

THE BOSTON POST OFFICE AND THE EVOLUTION OF MACHINE CANCELLATION

Machines for the rapid processing of out-going mail began to be developed in the United States in the 1870s, but the extension of machine cancellation to virtually all post offices with a significant volume of mail took another quarter of a century. The Boston Post Office played a major role in the development of these machines. This was so, not only because Boston had one of the country's largest postal systems in the latter part of the nineteenth century, but also because some of the most important machines were invented and developed there.



The experimental cancellation of the American Postal Machines Company popularly known as the "Eagle and Thunderbolt"

Several local companies, linked by convoluted interchanges of patents, innovating personnel and financial backers, account for much of the activity. And that activity resulted in several cancellations which were first applied in Boston—ranging from the embryonic Leavitts to the highly popular flag cancels—including what is almost certainly the most famous American experimental machine cancel: the unique "Eagle and Thunderbolt".

Certainly Boston was not the only city to be involved in the development of cancelling machines.

The prevailing force in the end was the International Postal Supply Co. whose first machines were installed in the New York area. But for its pioneering machines and eye-catching designs Boston wins hands down.

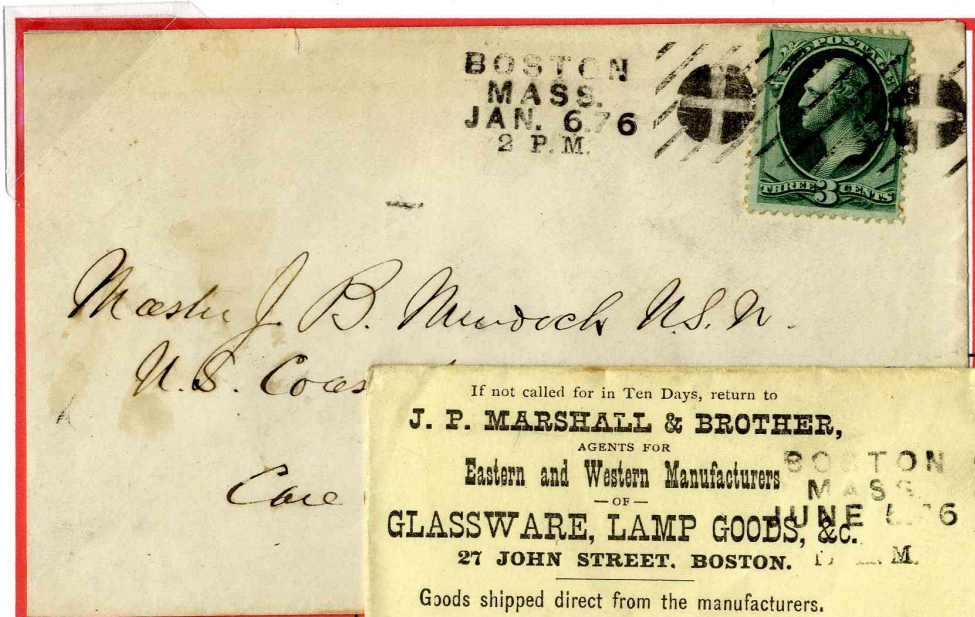
The goal of this exhibit is to show the development and the ultimate decline of the machines first used in Boston during the nineteenth century. Unusual cancellations are also shown where possible, including experimental machines, cancellation errors and apparent short-term testing usages.

Certain items which are of infrequent occurrence or particular interest are outlined in red.



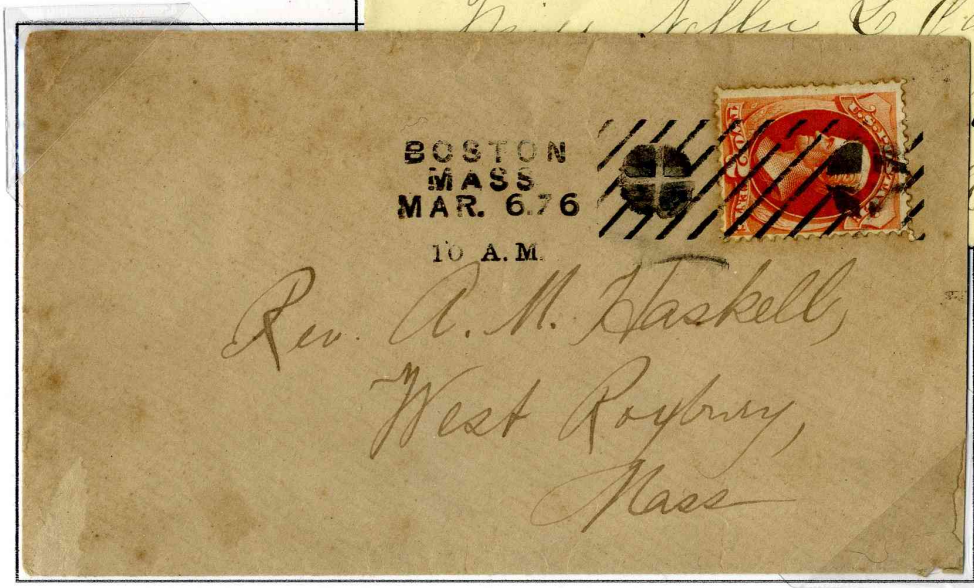
THOMAS LEAVITT

While there had been other mail marking devices invented and tested in the United States in the 1870s, the machines developed by Thomas Leavitt and others in his family became the first to achieve wide and sustained usage in America's largest cities. Thomas Leavitt used the Boston Post Office as his testing ground, and nearly all of his machines were first placed in service there. The first operational machine was designed to handle envelopes but apparently required that each piece be hand fed. Such a machine could not yield a significant savings in labor over hand cancellation. Only a single machine seems to have been made, saw sporadic use over five months, and could not have handled more than a small fraction of the daily mail in a post office the size of Boston.

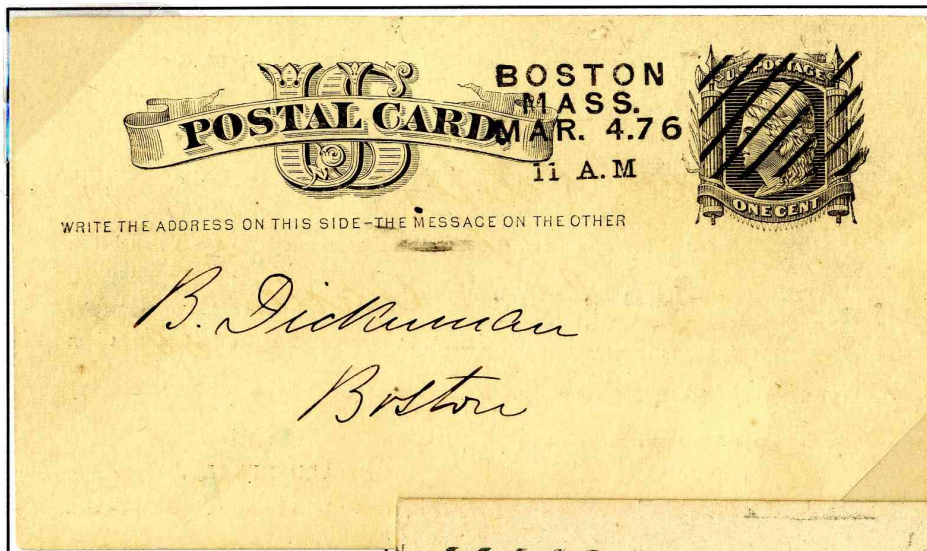


Initial Leavitt machine: first day of use, January 6, 1876; cover with two stamps, for which dual cork inserts were intended; local first class rate. **Last two covers each one of two recorded**

If not called for in Ten Days, return to
J. P. MARSHALL & BROTHER,
 AGENTS FOR
 Eastern and Western Manufacturers
 —OF—
GLASSWARE, LAMP GOODS, &c.
 27 JOHN STREET, BOSTON.
 Goods shipped direct from the manufacturers.

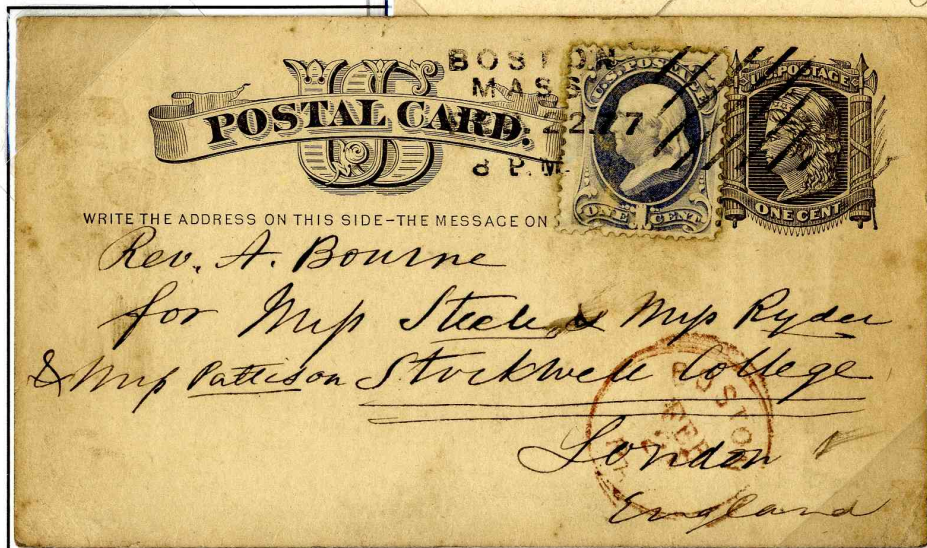


A second type of machine, with a mechanical feed but able to cancel only postal cards, was used from early February 1876 to the middle of April 1878. Despite its limited application, the machine met a substantial need, since the availability of postal cards in sheets dramatically increased their commercial use. A similar machine was installed in New York City in June 1876. Two Boston dies exist, most easily distinguished by the distance between the **S** and the period in **MASS.**



