated to the United States in 1948, taught me to love books, especially history. My earliest memory of collecting stamps was of playing with one of my friends who was collecting international stamps and his showing me the different designs that comprised his "catalog of treasures," as he called them. I initially started collecting US stamps by mail-order. My desire for those stamps soon overwhelmed my meager budget and I had to borrow against a future allowance, paying interest I might add, from a father who wanted to teach me that I had to live within my means. The great joy for me came from filling a page in my album and in having collected an entire series or year of stamps.

When I was eight or nine, my friends told me about a man named Ray Brown who had a stamp shop on Prince George Street in Williamsburg, Virginia. I decided to call upon Mr. Brown who held court in a small corner of a large row of shops. I remember entering the shop and seeing so many rows of those brownish green metal storage cabinets that people bought from military surplus and the inevitable old safe. Mr. Brown spoke with a decidedly New England accent and recognized me with a "hello there young fella," that I soon realized was his greeting to every young collector who visited his shop. He asked to see my album, perused its contents and selected some samples for me to evaluate. I soon parted with the $3.00 I had carried into the shop, representing my $1.00 allowance and the $2.00 from my paper route which I had to take on to support my hobby. After I had established a business relationship with Mr. Brown, he let me take stamps home and evaluate them. I would search through stamp guides trying to beat the genius of Mr. Brown in cataloging the samples. I could never get the better of him when it came to properly identifying a stamp. He was a master.

I remember 1965 distinctly, because I was 14 years old and it was the last year of the Civil War Centennial. Mr. Brown showed me a Civil War soldier's letter in an envelope. I was fascinated by the contents of the letter. It talked about the Battle of Williamsburg and the reaction of one Williamsburg resident at that terrible time. I lived near Fort Magruder, a place which the letter described. I was immediately hooked on collecting soldiers' letters and envelopes, especially Confederate letters if I could get them. Of course, they were much more expensive and I had to sell my stamp collection and get a higher-paying job to be able to collect one or two of these specimens periodically. Fortunately, Colonial Williamsburg had a job for me in the Fife and Drum Corps which enabled me to pursue my love of history and collect my covers. I learned about patriotic envelopes but could only afford Northern patriotics, which I was able to get unused for about $2.00 each. Southern patriotics, even at that time, were out of my financial reach. I could buy soldiers' letters for about $8.00 and the envelopes, which I prized for their markings, for about $4.00. I placed these finds in a series of black notebooks, carefully cataloging each on its own page. I learned about the great collector, Wallcot, and of a man named August Dietz. Then came dating and my college years and my collection of treasures gathered dust in a closet in my mother's home in Williamsburg. I had graduated from college and was stationed at Fort Belvoir in Northern Virginia before the collecting bug hit me again while visiting Williamsburg. I retrieved my collection and started to try to make some sense out of the interests of my childhood. Some covers had to go, the victim of childhood emotion that offered no semblance of the order my collection would later take. Two collecting interests started to emerge–Confederate letters and covers and soldiers' letters. By 1987, the collection had grown to 10 volumes and it was time to rethink what I was doing before I drove myself into the poor house. I decided that Confederate adversity covers and soldiers' letters

would be what I would retain and the rest would be consigned to dealers to sell off to raise money for more adversity covers.

One of the most momentous decisions I ever made was agreeing to work for the Envelope Manufacturers Association. Little did they know they were hiring someone who would have a vocation to match his advocation. When I came to work for EMA in 1984, I was assigned the onerous task of going through the file room and getting rid of old files and records deemed no longer useful to the association. It was at that moment I decided that a history of the envelope manufacturing industry in the United States needed to be written. As this idea began taking shape in my mind, Robert Ramage's 1952 *History of Envelopes* and *The Red Envelope* books produced by James Logan in the early part of this century were brought to my attention. My hopes were dashed as I realized a great deal of work had already been done. In addition, EMA went through some very busy and challenging years, as the recession of the late 1980s and early 1990s claimed a number of our members and resources were very limited.

I was greatly honored in 1990 by being chosen to become the executive vice president of the Envelope Manufacturers Association. I was only the fifth chief executive in the 57 years the association has had a staff. My first two years were taken up with building on the foundation that was created by my predecessor, Randy Shingler, who brought EMA into the realm of modern association management. One of the revelations of this time period was the understanding of what a special place EMA had become to me. The members I represented were extraordinary people. They were entrepreneurs, visionaries and eternal optimists. They made work fun and as I got to know them, they made me appreciate my unique heritage and what I brought to the association. I felt the only way I could repay their trust in me and honor them was to begin work on a more comprehensive history of their industry. Their grandfathers and great grandfathers produced the envelopes that I had collected as a young man.

I decided to build upon the work of James Logan and Robert Ramage. This book is by no means a comprehensive history of the envelope manufacturing industry. In many cases, it is only as good as the documentation is within the files of the association and the commercial records that I have reviewed. Scholars will argue over the facts because there will be conflicts in dates and events due to the nature of this industry. It was amazing to me that the philatelic community which cares so much about the stamp has never paid much attention to the people who made the device on which the stamp was carried. Yet, because of the care and quality that was put into the envelope, the message inside survived and more collecting value was given to the stamp.

I freely give credit to James Logan and Robert Ramage in this book. Without their work, this book would be almost impossible to do given the sad state of preservation of many early records of this industry. My only hope is that these vignettes will cause all who read them to never forget those who helped to forge the postal history of the United States–the men and women who make envelopes. I will always be indebted for their great kindness and trust in letting me be part of their exciting world.

February 2003

ACKNOWLEDGMENTS

This book would not be possible without the efforts of many people who have encouraged me and supported my work. First and foremost to Margie, my wife, and our son, Hank, who have endured countless hours of dad being in the basement typing away at the computer, generating the text that would appear each month in the *History of Envelopes* in the EMA newsletter.

Without the editing assistance of Mary Lee Stoll and Margie Benjamin, most of this book would be unreadable as my gift for history would not transcend into great writing ability. My assistant, Mary Lee Stoll, has read copy until her eyes have become crossed, but she has kept me laughing throughout and has always been a source of encouragement. Tonya Muse, Kim Moses, Barbara Monson, Neely Okopal and Diann Morris, fellow EMA staff members, have also been a great source of support.

Without my friends at Galaxy Classics, this book would not have become a reality. They have been most patient, offered creative assistance and have helped me create this book. I am particularly indebted to Shawn Thompson and Jeff Hall of Galaxy for their great assistance.

I appreciate the generous support of Westvaco Corporation, particularly the Envelope Division. Without their technical support and assistance, this book would not have been completed.

I thank Glatfelter and their employees for their support and encouragement. Without their help I could never have produced this book.

I am greatly indebted to James Bruns of the Smithsonian Institution and his staff for their assistance. Jim recognized the importance the envelope has played in the postal history of this nation and he and his staff have truly created a very unique place for all to come and learn about our philatelic heritage. Their support of literacy, especially in their programs for children, is a great gift to the nation.

Finally, to the members of EMA who have encouraged and supported my work. It is my only hope that this first book, and those that follow, will honor each of them. They deserve much respect from the philatelic community and our nation for the contribution they have made to our culture. It is my hope that these pages will honor that great contribution and that these pages will serve as my thanks for the honor they have given to me.

Maynard H. Benjamin
Alexandria, Virginia
February 2003

A Dedication

To John C. Wellons, Jr.
or as he was better known, the "Sheriff of Hattiesburg."
A man of greatness who profoundly
changed my life and everyone he touched.
I will always remember him.

In The Beginning...

Welcome to the inaugural issue of the History of Envelopes. As EMA passes its 60th year and many of our members' companies have surpassed 100 years in the envelope manufacturing business, it seemed appropriate to begin to document much of the oral history of our industry and to intertwine several pieces of relevant postal histor y. Our first attempt at establishing a history for the envelope manufacturing industry in the United States came from The History of Envelopes by Robert H. Ramage, which was published by EMAA in 1952. Since this text is now out of print and contains many gaps, especially relating to several of the men and women who played significant roles in the development of the envelope manufacturing industry in the United States, it is time that a history of the industry be initiated in serial form. This document represents the beginning of a journey, our goals and our dreams. It is also our heritage.

The Story of the Envelope Begins

Even in biblical times, proclamations had to be sent out and messages delivered. As written language developed, posts were organized. From this beginning, our modern postal system gradually came into being. In the Book of Esther, it is recorded that King Ahasuerus called in all of his nobles and princes from India to Ethiopia. After seven days of heavy drinking, "when the head of the King was merry with wine," he sent for Vashti, his beautiful queen. He wanted to show her the assembled princes. When Vashti refused to come, the king was upset. Determined not to let her get away with such insolence, he called his wisest lawmakers for a conference. They all agreed it was serious. If Vashti would get away with this, all the other wives would hear about it and there would be no telling what the women would be up to next. So it was written in the laws of the Persians and the Medes that Vashti was no longer queen. Further, it was decreed that wives all over the kingdom had better honor their husbands, or else. We read then, that Ahasuerus "sent letters into all the King's provinces, into every province according to the writing thereof, and to every people after their language, that every man should bare rule in his own house." Esther, who had become the new queen, was in a sense the first to benefit from a direct mail campaign.

The first use of "envelopes" was the clay wrapper used by the Babylonians in 2000 B.C. to protect documents such as bookkeeping accounts, deeds, mortgages, and, quite possibly, letters as well. Clay, in its 'plastics' state, was folded over the original message, crimped together, then baked. It was a foolproof system as the outside wrapper had to be completely destroyed in order to gain access to the tablet hidden within.

The first postal envelopes were nothing more than folded sheets of paper. Postage in Europe and the United States was charged according to the distance and size of the letter. For example, in 1775 it cost Samuel Adams 11 pence, or 22 cents, to send a "single letter" from Boston to Philadelphia. A "single letter" was one consisting of one sheet of paper. A "double letter," which cost twice as much for postage, consisted of two sheets and so on. The number of sheets was easy to determine

because envelopes were rarely used. A letter was simply a sheet, written so that when folded its outside was blank. On completion, it was folded, sealed upon itself with wax, or a "wafer" (a small disk of adhesive) and addressed upon the blank side.

The photograph on the previous page, shows an early ship's letter mailed to Major William Robison of Her Majesty's 24th Regiment Foot located in Bengal, India. This letter was shipped about by the private ship Deal. Reverse of the letter shows a receipt stamp of the Bengal post office, November 17, 1816. The reverse also shows the postage calculations. Ship rates were the same as colonial letters (charged eight times the postage of one penny). The ship's captain was the carrier of the letters and was responsible for delivering the letter to the nearest post office at his destination for a fee of one penny. Ship letters, before 1837, were usually sent via private ship. After 1837, they would be carried by the British Navy. This particular specimen traveled around a great deal before it caught up with its owner.

The Mulready Envelope:
Dawn of an Era

When Rowland Hill published Post Office Reform: Its Importance and Practicability early in 1837, he was not connected with the British Post Office, nor did he have a firsthand knowledge of the workings of the department; to use his own words, "I had never been inside the walls of a post office." The environment in which Rowland Hill matured was of the sort that led him to take a consuming interest in the desire for economic and humanitarian progress. It was so strong in the decades following the Napoleonic wars, that having chosen postal reform as a cause was more or less accidental.[1]

Hill's analysis of the cost of postal services in part, comprised an analysis of the actual cost of a load of mail from London to Edinburgh on a particular day. The result of this sample of mail was surprising. A letter weighing a quarter of an ounce - the average rate of a "single" letter - if charged for its share of the whole journey from London to Edinburgh, should be taxed by one thirty-sixth of a penny. Hill felt that it was manifestly unfair for a letter weighing a quarter of an ounce to be charged over a shilling for making the journey between London and Edinburgh. He concluded, therefore, that the charge for letters, sent anywhere in the British Isles, should not only be low, but that the tax should be uniform, since the distance from London to Edinburgh was more than the average distance that letters traveled in Great Britain. Not only should it be uniform, but precisely the same for every packet of moderate weight "without reference to the number of enclosures." In this way, Rowland Hill arrived at two of the principal features of his reform - the uniform charge and the charge by weight, rather than the number of enclosures.[2]

Prior to 1839 the use of an "envelope" would have meant a charge for it as an extra piece of paper. Only the very wealthy could afford to use an extra piece of paper under this system of charges. John Dickinson, the paper maker, referred to

them before the Select Committee on Postal Reform in 1838 as the "new fashioned envelopes, with the four corners of the paper meeting under the seal."[3]

Pursuant to Queen Victoria's endorsement of postal reform under the concepts proposed by Rowland Hill, both a physical stamp containing a gum wash and a prepaid penny wrapper were to be developed. In 1840, the British government offered a prize of 200 pounds for the best prepaid post-wrapper design. The contest was won by William Mulready, a member of the Royal Academy. This design was a highly decorative and symbolic rendition of Britannia seated upon the British lion, sending winged messengers to far-flung parts of the Empire. The design was printed as a rectangle in the center of a diamond-shaped sheet of paper ready for folding. The sample shown on the next page was sent from Manchester, England to Cheshire on May 26, 1840.

It is interesting to note the maltese cross cancel on the face of the "envelope" above. The maltese obliteration was used during the period to connote that the envelope had been used and was normally applied by the sending post office. The Mulready Envelope was not only the grandfather of the modern envelope but also the first prepaid postal wrapper sold through a post office. The Mulready Envelope was considered a "novel" idea but received a great deal of criticism from the general public. The average British citizen thought the design was silly. Newspapers blasted the government for the poor choice of design and by 1842, the average British citizen preferred to apply a simple postage stamp to a blank envelope or folded piece of paper and the Mulready Envelope faded from view.

[1] *Robinson, Howard, The British Post Office, A History, Princeton University Press, Princeton, New Jersey, 1948, p.258.*

[2] *Ibid., p. 266.*

[3] *First Report of the Select Committee on Postage, C.F.D. Marshall, The British Post Office, Oxford Press, 1925, p. 188.*

The Penny Black:
Uniform Postage is Born

Britain had a postal service since 1635, but after 200 years it was still inadequate, expensive and unsatisfactory. Letters had to be taken to the post office where they were weighed and examined for the number of sheets of paper. Mail was sent collect with postage paid by the receiver, a cumbersome, time-consuming system. Members of Parliament and others with official positions had the privilege of franking, a state of affairs which only served to keep up postage rates on private mail. Postal rates were based on distance.[1]

When Rowland Hill, the "inventor" of the British postage stamp, was called on to testify before Parliament on his reform proposals, he recounted an early story which moved him toward the postal reform arena. The story goes that Hill was standing by when a postman handed a letter to a servant girl, saying that the postage was one shilling. The girl took the letter, turned it over and studied it for some time, then handed it back to the postman, saying she would have to forego the letter as she could not afford to pay a shilling for it.

Mr. Hill was so distressed that so rare and cherished a thing as a letter had to be sacrificed because of its high postage that he stepped forward and paid the fee, handing the letter to the servant girl. Somewhat to his surprise, she expressed no gratitude, nor did she seem in any hurry to open the letter. She told him it was from her mother and that markings on the envelope had conveyed to her the important news. It was unnecessary to pay the postage.[2]

Rowland Hill went on to study the postal service, focusing on the quantity of mail handled. Relationships between volume of mail and population led him to the radical conclusions that postage should be paid by weight, not distance, that franking should be eliminated, and that drastically reduced and uniform rates would actually bring in more income by greatly increasing the volume of correspondence; and, at the same time, undercutting the fees charged by a private underground system. Hill's plan called for prepayment of postage as a means of simplifying procedures and thereby reducing costs. These ideas were published in 1837 in a private pamphlet which Hill called, Post Office Reform, Its Importance and Practicability.[3]

The idea of postage prepayment caused a lot of controversy. One of the objections to the use of stamped covers, or envelopes, was that those who wrote letters the traditional way, on ordinary letter paper, would be obliged to redirect the letter at the post office on the face of the stamped envelope. This would be difficult or impossible for illiterate messengers and servants who took the letters to the post office. Hill's answer to this objection is worthy of note:

"Perhaps this difficulty might be obviated by using a bit of paper just large enough to bear the stamp, and covered at the back with a glutinous wash, which the bringer might, by applying a little moisture, attach to the back of the letter, so as to avoid the necessity for redirecting it."[4]

Thus, the postage stamp was born. This immediately created a problem in how the stamps would be produced and who would be on the first stamp. In May of 1840 the first stamps or labels were produced and distributed to the public. The face on the stamp was that of young Queen Victoria taken from Wyon's Medal of 1837. *Note the letters K and B between the "One Penny" designation on the example shown above. These notations were used to mark the position

of the stamp on the 240 engraved steel plate roll. Each rotation of the roll produced 240 stamps (12 across by 20 down). This stamp was the 11th across and the 2nd down.

The example on the previous page is a folded letter from London, England to Omagh, Ireland canceled on November 8, 1840. Note the maltese cross obliteration which was used in 1840 to cancel these early postage stamps. An interesting story centers around the use of black ink for these first stamps. Apparently, the firm of Perkins, Bacon & Petch, consulted on the printing of these first stamps, indicated that black ink was superior to any other for steel plate engraving.

The adhesive stamp proved a remarkable success. The public took to the licking of stamps as though it was a suddenly released instinct. Over 68 million penny blacks were moistened during the first year of penny postage. As the usefulness of the stamp increased, the number of stamps rose to astronomical figures. Yet, in its printing, the engraved penny black remains one of the most attractive ever issued. Queen Victoria herself liked it so much that she refused to allow any other portrait of herself to be used on British stamps during her entire reign. To the end of her long rule of over 60 years, therefore, the stamps of Great Britain never carried any other portrait than that of the young queen in her eighteenth year.5

[1] *Ramage, Robert H., The History of Envelopes, Envelope Manufacturers Assoc. of America, New York, c. 1952, p. 15.*
[2] *Ibid., p. 16.*
[3] *Ibid., p. 17.*
[4] *Robinson, Howard, The British Post Office, A History, Princeton University Press, Princeton, N.J., c. 1948, p. 316.*
[5] *Ibid., p. 320.*

Early Envelope Manufacturers
Berlin & Jones

In 1847, a minor business transaction took place in the rear of a small stationery store on Fulton Street in lower New York City. This transaction would change the lives of millions of people and create an industry - envelope manufacturing.

Mr. Pierson began making envelopes in 1843. By hand methods only, Pierson would use an "envelope die" or template to cut around a stack of paper with a very sharp knife. The resulting blanks would then be hand folded and gummed to produce envelopes. Using these methods only resulted in costly production and Pierson's envelope line was gradually discontinued. Pierson sold the business to William Dangerfield, who operated out of a rented room at 180 Fulton Street. After experiencing financial troubles of his own, Dangerfield sold out to his landlord Jacob Berlin in 1847.[1]

So the envelope industry in the United States truly began through the settlement of a rental debt, and an unsuspecting landlord who found himself the proud owner of an envelope-making process. At first the business was so disappointing to Berlin, that he was about ready to sell out; nevertheless, he continued to operate the business, if for nothing else than to keep his employees going until he found a buyer. Jacob Berlin finally sold his business in 1852 to William West. Berlin's son, Henry, continued in the business and stayed with the firm owned by West.

Henry Berlin became a partner in the West firm in 1853 and reestablished the company as West and Berlin at 67 Pine Street, New York. In 1855, West and Berlin moved to their own six-story building at 120 William Street. By this time they were employing about 100 hand folders, producing 200,000 to 250,000 envelopes per day. During a trip to the Paris Exposition in 1856, Henry

purchased a "Rabbate" for 2,500 francs, then about $600. It turned out to be a highly temperamental piece of machinery, and never did produce envelopes satisfactorily, but it started the firm on the mechanical production of envelopes.[2]

In 1856, Mr. West sold his interest in the business to George H. Jones, a John Street stationer, and the firm name became Berlin & Jones, eventually to become Berlin & Jones Company, Inc. The new company continued to grow and in 1857 moved to larger quarters. First, the salesroom was moved to 134 William Street, then the factory was moved to a larger building at 534 Water Street. Production was up to 600,000 envelopes per day.[3]

Berlin & Jones produced a number of distinctive, quality envelope designs. They are best known by collectors of envelopes for a series of six patriotic cartoons produced during the American Civil War. Berlin & Jones covers depicting comic scenes were printed from engravings in black; some were hand-colored.

The envelope shown above is an original Berlin & Jones political cartoon. The envelope was mailed in Elmira, New York, on June 27, 1861. Elmira became better known during the Civil War as the site of a Federal Prisoner of War Camp. Berlin & Jones designs are very rare and prized by collectors.

During the presidency of Thomas Dickerson, a family descendent of Jacob Berlin, the company moved "uptown" to 26th Street and continued its operations. In 1957, Mrs. Gilbert Harrison, a granddaughter of Cyrus McCormick, purchased the company and shortly thereafter named Duncan Whyte as president. By 1962, the company moved to a modern factory in East Rutherford, New Jersey; and, in 1984, the officers of Berlin & Jones acquired the stock from the Harrisons.[4]

In 1993, Berlin & Jones celebrated 150 years of envelope making and manufacturing. From a debt owed to a landlord arose the first envelope manufacturer of record in the United States—a company still in existence today.

[1] *Grant, Richard, Patriotic Envelopes and Their Manufacturers, 1965, p. 4-7.*

[2] *Rammage, Robert H., The History of Envelopes, Envelope Manufacturers Association of America, 1952., page 28.*

[3] *Berlin & Jones, Inc., The Newsvelope, July 1958.*

[4] *Same as 3.*

The United States Postal Service
Early History
Entrepreneurship Leads to a Monopoly

So how did the Postal Service begin in the United States?

Before there was a United States, there was a postal service. Benjamin Franklin has long been considered the "father of the U.S. Postal Service." Franklin began his postal career in 1737 when Alexander Spotswood, Postmaster General for the British Colonies in America, appointed Franklin his deputy in Philadelphia. Franklin was given the appointment for the area between Philadelphia and Newport in Virginia, now known as Newport News. Franklin possessed an innovative mind and made many changes which had a lasting impact on the postal system. For instance, he designed distribution cases containing pigeon-holes for the deposit of mail for common destinations. He also improved the post roads by setting milestones along them. This innovation was important because postmen were paid by the distance they traveled. Later, as joint postmaster general of the colonies with William Hunter, Franklin made postmasters and riders from Maine to South Carolina aware of the unity and vitality of the postal service, drawing scattered colonies together through the exchange of letters.[1]

The American Revolution

During the Revolutionary War, the postal service was used as an instrument to unite Americans in a common cause. The Congress emphasized the importance of the post office by exempting postmasters and post riders from all military duties. Post riders carried the mail at great hazard to themselves. They carried messages between a central government which moved from site to site to avoid capture and its armies in the field, and between the soldiers and their families. For many Americans, the post office then - as now - was the only visible instrument of the federal government to enter their daily lives. After the war, President George Washington selected Samuel Osgood, a former member of the Continental Congress and an elected official of the Massachusetts legislature, as his first postmaster general.[2]

In 1789, when Osgood assumed the top postal job, there were 75 post offices in the 13 states and about 2,400 miles of post roads to serve a population of three million people. By the close of Washington's second term as president, the number of post offices, miles of post roads and revenue had increased more than five times. It was not until 1792, however, that postal policy was formally established by an act of Congress. Postage rates were set according to distance traveled, ranging from six cents for a single-page letter going as far as 30 miles to 25 cents for one going over 450 miles. In 1797, the first letter carriers appeared on the streets of some American cities. They were not paid a salary, but rather collected 2 cents for each letter they delivered. Postage was charged by the post office in addition to the 2-cent fee. Free city mail delivery did not begin in America until 1863.[3]

The Nation Grows

In 1845, a federal law created the contractor system - the hiring of private, or "star route," contractors to carry the mail between post offices. In 1845, cheaper postage rates were enacted so that by 1851 a half-ounce letter could be sent 3,000 miles for as little as three cents. In 1847, Congress reasserted the government's monopoly to deliver the mail.