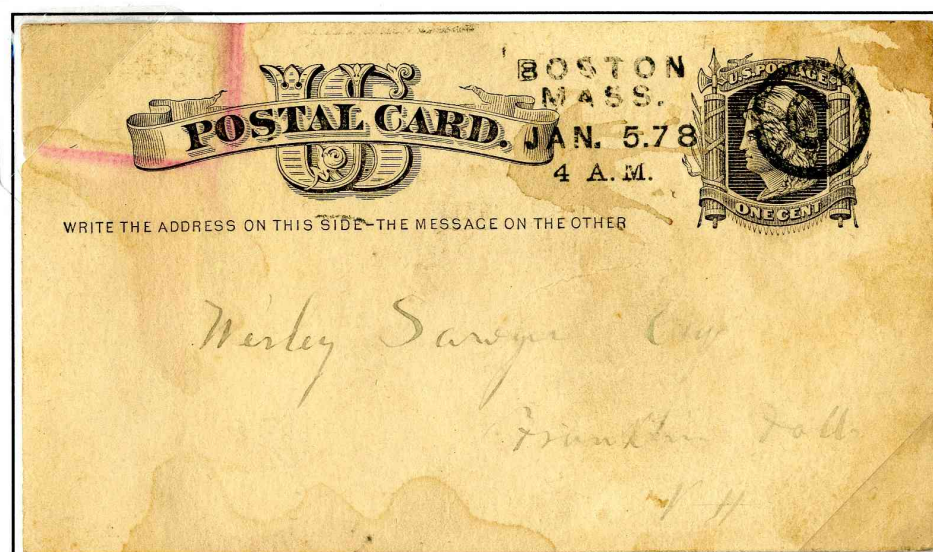
March 4, 1876. Type I
cancelling die.

January 7, 1878. Type II
die. Second impression
clearly shows all nine
oblique cancelling bars

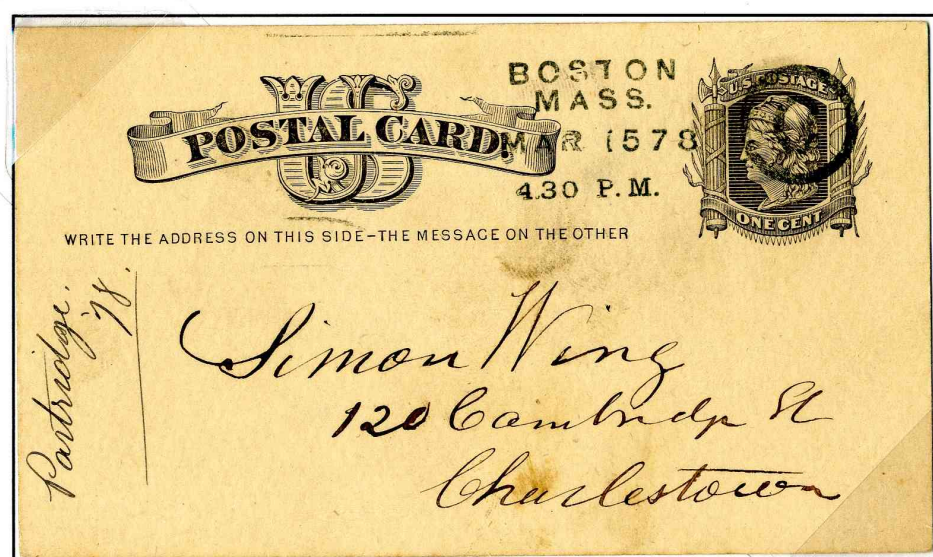


Used for bulk mailings,
European destinations
are unusual. **The only
recorded example from
this type of machine.**

From December 1877 until early April 1878 the same machine and postmark dies were occasionally fitted with a **C** in a circle, a service mark meaning "Mail collected from mail boxes by carriers." Both Type I and Type II postmark dies were used with this service mark.

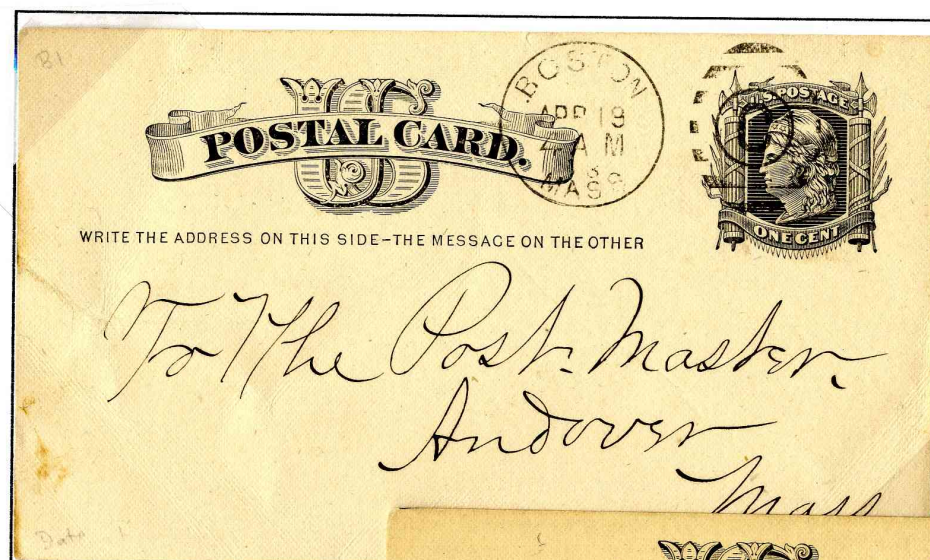


Type II die in use from December 24, 1877 to early March 1878



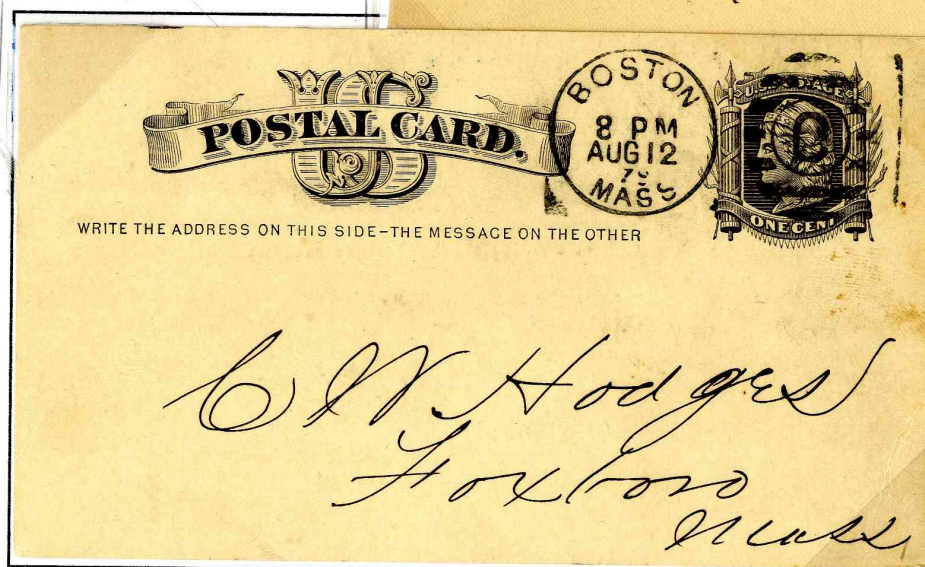
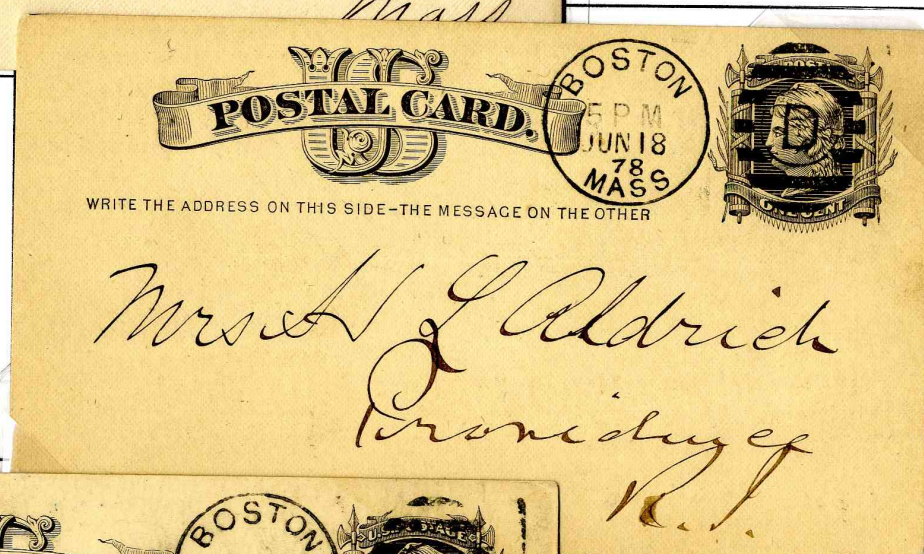
Type I die recorded only from March 11 to April 3, 1878

The most widely used of the Leavitt cancellations with circular postmarks and a barred oval canceller. Initially applied to existing machines in New York and Boston in early April 1878, this cancel was later used in 27 additional cities.

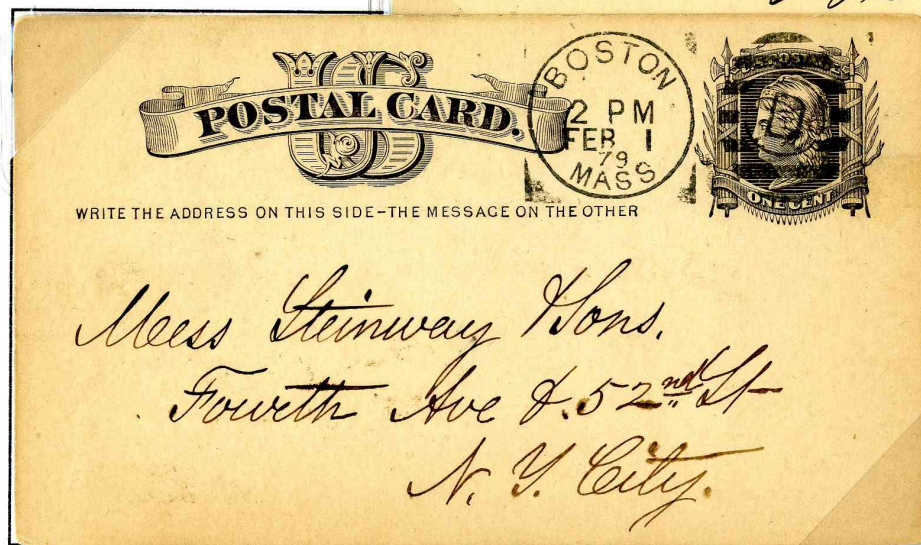
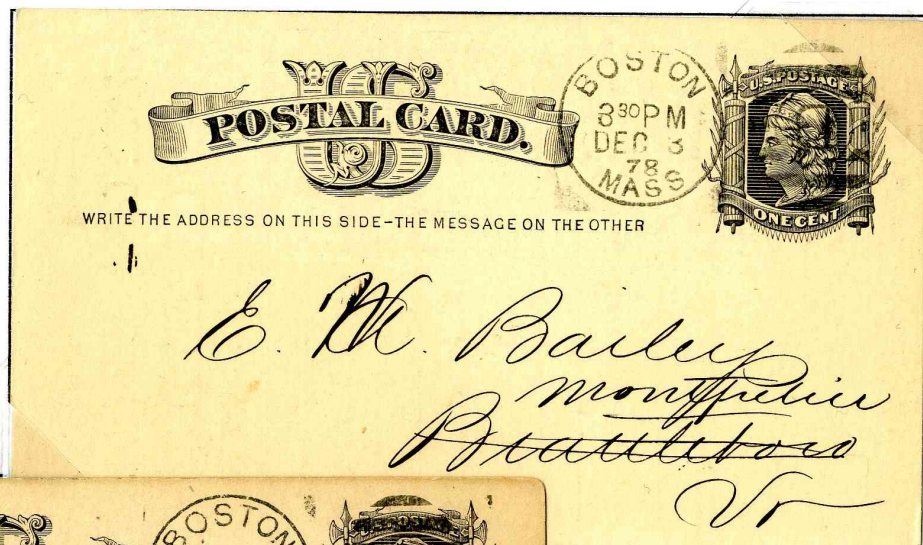


First type with seven bar canceller and small dial. April 1878 use with service letter **C**

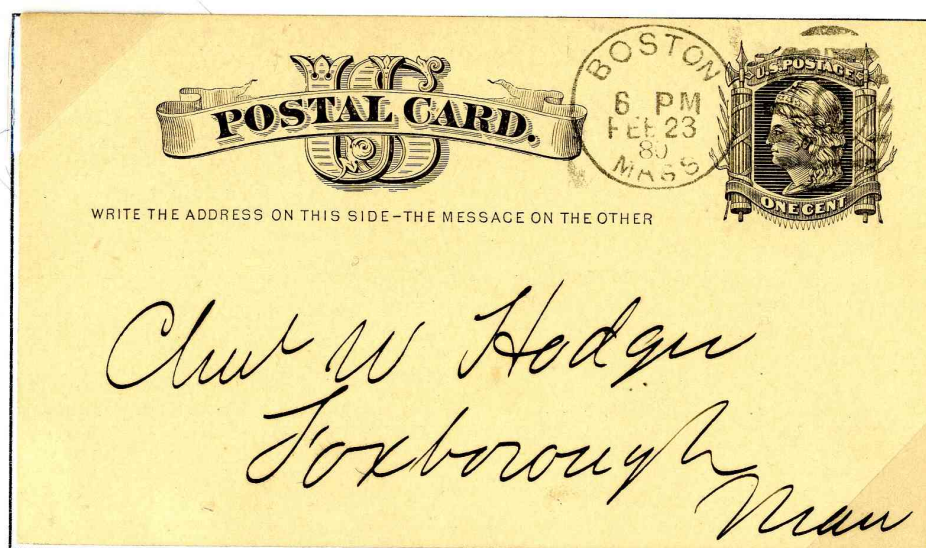
With a service letter **D**. Time and date reversed



First type in general use to July 31, 1879. Only a few examples are recorded after that date



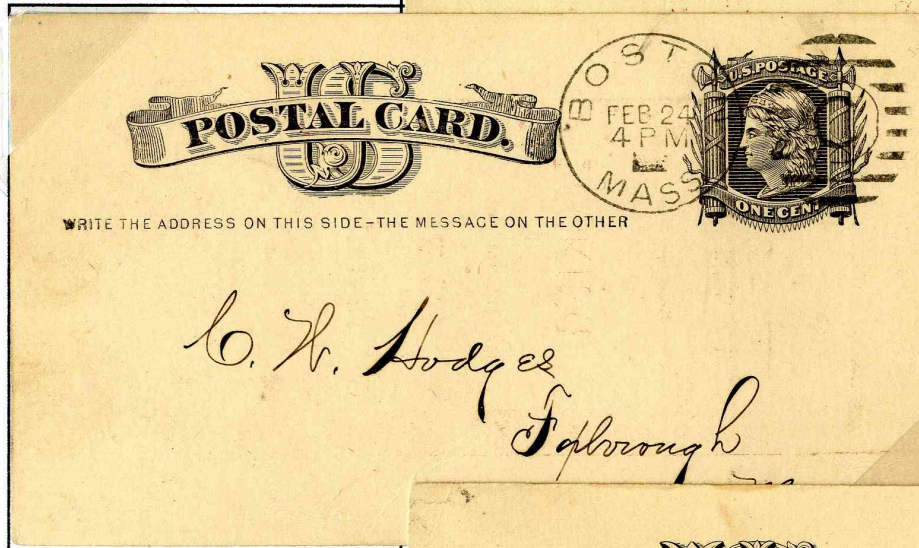
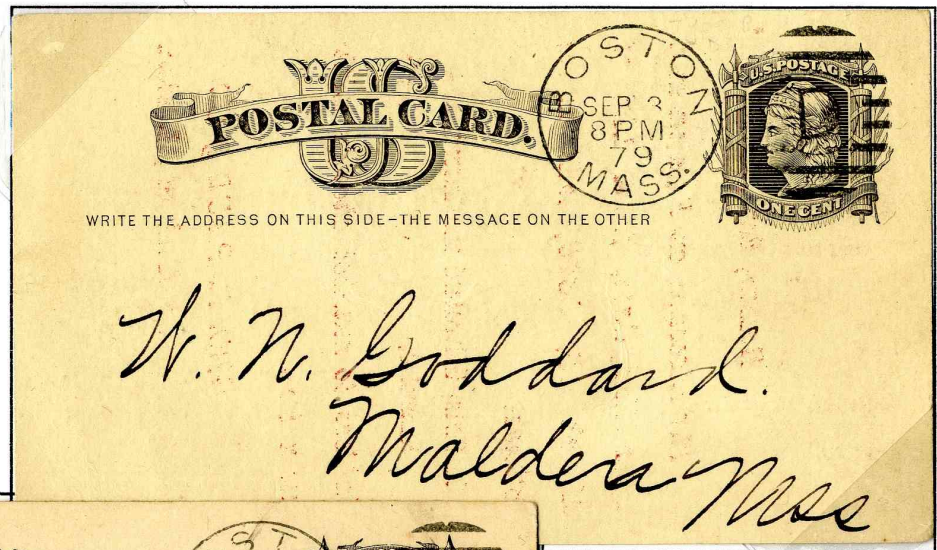
Lack of a key or pinning system left service letters at times askew or inverted



Type one cancels returned for six weeks in 1880. **This is the only example from that period with the time on top**

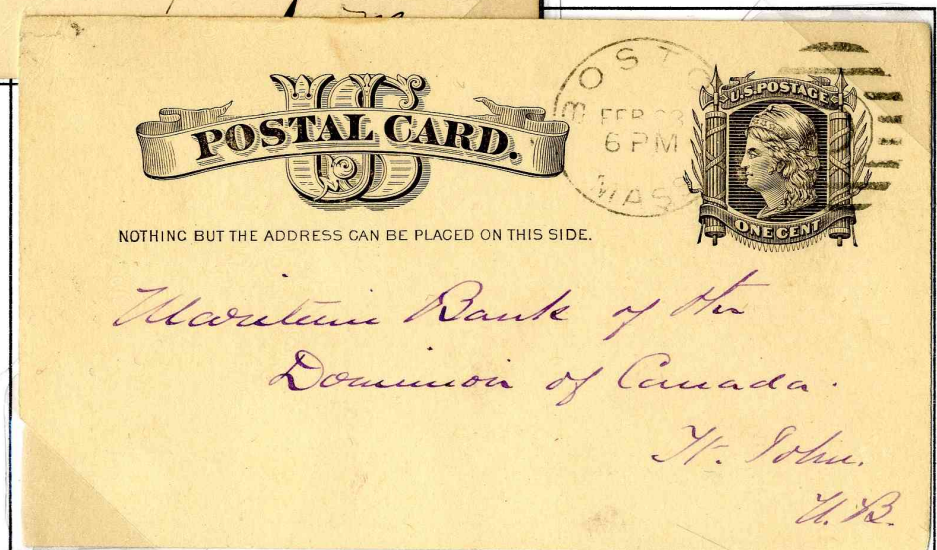
In 1879 a new eight bar canceller was paired with a larger postmark dial (second dial type). In 1881 regulations allowed the omission of the year date (third dial type). Printed commercial messages on the reverse usually allow the year date to be determined.