However, private delivery services prospered for a short time. These delivery services existed mostly in major cities and would take mail between locations in the city after first processing that mail through the postal system. Blood's Penny Post Dispatch was one service in particular that operated in the city of Philadelphia. D. Otis Blood was chief clerk and cashier of the Public Ledger. Blood purchased a private dispatch service from another individual in 1845 and operated the business as "Blood's Penny Post." Blood fashioned his own postage stamps, featured pickup and delivery and offered Saturday and special holiday service to his customers. The envelope shown above was sent shortly before Blood's Penny Post was put out-of-business by the Post Office.

The provisions of the Act of March 3, 1851, authorized the postmaster general to establish post routes in all cities and towns where the postmasters were appointed by the president. (Most postmasters were presidentially appointed since Andrew Jackson appointed William T. Barry postmaster general in 1829). This act, in effect, put private delivery services out of business. Several of these services lingered on only to be disbanded by a Postmaster General's Order of July 17, 1860, declaring all of the streets, lanes, avenues, etc., in the cities of Boston, New York and Philadelphia to be post roads. Private dispatch services were the first alternative delivery services. [4]

[1] *We Deliver, The Story of the United States Postal Service, Publication 1, United States Postal Service, February 1986, p.5.*
[2] *Same as 1, p.6.*
[3] *Same as 1, p.6.*
[4] *Post Office Department Letter, Chief Post Office Inspector, July 6, 1948*

The Postal Service Grows and Prospers

The Envelope Market is Born

This was a significant period of growth for the post office, or the "peoples post office" as it was called. This was also an era in which the seeds of the envelope manufacturing industry were sewn.

The administration of Postmaster General William Barry brought a new and potentially lethal disease to the fledgling postal system in the United States called patronage. While Barry's predecessor, Postmaster General McLean, succeeded in extending postal service and balancing the budget, William Barry, in short order, reversed all the gains made by Mr. McLean. After a series of investigations, Congress determined that Mr. Barry had violated the spirit, if not the letter, of the law. President Andrew Jackson mercifully appointed Barry ambassador to Spain in 1835 and put Amos Kendall in his place in the post office.[1]

The Postal Act of 1836, written after the lengthy investigations into Postmaster General Barry's conduct of the department, was 46 sections long and attempted to correct every administrative problem Congress had uncovered. Special rules were made for making contracts with mail carriers, accounting procedures were completely revamped, the postmaster general's duties were precisely defined and postal employees were forbidden to have financial connection with mail contractors. Most importantly, the method of handling postal finances was changed. From this time on, all postal revenues were to be turned in to the treasury, postal budgets giving estimated needs for the year ahead were to be submitted to Congress and each Congress was to appropriate from the general fund the money to operate the postal service.[2]

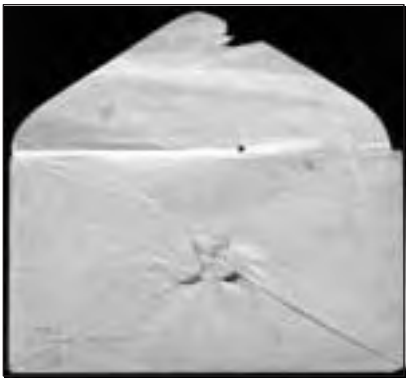
Daniel Webster, the great statesman and legislator, introduced a resolution in Congress in June 1840, to reduce postage rates by use of "stamped covers." In spite of this petition and others, it was not until March 1845 before postal rates were reduced to 5 cents per half ounce for 300 miles and 10 cents for more than 300 miles.[3]

These lower postal rates and the growing use of envelopes were stimulating the ever-greater production of envelopes by private industry. The first envelopes in this country were produced and sold by stationery stores, in those days often called bookstores. The usual practice was to set up a table in the back room of the store, and to send the clerks back there on rainy days, or when there was little business. One of the clerks would pile up 25 sheets of paper and place a tin pattern on the top sheet. Using a pocket knife, or perhaps a sharp shoemaker's knife, he would then cut through the paper, following the outline of the form. The blanks were passed on to other clerks who folded them by hand into envelopes. Sealing the side flaps was a separate operation.[4]

The closing flap was left ungummed. It should be remembered that a considerable trade in the store was done in sealing wax, special seals, candles, and lucifer matches-all for the purpose of sealing the envelope. Envelopes were made in several sizes, and in many colors. Business houses and banks often selected a particular color as a means of identifying their envelopes, as no one had yet thought of printing corner cards on envelopes. The smaller sizes were the most popular, a fact which may be attributed to the high rate of postage.[5]

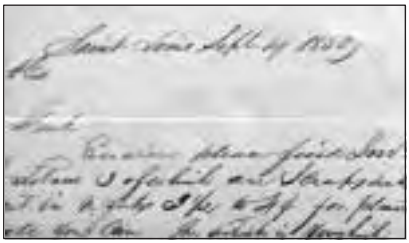
The envelope pictured above was mailed on September 20, 1850, from St. Louis, Missouri to Boston, Massachusetts. Note the St. Louis circle date stamp showing the prepaid 10-cents postage required to send the letter more than 300 miles.

The picture of the reverse of the envelope notes that the envelope seal flap was ungummed, being sealed with two spots of sealing wax. This envelope was cut from a template, the odd sizing of its diagonal seams attests to its status as an early envelope product.



The final picture below shows the letter fragment which attests to the date of the envelope. The letter was business-to-business correspondence.

(These two photos are from the collection of David Driscoll.)



Thus, the envelope industry was born. In back rooms of stationery stores, in attics and in small shops, clerks bent over a tin template to laboriously cut envelope blanks, then hand gummed, folded and prepared them for sale.

[1] *Fuller, Wayne E., The American Mail, The Chicago History of American Civilization, The University of Chicago Press, c. 1972, p. 54.*
[2] *Same as 1, p. 60.*
[3] *Ramage, Robert H., The History of Envelopes, Envelope Manufacturers Association of America, New York 1952, p. 23.*
[4] *Same as 3, p. 26.*
[5] *Same as 3, p.26.*

The Envelope Folding Machine is Born

It was not long after Sir Rowland Hill convinced Queen Victoria and Parliament that universal postage was right for England when the demand for envelopes began to exceed the supply produced by cutting envelopes with a template and hand folding them.

One of the first to design an envelope folding machine was Edwin Hill, a younger brother of Sir Rowland Hill. The younger Hill produced his first model late in 1840, and he and Warren De La Rue worked together on improvements. The Hill-De La Rue machine, patented in England in 1840, is generally considered the first envelope folding machine.[1]

The Hill-De La Rue machine was first exhibited at the Hyde Park, London Exposition, held in 1851. Another envelope folding machine, the Rabbate, developed by M. Remond, which operated on the plunger principle, like Hill's, also appeared at that time. The chief difference between the two machines was Remond's use of a vacuum to pick up the blank and transfer it to the plunger box. The capacity of this machine was rated at 240 envelopes per hour.[2]

The first patent recorded on an envelope machine in the United States was issued to Jesse K. Park and Cornelius S. Watson of New York City in January 1849. Their machine was called the envelope folder, gummer and embosser. The inventors claimed that "the paper is gummed and folded into envelopes in one operation." So far as it is known, this machine was never put into production.

The next machine on record in the United States is one that was built by Gerhard Sickles for Bell & Gould of New York in 1850. While this one worked, it was never patented and is completely unknown today. Milton Puffer built an envelope machine for White & Stickney of Rockville, Connecticut. Though later destined to become obsolete as better machines became available, Puffer's machine, completed in 1853, did make envelopes.[3]

The first successful automatic envelope folding machine is credited to Russell L. Hawes of Worcester, Massachusetts. Hawes was a doctor by profession and an inventive genius. He became associated with Goddard, Rice & Company of Worcester, manufacturers of paper machinery. His patent was granted June 21, 1853. Hawes sold his business in 1857. [4]

(Photo courtesy of EMA library)

J.B. Duff and T.W. Keating operated a machine shop in the building on Water Street occupied by the Berlin & Jones factory in 1857. They became interested in envelope equipment, and built a hand-fed machine for Berlin & Jones. Later, an improved model delivered envelopes to the front of the machine, so that one person could operate it.

The photograph above depicts one of the earliest pictures of envelope folding machines. The picture displays both the Plimpton Machine and one additional model suspected to be a Duff and Keating Machine on the far right. The location of this picture cannot be substantiated. Note the pulleys being used to drive the machines. The pulley system was connected to drive shafts, connected by other pulleys to a steam generator.

The significance of these early machines is that their design formulated the engineering principles on which better, faster, and more automatic machines could

be assembled. They were the grandfathers of the more modern "plunger," a story still to be told.

[1] *Ramage, Robert H., The History of Envelopes, Envelope Manufacturers Association of America, 1952, p.30.*
[2] *Same as 1, p.31.*
[3] *Same as 1, p.32.*
[4] *Same as 1, p.33.*

A Prelude to War:
"Binding the Nation Together"

From 1830 to 1850, while the nation's population was not quite doubling in size, the number of letters mailed increased fivefold. In 1850, nearly three letters were mailed for every man, woman, and child - both free and slave - in the nation. Four years later that number jumped to seven for every man, woman and child in the nation.[1] Up and down the nation, across its broad expanse, year by year, the great mails carried not only the commercial correspondence that bound business to business and customers to business but other literature—literature that caused the nation to go to war.

But valuable as all its services were to the cause of union, the postal service was, in the years before the Civil War, almost as likely to be an agent of disunity as unity. By the 1830s, people north of the Mason-Dixon line had adopted various attitudes toward slavery; some were unconcerned, others wanted to send the slaves back to Africa, and a few were demanding the immediate abolition of slavery. In 1832, the abolitionists founded the New England Anti-Slavery Society, and the next year, the American Anti-Slavery Society. Led by zealots like William Lloyd Garrison, they sought to promote abolition by educating the populace on the evils of slavery, and for that purpose, prepared and sent through the mails thousands upon thousands of anti-slavery tracts.[2]

The nation teetered on the edge of disaster. When at last the Union was saved by compromise, it was only natural that men who looked for a way to support their desire for cheap postage should argue that the reduction in postal rates would tie the Union together as nothing else could. Much of the cauldron of public opinion that had been simmering for years in the South over the anti-slavery literature being passed through the mails began to boil over as the post roads and routes established by Congress in the late 1850s brought a stronger southern mail system, and with it a rising spirit of

southern nationalism. Through the southern mails, in an ever-widening arc, went the fiery pamphlets of such organizations as the Southern Rights Association, which aimed at rousing national sentiment throughout the Cotton Kingdom. Finally, to compound the irony, the solidifying of southern opinion, achieved through a mail service that never paid its way, was done largely at northern expense.

The movement toward cheaper postage and a universal mail system created a number of new envelope products. One of the most unique for the period was the pre-stamped envelope. On October 25, 1852, the post office established a contract with the George F. Nesbitt Company of New York City to produce pre-stamped envelopes. The initial envelope series was produced from 1853-1860 in four sizes, interestingly established in millimeters. These sizes were note size (118 x 65mm and 120 x 73mm), large note size (139 x 82mm) and official size (225 x 98mm).[3]

(Collection of Maynard H. Benjamin)

The envelope shown to the right contains a date stamp of January 7, 1861. The type of postal indicia shown is known as a wreath mark for obvious reasons. This envelope appears to be the original Nesbitt variety-white. It is interesting to note that the Charlottesville postmark is spelled incorrectly which makes this particular envelope valuable as a postal error.

The second envelope shown is of the larger variety of Nesbitt cover and shows the "Star Die" variety of postal indicia. This is the large note size. Of significant interest is the usage of this envelope. Alabama seceded from the Union on January 7, 1861, and joined the Confederacy on February 4, 1861. This envelope was "used in the Confederacy." This is interesting because the postal indicia is of the United States of America and, therefore, the postage on this envelope was "appropriated" by the Confederacy.

The envelope is addressed to Thomas Hill Watts who was a former Greenville, Alabama attorney. Watts represented Butler County in the state legislature in 1841, '44 and '45. He moved to Montgomery in 1846 and represented that county in 1849 and then as a state senator in 1853. He entered the service in 1861 as a Colonel in the 17th Alabama Infantry. He resigned his commission to become attorney general of the Confederacy. He served until October 1, 1863, when he became governor of Alabama until the end of hostilities.

[1] *Fuller, Wayne, E. The American Mail, The Univ. of Chicago Press, 1972, p.88.*

[2] *Same as 1, p. 91.*

[3] *Perry Thomas Doane, Guide to the Stamped Envelopes and Wrappers of the United States, The Dietz Press, Richmond, VA., c.1940, p. 23.*

"Wanted: Young, Skinny, Wiry Fellows Not Over 18, Must Be Expert Riders, Willing To Risk Death Daily-Orphans Preferred"

This three-line advertisement appeared in the San Francisco papers in March 1860, heralding one of the most colorful episodes in American history–the Pony Express.

The Pony Express grew out of a need for swifter mail service between the East and West prior to the Civil War. After gold was discovered in 1848 at Sutter's Mill in California, prospectors joined with homesteaders flocking westward. That same year, the post office awarded a contract to the Pacific Mail Steamship Company to carry mail to California. Under the terms of the contract, the mail was carried by ship from New York to Panama, where it was taken across the Isthmus of Panama by horseback or rail, and then put aboard ships bound for San Francisco. Under the best of conditions, a letter could be carried to the West Coast in three or four weeks. But that schedule was optimistic.[1]

As the tensions of the approaching Civil War grew, the division between Northern and Southern states widened, exacerbating the problems of mail service to the western states. Both the North and South desired California's vast resources. By 1860, almost one-half million people were living in the Western states. Those people were determined to have the delivery time of their mail improved. Senator William M. Gwin of California was among those who said they need to improve the timeliness of mail service to the West. Expecting the Confederacy to cut off the only land-based source of connection between the federal government and California, Gwin persuaded Congress to consider the approval of an alternate route. This route would be about 800 miles shorter and was known as the "Central Route." Gwin found the answer to his concerns in William Russell, a stage express company owner. Russell agreed to establish a speedy and reliable express service over the Central Route, stretching from St. Joseph, Missouri to San Francisco. Russell hoped to prove that his company was an able competitor to John Butterfield's Overland Mail Company, and win away the exclusive government mail contract.[2]

Russell and his partners, Alexander Majors and William Waddell, were expected to operate the Pony Express for about a year. Once the race to connect the telegraph had ended, with both ends expected to meet at Salt Lake City, the Pony Express would no longer be needed. While Russell, Majors and Waddell all received credit for setting up the Pony Express, Majors deserves the credit for establishing a system of 200 relay stations and acquiring 400 ponies. Relay stations were placed 10 miles apart. Every third station was a home station, where extra ponies, firearms, men and provisions were kept. Here, the mail would be handed over to a new rider.[3]

(Photo courtesy of Cristie's Catalog of the Edwards Collection of Western Express Covers. Auctioned October 29, 1991.)

The cover shown above is an early carmine "Running Pony" express marking on a 10-cent embossed envelope. The cover was entered into the express at St. Joseph, Missouri on August 12, and delivery in San Francisco occurred 10 days later. This cover sold for almost $100,000 during an auction - quite a price for a single envelope!

About 80 young men rode for the Pony Express. When he hired the riders, Alexander Majors gave each of them a Bible and required them to sign a pledge promising not to swear, drink alcohol, or fight with other employees. The riders carried the mail in the four pockets of a mochila which fit snugly over the saddle and was quickly switched from one horse to another. Letters were wrapped in oilskin to protect them from moisture. The price of a letter was $5 at first, and reduced to $1 per half-ounce by July 1, 1861. Weight was an important factor. Riders, horses, letters, and gear were all chosen with this in mind.[4]

In May 1860, an unforgettable ride was made by "Pony Bob" Haslam. Approaching the Cold Springs station, he saw that the station was in ruins, the horses stolen and the station master killed. The ride to the next station, with an exhausted horse, was made even more wary by the thought that any moment could be his last. He managed to ride 120 miles in eight hours and ten minutes. When asked how he felt at the end of his trip, he is reported to have answered, "Li'l tired, ain't use to all this travellin."[5]

(Photo courtesy of Cristie's Catalog of the Edwards Collection.)

The above cover transcended the Pony Express in 1861, probably shortly before the service was disbanded since the Pony Express was acquired by Wells Fargo and Co. in May of 1861. This cover is also a patriotic envelope of a variety produced early in the War. On October 24, 1861, the telegraph was completed and the service officially ended a month later. By that time, the Pony Express riders had made over 300 runs between Missouri and California, carrying 34,743 pieces of mail. The Pony Express made several lasting contributions to the country's growth. In its eighteen months, the Pony Express not only provided Western citizens with speedier access to family and friends in the East, but also improved contact between western military outposts, and proved that the Rocky Mountains were not impassible in winter. Most importantly, it helped to direct and spur immigration to the West.[6]

[1] *Pope, Nancy A., Orphans Preferred: The Story of the Pony Express, Enroute, Volume 1, Issue 2, April-June, 1992, p.4.*
[2] *Same as 1, p.4.*
[3] *Same as 1, p.5.*
[4] *Same as 1, p.5.*
[5] *Same as 1, p.6.*
[6] *Same as 1, p.6.*

The War Begins

On December 20, 1860, the Secession Convention of the State of South Carolina dissolved its relationship between itself and the United States of America. The Ordinance of Secession was a contagious act. By February 1, 1861, six other states - Mississippi (January 9), Florida (January 10), Alabama (January 11), Georgia (January 19), Louisiana (January 26) and Texas (February 1) - had passed similar ordinances of secession and withdrew from the Union.

Those acts of secession created an immediate problem for the Confederate states. They could no longer depend on the Post Office Department of the United States of America. President Jefferson Davis was fortunate in calling John Henninger Reagan into his cabinet and entrusting him with the portfolio of postmaster general of the Confederate States of America.

Reagan was born in Sevier County, Tennessee, October 8, 1818. He was the son of Timothy R. Reagan and Elizabeth Lusk. At the age of twenty-one he settled in Texas, where he practiced law and farming. He served two years in the State House of Representatives. In 1856 he was elected judge of the District Court for six years, but resigned from office to go to Congress. After the war he became a member of the Constitutional Convention of Texas in 1875, and a member of Congress from 1875 to 1887; he was a United States Senator from 1887 to 1891, and chairman of the Committee on Postal Affairs. Reagan died in Palestine, Texas, on March 6, 1905.[1]

The most immediate concern of the new postmaster general was not only the organization of his department but making provisions for the payment of postage. United States postage could no longer be used to "officially" carry the mail, although, defacto, the Confederacy did use "appropriated" United States postal stationery for some time after the organization of the Confederate Post Office. General Reagan indicated in a letter in 1898 that he never conferred official authority on postmasters to issue interim "provisional" stamps, however, he indicated that as a practical matter prepayment of postage was difficult given the absence of stamps and stamped envelopes.[2]

Postmaster J. H. Francis of Marion, Virginia, claims to have issued the first Confederate Provisional. The provisional stamp shown below was issued by the New Orleans, Louisiana Post Office during the "provisional period," i.e., before Confederate States stamps were issued. The stamp is printed on a bluish wove paper.

(Collection of Maynard H. Benjamin)

The New Orleans or Riddell provisional was created from a wood cut. Forty stereo- (or electro) types were made from the original wood-engraving of the five cents, and mounted on wood bases, in horizontal strips-of-eight. The stamp shown above was not perforated but clipped or cut from these

horizontal sheets. An interesting story follows this particular provisional. Note that within the curve of the numeral "5" on the stamp appears a small figure "8" for which philately has never been able to provide a reason. Several Confederate philatelic specialists have determined that the figure "8" was not in the original woodcut but was added later, suggesting that "5 times 8" (40) was intended to indicate the make-up of the sheet.

The provisional envelopes are a difficult subject to research since each postmaster, in effect, created his own "stamps" before the official stamps of the Confederacy were issued. To this day, new provisional hand-stamps are still surfacing, some were as simple as the signatures of the postmasters themselves. The Postmaster's Provisional truly showed the innovativeness of the Confederacy in dealing with the shortages of materials that would plague it throughout the war.

[1] *Dietz, August, The Postal Service of the Confederate States of America, Dietz Press, 1929, p. 9.*
[2] *Same as 1, p.39.*

A Pioneer in the Envelope Industry

As the industrial revolution gained headway through the 19th century, mechanized envelope machinery began to replace hand-folded methods. Toward the close of the 19th century, true reciprocating "plunger" type machines were developed. Other stories in this book describe some of these early efforts, but there was one man who eventually became central to standardizing envelope machinery designs and helped our growing industry develop in a healthy, steady way.

Ferdinand Ludwig Schmidt, through determination, business acumen, and the design of a new and particularly well-made machine, was able to form a company which brought better technology to the envelope industry in both the United States and Canada. He enabled the "plunger" to become an industry standard and he strongly influenced, in many ways, the envelope industry that we have inherited today.

Ferdinand L. Schmidt was born in 1869, only eight years after the founding of the Pony Express and died in 1938, five years after the founding of the Envelope Manufacturer's Association of America. Throughout these years, he played a major role in the envelope industry in North America.

Early excerpts from the diary he maintained throughout his life give an interesting picture of New York City life and working conditions around the turn of the century. His writings describe his progress as well as failures as he worked in various machine shops. One of them was Emanuel Rau's machine shop which produced envelope making machines. By 1905, Mr. Schmidt finally became sole proprietor of his own shop, employing eight men. At that time there were eight competing envelope manufacturing companies - the smallest was Ferdinand's. Through all types of adverse circumstances, the little firm struggled to make itself recognized, and it was not long before Mr. Schmidt had won a name for himself throughout the envelope industry, not only for the high quality of his machines, but also for his honesty and square dealing. Over the next few years his company progressed to become the major, and soon the only, manufacturer of envelope machines in the United States.

Ferdinand wrote in his diary:

1887: *"Began at E. Ermold's Machine Shop at 198 Fulton Street on May 24th. Got $9.00/wk at start."*

1888: *"On March 12th, a terrible blizzard struck the city. I had my ears severely frost bitten while walking up from Fulton Street. They were transformed into two lumps of ice."*

1906: *"Received first large order for envelope machinery from Centralia Envelope Co. amounting to $25,000."*

1908: *"On May 10th bought out Emanuel Rau good will, patterns, and all machinery, excepting plant, for about $1,000."*

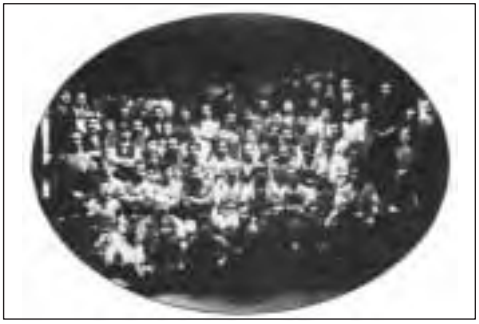
"PANIC YEAR! money tight – lost about $5,000 during year."

1909: *"In February sold open window patents to U.S. Envelope Company for $5,000 cash & received besides about $5,000 in orders."*

1913: *"Received order from the Independent Envelope Co., Indianapolis, for 45 machines, $52,350- the largest order ever placed in the history of the business - May 8, 1913."*

1915: *"Middle West Supply Co. deal on diagonals totalling $51,640... great relief for me as I would have a hard time... trying to get out 42 diagonal machines by July 1st... the negotiation for this deal began March 26th, my 46th birthday."*

In 1918, Ferdinand changed the family name from Schmidt to Smithe. His plunger machines remained the standard for the envelope industry through the first World War to the Depression of the 1930s. During these years, a fast and durable relationship had been established between his company and the many envelope manufacturers whose beginnings were often directly related to his cooperation and counsel. His aid, sometimes financial, often helped in seeing them through their difficult early startups.



During the 1920s, over 500 men were employed building plunger machines in his new factory erected near the Hudson River. Experimental work had already begun on early types of rotary folding machines. Cutting equipment, along with a wide variety of auxiliary machines, expanded his line.