Second dial type, September 3, 1879

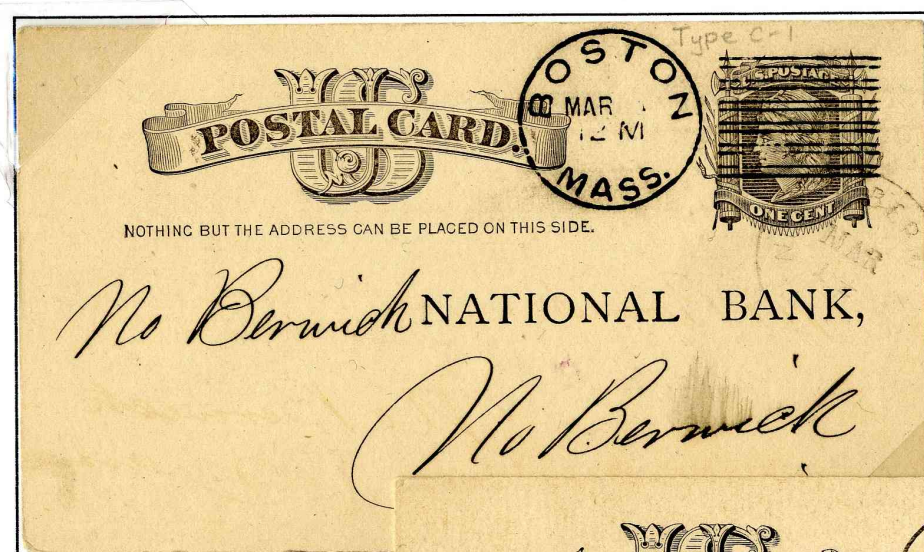


Transitional type with year-date slug inverted, February 24, 1881

Third dial type, February 23, 1882. Latest documented use

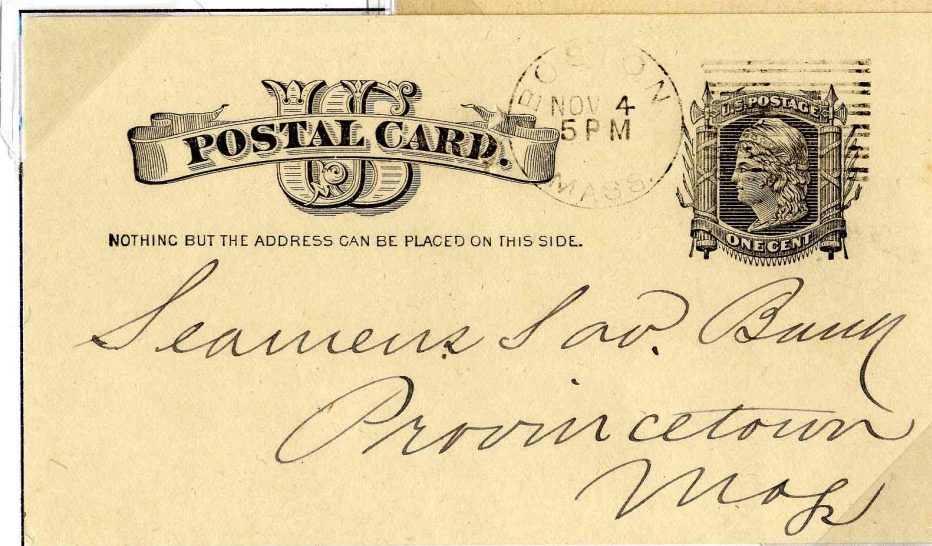
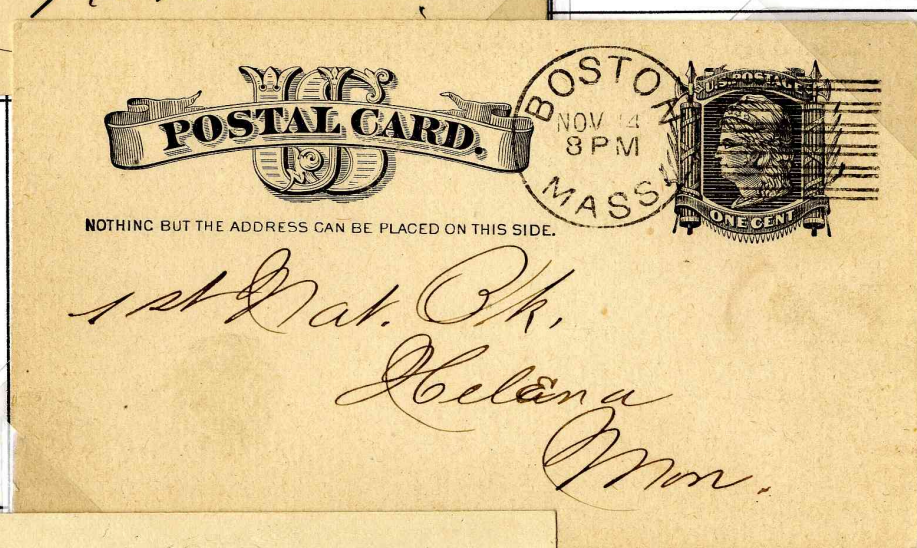


A new type of cancelling die consisting of twelve horizontal bars in six pairs was introduced in March 1882 in Boston. Three types of dials were used with these cancellers, each varying slightly in diameter. Washington, D.C. and Baltimore received similar, although not identical, cancellers in the same year.



Dial type one, used March 1 to March 23, 1882

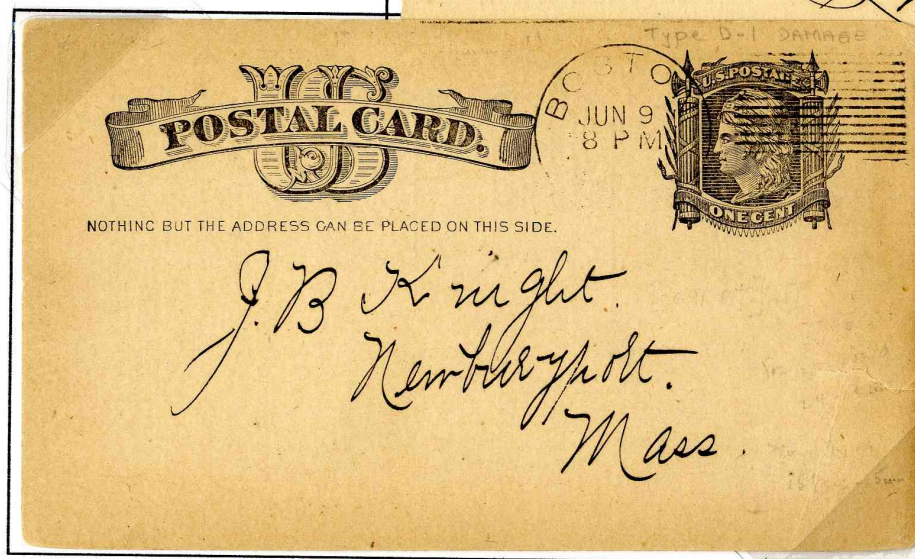
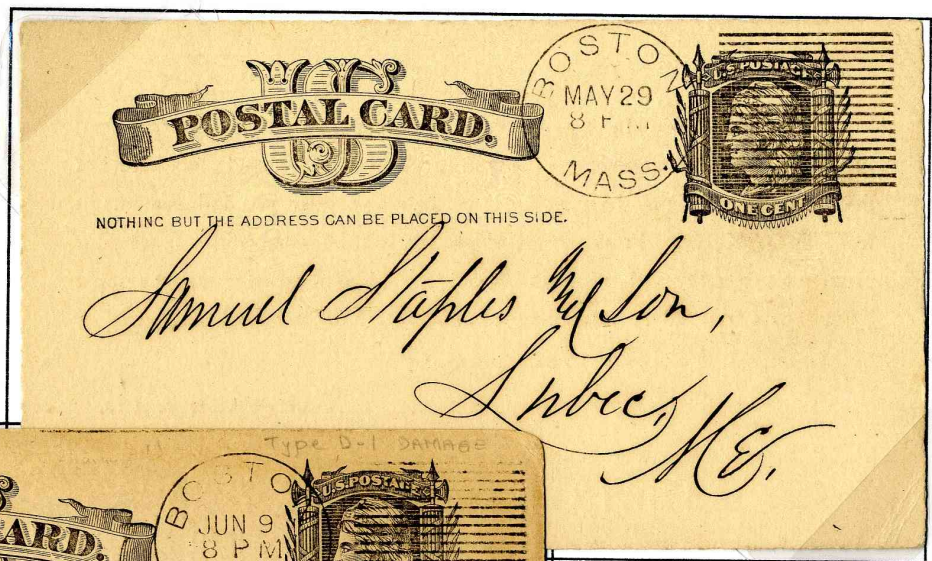
Dial type two, used March 30, 1882 to January 25, 1885



Dial type three, used November 4, 1885 to July 19, 1886. **Earliest documented date of use**

Beginning in 1882 three new designs were introduced and used only at Boston. When the final machine was retired in 1890 only a few Leavitt machines were in operation elsewhere in the country.

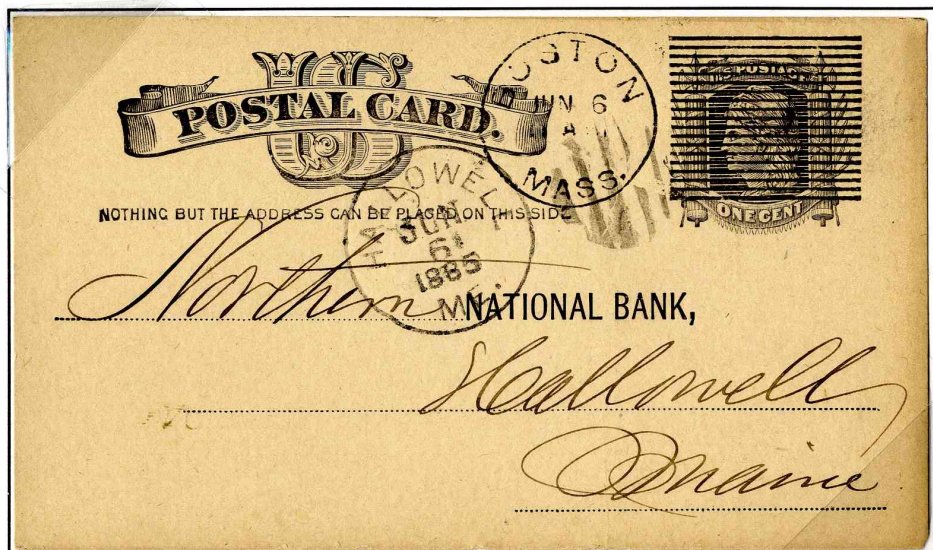
18-bar canceller in its first period of use, February 25 to June 30, 1882. Also used intermittently in 1884



18-bar canceller exhibiting problem caused by slipping inking ribbon. June 9, 1882, earliest date showing this defect

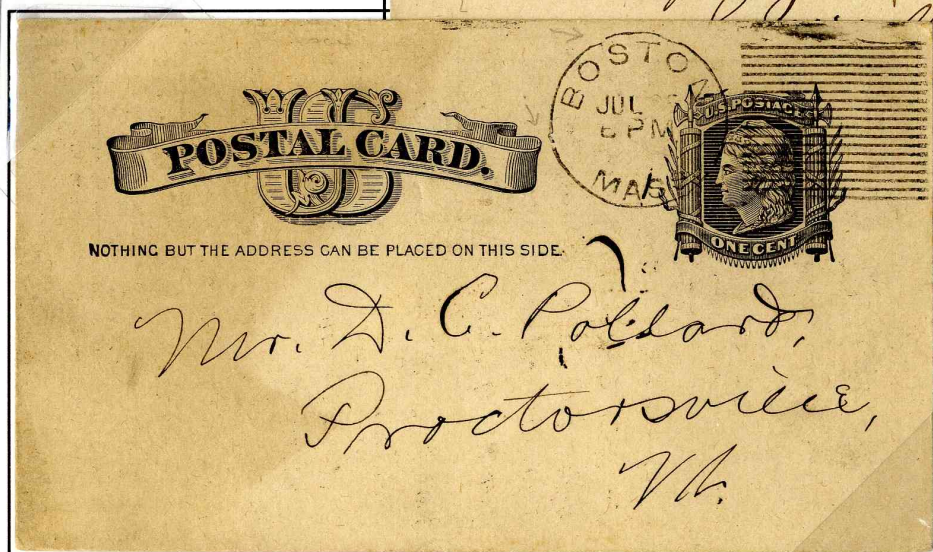
Final Leavitt canceller, in use 1886 to 1890. Known only with the D service mark





From January 27 to August 9, 1885, a 19-bar canceller used.

By the morning of June 27 top of dial and top bar damaged. The earliest recorded example, cancelled 11 AM



Damage evident late in July as machine impressions were heavily inked. July 25.

LEAVITT EXPERIMENTAL CANCELS

Aside from the hand-fed mechanism first used in 1876, the Leavitt machines were designed to cancel postal cards. Leavitt, however, solicited financing for his efforts to produce a feeding mechanism which would handle envelopes. During 1881 and 1882 a number of such mechanisms were tested, principally in Boston but also in New York, Washington, Baltimore and Philadelphia. The feeding method employed involved needles or pins, and the small holes created can often be seen on surviving covers.

Each of the experimental dies has been associated with specific arrangements of pin punctures; however, the holes are not readily seen without magnification if they are visible at all. Those that can be identified with some certainty have been highlighted here with red circles.



Third class usage, believed to be 1882. **One of three recorded copies** all undated and with an inverted **C** in the canceller. Pin punctures should be a line of six approximately 3.3mm apart. This example shows five of the holes.

The second design, a combination canceller of a barred oval with a **D** (the only recorded service letter) and eight short bars. These cancels are associated with pin punctures in two groups of four, with the two groups separated by about 23 mm. Known from September 30 to December 20, 1881.

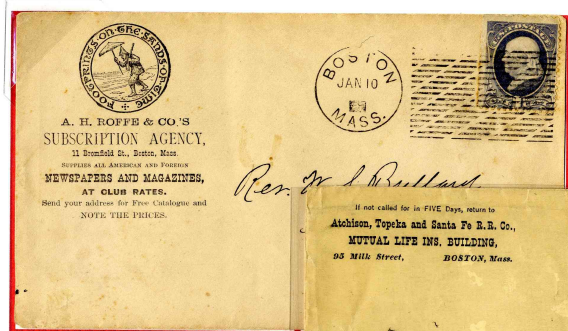


Four pin marks conform to the appropriate format, but the second (presumably lower) group is absent. **Earliest documented usage for this cancel**

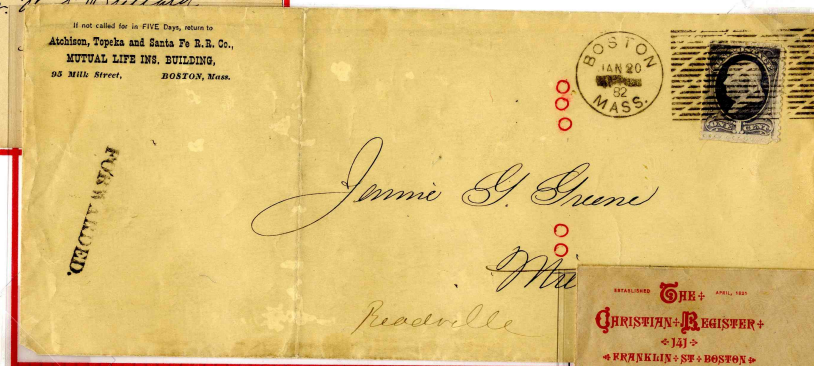


Five out of eight evident on this cover

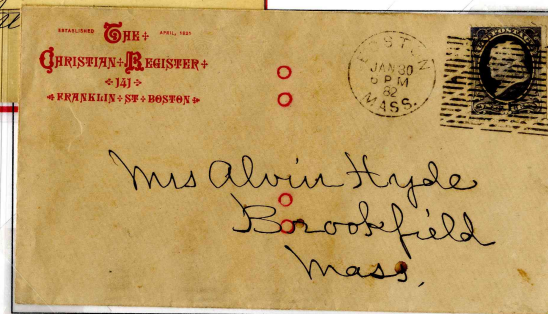
A new canceller is known from December 20, 1881 to April 19, 1882. The same arrangement of two sets of four pin marks was used.



'82 year-date slug not received in early January, and '81 slug inverted to correct. Only copy recorded with this 'correction'. No pin holes evident on this cover

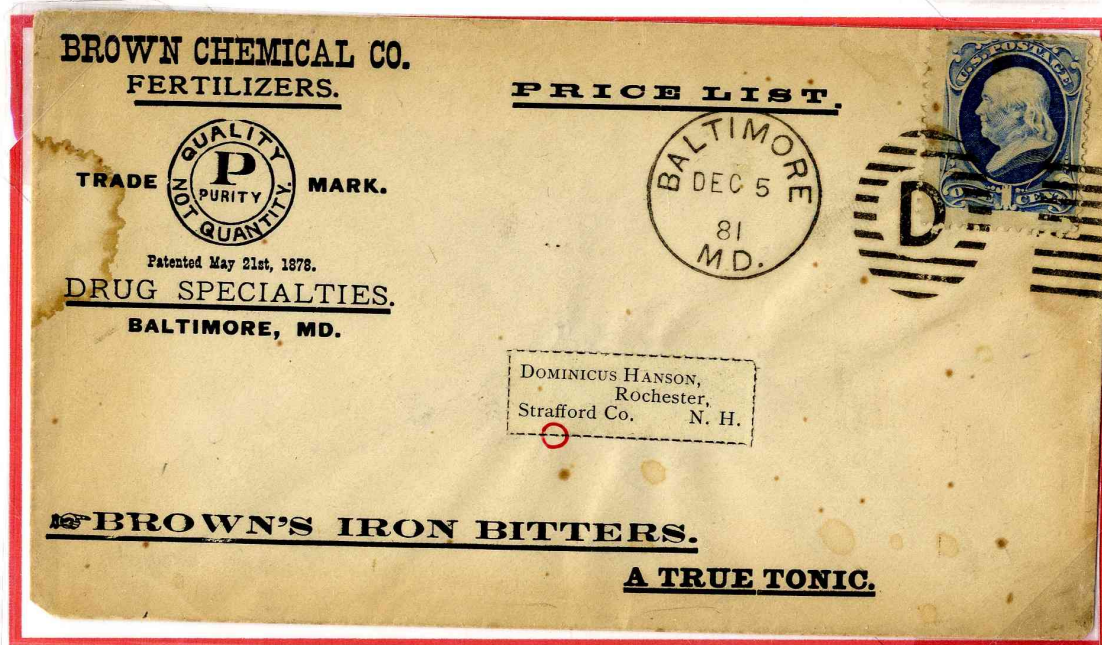


Ten days later, '82 slug in use. Time slug inverted, possibly to show third class usage. Previously unreported