The economic bubble burst in 1929 and factory employment was reduced to 75 men. During the third year of the Depression, with nearly 16 million people unemployed in the United States, Ferdinand experienced his worst year. "Not much left but a well-established business and the determination to fight on until our business family can feel safe again," he reported in his diary. To save the company, new developments of rotary machines proved important. The wide range, the wide range window, the small open-end and large open-end machines were put into production. These new designs eventually brought the F. L. Smithe Machine Company back onto its feet. By the time of his death in 1938, Ferdinand's company was once again prosperous and sound. His paternal relationship with the many companies that sprang up during his lifetime earned him a special affection and gratitude which has long been remembered in a variety of ways with many honors and testimonials. He became known fondly by his friends in the envelope industry as "Dad" Smithe. His sons continued to build quality machines through their lifetimes and, with a third generation, the company flourishes with the new high-speed and sophisticated machinery we in the industry know today.

The Beginnings of the Envelope Industry In Buffalo, New York

The study of the history of the envelope manufacturing industry is a study of places and people. It is also a study of family and friends. This story begins a study of the growth of the envelope manufacturing industr y through an extension of the towns which brought life to these fledgling manufacturers.

The author is indebted to the work of James Logan who was the general manager of the United States Envelope Company during the industry's formative years. Mr. Logan documented the people, places and events that spawned our modern industry. He produced a series of pamphlets under the name of The Red Envelope in which he chronicled the development of the industry through people and machines. No history of the envelope manufacturing industry in the United States could be complete without recognizing the tremendous contribution James Logan made in documenting the early years of the industry.

The first envelope factory in Buffalo, New York, was in operation in 1863. In the city directory of that year the following advertisement could be found:

The Buffalo Paper Warehouse & Envelope Manufacturers
E.R. Jewett & Co.
188 Washington Street
Buffalo, N.Y.

The attention of the trade is directed to the new branch of the Buffalo Manufacturing, having an entirely new machine of very recent invention, capable of double the amount of work per machine, over any now in use, and having the advantage of procuring paper at the manufacturers' rates. Our facilities for manufacturing of envelopes are such as to enable us to defy competition.

We propose to manufacture and keep on hand all the leading styles of envelopes of all grades and shades.

We invite careful comparison of both goods and prices with those of eastern manufacture, and we feel confident that we can make it an object to dealers to purchase our goods. Samples and price lists will be sent on application.

E.R. Jewett & Co.

The envelope machine that was referred to in the advertisement was probably the Reay envelope machine which was the only machine on the market at that time. The assets of Jewett became part of a new envelope company formed a year later - Niagara.

The Birth of Niagara Envelope

In 1864, a man named Vandome, or Vendome, who had been an envelope cutter in New York City, came to Buffalo and associated himself with a man named Charles Prosser. They started in the envelope business, using the Reay folding machine. This was the second envelope factory that was opened in Buffalo. In 1865, John E. Marshall purchased Prosser's interest and continued the business with Vandome, and about a year later he acquired Vandome's interest. One of the specialties which they manufactured under their patent was the Marshall Double Fold Safety Express envelope. It was this envelope that was frequently used by the Wells Fargo company, since Buffalo was the Eastern terminal for the company.[1]

In 1880, John E. Marshall failed and his brother, Charles D. Marshall, took over the business which was operated as the Niagara Envelope Company. In June 1908, the estate of Charles D. Marshall sold the Niagara Envelope Company to F.H. Fisher, B. Chittendon, Bert Oles and a young lithography salesman named Frederick G. Pierce. Pierce was hired to do the selling while the other three ran the factory. Chittendon sold out in 1911. Oles sold out in 1914 and went to Baltimore where he formed the Oles Envelope Company. Finally, Fisher sold his interest to Pierce in 1924.[2]

In 1945, Frederick S. Pierce joined Niagara Envelope Company as a salesman. In 1946, Frank S. McNeill, Sr. joined the company as sales manager and developed and trained the company's first sales group. McNeill continued to develop and train the sales group until his death in 1958. In 1956, Frederick G. Pierce died after 49 years with the company. His son, F. S. Pierce, assumed the presidency of the company.[3]

The company's first expansion was in 1960 when it bought Pringle Paper Products in Chicago. In 1963, William Nelson joined the Chicago division as general manager. Shortly thereafter, the division moved to a new location in Schiller Park.

In 1976, Niagara expanded into the Southwest market when it bought the Hesse Envelope Company - Dallas's oldest envelope company. Gilbert Packer, as general manager, and Wayne Swindell, as sales manager, joined the operation at that time and continued to guide the company.[4]

The year 1980 marked Niagara's entry into the West/Northwest with Niagara Envelope of Colorado. This division was started from scratch. In 1984, Niagara of Illinois moved its operation from Schiller Park to Elk Grove Village where the division is currently located. 1985 marked the opening of Niagara's first distribution center located in Seattle, Washington. G.E. Grimm was responsible for its opening and success.[5]

In 1986, Terrance J. McNeill, grandson of the late Frank S. McNeill, Sr., was promoted to general manager of Niagara of Illinois. Frederick G. Pierce, II, formerly general manager of Chicago, was moved to Buffalo as vice president, corporate operations.[6]

In late 1986 Niagara opened its second distribution center located in Tampa, Florida. In 1989, the Tampa operation moved to a new location

in Jacksonville, Florida. In 1992, a distribution center was opened by the company in Marlborough, Massachusetts.[7]

With the passing of Frederick S. Pierce in 1991, Frederick G. Pierce, II became president of Niagara.

The envelope industr y in Buffalo, New York, born with the skills of an envelope cutter from New York City, grew into a modern manufacturing enterprise.

Niagara Envelope Company was sold in 1996 to Williamhouse, Inc., a subsidiary of American Pad and Paper.

[1] *Logan, James, The Red Envelope, United States Envelope Company, Number 22, February 1924, p.4.*
[2] *Niagara Envelope Company, Fact Sheet, 1992, p.1.*
[3] *Niagara Envelope Company Fact Sheet 1992, p.1.*
[4] *Same as 2, p.2.*
[5] *Same as 2, p.2.*
[6] *Same as 2, p.2.*
[7] *Same as 2, p.2.*

The Civil War Continues, Shortages Plague the South

Soon after the outbreak of the Civil War, a shortage of paper for all purposes, including the printing of postage stamps and the making of envelopes, became evident. The various methods devised to solve this shortage, including the use of home-made and turned covers, were generally termed as adversity covers.[1]

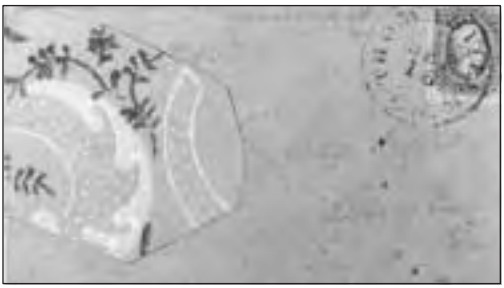
The Turned Cover

Old envelopes already used once, often were opened and refolded inside-out to be used again as a turned cover – their flaps resealed with household paste or glue.

This is an interesting cover tied on both sendings with the same type of CSA #11 stamp. The first usage of the cover (the inside) is to Selma, Alabama, on November 14, 1863, to a Miss Louise McKinsey. The second use is on September 28, 1864, to Talladega, Alabama, to a Miss Margaret Walker of Pleasant Hill in Dallas County, Alabama.

The Wallpaper Cover

Late in the Civil War, regular envelopes became a luxury and any suitable substitute was utilized. Actual wallpaper, generally cut from unused rolls, was widely used and many wallpaper covers were quite colorful and ornate.



(Collection of Maynard H. Benjamin)

This cover was sent in 1864 and displays the rare Thomasville, Georgia postmark. The diagonal seam of the envelope has been folded back to show that the envelope was made from wallpaper.

Fly Leaves, Book Pages and Other Usages

The third type of adversity cover was made from almost any available paper. Usually old book pages were taken and folded into envelopes. Sometimes official notices were taken from their posting place and refolded to become an envelope.

This is a hand-carried adversity cover made from an estate auction notice. The letter that was contained in the envelope was from a mother to her son, Lt. W.W. Davidson, stationed in Dublin Depot, Virginia. Here are some excerpts from her letter:

Lexington, Virginia
March 28, 1864

My Dear Willie,

I send by James Dorman a few pies and biscuits, also a bottle of wine which I hope will reach you in safety...

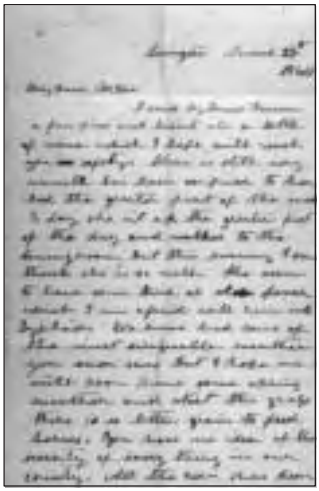
...There is little grain to feed the horses. You have no idea of the scarcity of everything in our country. All the corn has been appropriated and now they are going to appropriate the bacon. It will be very hard for the poor to get anything to eat and it is hard for anyone to get what they want. We have had to do without butter longer than we have ever done since we kept house. I am sorry that I had not something nice to send you....

...I hope you will relish the pies as they are something from home.

Your loving Mother,

Helen Davidson

The war carried on and news went back and forth, between field and home, in envelopes that were folded from any material available.



[1] *Gunter, Erin R., Saunders, Warren H. and Skinner, Hubert C., The New Dietz Confederate States Catalog and Handbook, Bogg & Laurence Publishing Company, Miami, Fl., 1986, p.259.*

Patriotic Covers of the Civil War

Civil War patriotic covers, or envelopes bearing patriotic illustrations and messages, provide an unusual insight into a turbulent and fascinating period of American history. These covers, with their designs reflecting patriotism, sentimentalities and realities of a soldier's life in war, documentation of great battles, tributes to heroes, or biting satires on opposing views, still communicate to us a sense of the great depth of feeling engendered by our nation's most bloody conflict.[1]

Confederate Patriotic Envelopes

Patriotic envelopes issued for the Confederate cause are considerably rarer than most Union patriotics. George N. Malpass, writing in the 1959 edition of the Confederate States Catalogue and Handbook of the Postage Stamps and Envelopes of the Confederate States of America, compares the scarcity of Confederate patriotic covers to Union patriotic covers on a ratio of one Confederate cover for every hundred Union covers.[2] In fact, one catalog of Civil War patriotic envelopes lists only 41 Confederate printers while listing over 277 Union printers.[3]

Many of the earlier Confederate patriotics were manufactured by Northern publishers and shipped to the South before the mail service was stopped on June 1, 1861. The Confederate covers printed in the North were far afield from the covers actually produced and used in the South. The latter, more likely than not, exhibited poorer printing techniques, paper quality, and overall appearance. As the scarcity of supplies became more severe and printing and paper-making machinery more work, the later issued patriotic envelopes were mostly printed in black and white and badly inked on poor grades of paper.

The first illustration is of a Confederate patriotic envelope that was probably produced in the North and shipped south. This is a military usage cover from Private A.G. Fickling, Company C, 19th Georgia Regt. Volunteers, Colonel Benning Commanding.

This is an 11-Star Confederate flag patriotic soldier's due from Virginia. It is very similar to some designs produced in the North with the flag changed.

The second illustration is of a Confederate patriotic cover produced and printed in the South. Note the poor quality of printing and paper.

(Collection of Maynard H. Benjamin)

Union Patriotic Envelopes

There are almost 2,500 distinct examples of Union patriotic envelopes. These envelopes were produced by over 277 envelope printers and envelope manufacturers throughout the Civil War. Some patriotic envelopes were even produced to celebrate the victory of the North after the end of the War.

This illustration is of a rare cover containing the St. Dennis, Maryland, postmark and commemorates the Union Navy. It is interesting to note that a similar cover appears in many Confederate collections with the appropriate change of colors.

Civil War patriotic envelopes not only conveyed a message, they were designed to provoke emotion. These envelopes were the great grandfather of the political direct mail of today and to a certain extent, direct mail in general. Patriotic envelopes were truly unique in that they represented an art of design and construction.

[1] *Grant, Robert W., The Handbook of Civil War Patriotic Envelopes and Postal History, Volume 1, Hugh Romano Printers, c. 1977, p.1-1.*

[2] *Malpass, George, N. Confederate States Catalogue and Handbook of the Postage Stamps and Envelopes of the Confederate States of America, 1959.*

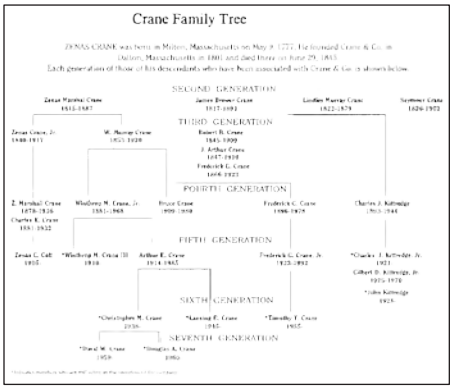
[3] *Same as 1.*

Early Papermakers - Zenas Crane

Much of the history of the envelope manufacturing industry in America evolves around the companies which have provided raw materials to the industry. Paper is to the envelope machine as oil is to the automobile engine. The envelope manufacturing industry owes many of its traditions and a great part of its success to the pioneering efforts of early American papermakers.

One of the earliest was Crane & Co. of Dalton, Massachusetts. The patriarch of the firm, Zenas Crane, established his first paper mill in Dalton, Massachusetts, in 1801. Thomas Jefferson had taken over the presidency of the United States and George Washington had passed away two years earlier.[1]

The Crane family and paper were one from almost the very beginning of the family in the United States. Henry Crane came from England in 1648 and settled in Dorchester, Massachusetts, which was incorporated as the Town of Milton in 1656. Henry's great grandson, Stephen Crane, was the first Crane in the American branch of the family to become a papermaker. Stephen's three sons, Luther, Stephen, Jr., and Zenas, were raised near the Milton Paper Mill, Massachusetts' first paper mill, and all followed their father in the trade. It is interesting to note that Stephen Crane sold a quantity of special currency-type paper to Paul Revere in 1775.[2]



The historical data which is available indicates that both Stephen Crane, Jr., born in 1766, and Zenas Crane, 11 years younger, were fascinated by their early exposure to papermaking and the people associated with the craft.

Stephen Crane, Jr., later moved to Newton Lower Falls where he established a new mill. It was here that Stephen learned the fundamentals of the papermaking industry. Several years later, Zenas Crane moved to Worcester, Massachusetts, where he found employment in a mill operated by General Burbank, an individual who considered papermaking a science of love and skill. Zenas learned both discipline and a desire for perfection from his experience with Burbank.[3]

Desiring to establish his own papermaking company, Zenas settled on a 14-acre site on the north bank of the Housatonic River. This property was owned by Martin Chamberlin, a prosperous farmer. Young Crane approached Chamberlin and soon a deal was struck to sell the 14-acre site for $194. Zenas returned to Worcester to raise the necessary capital to finance the land purchase and the construction of his first mill.[4]

Zenas returned to Dalton in February 1801, with two partners, Henry Wiswell and John Willard. Only Wiswell became active in the paper industry. The original building constructed in Dalton was a one-vat frame mill. The main part of the mill had two stories, with the upper part to be used as a drying loft. The mill had a daily output of 20 posts - a post being 125 sheets of paper.[5]

Americans !

Encourage your own Manufactories, and they will Improve.

LADIES, save your RAGS.

AS the Subſcribers have it in contemplation to ereſt a PAPER-MILL in *Dalton*, the enſuing ſpring; and the buſineſs being very beneficial to the community at large, they flatter themſelves that they ſhall meet with due encouragement. And that every woman, who has the good of her country, and the intereſt of her own family at heart, will patronize them, by ſaving her rags, and ſending them to their Manufactory, or to the neareſt Storekeeper—for which the Subſcribers will give a generous price.

HENRY WISWALL,
ZENAS CRANE,
JOHN WILLARD.

Worceſter, Feb. 8, 1801.

Early papermakers used rags as their feed stock. Many of the rags of the period were made of homespun linen that was difficult to make into pulp. In an early mill, the key positions were a vat man, coucher and engineer.

Helpers would sort through rags and separate contaminants from good rags. Housewives soon learned the advantages of saving old rags and selling them to brokers who would sell them to the mill. Rags became so valuable as paper making stock that they were used as barter for food stuffs.

In April 1810, Zenas Crane purchased a third interest in a new Red Mill, the predecessor of the Pioneer Mill, which had been constructed in 1808 on Martin Chamberlin's property. The company name became Crane, Wiswell and Chamberlin, the third partner being Joseph Chamberlin. In 1822, Crane bought out his partners' shares and became sole owner. The mill has been in the Crane family ever since.[6]

The market conditions that plague the paper industry today also existed in the 19th century. Zenas Crane's success soon drew agitation by many paper buyers for lower prices even if he had to cut the quality of his product. Many frontier publishers were not as concerned about the quality of their paper. In addition, European papermakers began dumping their wares onto the American market and sharply undercut the domestic price structure. Crane refused to compromise the quality of his product. Crane's stubbornness paid off in the form of a friend and customer, Phineas Allen, who was publisher of the Pittsfield Sun. Allen continued to market Crane's paper, as well as use it in some of the editions of his paper which exist to this day.[7]

The two sons of Zenas Crane, Zenas Marshall and James Brewer, became involved in the business and became the second generation of the company. In 1842, at the age of 65, Zenas Crane turned the management of the firm over to his sons and retired.

In 1844, Zenas Marshall Crane developed Crane's distinctive bank note paper. Crane was able to introduce fibers into paper. The new product had parallel silk threads which ran length-wise in the notes. This was designed to prevent the raising of money by turning a $1 bill into a $10 note. Crane put one thread in $1 bills, two silk threads in $2 bills and three threads in the ten common $3 denominations. This development put Crane in a position to support the federal government with the production of currency paper 35 years later. In spite of their success with the government, Crane continued to place emphasis on fine printing and writing papers.

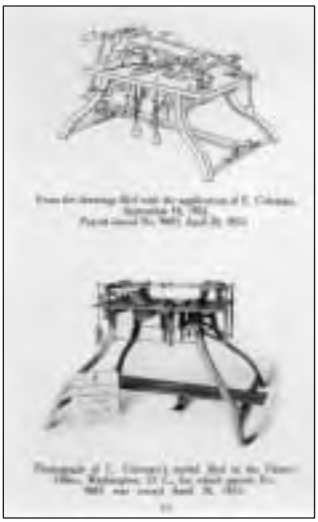
Zenas Crane died on June 29, 1845. A desire for uncompromising quality and a discipline for business would become hallmarks of the Crane family and the products they produced.

Today, Crane & Co. manufactures a wide range of envelopes to support its social stationery and commercial letterhead papers.

[1] *Pierce, Wadsworth, R., The First 175 Years of Crane Papermaking, Excelsior Printing Company, North Adams, MA, 1977, p.7.*
[2] *Same as 1, p.11.*
[3] *Same as 1, p.13.*
[4] *Same as 1, p.13.*
[5] *Same as 1, p. 13.*
[6] *Same as 1, p.15.*
[7] *Same as 1, p.16.*

An Early Envelope Machinery Pioneer - *Dr. Russell L. Hawes*

Worcester, Massachusetts, claims to be the birthplace of the first envelope folding machine manufactured in the United States. Prior to the mid-1850s, envelope folding machines were imported from Europe. The first patent for an envelope-folding machine in the United States was No. 6,055, issued January 23, 1849, to J.K. Park and C.S. Watson of New York. In the early days of the patent office in Washington, inventors of machinery had to file a working model showing their invention. The photograph below shows an early sketch of Park & Watson's patent model.1



The second patent for an envelope-folding machine was No. 9,683 and was issued to E. Coleman in Philadelphia, Pennsylvania, on April 26, 1853. This machine was hand operated. The patent drawing and a photograph of this machine is shown below.

Both of these machines made envelopes by hand and foot power, but neither of these machines ever had any practical commercial value nor is there any evidence that they were ever used in commercial envelope manufacturing.

The third patent, No. 9,812, was issued in the United States for an envelope-folding machine by Dr. Russell L. Hawes, a physician in Worcester, Massachusetts, on January 21, 1853. It would seem, without doubt, as if the honor of inventing and constructing the first practical commercial envelope-folding machine belonged to him.[2]

Hawes was born in Leominster, Massachusetts,

on March 22, 1823. He studied medicine with the local town physician. He died in Nice, France, on July 20, 1867, but his inventive and constructive genius would not allow him to follow the daily routine of his profession. He associated himself with Goddard, Rice & Co. of Worcester, Massachusetts, makers of paper machinery; and in their interest, he visited Europe and learned much for the improvement of papermaking machinery.

DR. RUSSELL L. HAWES

The photograph below shows the patent office model of the Hawes envelope making machine.

While Hawes was an agent for Goddard, Rice & Co., he had an opportunity to visit New York and to see some hand-made envelopes said to have been made by a gentleman named Karcheski. It has been claimed that Karcheski made the first hand-made envelopes in the United States. While Hawes was developing a better understanding of papermaking machinery in Europe, he had a chance to see an envelope-folding machine in operation. It is fair to say that the machine he saw was probably a Hill-De La Rue and Remond machine at the Hyde Park Exposition in London in 1851. Many of the design aspects of Hill-De La Rue can be seen in Hawes' patent model.[3]

Dr. Hawes believed that he could invent a machine for making envelopes and returned to Worcester with many notes and a physician's understanding of the manner in which the human body would have to interface with the machine. It can also be established that Hawes was extremely interested in what later became the science of ergonomics and kinetics. Hawes spent hours watching operators cut envelopes by hand and his notes contained many sketches of the body movements surrounding the Hill-De La Rue machine.

Up until the Hawes machine, all attempts at making envelopes by machinery had dealt only with the folding of the envelope, the single blanks being fed to the machine by hand, the same as sheets of paper are fed to a hand-fed printing press. Dr. Hawes had made a distinct advance and attached a feeding device to his folding machine by which the blanks were picked up automatically. He applied the mechanical principles which would later be used in self-gumming plunger machines. One of the men, who was to later work on Hawes' folding machine manufacturing envelopes, described the machine as a thing of springs and strings. The machine had a daily production of 10,000 to 12,500 envelopes.

The envelopes made by Hawes were sold to Jonathan Grout, who at that time was in the paper and stationery business in Worcester, Massachusetts. Hawes moved his factory to the building of the T.K. Earle Manufacturing Co. on Grafton Street in Worcester. In 1857, Dr. Hawes sold his business to Hartshorn & Trumbull who were succeeded in 1861 by Trumbull, Waters & Co. This company, in turn, was succeeded by the Hill, Devoe & Co. in 1866; later, the W.H. Hill Envelope Company in 1892; and finally, became a division of the United States Envelope Company in 1898.4

[1] *The Red Envelope, Number 4, February, 1916, p.15.*
[2] *Same as 1, p.17.*
[3] *Same as 1, p.17.*
[4] *Same as 1, p.22.*

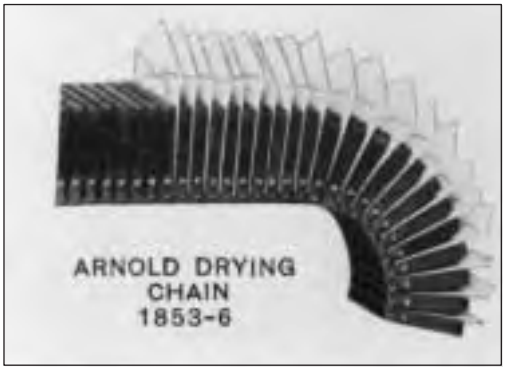
Arnold and Whitcomb, the Beginnings of the Envelope Industry in Worcester, Massachusetts

If Russell L. Hawes developed the first practical envelope-folding machine, James Green Arnold perfected the design and G. Henry Whitcomb made the machine work well in a commercial application.