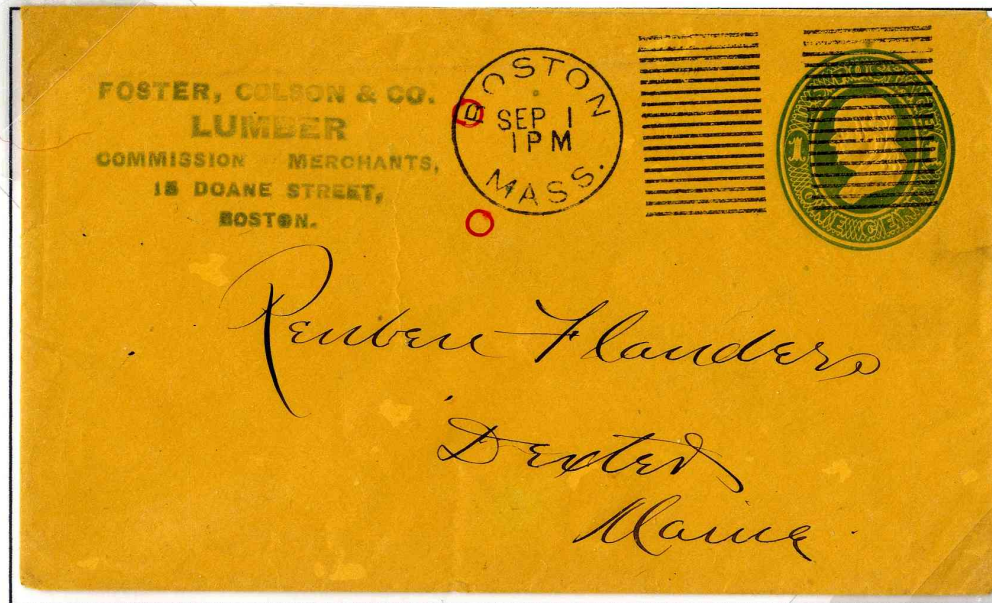
Ten additional days later, all systems in order

This flamboyant advertising cover with the same date and time as the last cover on the previous page used a thin paper which shows all of the pin holes clearly (one even tearing the cover) and confirms that a different machine was in use on at least that one day. Previously this grouping of pin marks has been known only from Philadelphia (December 2, 1881 to January 11, 1882) and Baltimore (December 7 to January 6). This suggests that at least one of the machines tested in these two cities was returned to Boston following the experimental period there. The usage of this pin arrangement in Boston has not been reported before.

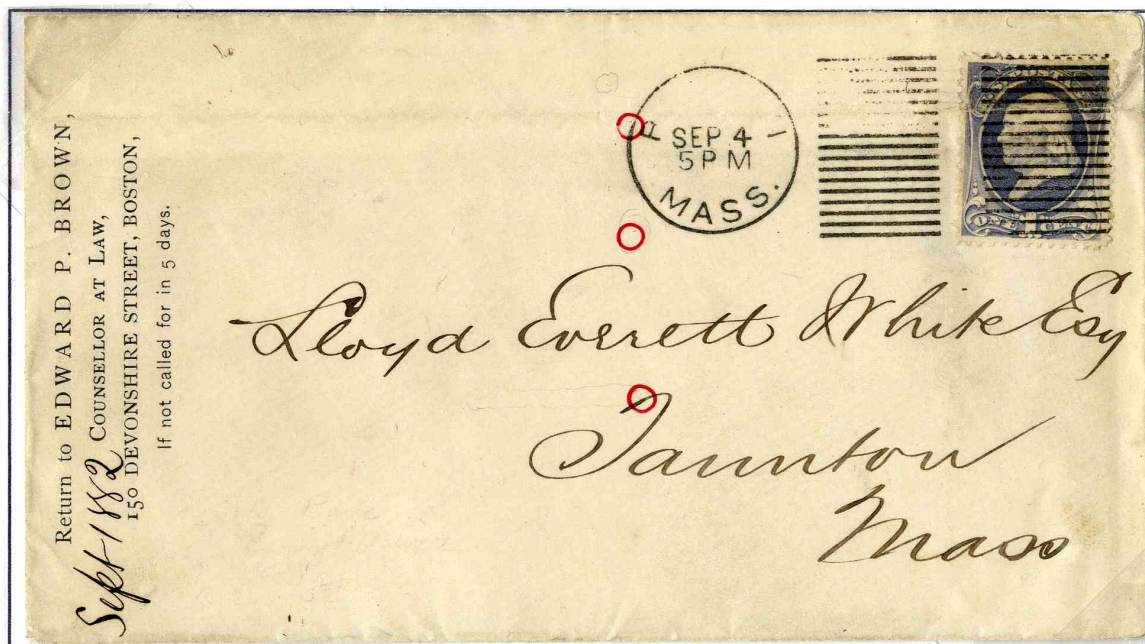


A previously unrecorded sixth cover from Baltimore's experimental usage and the earliest recorded date. Downward tilt to cancels suggests Baltimore machine created anomalous Boston cancel

A double 17-bar canceller with a channel between the sets of bars was used with two different dials. The first dial, with a relatively wide **A** in **MASS.** was used from September 1 to 27, 1882. The associated pin marks show two punctures in two groups.



The first day of use for this die, the year date confirmed by the advertising enclosure. Only the top pair of pin marks can be seen



Dated three days later the last day of use with a date in the dial, showing three of the four pin marks

The same cancelling die with the second dial showing a relatively narrower **A** in **MASS**. Dated covers range only from November 1 to 3, 1882, although undated third-class usages may have been processed somewhat before or after these dates.



Cover with the expected pin mark arrangement, lacking the top mark

41 TEMPLE PLACE.

YOUTH'S COMPANION.
BOSTON, MASS.

Another experimental die was introduced about September 9, 1882 and used off and on through the end of the year. This die is similar to the previous one with the addition of oblique cuts through the bars.



Mrs. S. A. Bailey.
N. Dummerston.
H

trust that our many
through whose favor
nation has reached
lation of nearly 300,000
ready, will be pleased
Announcement for the
year, which we send
also inclose other circu-
re by to remain.
Sincerely yours
Perry Mason

October 17, 1882.

All previously recorded covers with this die are third class uses. Covers with dated enclosures provide the only evidence of dates. All four pin marks in evidence



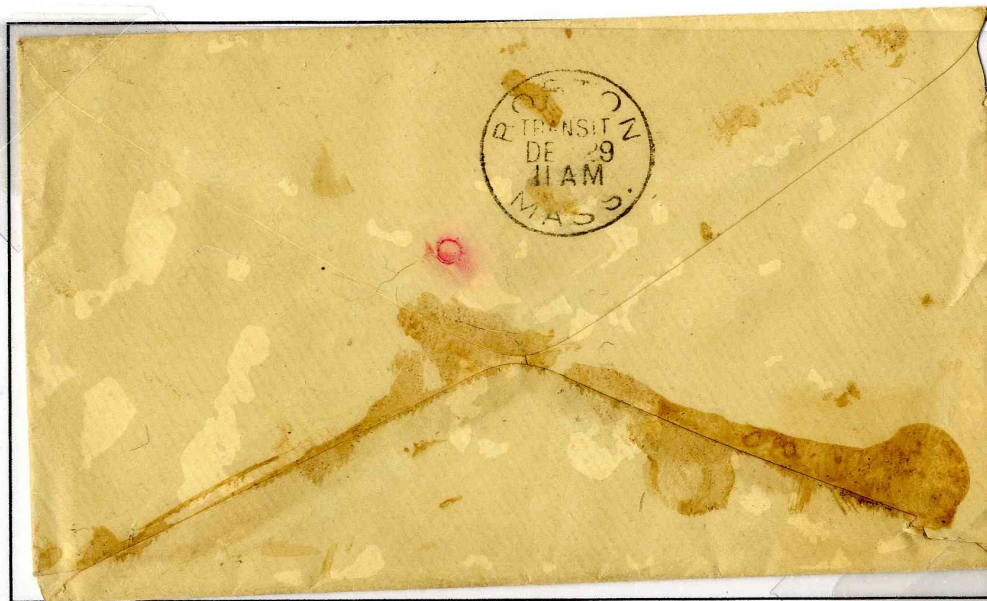
John Foster Esq
Pim Crooks.
Mass.

The only known first class usage with this die and one of two covers with a date

The experimental Leavitt machine was also used toward the end of 1882 as a transit marking created by removing the cancelling die from the machine and adding the word **TRANSIT** to the dial.



First type with **TRANSIT** in the third line, used November 10 through November 13, 1882

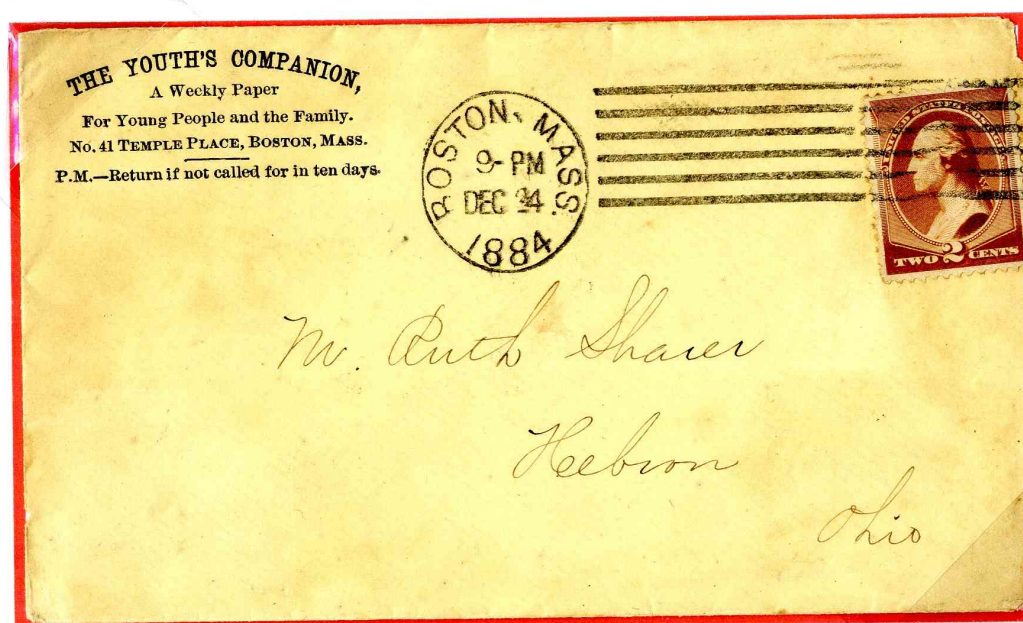


Second type with **TRANSIT** in the first line, used the balance of 1882. This cover, dated December 29 is the **last documented date of use**

THE AMERICAN POSTAL MACHINES COMPANY

The Bar Cancellations

Beginning in 1883, Martin Van Buren Ethridge began to work on the problems of developing a cancelling machine that would handle general mail. On November 30, 1884, a Boston newspaper reported that a new cancelling machine was operating in the Boston post office that could cancel up to 300 letters a minute. The American Postal Machines Company was formed, bought out the Leavitt patents and almost immediately became the dominant producer of machines in Boston. The products of these machines have become known as American Bar Cancellations to distinguish them from the later-developed flag cancellations.



Only one machine in operation in 1884 from slightly before the date of the newspaper announcement. The few surviving 1884 cancellations are mainly third class usages, showing no month and day in the dial. This is **one of four first class usages recorded**, the earliest known dated December 22, 1884

The first American machine was installed in the Boston Post Office on November 23, 1884 and initially used only on third class matter.

HOUGHTON, MIFFLIN & CO.'S PERIODICALS.

THE ATLANTIC MONTHLY.
THE (LAW) REPORTER.
U. S. OFFICIAL POSTAL GUIDE.
ANDOVER REVIEW.
BOSTON MEDICAL AND SURGICAL
JOURNAL.



EDINBURGH REVIEW.
QUARTERLY REVIEW.
THE ATLANTIC PORTRAITS.
HAWTHORNE, EMERSON, HOLMES,
LOWELL, WHITTIER, BRYANT, AND
LONGFELLOW.

All communications relating to the Periodicals should be addressed, Houghton, Mifflin & Co., The Riverside Press, Cambridge, Mass.

Boston Office,
4 Park Street.

The Riverside Press,

Cambridge, Mass., Nov. 24, 1884.

As we formerly numbered you among the subscribers to the Atlantic Monthly, we venture to send you the prospectus for the coming year, hoping that

you will

The att

and we

be more

We c

of Haw

Bryant,

as most

of art, c

We to

the ex

*edition of the leading English Reviews, namely: -
The Edinburgh Review and The Quarterly Review,
which are published by special arrangement with
the English Publishers, and are printed from the*

HOUGHTON, MIFFLIN & CO.
The Riverside Press,
Cambridge, Mass.

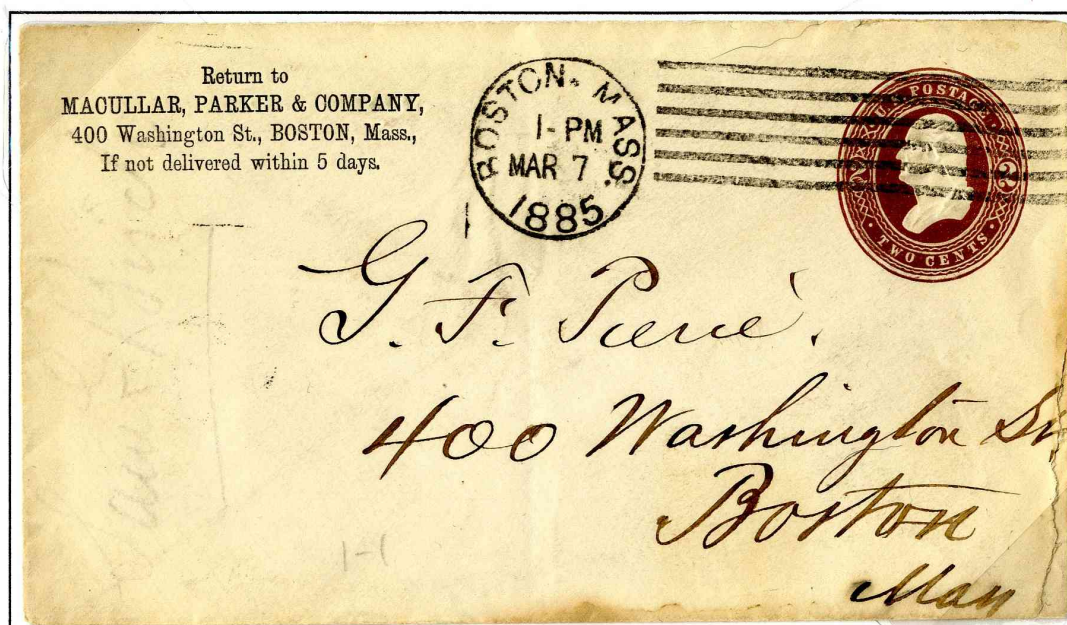
THE ATLANTIC MONTHLY
U. S. OFFICIAL POSTAL GUIDE.
BOSTON MEDICAL JOURNAL.
THE (LAW) REPORTER.



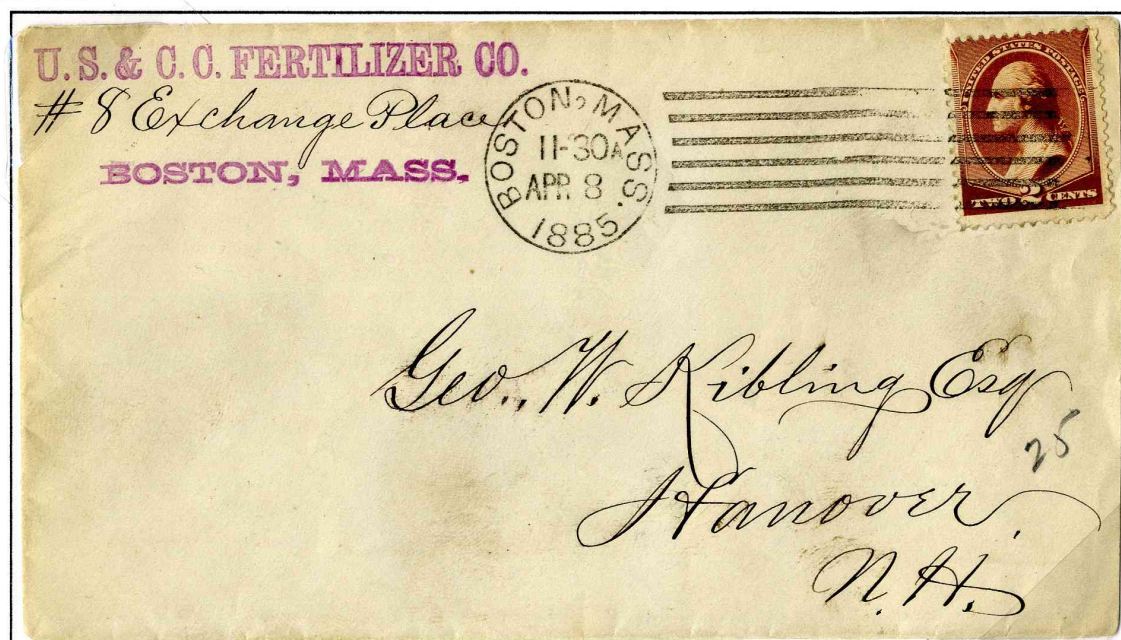
*Whittier Society.
Wyomanoek Seminary,
New Lebanon N.Y.*

Undated dial but
earliest recorded use
based on date of
enclosure

The year 1885 was one of experimentation, with fourteen different cancels identified. The number of machines in use during the year, however, began with two and ended with six.