James Green Arnold settled in the city of Worcester, Massachusetts, in 1851. Arnold was a pattern maker and a draughtsman who later became a patent solicitor. The first Arnold rotary envelope machine was invented between 1853 and 1856 and was completed in 1858. Only one Arnold machine was ever built.1

JAMES GREENE ARNOLD, 1866, AGED 42

The Arnold envelope-folding machine was a rotary type bag pattern style machine, i.e., it folded up the sides, the envelope being cut from the roll or a web of paper. In Arnold's machine, the gum on the sealing flap, which once was applied by hand with a brush (the Hawes concept), was now applied to the flap of the envelope by a brush in the machine after the envelope had been folded. The envelope was then deposited in the drying chain or endless belt with wooden blocks attached, between which the envelope was held while the gum on the flap was drying. This was, without doubt, the first rotary self-gumming envelope machine ever made.2


ARNOLD DRYING CHAIN 1853-6

Unfortunately for Arnold, the machine was never a mechanical success. Also, Mr. Arnold was more interested in the

envelope than the machine and patented the Arnold Side-Seam Envelope as No. 22,405, issued on December 28, 1858. The patent on the envelope was practically worthless. Had he patented the drying chain, pull-off, and other patentable mechanical features in his machines, his patents would have been of real value. It was years later before the first successful self-gumming machine was invented and patented. Needless to say, Arnold stayed poor. But, fortunately, he met a neighbor by the name of David Whitcomb who had both vision and the financial means to make a machine for the folding of envelopes employing Arnold's principles.[3]

DAVID WHITCOMB, 1866, AGED 58

David Whitcomb had honed his skills in the tin peddling business. He worked for John Boynton who had a company in Templeton, Massachusetts, that made cooking utensils as well as cleaning equipment. Whitcomb would frequently travel to Worcester on a tin peddler's wagon. At that time currency was in extremely short supply and tin peddlers had to have excellent bartering skills. Whitcomb became a partner with Boynton. He later retired to Worcester in 1854 where he became a partner in the hardware firm of Calvin Foster & Co. He continued as a member of this firm until 1866.

G. HENRY WHITCOMB, 1866, AGED 22

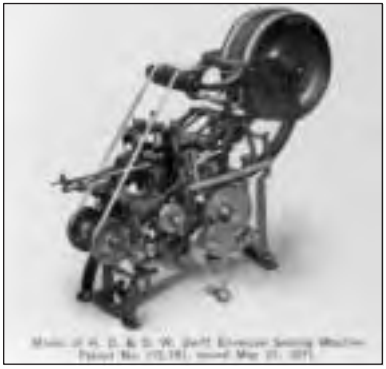
Whitcomb's son, G. Henry, joined his father in Calvin Foster & Co. as a clerk upon his graduation from Amherst College in 1864. The addition of Whitcomb money enabled Arnold to develop a second prototype envelope folding machine which was built during 1863-64 in a building on School Street. David Whitcomb continued his doubts over the practical use of any of Arnold's inventions. Whitcomb brought the matter before a close friend, J.C. Parsons, one of the founders of the Parsons' Paper Company of Holyoke, Massachusetts. Parsons assured Whitcomb that some day there would be a demand for envelopes. Whitcomb's son, G. Henry, would begin the Bay State Envelope Company using the second Arnold machine in a building on School Street.

Mr. Arnold, then employed by Bay State, hired D. Wheeler Swift into the envelope manufacturing company in November 1864. Swift kept working with the Arnold machine but could never get the machine to reach the necessary levels of production. David Whitcomb joined the firm in 1865 after retiring from Calvin Foster and Company and the envelope company became known as G. Henry Whitcomb & Company.

Early in 1866, several Reay envelope machines were purchased to supplement the Arnold machine (the Reay machine was new on the market). The firm eventually had over 20 Reay machines in operation. The two Whitcombs and Wheeler Swift became convinced that the Arnold machine would really never work well and the machine was scrapped. Wheeler Swift was soon able to coax his older brother, Henry Swift, to come to work for the envelope manufacturing company. The acquisition of Henry Swift was propitious given his skill at inventions. Both Swift brothers were soon developing inventions so

quickly that the firm could not effectively employ them in operations. For example, the Swifts developed the automatic band embosser and cutter. They also invented a machine for embossing valentine envelopes.[4]

The Swifts soon began work on an envelope machine of an entirely new type, which was finally developed into what became known as the Swift Round Table Machine, patent No. 115,382, issued May 30, 1871. The Swift Round Table Machine was simple in construction and only cost $350 to produce while a comparable Reay machine cost $800. In addition, the Swift machine had an increased capacity of about 30% over the Reay machine. The Swifts went on to develop an envelope sealing machine in 1871. Four years later, the Swifts applied for patents on the Swift Chain Dryer Machine, known as patent No. 173,870, issued on February 22, 1876. The Swift machine employed many of the principles of the earlier Arnold chain design with one important exception, the Swift chain was metal rather than wood.



So from the ideas of James Green Arnold, fostered by the business acumen of David and Henry Whitcomb, brought forth the inventive genius of the Swift brothers. The envelope-folding machine now had the ability to apply and dry gum in-line.

[1] *Logan, James, The Red Envelope, United States Envelope Company, Volume Nine, February 1919, p.4.*
[2] *Ibid., p.4.*
[3] *Ibid., p.5.*
[4] *Ibid., p.30.*

The Reay Envelope-Folding Machine

No history of the envelope manufacturing industry would ever be complete without presenting the contributions of George H. Reay and the Reay envelope-folding machine. Mr. Reay, after numerous attempts, was able to perfect an envelope-folding machine in late 1862 or early 1863. While the design of the machine was Reay's, the builders were Martin Rau and Leonard Ankele, later Rau and Ekstine, and still later Martin Rau. Reay would sell the machines and also supervise their installation in various envelope companies. In 1863-1865, Reay machines were installed in the following companies:

White, Corbin & Company, Rockville, Connecticut

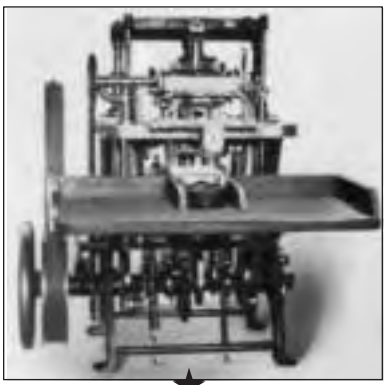
Rockville Envelope Company, Rockville, Connecticut

McSpedon & Baker Envelope Company in New York

The Henry Chamberlin Envelope Company in New York

The Berlin & Jones Envelope Company in New York

The Samuel Raynor and Company in New York.[1]



Later in the period of 1866 through 1867, Mr. Reay installed his machines in the following companies:

The L.B. Plimpton and Company, Hartford, Connecticut

The G. Henry Whitcomb Company Plant, Worcester, Massachusetts.[2]

George H. Reay was born in Northern Ireland in the town of Droghea. Very little is known of Reay's youth, but he apparently emigrated to the United States in the early 1850s. Reay went west to the Berlin Envelope Company (later Berlin & Jones) looking for work as a mechanic in 1855. He was hired to improve the operation of the firm's Rabbate refractory French envelope-folding machine. While Mr. Reay was not successful in improving the operations of the Rabbate, it did give him some valuable ideas on the development of his own machine design.[3]

In 1856, Mr. Reay left Berlin & Jones and associated himself with Butler & Bryan who were operating a small handfolding envelope factory in Brooklyn, New York. About this time, Mr. Butler sold his interest in the firm to Louis Negbaur, who eventually acquired Bryan's interest also and continued the business alone.[4]

The funds for the development of a working model of Reay's folding machine design were provided by Mr. Negbaur and the machine became first known as the Negbaur machine. Mr. Reay eventually obtained other capital and completed the development of the machine on his own account and gave his machine the name Reay. For years the Reay machine was the leading envelope-folding machine in the United States.[5]

The patent on the Reay machine, No. 39,702, was issued August 25, 1863, thus showing that Mr. Reay had been working more than seven years on his machine before the patent was issued. The Reay machine was the first mass-produced machine made in the United States that had gained a significant share of the market for envelope-folding machines. For years, the Reay machine was practically the only successful machine which could be bought on the open market. While not a self-gummer, it was not until about 1913 before another open market machine would out perform the Reay machine.[6]

To George H. Reay we owe a debt of thanks for his early pioneering efforts to bring a machine to the market which set the standard in the market for over 50 years.

[1] *The Red Envelope, Number 14, October 1921, p.14.*
[2] *Same as 1, p.14.*
[3] *The Red Envelope, Number 5, May 1916, p.12.*
[4] *Same as 3, p.12.*
[5] *Same as 3, p.13.*
[6] *Same as 3, p.17.p.12.*

Thomas McSpedon, an Early New York Manufacturer and the W.W. Cotton Envelope-Folding Machine, 1856

Among the first manufacturers of machine-made envelopes in New York City was the firm of McSpedon & Baker, later McSpedon & Robbins.

The name of Thomas McSpedon first appeared in the New York City Directory in 1839 as a bookbinder at 1 Pine Street. He continued there until 1845, when the firm name of McSpedon & Baker appears as stationers at 23-25 Pine Street. The firm was at this location from 1846-1856.

In 1856, their name appears as blank book and envelope manufacturers located at 29-33 Beekman Street. In 1863, the directory lists them at 51 Ann St., and in 1866 the firm name was changed to McSpedon & Robbins, who are given simply as manufacturers of envelopes.[1]

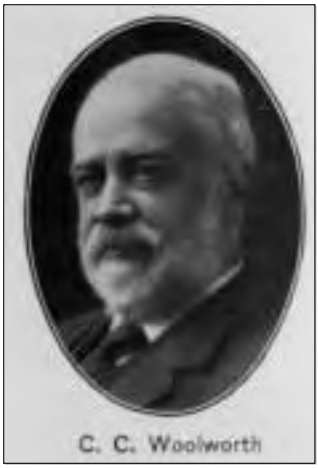
Mr. McSpedon was born on Hestor Street, New York City, of Scottish parents on August 9, 1817, and died on September 3, 1889. McSpedon's partner, Charles Baker, was born in New York and died in New York City in 1903. McSpedon & Baker operated machines built by W.W. Cotton, to whom a patent (No. 14,625) for an envelope-folding machine was granted on April 8, 1856. This was the fifth patent granted for an envelope machine in the United States. Mr. Cotton's patent was granted three years before the Duff & Keating patent in 1859 and seven years before the patent was granted to George H. Reay in 1863.[2]

The W.W. Cotton machine was one of the

first power operated envelope-folding machines, the others of this time being foot operated and crude in design. The Cotton machine was provided with a counter. This was a tin box divided into compartments, into which the envelopes were discharged from the folding box. When twenty-five envelopes had been dropped into one of the compartments, a ratchet moved the box to present another compartment to receive the next box (the first early package assist). But this counting mechanism had very little value, for it counted not completely perfect envelopes, but revolutions of the machine. When the machine made waste, as it did most of the time, the count in the boxes was wrong. Clearly, Cotton had invented one of the first envelope mechanisms.[3]

But what of McSpedon & Baker? Having difficulty competing against Berlin & Jones, they sold their envelope machine plant, consisting of six Cotton machines, to Woolworth & Graham, who continued to operate the factory at 51 Ann Street, with offices and sales rooms on John Street.

[1] *The Red Envelope, Number 15, January 1922, p.19.*
[2] *Same as 1, p.21.*
[3] *Same as 1, p.22.*


C. C. Woolworth

John S. Graham

Woolworth & Graham, Early Paper Dealers

The firm of Woolworth & Graham was established in New York City in 1862 and the name of the firm was retired in 1907. C.C. Woolworth was born in Homer, Courtland County, New York, on September 5, 1833. He began his affiliation with the paper industry in 1848 when, at the age of 15, he left home and went to Buffalo, New York, where he worked in Danforth's Book Store. In 1852, while working at Hall, Mills & Co. in Syracuse, Woolworth came across his first envelopes which were from England and were buff colored open-side products. These envelopes were sold by putting them in commercial packing, but they did not move fast since there was no market for commercial envelopes in Syracuse at the time.[1]

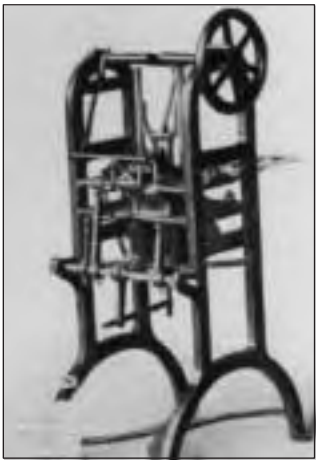
C.C. Woolworth left Syracuse, spent a brief time with A.S. Barnes and Company in New York, and moved on to open his own company in Omaha, Nebraska, in 1856. While he was working with A.S. Barnes, he became familiar with many different styles of envelopes being produced for Barnes by Hartshort & Trumbull of Worcester, Mass.[2]

In 1856, Omaha, Nebraska, had a population of about 1,200, the Indian land titles having been vacated the preceding year. The entire population of Nebraska then, including both Dakotas, was about 3,000; Kansas City had less than 2,000 and Chicago had less than 100,000. From his Omaha foundation, Woolworth opened stores in St. Joseph, Missouri, Atchison, Kansas and in 1859, Denver, Colorado,

where the first Woolworth & Moffat store was opened. Moffat had to bring the store's inventory from Omaha, Nebraska, in a covered wagon, taking about 40 days to reach Denver.[3]

When Woolworth was living in St. Joseph, Mo., he saw the first pony express start across the plains. He recorded the following in his journal:

There was hot competition in delivering mails to California between the overland route and the sea route via Panama. My partner, W.A. Davis, postmaster at St. Joseph, Mo., joined in the contest, went to Hannibal, Mo., over the Hannibal & St. Joseph R.R., then recently completed, and established arrangements for sorting the mail on the train for delivery to the stage lines immediately on its arrival at St. Joseph instead of as formerly sending the mail to the St. Joseph post office for sorting, and that was the beginnings of the railway mail service. [4]



Woolworth began his envelope business when he returned to New York from the West in 1862. He entered into a partnership with John S. Graham who had similar experience as a salesman with A.S. Barnes & Co. When they began the envelope business, they first bought paper mainly from Parsons Paper Company of Holyoke, Massachusetts, and had the paper made into envelopes by White & Corbin of Rockville, Connecticut, and McSpedon & Baker of New York City.[5]

McSpedon & Robbins (Baker got out) operated six Cotton envelope-folding machines which Woolworth & Graham finally bought in 1866 and operated the factory at 51 Ann Street with an office and salesroom on John Street.

On November 10, 1874, after losing the government contract for making stamped envelopes, George H. Reay assigned John S. Graham of Woolworth & Graham as receiver. C.C. Woolworth secured the contract for making postal cards for the U.S. government from July 1, 1881 to July 1, 1885.[6]

Woolworth & Graham retired from the envelope business in 1869, selling their plant to a man named Brown. Woolworth & Graham were pioneers in life and in business.

Author's note: It is my great honor to dedicate this story of Saul "Sonny" Olzman of Williamhouse-Regency. Sonny passed away on March 30, 1994, and was well known in the paper industry and was an institution in the New York paper market. He, like Woolworth and Graham, was also a pioneer.

[1] *Logan, James, The Red Envelope, Number 15, January 1922, p.4.*
[2] *Same as 1, p.7.*
[3] *Same as 1, p.7.*
[4] *Woolworth, C.C., Letter to James Logan, July 14, 1916, New York City, p.7.*
[5] *Same as 1, p.13.*
[6] *Same as 1, p.16*

Edwin Allen,
an Early Envelope
Machinery Maker

No history of the envelope manufacturing industry would be complete without mention of Edwin Allen. Allen ran the Allen Manufacturing Company of Norwich, Connecticut, and was an extraordinary gifted inventor. He was granted over 40 patents. Early in the life of the envelope industry he gave thought to the invention of machinery for making envelopes.

Edwin Allen was born in Windham, Connecticut, on March 27, 1811, and died on January 4, 1891 at 79 years of age. He started his career in the clock business and then went on to invent and later perfect a machine for cutting wood block type. That business later failed and was purchased by Ackerman & Miller and J.G. Cooley, proprietor of the Printers Warehouse, New York City.[1]

Not to be deterred, Allen went on to other ventures. The firm of George F. Nesbitt & Co., was one of the largest printing and publishing houses in New York City in the mid-1800s. Nesbitt was aware that Allen had been working on paper feeders. Given the complex ties of a government contract to manufacture stamped envelopes, the Nesbitt company asked Mr. Allen to consider producing a machine to make envelopes. Allen went to Newark, N.J.; and in the shop of Ezra Gould, he built the first stamped envelope machine for George F. Nesbitt & Co. These folding machines had Allen's printing press feeding attachment, later covered by patent No. 39,872 issued on September 15, 1863. This machine also had an elevating mechanism for keeping the blanks at the proper height and a device for embossing stamps.[2]

The Allen machine is believed to be the first envelope folding machine with printing and embossing attachments and was the fore-runner in the development of printing and folding envelope machines. It seems that no patents were ever granted on the Allen machine operated at Nesbitt and so no model or patent office drawings are available to show just what the machine was like.

One photograph remains of a section of the envelope folding room of George F. Nesbitt & Co. The feeding device on the envelope folding machines have been identified as Allen paper feeders.[3]

In 1865 or 1866 Allen organized the Allen Manufacturing Co. to manufacture the new Allen Rotary Envelope machines perfected through the experience at Nesbitt & Co. This new machine was on the rotary principle and comparatively few machines were built or sold. However, a photograph of the Allen patent for this machine does exist and is duplicated on the next page.

While he was manufacturing envelopes using equipment he had developed, he also devoted considerable time to the further development of the Allen Rotary Printing Press. Allen's thought in developing this press, later called the Jumper, was that by supplying the envelope with the business card in the corner (the first corner card envelopes) he could develop a large

business. However, the corner card was not accepted in the market and the failure of this venture caused Allen to retreat from envelope manufacturing on March 1, 1869.[4]

Edwin Allen will always be remembered as the father of the corner card envelope. He possessed a vision that was beyond his time. His contributions to the field of envelope manufacturing and envelope machinery design set the stage for later significant developments.

[1] *The Red Envelope, United States Envelope Company, No. 19, June 1922, p.6.*
[2] *Same as 1, p.7.*
[3] *Same as 1, p.10.*
[4] *Same as 1, p.14*

The Early Envelope Industry in Philadelphia

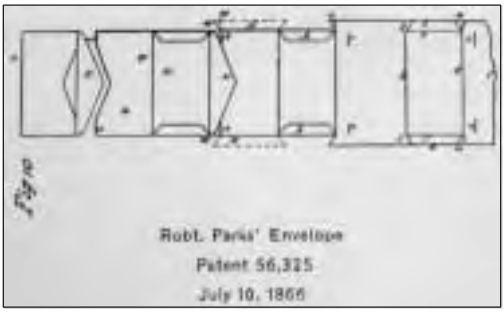
The envelope manufacturing industry certainly began in Worcester, Massachusetts, and New York City. However, Philadelphia, Pennsylvania, also claims a number of envelope manufacturers that date back to the 1850s.

In the mid-1850s, a factory for making envelopes was established by Samuel Tobey and Caleb S. Tobey. The firm was located at 233 South Fifth St. in Philadelphia. Little is known about the machinery these gentlemen possessed although they had numerous dies. However, these were more like templates for cutting out envelopes by hand rather than the machine cutting the envelopes. This firm did not survive the death of the Tobey brothers and the assets of the firm were sold throughout the industry at that time.[1]

In the early 1860s, W.E. and E.D. Lockwood formed a company on South Third Street, Philadelphia. They began their business as manufacturers of paper collars which were consumed in large quantities during the Civil War. During the War they decided to diversify their business into envelope folding and bought or constructed envelope-folding machines known as the Pette machine, which was the invention of S.E. Pette of Philadelphia. Pette's first application for a patent was for a side-seam envelope for which he took out a patent on March 22, 1859, under patent number 28,537. This machine cut the envelope from a continuous roll and was made with the seams at each end, and was a self-gummed

envelope when completed. No examples remain of the Pette envelope. The Lockwood brothers continued to grow their business and manufactured many different styles, mostly open-end envelopes. With the death of Charles Lockwood the company turned its attention to folding boxes and disposed of their Pette machines.[2]

On July 10, 1866, Robert Parks, of Philadelphia, Pennsylvania, patented a machine for making an improved envelope and assigned all his rights to W.E. and E.D. Lockwood and E.J. Spangler. The gumming and drying portion of the machine was invented by John Armstrong of Philadelphia. The machine was an enhancement on the original Pette design and produced an envelope from a continuous roll. The Parks envelope patent is shown below.[3]



Since there is no remaining picture of the Lockwood (Parks) machine, let me quote from the original description of the Lockwood Envelope-Folding Machine (Parks design) which was exhibited at the Centennial Exposition in 1876.

"The paper from which the envelopes are cut is fed into the machine from large rolls after the fashion of newspapers which are printed from the web, the web in the case of the envelopes, however, being kept slack. On being drawn into the machine by rollers the paper is caught between two side guides controlled by springs, which keep it always in the center, but have sufficient expansive power to allow any inequalities in the edges of the paper to pass. The paper then passes under six knives, hanging from a cross-head frame, which has an up-and-down motion, which cut the corners for folding, etc., before it comes under the operation of the creasers. Two of these creasers turn over the side edges ready for pasting and the third makes the crease which is to form the bottom edge of the envelope. The edges of the envelope next pass under two small and narrow rolls which are governed by cams. The rolls being fed with paste from tubular reservoirs above, paste the edges of the paper where desirable, the action of the cams causing the rolls to jump the parts where no paste is wanted, or rather where its absence is necessary."[4]

"Passing on, the half-made envelope is struck by a second set of knives, three in number; of the two, the first one cuts off the unnecessary edge of the overlap and the other cuts out the shape of the cover. The third knife, which is heavy and blunt, catches the envelope at the creased line which is to form the inside of the bottom edge, and drives the envelope down between two rollers, in passing through which the envelope is folded and the side edges are firmly pasted together. The envelopes are caught in endless tapes, which are carried by a series of slowly revolving wheels. Each envelope laps closely over the one behind it, thus the only portion of all the envelopes which remains exposed is the three-eighths of an inch of the inside cover which is gummed so that the envelope can be sealed when it is used."[5]

"These tapes carry the envelopes around one large wheel forty inches in diameter, and thirteen smaller ones, each thirty inches in diameter; these wheels over which the envelope passes on its back being cut out so as not to interfere at all with the drying gum. As the envelopes pass over the large wheel they are struck by a flat revolving brush which is fed with gum arabic from a roller revolving in a reservoir and which transfers it to the envelope gumming some half a dozen of them at each revolution."[6]

This pamphlet went on to discuss the counting mechanism which was comprised of a plate and ratchet mechanism which moved the envelopes into a crude packaging system. This envelope machine was producing at a rate of 120 per minute from the web, the first of its kind. The Lockwood brothers deserve great recognition for their efforts in assisting the development of the first web envelope-folding machine.

From Tobey to Lockwood, Philadelphia made its mark as a city important to the history of envelope making.

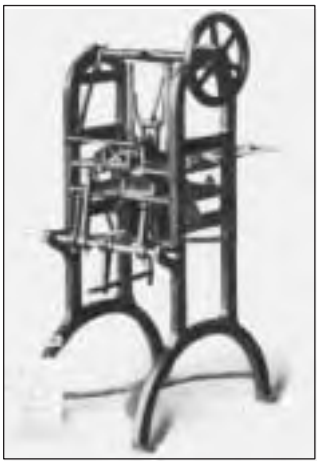
[1] *The Red Envelope, United States Envelope Company, Number 22, February 1924, p.9.*
[2] *Same as 1, p.10.*
[3] *Same as 1, p.10.*
[4] *Same as 1, p.13.*
[5] *Same as 1, p.14.*
[6] *Same as 1, p.14.*

The House of Raynor

The envelope manufacturing industry has a number of families in which generations of the same family were involved in the business. The Samuel Raynor family was one of these early envelope families.