One of the two machines in use at the beginning of 1885. High and heavy killer bars similar to the original 1884 cancels. Killer cylinder disposed of at the end of March

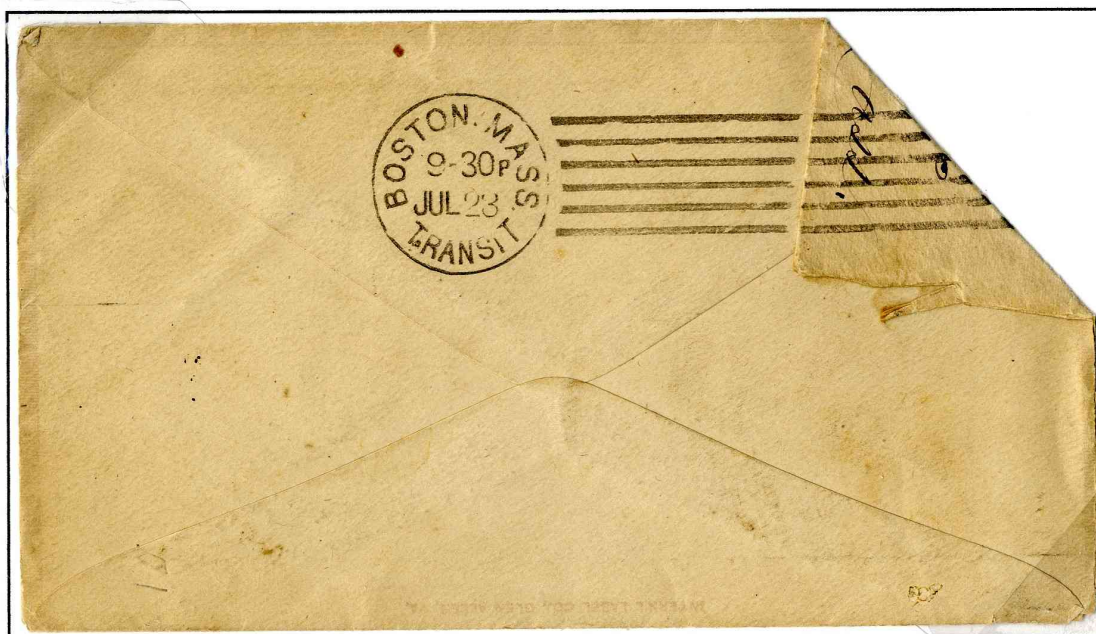


One of two very similar machines introduced in the second week of April with lower killer bars. In use to the end of October

An unusual and short-term usage was a transit marking used for local mail routed through Boston. The word **TRANSIT** replaces the year date. In sporadic use until the end of August 1885.

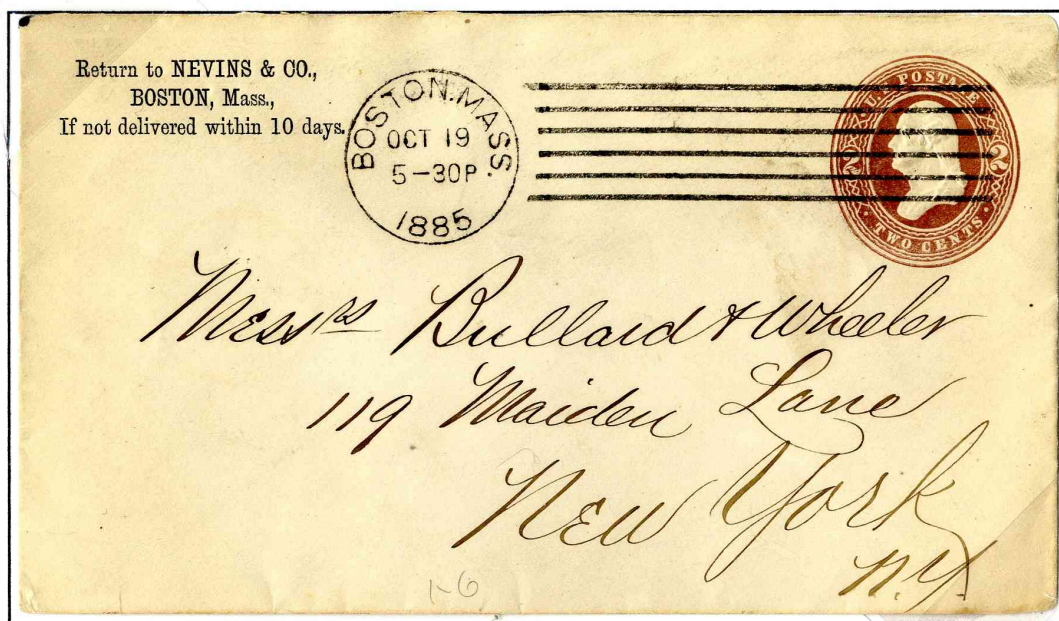


On a cover from North Easton, Massachusetts to Providence, Rhode Island.
Earliest documented date of use

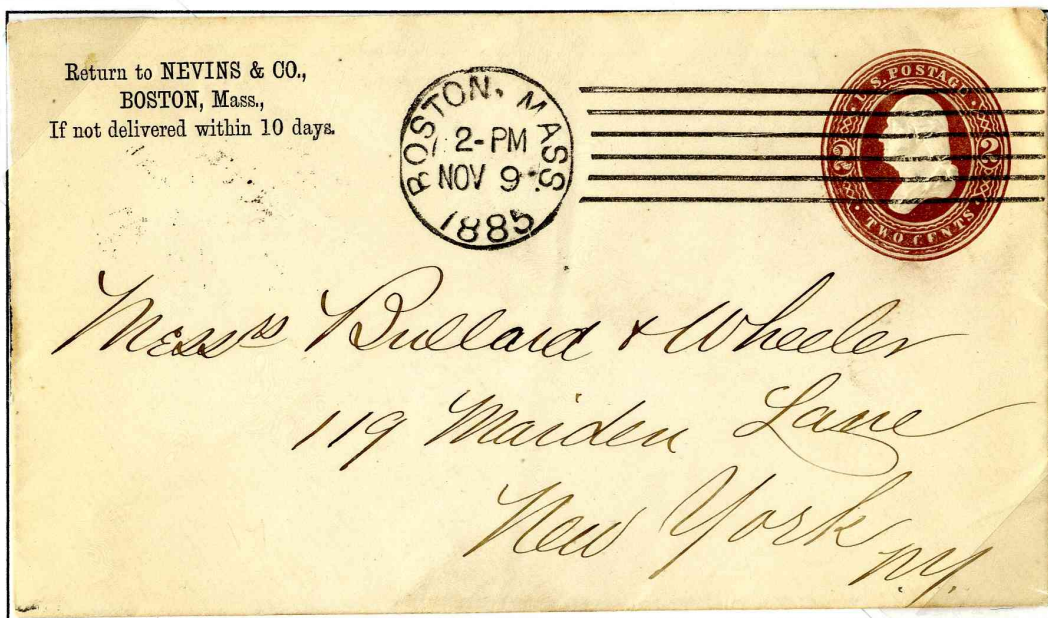


Folded corner apparently created by a machine jam

In mid-October 1885 the thickness of the cancelling bars and dials were reduced, and the dials featured smaller and lighter letters. In the new dials the date now appears above the time.



The first of the new machines in its first week of use. The four parts of the date and time were manufactured as quadrants of a circle. The date could not appear below the time unless inverted



A mixture of old and new. The first dial type recycled with new killer bars. Flattened left side of dial is one of several characteristics identifying the original dial

In December 1885 five different varieties of the new-style cancellations appeared. These had usages of from ten days to nearly a month.



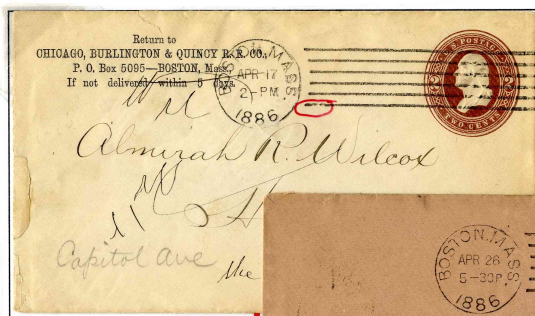
The last of the five new types introduced in December, 1885. **Earliest recorded date of use**



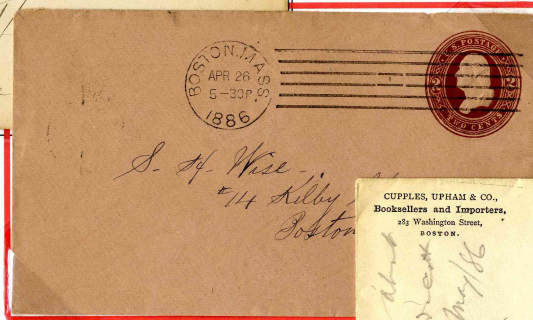
A final throw-back type, used only on December 31. **The only recorded example**

1886: Numbering of Machines Introduced

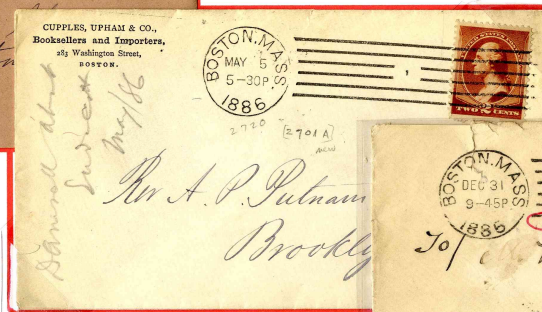
As the earliest post office with a significant number of machines, Boston was the first to have them numbered. This involved drilling the cancellation die, with a blank die space surviving for up to a few weeks before the number was inserted. Generally three varieties exist for each of the seven machines used in 1886. Machines 1 and 2, however, display unique anomalies.



Latest recorded use of Machine 1 before drilling. Killer distinguished by saw-tooth damage to bottom bar



The same dial with a new drilled killer and tiny experimental number surrounded by lines. Only known copy and not previously reported



Same dial and killer, lacking lines around the number. One of two recorded copies



Original killer reinstalled with the accepted large number. In use from May 7 to the end of 1886