In 1818, a small stationery store was established at 76 Bowery, New York City, by Richard Bartlett, which grew into the Raynor & Perkins Envelope Company in 1896. Samuel Raynor was born in 1810, in the town of Hempstead, Long Island, and came to New York City in the year 1822. At the age of 25, he associated himself as a partner with Richard Bartlett under the firm name of R. Bartlett & S. Raynor.[1]

Bartlett died in 1837 and Samuel Raynor brought his older brother, Hiram, into the business. The company then became known as H. & S. Raynor until 1847, when Hiram retired from the business at age 45. In February 1858, Raynor, who now ran the business as a sole proprietor, moved to 118 William Street. Prior to 1856, the company did not manufacture envelopes but sold products on consignment made by McSpedon & Baker. In that year Raynor bought an interest in the envelope firm of Charles H. Lyon & Brother, which was established in 1853. The firm became known as Lyon & Raynor, and was located at 27 Beekman Street. In the fall of 1857 or 1858, the firm was dissolved by mutual consent and Raynor continued on alone.[2]



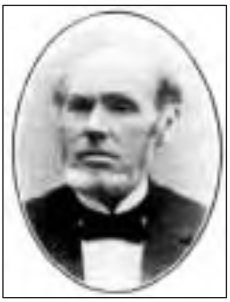
In 1858, the envelope business was still in its infancy - the folding was done almost entirely by hand. The first machines used to fold envelopes at Raynor were made by W.W. Cotton, who was a foreman in the Raynor factory. Cotton received the fifth patent granted on envelope machinery in the United States.

In the summer of 1858, the White & Corbin envelope machines, which were

invented by Milton G. Puffer, were first placed on the market and Mr. Raynor gave an order for twelve machines at $500 each. These were the fastest machines on the market at the time, making about 1,300 envelopes per hour. Since one operator was required to seal the flaps for every two machines, the average productivity was about 900 envelopes per hour per employee which was considerable in those days. As the company continued to grow, a loft at 75 John Street was rented and an opening was made through the wall into the William Street store which enabled the new office space to have communication with the factory.[3]

In 1856, William Irwin Martin joined the firm. When Lyon & Raynor dissolved the partnership, he continued with Raynor; and in 1862, became a junior partner with Raynor's son, William P. Raynor. The business soon outgrew the limits of the John and William streets establishment and Mr. Raynor bought a four-story building at 115 William Street. The business was moved to this new location in the spring of 1865. In March 1888, Samuel Raynor died, the result of exposure contracted in the great blizzard of March 12 of that year. The firm continued under the name of Raynor & Martin until January 1, 1892 when the Raynor Envelope Company was incorporated in New York and Mr. Martin retired.[4]

William M. Perkins who worked for the J.Q. Preble & Co. organized Perkins Envelope Company on May 1, 1890. On January 1, 1896, the Raynor Envelope Company and the Perkins Envelope Company were merged under the corporate name of the Raynor & Perkins Envelope Company with Perkins' interest in control. In 1900, Mr. Perkins bought the Raynor interest. William P. Raynor died on April 17, 1911, thus ending a family which was synonymous with envelopes for over 90 years.



[1] *The Red Envelope, U.S. Envelope Company, No. 21, June 1923, p.4.*
[2] *Same as 1, p.5.*
[3] *Same as 1, p.7.*
[4] *Same as 1, p.9.*

The House of Plimpton

The envelope manufacturing industry in Hartford, Connecticut, owes its beginnings to William H. Prescott. The firm of Prescott, Plimpton & Company was founded in 1865 by William H. Prescott and Linus B. Plimpton. Mr. Prescott was associated with White & Corbin of Rockville, Connecticut. Mr. Plimpton was a dry goods salesman for P.R. Moore in Rockville, Connecticut.

The firm began doing business in the upper lofts of the Howard Building on Asylum Street in Hartford and had been operating a year when Mr. Prescott returned to the firm of White & Corbin in Rockville. Prescott sold his interest in the Hartford venture to Mr. Plimpton. With the departure of Prescott, Mr. Plimpton began the process of reorganizing the company under the firm name of L.B. Plimpton & Company, later changed to Plimpton Envelope & Paper Company, and still later the company was incorporated as Plimpton Manufacturing Company in 1872.

In 1868, the business moved from the Howard Building to a building on Ford Street. In January 1877, a fire destroyed the Ford Street plant and what was salvaged from the fire was taken to the Batterson Building on Asylum Street. The firm continued to do business there until 1887, when the business, having outgrown this plant, moved to the building at 256 Pearl Street, where it remained until 1921. They then moved the factory to South Ann Street and the corner of Jewell Street, which was formerly the home of the Hartford Manufacturing Company, where the company made government stamped envelopes for many years.

One of the most interesting early employees of the company was F.C. Graves who was connected with the Plimpton Company for 40 years. Mr. Graves came to the United States from Ireland in 1851, when he was 21 years of age. He worked for a while as a machinist for Hoe & Co. in New York. He worked on the first press built by them that enabled a newspaper to be printed on both sides without rehandling the paper. Mr. Graves later went to work for G. H. Reay in the manufacturing of Reay envelope-folding machines. When the Plimpton Manufacturing Company bought 12 Reay machines, Graves was sent to Hartford to install the machines and additions. After a brief period with the White & Corbin Envelope Company, he went to work in 1870 for Plimpton as a machinist. He worked for Plimpton for the next 40 years, retiring as super-intendent of the plant.

Another interesting early employee was Cynthia Root. Miss Root was employed to teach the plant operatives (inspector/ operators) at the Plimpton plant. She would work for the Plimpton Manufacturing Company regularly until October 21, 1915, when at the age of almost 82 she was retired.

In 1869, Oliver Plimpton, brother of L.B. Plimpton, became superintendent of the Plimpton plant, continuing in that position

for 25 years, until 1894, when failing health compelled his retirement. He was succeeded by F.C. Graves.

In 1874, the Honorable Marshall Jewell, of Hartford, Connecticut, was the postmaster general and he induced the Plimpton Manufacturing Company to bid on the contract for supplying the government with stamped envelopes and newspaper wrappers then held by George H. Reay of New York City.

J. Q. Preble & Company
New York City

J.Q. Preble was born in Bowdingham, Maine, on February 12, 1826. In 1844, when he was 18 years of age, the family moved to Worcester, Massachusetts. He worked for about a year in the book binder business of Jonathan Grout on Main Street and then worked for A.C. Beaman, also on Main Street. Beaman's business involved the making of perforated cardboard.

After a short time in Oconomewoc, Wisconsin, Preble returned to Worcester and began the manufacture of fancy specialty envelopes. Sometime between 1849 and 1851, Preble moved his manufacturing plant to New York City where he later added the manufacture of embossed envelopes. A photograph of an early Preble embossed envelope is shown to the left.

Preble hired Charles H. Lamport and David W. Robinson as the managers of his envelope department. Both later became junior partners in the firm. Lamport continued in the company until 1877, when he left to take the management of the J. G. Shaw Company, blank book manufacturers. Later this name would be changed to the National Blank Book Company of Holyoke, Massachusetts.[1]

Preble's envelope folding department was largely comprised of envelope-folding machines that were footpower operated. The envelope blank was placed on the folding block and then the folding flaps were operated by foot power, the folded envelopes being removed from the folding

block by hand. The flaps of these envelopes were not gummed; the wafer was still being used to seal the envelopes. It was from this idea of the embossed envelope that a few years later the embossed initial stationery developed.

Preble's business continued to grow in the late 1870s and early 1880s. Preble began to look around for a more efficient folding machine. The firm of Bell & Gould was making envelopes by hand at this time in a building on Beekman Street and the Preble company was one of their largest customers. Bell & Gould was operating some very crude envelope machines that did part of the work of embossing and folding the envelope. These were small portable machines, operated by foot power. Preble, desiring the Bell & Gould machines, purchased the company upon the retirement of Bell. Apparently, these machines were never patented. The Preble factory was completely destroyed by fire on July 3, 1887.[2]

J. B. Sheffield & Son of Saugerties, New York, had been one of J. Q. Preble & Co.'s sources of supply for paper, both for the blank book and envelope departments. An arrangement was made between Preble and Sheffield to erect a new factory building adjoining the paper mill plant at Saugerties, N.Y. Walter E. Preble, J.Q.'s son, managed the envelope and blank book converting while William R. Sheffield managed the paper making operations. The Sheffield & Preble joint venture was reorganized on August 5, 1890, as the Sheffield Manufacturing Company when Mr. Preble retired from the business. J.Q. Preble died in New York, on June 23, 1909, at the age of 83.[3]

J.Q. Preble and his son, Walter, made a tremendous contribution to the envelope manufacturing industry in their ability to both manufacture and sell specialty envelopes. Their knowledge of the stationery market and their ability to produce machine-made embossed stationery led the way for many in the industry.

[1] *Same as 1, p. 19.*
[2] *Same as 1, p.24.*
[3] *Same as 1, p.25.*

The House of Morgan

Elisha Morgan, the patriarch of Morgan Envelope Company, was born in Northfield, Massachusetts on September 7, 1833. In his youth, Morgan worked in his father's merchandise store and received valuable business experience. After spending several years as an employee of the Connecticut River Rail Road Company in Greenfield, Massachusetts, he resigned to take on the challenge of a new and uncertain venture, the manufacturing of envelopes.

In 1864, Mr. Morgan, operating under the name of Rockville Envelope Company, purchased four Reay envelope folding machines and began the manufacturing of envelopes in Rockville, Connecticut. Morgan quickly moved the equipment and business to Springfield, Massachusetts and began an association with Mr. Chester W. Chapin of the Boston & Albany Railroad. The name of the company was changed again, to E. Morgan & Company.[1]

The company was initially located in the Leet Building on the corner of Dwight and Hillman Streets. Soon after the move, three more Reay machines were added, bringing the total manufacturing capacity to seven. These machines were not self-gummers, but were of a much better design than the prevalent Duff & Keating machines used by several competitors in the area. Each machine produced about 2500 envelopes per hour, and required one operator. The earlier models made commercials in sizes 3, 4, 5, and 6. Before long, modifications and later models produced 9 and 10 official sizes.[2]

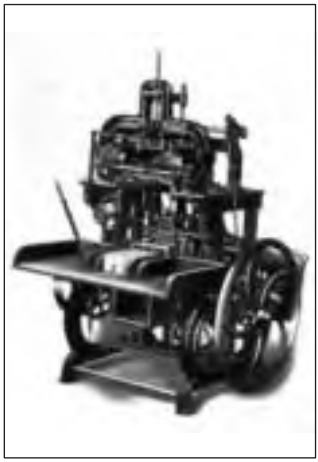
About 1869, the business, which had grown steadily, moved from Hillman Street to Taylor Street. In 1873, the business moved again, into the new building erected by Emerson Wright on Worthington Street. The box shop was left in the Taylor Street building and later operated by Seymour Brothers. Additional room was acquired in the adjacent building on the street corner of Mail & Worthington Streets, where the Finishing Department was located on the top floor for folding and ruling papers.

More Reay machines were added, and a few years later a machine built by Lester & Wasley of Norwich, Connecticut, under license from Berlin & Jones Envelope Company of New York, was purchased. This was the first self-gummer the company had available.[3]

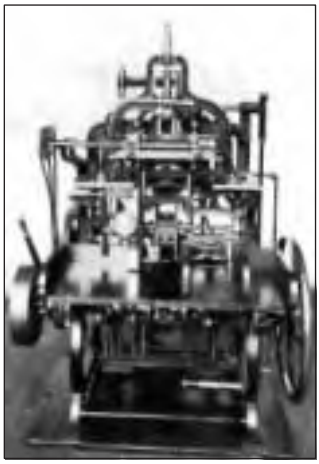
In 1873, the government, for the first time, issued postal cards and awarded the first contract to the Morgan Envelope Company. These early postal cards were printed with an artistic design, consisting in part of a scroll-work border in a rich brown ink. From the manufacturing of postal cards, the company moved into the manufacturing of papeteries. Papeterie is a word adopted from French meaning "a manufacture of paper." In later use it meant a box containing writing paper and envelopes and, sometimes, other materials used in writing. Before papeteries, businesses that wanted writing materials had to go to a stationery store.

The movement into the papeterie business meant that Morgan would need

to secure a reliable supply of boxes, which it did by manufacturing its own boxes. In 1882, the company bought out a boxmaker on Harrison Avenue in Springfield and the entire envelope company was moved to that location. About 1885, the firm manufactured toilet paper. The first specialty under this line was King toilet paper and the company designed a special dispensing system for this product line. It was also in the Harrison Avenue building that the company began to make its own envelope-folding machines.[4]



This new folding machine was named the Slater machine after William D. Slater, a principal in the company and designer of the machine. The initial machine was a Portfolio 8 (6 1/2 x 10), built to make speech envelopes on a government contract. This was the first order placed by the government for envelopes other than stamped envelopes. These envelopes were used to send the speeches and writings of politicians and bureaucrats to "grateful constituents."[5]



It is interesting to note that while the "Outlook" or window envelope was developed by Outlook Envelope Company (which exists to this day), William D. Slater solved the problem of their manufacture by machinery. His patent, issued July 14, 1908, No. 893,105, represents the basic patent for window envelope machines. William Slater, like Elisha Morgan, was a true visionary and contributed greatly to the technology for manufacturing envelopes. The Morgan Envelope Company was merged into the United States Envelope Company in 1898.[6]

[1] *The Red Envelope, Number 16, March 1922, p. 5.*
[2] *Same as 1, p. 10.*
[3] *Same as 1, p. 13.*
[4] *Same as 1, p. 15.*
[5] *Same as 1, p. 18.*
[6] *Same as 1, p. 22.*

An Early Envelope Pioneer:
Wade Hampton Hill

Wade Hampton Hill was born in New York City on February 27, 1834. Shortly thereafter his family moved to Batavia, New York, were he received his education in the public schools. In 1848, at the age of 14, he worked as a clerk in a woodenware store in New York City. He remained there for about a year and then became a clerk at the Dunham Piano Company. He remained there until 1854, leaving to become a salesman for the Berlin & Jones Envelope Company. He stayed at Berlin & Jones until the spring of 1865, when, at the age of 31, he went to Worcester, Massachusetts, buying out the firm of Trumbull, Waters & Co., manufacturers of envelopes. There, he organized the firm of Hill, Devoe & Co., his partner being his brother-in-law, Charles H. Devoe. Mr. Devoe was also born in New York City and was a partner of Mr. Hill for many years. In fact, he became a director when the W.H. Hill Envelope Company was incorporated. However, he resigned from the company in 1898.

Another figure enters prominently in this story – Abram A. Rheutan, who was born in Paterson, New Jersey, on August 20, 1837 (the same day as Devoe). Rheutan worked for Duff & Keating in New York City. They were among the pioneer builders of envelope machinery in the United States. He left Duff & Keating to become superintendent of the Berlin & Jones Envelope Company. Later, he became superintendent for Samuel Raynor & Company of New York, and from there he went on to the Hill factory in Worcester, Massachusetts.[1]

Mr. Rheutan was the inventor of much of the machinery in the W.H. Hill Envelope Company factory. Shown on the next page is the patent office model of No. 133,800, issued December 10, 1872–an early envelope making machine.

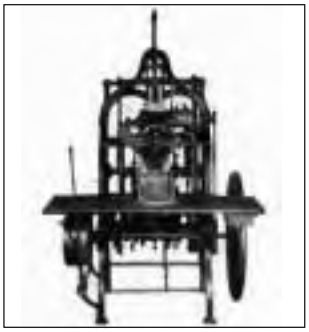
Rheutan next invented an envelope-folding machine, which was not a self-gummer. A side profile of the machine is shown on the next page.

To supplement this machine, Rheutan built an envelope sealing machine, which completed his cutting, folding and sealing inventions.

Isaac L. Rheutan, the son of Abram A. Rheutan, was born in Worcester, Massachusetts, and was educated in the public schools there and attended the Worcester Polytechnic Institute, graduating with the class of 1889. He at once became the assistant superintendent of the W.H. Hill Co., and on the resignation of Abram A. Rheutan as superintendent, he was appointed superintendent of the W. H. Hill Envelope Co., a division of the United States Envelope Co. He held that position until 1902, when he resigned to become superintendent of the Union Envelope Company in Richmond, Virginia.[2]

Charles W. Gray was also connected with the W.H. Hill Envelope Company for over 30 years. He was born in West Barnstable, Massachusetts, June 10, 1844, and was a student at Amherst College 1860-1861. He taught school in Newport, Rhode Island, in 1862 and was a medical cadet, U.S. Army Hospital, Portsmouth Grove, New Hampshire, in 1863. He was a student in the medical department of Harvard University in 1863-64 and for the next five years he taught school at the Alexander Institute in White Plains, New York, and several other schools. In 1871, he accepted a position as a correspondent and salesman for G. Henry Whitcomb & Company in Worcester, Massachusetts.

On July 1, 1873, he joined the Hill, Devoe & Co. When Mr. Hill organized and incorporated under the name of the W.H. Hill Envelope Company, Mr. Gray was elected president and held that office until the company became one of the subsidiaries of the United States Envelope Company, on August 18, 1898.[3]



Gray continued to work at the United States Envelope Company until 1903 when he resigned and became one of the organizers of the New England Envelope Company in Worcester, Massachusetts, which is in existence to this day. He continued at New England, serving as its president until his death on December 21, 1921.

A final person of note who was also connected to the W.H. Hill Envelope Company was H. M. Wood, a member of the staff from 1878 to 1898. Prior to that time, he was a member of the office staff of G. Henry Whitcomb & Company. On the founding of the United States Envelope Company in August 1898, he became the chief clerk to the general manager, remaining as such until his death on January 7, 1917. Wood made many contributions to the W.H. Hill Envelope Company behind the scenes and later for the United States Envelope Company.[4]

The W. H. Hill Envelope Company is important to the history of the envelope industry as a finishing school for many envelope manufacturers who went on to make significant contributions in the industry.

[1] *Logan, James, The Red Envelope, No. 22, p.7*
[2] *Same as 1, p. 13.*
[3] *Same as 1, p.14.*
[4] *Same as 1, p.15*

The Early History of Paper

The raw material for the envelope maker has always been paper. Many scholars trace the beginning of paper to the ancient Egyptians who pressed papyrus into a writing material. However, it is claimed that the first "handmade" paper was made by the Chinese who had a knowledge of paper making that evolved from the second century B.C. In the eighth century A.D. the Chinese invaded Arabia and were defeated by the Arabs, who made prisoners of some of the invaders. According to tradition from these prisoners, the Arabs learned the art of paper making. Many of the earliest paper manuscripts from the ninth and tenth centuries are of Middle Eastern origin.

In the University Library of Leiden, there is a treatise on the rare and curious words in the sayings of Mahomet and his companions written in 866 A.D. which is one of the oldest paper manuscripts in existence. In the British Museum there is a paper manuscript of a treatise by an Arabian physician on the nourishment of different members of the body that is dated 960 A.D. and is probably one of the oldest paper manuscripts in existence. The material from which these early manuscripts were made was linen; flax, cotton, and other vegetable fibers were later used.

In pre-industrial England and colonial America, paper was made by hand and the process used was time consuming. The stock, usually cotton rags, having been reduced to pulp, was stored in tubs or vats. The paper makers' mold, or form, was composed of two parts, one form being practicably a wire sieve tacked to a frame the size of the sheet to be made. The other form fitted around the edge of the wire sieve quite like the frame of a picture, being about a quarter of an inch deep, formed a dam around the edge of the sieve, thus holding the pulp in the sieve.

The paper stock in the tub was agitated by the paper maker who then dipped his mold into the agitated pulp, filling the mold up to the rim of the form around the wire sieve, then shaking the mold gently. The excess pulp would run over the sides of the mold back into the tub and what pulp remained in the mold the paper maker continued to shake and, while the water was straining through the sieve by the continual shaking of the mold, the pulp was being distributed evenly over the surface of the sieve, thus forming a film on the wire sieve of the proper thickness for the sheet desired. Then the form, which acted as a dam around the sieve, was removed and the film of pulp was peeled from the wire sieve. The films of pulp, now sheets of wet paper, were then placed between layers of felt, placed in a press and the excess water was squeezed out when the sheets were hung up to dry. Later the sheets were dipped in a preparation of sizing which gave to the paper a surface on which the ink would not run.[1]

As the industrial revolution took hold in England, mechanical paper making replaced the handmade process. The first paper machine using a continuous wire for forming a sheet of paper was patented in 1799 by Nicholas Louis Robert of France. Robert turned his patent over to his employer, Didot, who was able to interest John Gamble, an Englishman. Gamble was able to interest Henry and Sealy Fourdrinier who were

the largest paper makers in England. The Fourdriniers and Gamble took their machine to the Halls Engineering Establishment at Dartford, in Kent, England. Bryan Donkin, the head of that establishment was able to perfect the machine designs over the next several years. In 1803, Donkin began building a perfected machine which did not have drying ability.[2]

In 1815, or shortly thereafter, Donkin developed copper cylinders to be used in drying paper directly on the machine. These were open on the ends, turning on journals which were part of the through shaft from the front end to the back end of the drier. Inside of the copper cylinder loosely hung from this shaft was a charcoal fire pan equipped with grates, etc., which did not revolve and in which a hot charcoal fire was kept going. The problem with the drying cylinder was that it irregularly dried the paper. Donkin later decided to close up the ends of the cylinders. He put steam through them instead of direct heat, and thus was able to regulate the drying process. Donkin added calendar rolls so that by 1823, he had a Fourdrinier machine practicably so far as the fundamentals are concerned that we have today. It was as late as 1823 before the French had a machine, remotely similar, running in France. It is interesting to note that the first Fourdrinier machine, built in 1803, was installed at the Spicer Brothers Mill in Sawston, Cambridge. That machine was taken out of service in July 1920, although the mill site, minus the machine, can still be seen today.[3]

In 1827, the first Fourdrinier machine came to America. It was built by Bryan Donkin and set up at Saugerties, New York. In the same year, another machine arrived during December and was set up at South Windham, Connecticut. The first Fourdrinier actually built in this country was built by a company called Phelps & Spoffard in Philadelphia, Pennsylvania. This machine had wire presses and driers. The next machine was built in Brattleboro, Vermont, and was followed by Goddard and Rice of Worcester, and Smith and Winchester of South Windham, Connecticut, and the Crane family of Massachusetts.[4]

The last manufacturer to make handmade paper in this country was the L.L. Brown Paper Company of Adams, Massachusetts. They discontinued manufacturing in July 1907. The handmade paper department was run by the Norman family, who were all handmade paper makers; and at the time manufacturing was discontinued, Walter Norman was foreman of the department. His father, William Norman, was an English paper maker, who came to America from Wells, England in 1880. At one time, six members of the Norman family were employed at the Adams mill. William Norman learned the trade of handmade paper making from his father, James Norman, in a mill near Exeter, England. James Norman and his brother made the Whatman drawing paper at Maidstone Mills, Kent.[5]

From these early and humble beginnings the paper making industry grew and

prospered. The envelope making industry would also grow and become an indispensable customer to paper makers.

[1] *Logan, James, The Red Envelope, United States Envelope Company, Number 24, July 1925, p.6.*
[2] *Same as 1, p.11.*
[3] *Same as 1, p.12.*
[4] *Same as 1, p.11.*
[5] *Same as 1, p.13.*

The First Envelope Machine

After a recent trip to Europe, where the subject of who developed the first envelope-folding machine came up, I decided to digress slightly in this history of the envelope manufacturing industry to address this subject in more detail. This is by no means a comprehensive treatise on the subject, as there is considerable additional information in the archives of the Royal Mail in London.

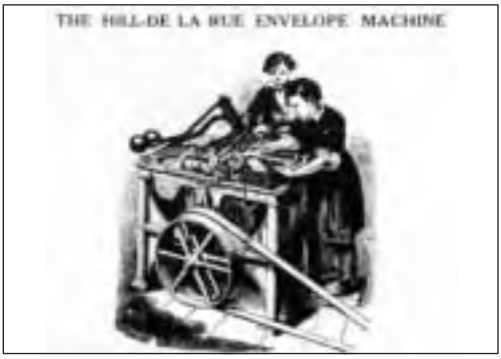
There is no conclusive evidence on who designed the first envelope-folding machine. It is clear that envelopes, not folded letters, were in existence as far back as the 17th century. However, these envelopes were cut from a template or form and folded by hand. Most of the correspondence related to these envelopes was government-to-government or for very significant business purposes. In essence, the citizen of that era was still sending his/her mail in folded letter form.

Sir Rowland Hill, a Worcester, England, schoolmaster later turned postal reformer, objected to postal rates of the time set on the basis of number of pieces of paper mailed rather than the type of service provided. Hill's agitation for lower postal rates and a system based on service brought not only fundamental reform of the Royal Mail but also created a considerable demand for envelopes. Rowland Hill's younger brother, Edwin, was able to produce a model of an envelope-folding machine in late 1840, and he and Warren De La Rue worked together on improvements to this machine. The Hill-De La Rue machine was patented in England in 1840 and is considered by many to be the first envelope-folding machine.

There are no patent drawings of this "first" envelope machine to offer and neither the British National Archives nor the Royal Mail have examples of this machine in the form of the equipment or reconstructions of the equipment. Two wood cuts are reproduced on the next page which show the machine in operation and there is a brief description of the machine's process which was offered in

the catalog of the Hyde Park, London, Exposition of 1851.

"The feeding boy places the previously cut blank envelopes onto a small platform, which rises and falls in the rectangular recess formed by the cylindrical axes of the folders. A plunger descends and creases the envelope by carrying it between the folder axes, at the same time turning the flaps upward in a vertical direction. The plunger, which descends as a whole, now divides into two parts, the ends rising and the sides remaining down to hold the envelope until the end folders have operated; these latter turn over flaps, the one on the right of the feeding-lad taking a slight precedence, and being closely followed by the gumming apparatus which takes gum from an endless blanket working in a trough and, after applying it to the two endflaps, retires. At the same time the remaining half of the plunger moves upward, to allow for the side folders turning over the remaining two flaps, the folders nearest the feeder taking precedence. During these operations, the end folders have remained at rest and the whole four open simultaneously."[1]

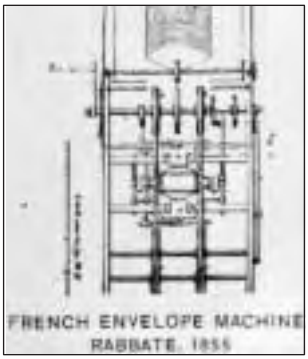


"The taking-off apparatus, with its fingers tipped with vulcanized caoutchouc, now moves forward over the folded envelope, which is lifted upward by the rise of the small platform and retreats with it, placing each envelope, as it is successively folded, under those which have preceded it. The envelopes are now knocked over onto an endless blanket, and are conducted by it between two cylinders for a final squeeze, and then into a pile. There is a provision in the machine by which the gummer is prevented from placing gum upon the platform in case the feeder omits feeding in an envelope. The machine works at the rate of 2700 envelopes per hour, and although superseding hand labor in folding, it is satisfactory to find that, instead of displacing hands, its introduction, by extending the consumption has, in reality, created work for more than it has displaced."[2]

There was another machine exhibited at Hyde Park in 1851 developed by M. Remond of France. That machine was called the Rabbate and there are limited drawings in existence of that machine. A description of the operations of this machine was found in a section of the Year Book of Facts 1851 which was published by John Timbs of David Bogue, Fleet Street, London. Here is what the year book stated about the Remond machine:

"Remond's machine, also exhibited, differs essentially from that of De La Rue; atmospheric pressure being employed for raising singly each sheet of paper and placing it on top of the folding apparatus and, again, in giving the necessary inclination to the flaps of the envelopes previously to their being folded down by the action of the plunger. Several hundred blanks being placed on the feeding table of the machine by a very simple

operation, it is started by the girl in attendance. The top sheet is raised from the rest by a "finger," the underside of which is perforated; when a partial vacuum being formed each sheet is sucked up against its under surface and transferred to the folding apparatus, on reaching which, the exhaustion being no longer maintained, the sheet drops into its place. The folding apparatus consists of an open box or frame, the size of the required envelope, over which is fixed a creaser or plunger fitting the inside of the frame. The blank piece of paper having been placed on the top of the box by the feeding finger, the plunger descends just within the box, and the flaps of the envelope are thus bent to a right angle. The bottom of the creasing frame or box is perforated, to prevent any atmospheric resistance on the entrance of the paper, and the passing back of the plunger leaves the paper within the frame, with its four flaps standing upright. At this point, the second atmospheric action gives the flaps of the envelope a preliminary inclination upward and fits them for receiving the flat folding pressure of the return stroke of the plunger; to this end, the four sides of the folding box are perforated, so as to allow streams of air to be forced against the outsides of the flaps of the envelopes, in order that, on the second descent of the plunger, they may all be folded down at once. There are also certain contrivances for embossing the outer flap of the envelope and for gumming the lowest flap as a fastening. To compensate for the continued decrease in the height of the pile of blank papers, and to provide for the upper one always coming in close contact with the lifting finger when the platform rises, the addition of a spring has been found amply effective. By this machine forty envelopes are produced in a minute, gummed, embossed, and entirely completed for use."[3]


FRENCH ENVELOPE MACHINE
RABBATE, 1855

James Logan, in his early history of the envelope manufacturing industry as recorded in the Red Envelope, indicated that Henry Berlin (Berlin & Jones) visited Paris in the mid-1850s and saw the Rabbate in operation. He purchased the machine for 2,500 francs plus delivery charges which was approximately $600, for his envelope manufacturing company in New York. This Rabbate machine was the first machine of record in the New York envelope market. The picture to the left represents one of the few drawings in existence of the Rabbate.[4]

Henr y Berlin soon discovered that owning a Rabbate was easier than operating one. Several years later the company discontinued using the machine because Berlin felt that it never operated satisfactorily and in its place, acquired a Reay folding machine.

So, to Edwin Hill goes the honor of developing the first mechanical envelope folding machine, followed closely by M. Remond of Paris, France, who developed the first machine for export.

[1] *Ramage, Robert H., The History of Envelopes, The Envelope Manufacturers Association of America, New York 1952, p.30.*

[2] *Same as 1, p.31.*

[3] *Logan, James, Red Envelope, United States Envelope Company, Number Four, February 1916, p.13.*

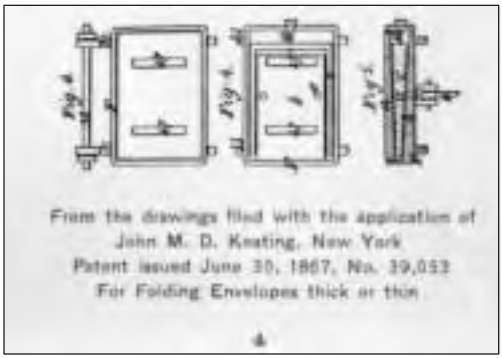
[4] *Logan, James, Red Envelope, United States Envelope Company, Number Five, May 1915, p.10.*

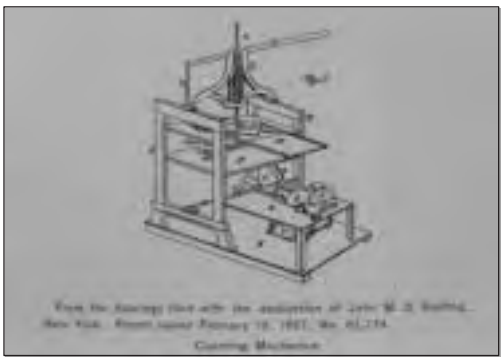
The Keating Patents

One of the most significant developments in the evolution of the envelope folding machine was made by John M.D. Keating of New York. Keating's first patent, No. 39,053 was granted on June 30, 1867. In Keating's own words:

"The first part of my invention consists in making the bed for the face of the envelope, adjustable in connection with a folding mechanism, so that the envelope may be folded loose or tight and also readily adjusted to varying thicknesses of paper." [1]

To accomplish this result, Keating used what is now known as a drop box construction; that is, a trap which comes up at the proper time and against which the blank is forced in the usual way by means of the plunger. Keating's drop box, however, was hollow, having around its four sides a sort of rim or bead. Within the formed enclosure was placed a metal plate flush with the rim or turned up edges of the swinging trap. This made literally a box of the whole structure, having all six sides, top, bottom, and the four bounding walls. This top side was the one to which the adjustment was given. This was done by means of a wedge- shaped piece of metal, shown in the illustration above, which was made to slide, whenever desired, between the upper and lower plates by means of a screw adjustment. In this manner the folding box could be adjusted for either thick or thin envelopes, and Keating was allowed a very broad claim on this structure under patent No. 62,274 which reads as follows:





"The adjustable bed in connection with the folding mechanism substantially as described where by the machine can be readily adjusted to fold the envelope loose or tight, and for varying thicknesses of paper substantially as described and set forth." [2]

There are other features of this patent which cover details of a moving conveyer or carriage with means for opening it, but these features are not as important as the adjustable box feature mentioned before. This appeared to be the first time a provision was made for folding envelopes thick or thin and for accommodating the different thicknesses of paper. A novel feature in the patent No. 62,274, February 19, 1867, appears to be the introduction of a counting mechanism in connection with a folding machine. Keating provided a wheel containing four pockets at the rear of the machine. These pockets were carried in a revolving drum. Into these pockets the envelopes were delivered one at a time. When twenty-five had accumulated in any one pocket, the pocket wheel, by means of a ratchet and cam mechanism, was made to revolve quickly forward and present another pocket to the oncoming envelopes. This counting mechanism was positively driven from the machine and counted the revo-

lutions of the machine. The counting mechanism was going all the time and if we assume that the machine made no waste and that no product was lost while loading the machine with the envelope blanks it would have been a perfect counting mechanism. However, every time the machine made waste and when feeding the machine, the counter kept on counting so it had little value as a counter. Even though crude and imperfect, it was a step forward.[3]

This was not the first counting mechanism invented, though it seems to have been the first one patented. Some time prior to 1858, James Green Arnold, of Worcester, Massachusetts, invented a counting mechanism for his envelope machine (he also invented the Arnold drying chain). Arnold never patented his invention and it was probably unknown to Keating.

[1] *Logan, James, The Red Envelope, Number 7, October, 1916, p.3.*

[2] *See Logan, James, same as 1, p.4.*

[3] *See Logan, James, same as 1, p.5.*

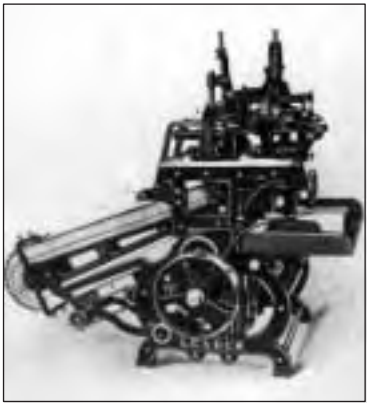
William Prescott:
An Envelope Pioneer

William H. Prescott was born in Loudon, New Hampshire, on August 12, 1840. Prescott died in Rockville, Connecticut, on February 24, 1908, at 67 years old. When he was about ten years old, his family moved to Holyoke, Massachusetts, where he attended high school and worked mornings and evenings in the store of R.B. Johnson. At the age of 18, he left school and continued to work for Mr. Johnson until 1860. In August 1860, he was employed as a bookkeeper by White and Corbin, envelope manufacturers in Rockville, Connecticut, and remained with them until 1865.

In July 1865, Mr. Prescott formed a co-partnership with three other gentlemen: J.N. Stickney, who years before had sold his interest in the White & Stickney Company to Mr. L.A. Corbin; Mr. E.K. Rose, who had been in the silk winding business; and Mr. Linus B. Plimpton, employed at that time in Rockville as a clerk in the dry goods store of P.R. Moore. Under the firm name of Prescott-Plimpton & Co., they began the manufacture of envelopes in Hartford; but at the end of a year, White & Corbin made Mr. Prescott an attractive offer to return to Rockville and take an interest in the firm. He accepted it, and in May 1866, he sold his Hartford interest to his partner, Linus B. Plimpton, who then organized the Plimpton Manufacturing Company. This firm started with Reay envelope folding machines at 178 Asylum Street and later continued at Howard's building near the train station. In 1899, the firm was absorbed into the United States Envelope Company.

In 1877-1878, White & Corbin fully equipped their factory on Brooklyn Street with Berlin & Jones self-gumming envelope machines, which, at that time, produced about 3,000 envelopes per hour. These machines operated at about the same rate as the Puffer double machines, but the Berlin & Jones machine gummed the flaps and marked a great advance in the development of the industry.

These machines were built exclusively for the Berlin & Jones Envelope Company which controlled these Waymouth patented machines. D.M. Lester and F. R. Wasley were both mechanics who had worked for the Allen Manufacturing Company. They improved the Waymouth machine with their own innovations through an arrangement with Berlin & Jones. This new machine was put on the market in 1879 under the name "Leader," which was a registered trademark established by Lester & Wasley.



William H. Prescott immediately recognized the advantages of the "Leader" machine and acquired a number of machines for White & Corbin. These machines enabled White & Corbin to grow their business substantially. In 1885, White, Corbin & Company was incorporated with Cyrus White as president, Lewis A. Corbin as vice president and William H. Prescott as treasurer and manager. Prescott continued to work actively in the company through the merger with United States Envelope Company and eventually became a director and member of the executive committee. He was still active with the company when he died.

William H. Prescott was a visionary, as well as a good business man. He helped build the White & Corbin Envelope Company into a company that became part of the United States Envelope Company. He deserves recognition as a pioneer in management and financial administration in the envelope manufacturing industry.

The House of Nesbitt - Part I

The name Nesbitt and envelope manufacturing are synonymous. It is not possible to present the history of the envelope manufacturing industr y in the United States without dealing with George F. Nesbitt and the company he created. This is the first part of a two-part series on Nesbitt.

The "House of Nesbitt" was established in 1795 by Joseph Spear, an uncle of George F. Nesbitt. George F. Nesbitt was born in New York City in 1809. While a boy he was apprenticed to his uncle to learn the art of printing; and by the time he was fifteen years of age, he was carrying a large burden of responsibility in his uncle's business.

Upon his uncle's death in 1828, the business was taken over by Mr. Nesbitt. In 1831, the business was operating under the name of George F. Nesbitt at 117 Water Street in New York City. It was after 1840 before the "& Co." was added to the title of the business. In 1835, Mr. Nesbitt became interested in the manufacture of wood block type by machinery. The machine he used was invented by Edwin Allen of Norwich, Connecticut. Mr. Nesbitt and Mr. Allen entered into an agreement that allowed Mr. Nesbitt to market Allen's invention. "Nesbitt's Wood Type" was launched shortly afterward, a name which would change the character of the printing industry.

Under Mr. Nesbitt's progressive management, his business continued to prosper and grow. While he was directing its affairs, the firm moved into the larger Tontine building on the corner of Wall and Water streets. From 1833 to 1844, the firm was located at 67 Wall Street.

From the Tontine building, they moved to the building on the corner of Pearl and Pine streets. The date of this move was approximately 1850, just before the time they secured the contract for making stamped envelopes for the United States government. Very early in Mr. Nesbitt's business career as a printer, lithographer, blank book and envelope manufacturer, card manufacturer and stationer, he gave evidence of possessing an entrepreneurial spirit. That spirit led him into the envelope manufacturing business, where the business produced crude products on foot-powered machinery.

On October 25, 1852, George F. Nesbitt & Co. was awarded the contract for the production of stamped envelopes for the United States government. This was two years before the first envelope folding machine was introduced into the market. The contract was awarded for a period of five years and Nesbitt continued as the contractor until 1870, when George H. Reay secured the contract for four years, from 1870 to 1874. But, on his

failure to deliver the goods to meet the needs of the government, this contract was canceled on July 16, 1870, and a new contract was awarded to Dempsey & O'Toole of New York. They also failed to furnish the goods and their contract was canceled. Then Mr. Reay entered into an arrangement with the George F. Nesbitt & Co., by which the Nesbitt plant would manufacture the envelopes for Reay. A new contract was made with the government on October 10, 1870, and was completed in 1874, at which time the Plimpton Manufacturing Company of Hartford, Connecticut, underbid George H. Reay for the contract for the next four years.

George F. Nesbitt died on April 7, 1869. The business was carried on by his associates, James White, Edmund F. Martin and Frederick A. Harter. Edward P. Martin, a relative of Edmund F., later became head of the firm and continued in that position until his death in 1912.

Nesbitt & Company was one of the early makers of handmade envelopes and, being progressive, was also one of the first to avail itself of simple foot-power machines. The development of the production of envelopes by use of mechanical systems will be the subject of the second part of this series. George F. Nesbitt will always be remembered as an early envelope pioneer who possessed the undying spirit of enterprise that built the envelope manufacturing industry.

Edwin Allen and George F. Nesbitt & Company

Edwin Allen began his career in the clock business, but made some of his most significant contributions in the envelope manufacturing and printing industries.

Allen had previously invented a machine for cutting wood block type which brought him to the attention of George F. Nesbitt. Mr. Allen went to Newark, New Jersey, and in the shop of Ezra Gould, built the first stamped envelope machine for Nesbitt. These folding machines had Allen's printing press feeding attachment, which was later covered by Patent No. 39,772 dated September 15, 1863. This was one of the first examples we know of in "in-line" printing on an envelope-folding machine. This machine is believed to have been the first so called "Stamper," or envelope-folding machine with printing and embossing attachments and was the forerunner in the development of printing and folding machines. Later, developments by Horace J. Wickham and Edward Pittman would perfect the machine for creating stamped envelopes for the Post Office.[1]

It would appear that no patents were ever granted on the Allen machine operated by George F. Nesbitt & Co., so no model or patent office drawings are available to show just what the machines were like. However, the photograph above shows two of the Allen folding and embossing machines on the George F. Nesbitt & Co. production floor c.1913. It would also appear that no infringement suits were ever brought against these machines and the theory is that Allen patents on the

rotary printing and embossing press and feeding device was part of their protection. An arrangement had been entered into by which some of the earlier inventions covered by patents owned by other parties were used in this envelope machine or they pinned their faith for the protection of their invention on the lock and key. Plimpton did employ some of Allen's concepts in the machine that was used in 1874 to secure the contract for making stamped envelopes.[2]

Edwin Allen, organized the Allen Manufacturing Company and manufactured the new Allen Rotary Envelope machines that were perfected through his experience with George F. Nesbitt & Co. Allen later developed an envelope printing press, called the "Jumper," which brought Allen the distinction of the "father of the envelope corner card."

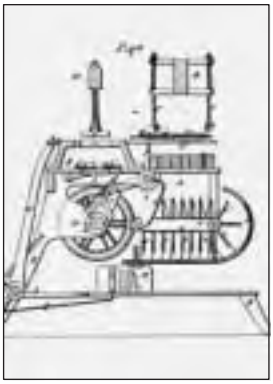
The mystery still remains as to what happened to the Allen/Nesbitt patents. When Plimpton Manufacturing Company secured the first contract for making stamped envelopes for the United States government in 1874, they were not able to procure any of the machines which were operated by George F. Nesbitt, so they had to do their printing and embossing of envelopes on separate machines. Would they have done this if the inventions on the machines operated by Nesbitt had not been covered by patents?

Edwin Allen and George F. Nesbitt made significant contributions to the envelope manufacturing industry through their inventiveness and determination. Allen's wood block type cutting machine, which changed the future of the commercial printing business, and his work with George F. Nesbitt would prove that envelope makers could both fold and print in-line.

[1] *Logan, James, The Red Envelope, Number 19, June 1922, p.8.*
[2] *Same as 1, p.10.*

Thomas V. Waymouth and the Berlin & Jones "Leader"

In 1863, Berlin & Jones of New York employed an inventor named Thomas V. Waymouth, who had been working on paper bag machinery and brought to his new employer a wealth of experience. Berlin & Jones wanted Waymouth to design a self-gumming and folding envelope machine. At that time, envelope folding machines had no in-line gumming capabilities. Berlin & Jones agreed to pay Waymouth $20,000 for the first prototype gumming and folding machine.



Waymouth was an experienced inventor. He drew his machine design from the Duff & Keating envelope folding machine and placed his own improvements on the basic Duff & Keating design. His application for a patent was filed in 1864, the machine was completed in 1865 and patents were finally issued in 1866-67.

This was Waymouth's first patent drawing. Unfortunately, for Waymouth and the other envelope folding machine inventors of the period, patents issued were very broad and sometimes held other inventors at bay. Waymouth's drawing was so general that he became concerned that he could conflict with other inventors he knew were working on this problem.

Waymouth's original patent No. 58,237, which was issued on September 25, 1866, had to be redrafted and was reissued as No. 62,787 on October 22, 1867. This patent covered the first successful self-gumming plunger envelope-folding machine and was known in the trade as the "Berlin & Jones Leader," as it was a leader and stood in a class by itself for many years. One of the leading claims in Waymouth's patent was for applying the gum to the two edges of the envelope blank in the machine. The language of the claim reads as follows:

Claim 1. "Gumming the seal flaps of the blanks for the envelopes simultaneously or nearly so, with the lower or 'end flaps', or during the time while the blank passes from the gumming to the folding mechanism and by mechanism substantially such as herein described or any other suitable mechanism which will produce the same effect."[1]

The photograph shown was Thomas V. Waymouth's model of the original patent which was filed on September 25, 1866. Waymouth's reapplication suggested that he did not cover the entire claim when the machine was first patented. The language of Waymouth's reissued patent is interesting because he covered the idea of gumming the blank before it was folded, a very broad claim which would soon create problems for other inventors.

Waymouth was the first to accomplish the gumming of the back flap and seal flap in a plunger envelope-folding machine and he secured his pioneering effort with the following re-issued patent claim of October 22, 1867:

Claim 1. "Gumming the seal flaps of the blanks, for envelopes at or about the same time with the lower or end flaps after the blanks are placed in the machine, and before they are folded, by mechanism substantially such as described, or any other suitable mechanism to produce the same

effect, or the purposes set forth."[2]

Waymouth continued to perfect the "Leader" and the final design was created in 1870 and is shown in the photograph below. Thomas Waymouth had created a "leader."

[1] *Logan, James, The Red Envelope, Number 7, October 1916, p.11.*
[2] *Same as 2, p.12.*

Charles W. Gray, from W.H. Hill to New England Envelope Company

Charles W. Gray was born in West Barnstable, Massachusetts, on June 10, 1844. He was a student at Amherst College in 1860-61 and taught school in Newport, Rhode Island, in 1862. Gray was a medical cadet at the U.S. Army Hospital, Portsmouth Grove, New Hampshire, in 1863 and experienced the terrible carnage of the American Civil War. Gray was drafted in 1863, but was later exempted because of his medical service. He continued his medical education by becoming a student in the Medical Department of Harvard University in 1863-64. For five years following the war, he taught school in a variety of private institutions around New York State.

Gray joined Sanford & Company, booksellers and stationers in Worcester, Massachusetts, in 1871. He later resigned to accept a position as correspondent and salesman for the G. Henry Whitcomb & Company Envelope Manufacturers in Worcester. He remained with Whitcomb until July 1, 1873, when he associated himself with Hill, Devoe & Co. When Mr. Hill died in 1892, and the company was reorganized and incorporated under the name of the W.H. Hill Envelope Company, Mr. Gray was elected president and held that office until the company became one of the subsidiaries of the United States Envelope Company on August 18, 1898.

Gray was elected manager of the W.H. Hill Envelope Company Division of the United States Envelope Company in 1898 and continued in that position until he resigned in 1903. Shortly thereafter, Gray became one of the organizers of the New England Envelope Company of Worcester, Massachusetts,

of which he was president until his death on December 21, 1921.

Charles W. Gray is credited with being one of the early pioneers in the envelope manufacturing industry during its infancy in Worcester, Massachusetts. The company which Charles W. Gray founded, New England Envelope Company, is still in existence today and continues the proud record of service to Worcester that Gray established.

[1] *Logan, James, The Red Envelope, United States Envelope Company, Number 23, March 1924, p. 14.*
[2] *Same as 1, p.15.*
[3] *Same as 1, p.15.*

E.W. Goodale and Marie Antoinette Reay, Visual Spirit.

On October 9, 1855, a patent for a machine for folding envelopes was granted to E.W. Goodale, of Clinton, Massachusetts, No. 13,647. This was the fourth patent granted in the United States for an envelope-folding machine. This machine was not a mechanical success - it was simply the work of a pioneer feeling his way through the folding process. The working patent office model is the only remnant of Goodale's work as the machine was never put into production.

Goodale was born in Marlboro, Massachusetts, on May 25, 1818. Eventually Goodale became a foreman at the Clinton Coach Lace Company in Clinton, Massachusetts. He later worked for the Harris Comb Company where he made improvements in the comb making process. Later he traveled to Iowa where he established a machine show and became involved in a sawmill operation in Dubuque, Iowa.

So how does this story go full circle back to envelope machinery? In the early years of the patent office, an inventor, in addition to the drawings and descriptions of his invention, was obliged to deposit with the patent office a miniature working model of his machine showing just what his machine would do and how it did it. The number of patent applications rapidly increased and the question of space for the display of the enormous number of models became a serious matter. In 1870, the law was changed so that working models were no longer required - only detailed drawings. The patent office kept these old models until October 1908, at which time these models were boxed and placed into storage in the corridors of the Patent Office Building. Fortunately, Mr. James

Logan, of the United States Envelope Company, had the foresight to have these patent models photographed and included in his history of the envelope manufacturing industry entitled *The Red Envelope.*

Henry C. Berlin, of Berlin & Jones Envelope Company, bought the Goodale patent in an effort to show the "prior art" in some patent litigation with Mrs. George H. Reay (wife of George H. Reay who produced the first government stamped envelopes). As the story goes, Marie Antoinette Martine worked for Berlin & Jones in 1863, and left the firm to work for the Reay Envelope Company as forelady. In 1868, realizing her significant contribution to the business, George Reay wisely married Ms. Martine. Mr. Reay died in 1876 and the business was carried on by his widow. In 1880, she discovered that certain envelope manufacturers were using various attachments on their machines that were covered by the George H. Reay patents and no royalties were being paid. While the patents on Reay machinery had expired by 1880, she brought suit for back damages. It took until 1887 for the patent litigation to be settled for a sizable sum, but less than the fees she paid for litigation.

In 1887, Mrs. Reay sold the envelope company to a group of envelope manufacturers. During the sale proceedings, Mrs. Reay was informed by the prospective purchasers that if she did not agree to their terms, they would put her out-of-business by fair means or foul. To them, she replied, "Why not try the fair means first?" The result was a price $3,000 greater than the original offer she was given. But thanks to Mr. Goodale, who never was able to produce a working prototype of his folding machine, Mrs. George H. Reay, was able to prevail in her patent litigation and retire to a comfortable life. She died on April 24, 1901.

[1] *Logan, James, The Red Envelope, United States Envelope Company, p.12.*
[2] *Same as 1, p.13.*
[3] *Same as 1, p.17.*
[4] *Same as 1, p.18.*

The White & Corbin Envelope Company

The White & Corbin Envelope Company became part of United States Envelope when it was formed in 1898. The company, however, traces its origins to the White & Stickney Envelope Company founded in 1853. Cyrus White, the founder of White, Corbin & Co. was born in Richford, Vermont, on November 18, 1814. White was brought up on a farm and at the age of 19, he was apprenticed for three years to a blacksmith at Enosburg, Vermont. Mr. White was also an entrepreneur and was continually mortgaging the future with new business ventures. He owned a grist mill, a coal distributor, a general store and eventually became the sole owner and general manager of a large gingham mill in Rockville, Connecticut, from 1870 until the time of his death in 1891.[1]

In July 1849, Cyrus White bought a half interest in a foundry owned by William R. Orcutt for $1,700 and found himself in partnership with J.N. Stickney.[2] Through William R. Orcutt, White and Stickney met Milton G. Puffer, a patternmaker and blacksmith. Cyrus White's taste for entrepreneurship soon found him researching the envelope manufacturing business which was mostly a hand-fold business at that time. Cyrus White convinced his partner, J. N. Stickney, that Mr. Puffer had the necessary skills to build an envelope-folding machine. They entered into an agreement with Mr. Puffer that for his labor, they would give him a one-third interest in White & Corbin to build the machine. Puffer agreed and soon began work on a prototype. Both White and Stickney became discouraged at Puffer's slow progress which caused Puffer to abandon the firm and leave for Windsor Locks, Connecticut, where he again went to work as a patternmaker. Puffer returned in less than a year, rejoined the firm and completed the prototype. In 1855, Mr. Stickney sold his interest in the company which became White & Corbin, later White, Corbin & Co.[3]

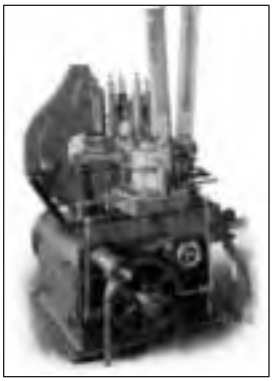
Milton Puffer, the developer of the envelope-folding machine for White & Corbin soon became acquainted with one of the women who was struggling to run his prototype machine, Mercy B. Rogers, who shortly thereafter became his wife. Mrs. Puffer taught Cynthia Root to operate the original and second Puffer machine in 1854. Miss Root gradually began teaching young operators how to operate this machine. Miss Root stayed at White & Corbin for 60 years![4] The Puffer machine was one of the few machines sold on the open market as many envelope companies built machines for their own use. Berlin & Jones was the other company that sold machines on the open market.

White & Corbin was in full-scale envelope production in 1857 and had to move into a new factory on Brooklyn Street in Rockville. In the basement of their new factory, Edward Shelton and William W. Andross manufactured boxes for the company. Shelton & Andross later (1862) began manufacturing envelopes using four Reay machines; but in 1864, they sold the business to Elisha Morgan of Springfield, Massachusetts, and the equipment and stock of the factory were moved to Springfield.[5]

In 1877-78, White & Corbin fully equipped their factory on Brooklyn Street with Berlin & Jones self-gumming envelope machines which were capable of being operated at a lightning speed of 3,000 envelopes per hour. These machines were built in consideration of the Waymouth patents and improved by Lester & Watley. The machine was called the "Leader."

In 1885, White, Corbin & Company was incorporated with Cyrus White and Lewis A. Corbin as senior officers and William H. Prescott as treasurer and general manager. A new factory was acquired in 1881 through the acquisition of the Florence Woolen Mill which became the "high-speed" division of the company with many Lester & Watley "Leaders" in operation there.

In 1882, Francis H. Richards, an eminent mechanical engineer of Hartford, Connecticut, commenced work on an envelope printing and folding machine for White, Corbin & Co. The principal patents on this machine were issued January 20, 1891, but there were many detailed patents issued prior to that date. This machine was such a departure from the "Leader" or the Puffer machines that more than 30 new patents were granted on it. The machines were built by Pratt & Whitney Company of Hartford, Connecticut. Only six machines were built for White & Corbin.[6]



The Richards envelope machine for gumming, folding, printing, counting and banding envelopes was without doubt the most advanced envelope-folding machine of the 19th century. Unfortunately, the Richards machine was also temperamental as envelopes frequently jammed between handling chains and the banding well. However, the Richards machine was as close to the modern envelope-folding machine as machines of that period could get.[7]

The story of White & Corbin is an important part of the history of envelopes due to the many machine and production developments that occurred throughout the life of this important firm. White, Corbin & Co. became part of the United States Envelope Company in 1898.

[1] *Logan, James, The Red Envelope, Number 12, February 1921, United States Envelope Company, p.5.*
[2] *Same as 1, p.8.*
[3] *Same as 1, p.10, 11.*
[4] *Same as 1, p.14, 15.*
[5] *Same as 1, p.20, 21, 22.*
[6] *Same as 1, p.32.*
[7] *Same as 1, p.34.*

The Alling & Cory Company
Early Paper Merchants and
Envelope Manufacturers

The Alcor Envelope Company, Inc., of Hamburg, New York, is a wholly owned subsidiary of the Alling & Cory Company of Rochester, New York, which is now owned by Union Camp Corporation of Wayne, New Jersey. Alling & Cory is one of the largest and oldest independent wholesale paper merchants in the country, tracing its origin back to 1819. At the turn of the century, Alling & Cory was operating in Rochester, New York, Buffalo, New York and Pittsburgh, Pennsylvania. In 1911, a new multi-story building was built in Buffalo, New York, including an envelope manufacturing plant. The company was selling envelopes prior to the turn of the century which were either manufactured internally by hand fold or on more primitive machines.

The M.M. Bork Company, an operating envelope plant in Buffalo, was purchased by Alling & Cory and moved into the new building. It began operations as a department of the Buffalo Division in 1911. Robert F. Pavier, an employee of the company in Rochester, moved to Buffalo to assume management of the envelope department. Mr. Pavier managed the department until his death in 1949. During that time some F. L. Smithe wide-range machines were added, making it a larger operation.

In 1949, Albert G. Novy was appointed manager of the department and served in this position until 1953, when Allen W. Rider was appointed manager. Over the years both space and machinery were added to the operation. It began in 1911 with 16,000 sq. ft. and prior to its move to new quarters, was operating in some 50,000 sq., ft., within the Alling & Cory warehouse.

In 1960, it was decided to create a wholly-owned subsidiary that would produce envelopes only for customers of Alling & Cory. The new company was named the Alcor Envelope Company and continued its operations in Buffalo until 1981. In 1981, a new facility for the Alcor Envelope Company was built in Hamburg, New York. Allen W. Rider was the president when the plant was constructed and he was later succeeded by Charles J. Gerber who serves as the company's president today.

Adapted from the history of the company supplied in the EMAA 60th Anniversary Commemorative Edition, March 4, 1984.

The History of American Envelope Company: ***Now American Mail-Well***

American Envelope Company can trace its history to 1884. It should be kept in mind that American Envelope Company had 13 divisions in the late 1980s, including the Kruysman Division (file folders). American Envelope is the result of a wide range of acquisitions over the years. The history of each acquisition will be traced below. The first group of companies that made up American were associated with Stanwood Industries. These companies comprise the oldest members of the American family of companies. The origins of the entire company start with Mills Envelope Company that began as The Paper Mills Company in 1884. There were companies that printed envelopes that went back to the American Civil War with Mills Envelope; however, since they did not make envelopes but printed them they are not covered at this point. In 1973, Mills was sold to Stanwood Industries and the name of Stanwood's Chicago-based operations was changed to Mills-American to reflect the combination.

The original American Envelope Company, with origins dating back to 1896, was the result of the combination of the Peerless Paper Company, American Paper Goods Corporation and Brown Superior Paper Goods Company. In 1970, the original American Envelope Company was sold to Stanwood Industries, along with affiliated companies, Commercial Envelope in Baltimore and Washington Envelope in Washington, D.C.

The next oldest company in the Stanwood acquisition was Philadelphia's Whiting-Patterson which was founded in 1909 as an envelope manufacturing business. In 1911, a paper merchant distribution system was added, making Whiting-Patterson share the glory of one of the first companies in envelope manufacturing and paper distribution. Whiting-Patterson was acquired by Stanwood Industries in 1970. Kruysman, located in New York City was the third oldest member of the company. Started in 1935, the company offered a wide variety of stock and customized office supply products including speciality mailing and packaging envelopes, report covers and filing products. Stanwood acquired Kruysman in 1971.

In 1979, Mills-American, Whiting-Patterson and Kruysman were sold to CCL, a unit of Henry Crown & Company, a privately-held Chicago-based holding company. In 1982, the name of the parent company reverted back to American Envelope Company.

As mentioned earlier, there was a second group of companies acquired which included the St. Regis operations (see Cupples-Hesse, St. Louis) and seven operations acquired from Champion International in 1985, including five units of Federal Envelope Company, Northwest Envelope and Buffalo Envelope Company. The Federal group of companies will be presented first. The first Federal operation began in Omaha in 1917, servicing the Carpenter Paper House merchant group. As Carpenter expanded, additional converting facilities were built in San Antonio and Los Angeles in 1931. During the late 1930s and 1940s, other converting operations were acquired, including Carter Rice Envelope Company in Denver, Texas Envelope Company in Dallas, Northwest Envelope Company in Seattle and Field Ernst Envelope in San Francisco. In addition, a small imprinting operation began in Salt Lake City.

In 1961, Champion International, one of the nation's largest paper manufacturers, acquired Carpenter Papers and their envelope group. At the same time Champion operated Buffalo Envelope Company. Buffalo was combined with the Carpenter Group to form Federal Converting Services. This name was changed to Federal Envelope in 1965, although the operations in Buffalo retained its pre-acquisition name.

The two St. Regis operations became a part of Champion in late 1984 when Champion acquired St. Regis Paper Company. This also included Cupples-

Hesse Envelopes. The Cupples-Hesse operations in Des Moines (1948), Detroit (1926) and St. Louis were sold to St. Regis Paper Company, all renamed St. Regis in 1960. In 1962, St. Regis opened up a converting facility in Nashville, Tennessee. The Detroit and Des Moines operations were closed and the remaining St. Regis converting companies were folded into Champion in 1984. One year later, American Envelope Company acquired Champion International's eleven manufacturing operations. The operations in San Francisco closed and blended into the Los Angeles location and the imprinting operation in Salt Lake City was sold.

There is one final member of the American family of companies that has not yet been mentioned — Garden City Envelope Company. Garden City was started in 1913. The company has grown over the years to become a significant manufacturer of direct mail style envelopes. Williamhouse-Regency sold Garden City to American Envelope Company in 1986. In 1987, Garden City's Detroit die-cutting operation was folded into the Mills-American operation while Garden City's Chicago web equipment operation was significantly expanded. By 1987, American Envelope Company consisted of 13 manufacturing facilities in 12 cities with over 50 sales offices. In December 1994, Mail-Well Corporation acquired American Envelope Corporation from CCI. The history of Mail-Well will be covered in a future volume of this history.

This story would not be complete without a short history of one of the employees of American Envelope Company. Leslie J. Weil was a principal of Peerless Paper Company in 1946 when Peerless bought the Ontario Company. Peerless was liquidated in 1950. However, the Ontario Company bought the American Envelope Company. Les Weil saw these non-integrated companies merge into an industrial giant—at one time the largest privately-owned envelope company in the United States. He stayed on to work for American Envelope, when the Crown family bought Stanwood Industries and to work for the American Mail-Well Corporation when it acquired American Envelope. Les' career has spanned over 50 years and he has truly seen it all.

Adapted from The History of American Envelope Company and the EMAA 60th Anniversary Commemorative Edition, March 4, 1984, with generous assistance from Leslie J. Weil.

The United States Envelope Division
Westvaco Corporation

The Envelope Division of Westvaco Corporation, formerly known as the United States Envelope Company, traces its origins back to the early 1850s and James Green Arnold, inventor of the first self-gumming envelope making machine - The Arnold Drying Chain. Arnold's company was one of the charter companies which later banded together to form the United States Envelope Company in 1898.

By the early 1890s, there were 51 envelope manufacturers of consequence in the United States. Despite their combined capability to turn out millions of envelopes, their productive capacity could not match projected market demands for the future. The management of some of these companies were quick to realize that individually, none of the existing envelope manufacturers possessed the resources to fund the massive plant and equipment investments necessary to match the growing market demands. As a result, a few of these managers discussed the situation informally, and developed the idea of merging a few select envelope companies into one large envelope firm. With the combined resources of several companies, this "super company" would have the capabilities to meet the growing demand for envelope products. The merger of companies, most of them privately owned, into one jointly-owned, larger company was a unique idea for that day.

In 1898, the United States Envelope Company was formed by a merger of ten of the existing 51 envelope manufacturers. The merger resulted in significant operational improvements. Sales territories were consolidated, and sales talents were pooled. Patent rights covering some of the most valuable and ingenious envelope machinery of the period were brought under one "roof." Plants and equipment were reallocated for more efficient operations. In addition, highly-trained technical and operating personnel, as well as management talent, were integrated into one giant operating company.

The ten charter companies of the United States Envelope Company were:

- Logan, Swift & Brigham Envelope Company, Worcester, MA
- Holyoke Envelope Company, Holyoke, MA
- White, Corbin & Co., Rockville, CT
- Plimpton Manufacturing Company, Hartford, CT
- Morgan Envelope Company, Springfield, MA
- National Envelope Company, Milwaukee, WI
- Whitcomb Envelope Company, Worcester, MA
- W.H. Hill Envelope Company, Worcester, MA
- Springfield Envelope Company, Springfield, MA
- P.P. Kellogg & Company, Springfield, MA

Each of the histories of these early companies are contained elsewhere in the book with the exception of the P.P. Kellogg & Company which was established in 1868 and the Holyoke Envelope Company which was established in 1890.

The United States Envelope Company quickly diversified its product lines. In 1900, the Logan, Swift & Brigham Division initiated a steel stamping department for letterheads and over the next several years, the Hill Division established a fine stationery department and became the headquarters for "window" envelopes. In 1904, National Envelope Company moved to Waukegan,

Illinois, and the Morgan Envelope Division became the Morgan Tissue Company Division, since this group concentrated on the manufacture and sale of toilet tissue. In 1909, the company expanded even further by purchasing the Cincinnati Envelope Company and the Pacific Coast Envelope Company.

In 1916, a large portion of the Cincinnati Envelope Company moved to Indianapolis, Indiana, for strategic purposes and became the Central States Division. In the same year, USE purchased the Cooley & Trevor Manufacturing Co., an envelope machine manufacturer in Hartford, Connecticut. In 1915, the engineering department was formally established at the Logan Division in Worcester, MA.

In 1920, the company's ever-growing drinking cup department, founded in 1911, was consolidated and formed into the Logan Drinking Cup Division, complete with its own manufacturing facilities. In 1922, the Monarch Envelope Company Division was established in Philadelphia. The Holyoke Division closed in 1923 in a move to consolidate operations; and in 1931, the Cooley & Trevor Division was liquidated. At the same time, the Consumer Box Board & Paper Company of Lititz, Pennsylvania, was purchased and the Morgan Tissue Division moved to that location.

With the entry of the United States into World War II in 1941, much of USE's product line was curtailed or greatly restricted because the company converted its facilities to the manufacturer of products relating to the war effort. These products were diverse and included bullet cores, field ration envelopes, V-Mail and other service-oriented letter writing articles, moisture-proof envelopes, and moisture-proof, grease-proof and vapor-proof papers. When the war ended, consumers were ready for products they could not get during the war. By 1947, sales reached the highest level ever in USE history, and, to accommodate the increased levels of business, new plants were built in Emeryville, California, and Doraville, Georgia.

In the early 1950s, the engineering department, under the direction of Vincent E. Heywood, developed the first VH envelope machine. The VH machine produced the first diagonal-seam style envelope made directly from a web or roll of paper. This envelope, which is marketed under the Executive Style envelope brand name, is one of USE's most well known products. USE continued to introduce these and a wide variety of other product innovations in the 1950s and 60s.

In 1960, a majority interest in the outstanding shares of common stock was acquired by Westvaco Corporation, a major manufacturer of paper, chemical and packaging products. In October 1977, the balance of the shares were acquired and United States Envelope became a division of Westvaco. Westvaco continues to upgrade and modernize its plants to this day and remains one of the largest envelope manufacturers in North America.

Adapted from the EMAA 50th Anniversary Commerative Edition, March 4, 1984.

Sigmund Guthman - A Man of Vision and Entrepreneurial Spirit

In 1893, Sigmund Guthman immigrated from Germany to Atlanta, Georgia. By that time, Atlanta was already emerging as a communications and commerce center, with its railroads leading to all points south.

As did many other envelope companies born of this period, Guthman began his business career in envelopes in a small print shop. He served as printer, salesman and deliveryman. He soon learned that a printer without envelopes to sell would not be successful. Sigmund Guthman's first envelopes were made by hand. He moved his printing shop from his home to a central site in Atlanta and named it Atlanta Envelope. Within nine years he had outgrown that first plant site and moved his company to larger quarters. By the turn of the century, Guthman was looking for a machine that would make envelopes. The demand for hand-folded envelopes far exceeded his capability to produce them. Guthman acquired several envelope folding machines, primarily plungers made by Ferdinand Smithe.

In 1922, Atlanta Envelope required still larger quarters so it constructed a building designed for its special needs. Sigmund Guthman actively managed the business until 1940 when he became ill and his wife, Emma, became president of the firm. Two of their sons-in-law, Charles Held, Sr. and David Goldwasser, were also active in the business. When Mr. Guthman died in 1943, at the age of 71, he had seen his one-man business flourish into one of the South's largest envelope manufacturing companies.

Shortly after Mr. Guthman's death, the company was reorganized into a working partnership with Charles Held, David Goldwasser and one of the Guthmans' nephews, Siegfried Guthman, jointly managing the company. In 1951, a new plant was planned to incorporate new envelope manufacturing machinery and better suited for high-speed production. A second expansion of the Atlanta plant was needed in 1963 to store finished goods and house equipment for vacuum and compressed air. Also in 1951, Atlanta Envelope management selected Nashville, Tennessee, for their first branch plant operation. The company purchased the Southern Envelope Manufacturing Company from Maurice Connors. Sigmund Held, the eldest grandson of Sigmund Guthman, was appointed as its first manager.

In 1955, Atlanta Envelope purchased the three-year-old Schutt Envelope Manufacturing Company in Miami. John C. Schutt, founder of the firm, continued as general manager with Dick Clements as the plant superintendent. In 1959, the Miami operation was moved to large new quarters and Charles Held, Jr., was named its general manager.

In 1964, the company merged with a young conglomerate of Atlanta-founded firms - National Service Industries, Inc., and became known as AECO Products Division. In addition, the Atlanta Envelope name was dropped and the company used Atlantic Envelope as its new name. Sig Guthman, Jr., would be named its first division manager. He was the great-nephew of the founder and his father was one of three partners who led the company after the founder's death in 1943. Sig was general manager of the Atlanta Division at the time of his appointment as the president

of the AECO Products Division. Sig was succeeded as general manager of the Atlanta Division by Jerry Goldwasser, the elder son of David Goldwasser. David Goldwasser would shortly be named group vice president on the corporate staff.

In 1962, Atlantic Envelope Company in Charlotte, North Carolina, was opened. T. A. Rutledge, who had been controller of the Atlanta plant for many years, was named its general manager. In the fall of 1963, AECO announced the opening of a new manufacturing facility in Louisville, Kentucky, for the spring of 1964. The plant was managed by Fred Cogswell, an Atlanta veteran since 1925, who had been sales manager of the Atlanta plant. The Louisville plant closed in 1972 and a new plant opened in Shelbyville, Kentucky, under the leadership of Denver Dalton as general manager.

In 1969, AECO acquired a manufacturing plant in New Orleans that was founded by Owen Bressler and Roger Zotti. Mr. Bressler remained as general manager. Bressler was later succeeded by Don Zink, who had been a sales supervisor in the Miami plant. In 1972, the Nashville plant began a satellite operation in Little Rock, Arkansas. It took about one year for the plant to grow to the point that it was a self-reliant manufacturing facility and AECO Little Rock was born. Sig Held, Al Schroeder (Nashville's sales manager) and Sig Guthman, Jr. would all play a key role in building this plant.

Randy Zook was appointed Nashville's sales supervisor in Little Rock. By the end of 1975, Little Rock had become so large that it needed an independent general manager and Randy Zook was chosen as general manager. In 1985, Randy Zook joined the division staff in Atlanta; and in 1990, was appointed president of the AECO Products Division, succeeding Sig Guthman when he retired. Mr. Zook continues as the president of the AECO Products Division.

There were many others, too numerous to mention, who carried forward the spirit of entrepreneurship of Sigmund Guthman. It is a testament to all of their efforts that the company continues to prosper and grow today.

Adaped from "Atlantic Envelope Company, 90 Years Old: Still Pioneering" by Leon Socol, director of training and development, Atlantic Envelope Company, Atlanta. EMAA 50th Anniversary Commerative Edition, March 4, 1984.

Frank H. Hesse and Samuel Cupples, Envelope Pioneers

Frank H. Hesse founded a printing company in 1888 in St. Louis, Missouri. By 1897, he added envelope making equipment to his firm and formed the Hesse Envelope and Litho Company.

The Samuel Cupples Envelope Company was formed at the turn of the century in St. Louis. As early as 1908 the company was actively involved in the development of the first web machines in the industry. The web envelope machine that Cupples was using was developed by James West of Brooklyn, New York, and was patented and assigned jointly to the Samuel Cupples Company and the U.S. Envelope Company on July 14, 1908.

T. William Keinast of New York invented and patented three innovations to the envelope industry that involved the production of expansion envelopes. These were assigned to the Samuel Cupples Envelope Company on September 7, 1908.

M. Vierengel developed and assigned patents to Samuel Cupples for a machine to make web window envelopes in 1916. The next year, he improved and simplified a machine to make window envelopes from die-cut blanks. In all, nine patents were assigned wholly or jointly to Samuel Cupples Company.

Both the Hesse and Cupples envelope companies continued to grow in the fledgling envelope manufacturing industry. Cupples Envelope operations included plants in Dallas, New York City and Chicago. Prior to World War I, the Cupples Envelope Company had a daily production capacity of over seven million envelopes. Both companies would merge in the early 1930s. The die-cut product capabilities of Hesse Envelope were enhanced by the streamlined C-style web machines of the Cupples Envelope Company.

In 1950, the Cupples-Hesse Corporation purchased the Smithe Envelope Company of Detroit, Michigan. In turn, the Cupples-Hesse Corporation was purchased by the St. Regis Corporation. St. Regis would sell its envelope divisions to American Envelope Company, which would later become American Mail-Well Envelope Company in the 1990s.

Adapted from "Our Web Envelope Machines Will be 76 Years Old in 1984...And Some Are Still Running." by Leonard D. Kaye. From the EMAA 50th Anniversary Commerative Edition, 1984.

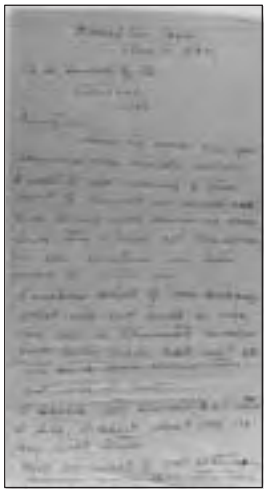
The Alfred L. Sewell Envelope Company, The Alfred L. Sewell Cromatic Envelope Factory, The Sewell-Clapp Envelope Company

What little is known of the Alfred L. Sewell Envelope Company comes from Mr. Sewell's job book, a few newspaper articles and the minutes of early Bureau of Envelope Manufacturers of America meetings from the 1920s. According to Clement L. Clapp's obituary, the company was founded in 1875. Little is known about the company until the 1880s. A review of one of the company's job books gives an interesting perspective into the operations of a 19th century envelope company. On October 15, 1881, the company produced 20,600 3/4 envelopes for the Kansas City, Missouri, *Times*. The total price of the order was $53. Sewell's job book is like an early encyclopedia of Chicago, Illinois, businesses. He produced 180 separate envelope orders in 1881 and was selling to merchants, other envelope companies, printers and businesses.

WOULD HIRE HUMPBACKS

Envelope Firm "Starts Something" and Tells Why It's Doing It

By 1882, his business had grown dramatically. In 1882, he produced over 800 separate envelope orders and in 1883, produced 801 orders. In 1884, he produced 998 and it became obvious to Sewell that he had to take in partners or obtain other investors. In 1887, he put out a private and confidential offering notice where he listed the total value of his business as $25,000, including $10,000 in plant and machinery and $5,000 in goodwill. He also listed $10,000 for his interest in patents and other manufacturing rights. It is interesting to note that Sewell tried to copyright some of his packaging and was not successful. There is a notice from the Library of Congress, dated October 11, 1884, that indicates to Sewell that his "Kings Flour" application was rejected.



The date on which Clement Clapp became a full partner in the business is not known for certain; but it had to be in the late 1890s, because, after that time, the company became known as the Sewell-Clapp Envelope Company. Sewell concentrated on marketing the business and Clapp involved himself in manufacturing. There is a humorous newspaper clipping from the *Chicago Evening News* of January 24, 1917, which reads as follows:

Would Hire Humpbacks Envelope Firm 'Starts Something' and Tells Why It's Doing It

The day of the psychological employer has arrived. He has graduated from the "Wanted - Blue-eyed, open-faced and reliable young man" school of employers. In the evening he studies Lombroso and Carpenter Ellis and Kant. By day, he hires his help as a physician diagnoses his cases. The Sewell-Clapp Envelope Company, 23 North Desplaines Street, inserted the following "ad" in the *Daily News*:

Wanted - 3 Humpbacks: Men over 20 years old and under 40 preferred; neat; strong; intelligent; easy work; steady; profitable if competent.

C.L. Clapp was asked by the paper to explain the ad. He said, "The humpbacks are wanted for the plunger envelope machine. This machine, since it was originated, has always been operated by girls. That is the tradition of the business. But we found it necessary to work a

night shift. We couldn't very well place girls to work at night, for special and ethical reasons which we have on the subject. We tried men, but found their masculinity interfered with the work which is of a delicate sort...hunchbacks are delicate workers. The work requires chiefly the use of the arms. A hunchback can do it as well as a perfectly formed man. And he can do it better because of the more delicate touch he has..." *Chicago Daily News*, January 24, 1917.

Clapp's plan became too controversial to implement, even for the less politically sensitive times of the early part of the 20th century, but the article tells much about the engineering genius that had become an important part of Sewell-Clapp Envelopes. The minutes of the Bureau of Envelope Manufacturers for 1919 and 1920-22 also show two individuals involved with the company, Mr. Wyatt and M. D. Strong. Strong was involved in the company until the late 1920s or early 1930s. Records show that he purchased Outlook Envelope Company in May 1935. There was another founder of the Alfred L. Sewell Envelope Company - E.O. Leadbetter. Leadbetter was 19 when he helped open the company and was superintendent and chief inspector for the company for 46 years. Leadbetter was 65 years old when he passed away on February 8, 1875.

No mention is made of Alfred Sewell's passing. However, C.L. Clapp passed away in 1923. The following is from his obituary:

"Mr. Clapp was born in Monroeville, Ohio and was 71 years old. He co-founded the first envelope manufacturing plant west of the Allegheny Mountains. He was survived by his widow, a daughter, Rosalie C. Clapp, two sisters and his mother, Mrs. Jane Bassett Clapp of Duluth, MN, who is 101 years old."[1]

No mention can be found of the Sewell-Clapp Envelope Co. after 1930. It was either merged with another company, sold or closed.

[1] *"Clement L. Clapp is Dead" Manufacturers News, December 22, 1923, Chicago, IL.*

John A. Heinrich and the Heinrich Envelope Corporation

In 1898, John A. Heinrich's mother invested money in the Heywood Manufacturing Company on North 4th Street in Minneapolis, Minnesota. Heywood produced boxes and envelopes. As a result of the investment, John Heinrich, at age 18, became a partner in the firm. Frank Heywood managed the box production portion of the business while John Heinrich managed the envelope operations. This arrangement continued until 1926 when John Heinrich purchased the envelope production equipment and started John A. Heinrich Envelope Company. The company rented space on North Washington Avenue in Minneapolis until 1963.

Starting in 1928, John Heinrich's sons followed him into the business. The oldest son, John T., came into the firm, followed by Richard in 1932. Tom Heinrich joined the firm in 1939 and Paul in 1940. John Heinrich retired in 1938; and in 1943, a partnership was formed among the brothers. In 1948, the brothers incorporated the company as The Heinrich Envelope Corporation.

In 1956, Heinrich Envelope Corporation, in partnership with a local printer, opened Superior Envelope Co. in Winnipeg, Canada. At a later date Heinrich Envelope Company purchased the partnership interests and Superior Envelope was subsequently sold to National Paper Goods Company in Hamilton, Ontario.

In 1957, Heinrich Envelope Corporation opened a branch plant in Boone, Iowa, in part to handle the large volume of business from Hall Brothers, the makers of Hallmark cards. In July 1971, John T. Heinrich sold his interest in Heinrich Envelope Corporation and purchased the Boone plant to form Heinrich Envelope, Inc. The decedents of John T. Heinrich still own and operate Heinrich Envelope, Inc. today.

In 1962, Heinrich Envelope Company purchased its present location in Golden Valley, Minnesota. On November 15, 1976, Heinrich Envelope Company sold its assets to the Taylor Corporation of Mankato, Minnesota. Heinrich Envelope Company subsequently became an independent-affiliated company of Taylor Corporation.

Adapted from the EMAA 50th Anniversary Commemorative Edition, March 4, 1984, and information provided by the Heinrich family.

Berkowitz & Company

In 1886, much of Kansas City still resembled the frontier when two brothers, William and Maurice Berkowitz, decided to open a small printing shop and produce advertising novelties. The client base quickly expanded owing to the business acumen of the two brothers. An early feature of the business was offering envelopes with the printed products which the young company was producing. During that time, there were no envelope companies west of the Mississippi River. Chicago was the nearest location where one could get envelopes in a single size. Custom envelopes were usually hand-folded. William Berkowitz found himself frustrated because the demand for envelopes was growing faster than the supply and he could not get timely delivery of envelopes from the East.

In 1894, William Berkowitz decided that the only way he could keep a regular supply of envelopes was to manufacture envelopes himself. All of the machine manufacturers at that time were in New England. William Berkowitz managed to acquire a machine and was shortly making envelopes. The first envelope company west of the Mississippi had begun. The marketing genius of William Berkowitz quickly coined the phrase, "Berkowitz makes envelopes and prints everything." By 1901, the company was becoming more well known for envelopes and the name was changed to Berkowitz Envelope Company.

E. B. Berkowitz was born in 1889 and by age 16, was actively involved in the business his father and uncle had begun. Young Berkowitz showed the same business acumen as the elder Berkowitz filing his first patent in 1909. This patent was on a shirt cover with a cardboard back and a glassine front. E.B or "Bert" as he was then known sold the job to Speth's Laundry in Kansas City. Bert Berkowitz spent his weekends and evenings building the shirt cover folding machine in the basement of their factory behind the paper stacks. When the machine was ready to operate and the account was sold, young Berkowitz started the machine with a flair on a Monday morning at 7:30 am. His uncle Maurice was furious, having no knowledge of this project and let young Berkowitz know it. Bert Berkowitz told his uncle that he would have no choice but to leave the company and Maurice knew that if Bert left, William would also follow. There was nothing to do but for one brother to buy out the other so Maurice decided that he would leave the business.

So William Berkowitz, with his 22 year old son running the factory, began anew. At that time the company had 60 employees in the hand fold department. The primary product they manufactured was not mailing envelopes but triangular shaped fruit pouches. Maurice would never let Bert Berkowitz try to manufacturer the fruit pouches on the envelope folding machine believing that they could be better manufactured in the hand fold department. Shortly after Maurice's departure, Bert was producing a full size range of fruit pouches on the folding machine at the grand speed of 10,000 per hour.

By 1920, the company was supplying envelopes to firms in 40 of the 48 states. The company

moved several times to acquire larger manufacturing facilities as the business grew. By this time, William Berkowitz's other son, Walter, had joined the business. During his honeymoon trip to Germany in 1921, Walter made a discovery that would change Berkowitz Envelope Company forever. In Neuwied, a small town on the Rhine River, Walter visited the factory of Max Dunnebier and Richard Winkler (Winkler and Dunnebier), where he saw a prototype of a rotary envelope folding machine. This fully adjustable machine not only provided the technology to manufacture a wide variety of envelope sizes but could do so at a speed of 180 envelopes per minute. It should be kept in mind that the Smithe and General Paper Goods plungers and Staude and Vierengle machines that were being used in Kansas City at that time were only capable of producing a limited size range.

Walter quickly realized the significance of his find and cabled his brother for funds to buy the prototype and secure the American patent rights on the machine. It is an interesting side note that Walter was not the engineer of the company, in fact, he knew little of envelope-folding machines. He cabled Bert three times requesting 25,000 Deutchmarks each time and only after receiving the money did he inform Bert that he had bought the patent rights to the German equipment. This was a great deal of money in the early '20s and when Bert finally saw the equipment, he wondered if he could make it work. After an aborted attempt to interest other envelope manufacturers into buying into the machinery, the Berkowitz brothers decided to finance the equipment themselves and, thus, they became machinery distributors. The brothers assigned those patent rights to the Baltimore Paper Company, a firm under their ownership at the time. The Winkler & Dunnebier machines would be imported, redesigned for the American market, and sold (subject to a limited production royalty) to envelope manufacturers. The prototype machine that Walter bought arrived in Kansas City in July 1922 when Bert and his wife, Kitty, were on their honeymoon. Bert began working with the prototype, learning how to adjust and operate it himself. By 1925, he had a clear understanding of how the machine would have to be modified to fit the needs of the American market. Subsequently, in 1954, Richard Kranz from Germany joined the firm as an adjuster, later to become vice president of manufacturing and a leading machine innovator in the industry.

Bert went to Germany in 1925 and sat down with Max Dunnebier and Richard Winkler. Since Bert Berkowitz spoke little German and Dunnebier and Winkler limited English, the early meetings that included Karl Luck, the factory superintendent, were filled with memos and drawings, exhausting the services of the interpreters who had to be hired. Shortly thereafter, the Type 26 W+D machine was born. E.B. Berkowitz would make a number of trips to Germany, each time taking a new idea or concept for W+D to consider and Max Dunnebier would also have ideas for E.B. to review. Out of this early collaboration, the Type 46 machine would be built which was a 5 1/2 coin envelope machine. That

machine would replace the plunger machine for the production of coin envelopes.

During this same time period, Berkowitz Envelope Company began to expand its operations into different cities and states. In 1923, Berkowitz Envelope Company of St. Louis was established. In 1924, Berkowitz Envelope Company of Iowa opened its doors in Des Moines. The Monasch Company was purchased in 1929 and incorporated as the Berkowitz Envelope Company of Minnesota. In 1937, the company bought a pioneer in the American envelope industry, the Tension Envelope Company of Brooklyn, New York. The Tension name came from a unique open-end envelope with a button on the back and a button on the flap. An attached string was wound around the two buttons to hold the envelope closed. This device was invented by this company in 1884, holding the flap with the contents under "tension" and giving the product its name. The Tension name remained with the New York operation while the Midwestern plants continued to be known as Berkowitz Envelope Company.

In 1944, all Berkowitz Envelope Company identification was dropped and sales and manufacturing efforts were all consolidated under the more widely recognized name of Tension Envelope Corporation. In 1947, the Minneapolis plant moved to larger quarters, and in 1950, the New York plant was moved from Brooklyn to South Hackensack, New Jersey. The Fort Worth plant would open in 1953. In 1960, Tension bought the Delta Envelope Company of Memphis, Tennessee. In 1968, the Santa Fe Springs, California, plant was opened. In 1970, there would be a new plant in Marysville, Kansas, and a relocation of the Des Moines facility. In 1977, a plant was opened in Winston-Salem, North Carolina. Santa Fe Springs and Winston-Salem would relocate to larger facilities in 1985 and a new plant was opened in St. Clair, Pennsylvania, in 1987. In 1994, the Santa Fe Springs plant would be moved to Temecula, California. Finally, in 1995, TransCoast and Transo Envelope Company of California would become part of the Tension family of plants.

The "third generation" at Tension began with Walt Hiersteiner joining the company in 1946. Walt would go on to become vice president in 1951, vice president and general sales manager in 1953 and executive vice president in 1962. Walt, an attorney by trade, proved himself quite an inventor with 24 patents on envelopes and envelope related products. E.B. Berkowitz's son, Bert, joined the company in 1961 and worked for a short period of time in Baltimore Paper Company, later Berkley Machine Company, handling W+D folding equipment for the U.S. market. In 1962, Bert became president and E.B. became chairman of the board, with Walter becoming vice chairman. The envelope manufacturing industr y and Tension Envelope Corp. lost natural leaders in 1966 when E.B. passed away with Walter only surviving his brother by 23 days.

Also part of the "third generation" is Richard L. Berkley. Dick joined the company in 1966, shortly after Bert, and became secretary/treasurer of the company. Dick was avidly interested in public service and was elected mayor of Kansas City in 1979 and would be reelected in 1983. He holds the distinction of being Kansas City's only modern three-term mayor. After Dick's final term as mayor ended in 1991, he rejoined the company and continues as secretary/treasurer to this day.

The "fourth generation" began with Bill Berkley joining Tension in 1981. Bill began his career with Tension as a sales representative after earning his MBA from Dartmouth College. He served for a while as assistant to the executive vice president, then as sales manager of Kansas City and acting general manager of Tension Envelope in Memphis, Tennessee, before becoming responsible for national sales at Tension. Bill was elected president and CEO of Tension in 1988 and Bert Berkley and Walter Hiersteiner became chairman and vice chairman respectively.

Wisdom, good judgement, an extraordinary sense of timing and vision are all the hallmarks of the leadership of Tension Envelope Corp., a company with over 125 patents to its credit. William Berkowitz understood what the customer wanted and developed a company to meet customer demands. E.B. and Walter Berkowitz built a nationwide production organization and gave birth to a new generation of envelope folding equipment. Bert Berkley and Walt Hiersteiner continue E.B. and Walter's vision in updating the production organization, creating new products and creating a high performance, customer service oriented company. Dick Berkley focuses Tension's resources on the community and in participating in community activities. Bill Berkley continues to build a company for the 21st century and carries forward the spirit of Tension Envelope.

The Wolf Envelope Company

The Wolf Envelope Company began business in October 1899, in Cleveland, Ohio. The business was founded by three partners: Alan Wolf, Louis Littman and Nathan Dreyfuss, friends who pooled their knowledge and financial resources to form a small business manufacturing envelopes. Mr. Littman was a German immigrant and former lithograph salesman. He started the business with money loaned by two friends (Wolf and Dreyfuss) who would become silent partners.

Initially, these envelopes were manufactured as a hand-designed product used primarily for business purposes and sold directly to the customer. While manufacturing processes and printing methods have advanced over the years, this same method of sales is still used today, but on a much larger scale. The Wolf product line rapidly gained popularity among local businesses. As a result, the company continued to grow rapidly, expanding its market area and broadening its customer base far beyond the Cleveland area.

In 1909, Wolf Envelope was forced to move to new facilities at 1749 East 22nd Street in Cleveland to accommodate growing sales and production requirements. New "state of the art" folding machines were purchased altering the earlier method of hand-making envelopes and also permitting a much greater diversification brought about by the new machinery. They also incurred speed of production, thus

forcing new sales to keep machines operating at optimum levels. These factors, combined with effective management, were responsible for the continued growth for decades. In 1913, Louis Littman's son-in-law, Harry Affelder, a mechanical engineer, joined the company. The 30-year-old Affelder had been a designer of gas engines and previously worked for George Westinghouse, founder of the Westinghouse Company. Although originally hired as a superintendent at Wolf, Affelder soon applied his innovative engineering skills to introduce several mechanical inventions to the field of envelope manufacturing.

Over the years, Affelder became a leader in mechanization of envelope making. Around 1920, the company had installed one of the first German-made rotary folding machines in use in the United States and Affelder custom-designed mechanical improvements to the equipment. He also designed and built seal-flap gumming machinery, adjustable die-cutting equipment and a metal clasp machine which became a standard for the envelope industry and marketed and popularized worldwide by F.L. Smithe Machine Company.

The Wolf Envelope Company continued to expand as Louis and his son, Alan Littman, directed company sales, while Harry Affelder served as general manager. In 1923, Wolf management purchased a small envelope company in Detroit, Michigan. This company was later named The Wolf-Detroit Envelope Company. Harry Affelder served as president of the Envelope Manufacturers Association for four years during World War II at a time when the industry was called upon to make V-Mail envelopes for the war efforts. One of Affelder's contributions was the development of methods for adapting existing machinery to make V-Mail envelopes, which enabled the industry to supply them in the extensive volume needed.

In 1946, Harry Affelder became president of Wolf Envelope and was succeeded by Alan Littman in 1956. Harry Affelder's son, Lewis, became president in 1968. He was also president of EMA from 1960 to 1962. The company continued under the ownership of the Affelder family until the late 1980s when Lewis Affelder sold the companies (Wolf and Wolf-Detroit) to their respective managers. Wolf-Detroit was sold to Hugh Mahler and Wolf Envelope was sold to Howard Shaw, Harry Goodfriend (great-grandson of Louis Littman), Tom Kahn (stepson of Alan Littman) and Jeffrey Anspach (accountant and advisor to Lewis Affelder). Both companies continue to operate today.

With thanks to Harry Goodfriend for his assistance in writing the history of his family and the company his great-grandfather founded. Also adapted from the EMAA 50th Anniversary Book.

About the Author

Maynard Benjamin is currently the president of the Envelope Manufacturers Association, a position he assumed in 1990. Mr. Benjamin has been with the association since 1984, serving as its vice president and treasurer and executive vice president. Mr. Benjamin has had a life-long interest in philately and specializes in the American Civil War and also in 1840 to 1850 British philately. Since 1992, Benjamin writes a monthly column for the *Envelope Report*, the newsletter of the Envelope Manufacturers Association, entitled, "History of Envelopes." It is these columns that comprise his current book.

Mr. Benjamin is a member of the Director's Council of the National Postal Museum of the Smithsonian Institution. He is also a member of the Confederate Stamp Alliance. Mr. Benjamin is married to Margaret Challoner Benjamin and they have one son, Hank. They reside in Alexandria, Virginia.

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GENERAL MANAGER'S OFFICE,
WORCESTER, MASS.

September 23, 1924.

TO DIVISION MANAGERS:

Gentlemen:-

The United States Envelope Company has been running twenty six years and during those years we have accumulated a large amount of inertia, which, unless overcome, will in the years ahead of us, be the undoing of the Company.

We have a great many employees who have been with us many years and they have become hide-bound, their life and daily work has become stabilized and they have no new thoughts - they come in every day, hang their hat on the same nail and take up the daily routine of their job, but they give no thought beyond that.

They do their job, and having done that, they feel absolved from doing anything further and they give birth to no new ideas. Every day is like the preceeding one - there is no progress.

It will be a difficult task to create the new spirit but it must be done - we must get more work out of our working force.

Business is improving slowly and this is the time to see if your present working force cannot care for the increased volume of business.

During the past few years it has been easy when busy to hire in more help without giving much thought as to whether or not your present force could by extra exertion, and re-arranging the work, have carried the additional burden. This is the time to do it. Don't say it cannot be done. It must be done - our teams must do more work. As Managers of your Division, you have no more important work than this and to look over your whole working force in each department with this thought in mind.

Yours truly,

James Ryan

President

by Maynard H. Benjamin

1840 - 1900