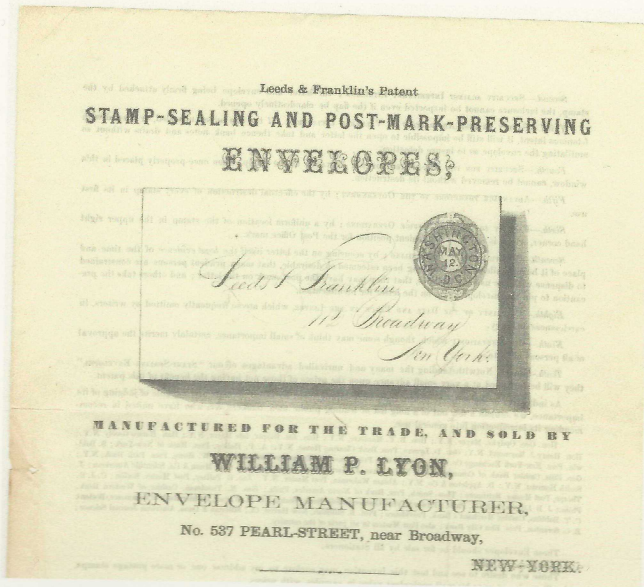


The Prevention of Reuse

Morison-Leeds patent: the 'Lyons' circular advertising the use of the envelope to prevent reuse



Scan of the front of the circular

Excerpt from the circular below

....
Fourth — SECURITY FOR THE PRE-PAYMENT OF POSTAGE; as the stamp when once properly placed in this window, cannot be removed without its destruction

Fifth — ADVANTAGE THEREOF TO THE GOVERNMENT; by the effectual destruction of every stamp in its first use

....
Postal regulations required the CDS to be clear of the stamp. The Morison-Leeds envelope could therefore never be used to both secure the date of the contents; and prevent the reuse of stamps.

Second.—SECURITY AGAINST IMPERTINENT INTRUSION; the letter and envelope being firmly attached by the stamp, the inclosure cannot be inspected even if the flap be clandestinely opened.

Third.—SAFETY AGAINST ABSTRACTION OF VALUABLE INCLOSURES. If the flap be left unsealed, or opened with felonious intent, it will still be impossible to open the letter and take thence bank notes and drafts without so mutilating the envelope as to insure detection.

Fourth.—SECURITY FOR THE PRE-PAYMENT OF THE POSTAGE; as the stamp, when once properly placed in this window, cannot be removed without its destruction.

Fifth.—ADVANTAGE THEREFORE TO THE GOVERNMENT; by the effectual destruction of every stamp in its first use.

Sixth.—FACILITY TO THE POST OFFICE OPERATIONS; by a uniform location of the stamp in the upper right hand corner, which is the most convenient position for the Post Office mark.

Seventh.—VERIFICATION OF THE MAILING; by securing on the letter itself the *legal evidence* of the time and place of it being mailed. This has long been esteemed so desirable, that many prudent persons are constrained to dispense with the use of envelopes, that they may have the post mark on the letter; and others take the precaution to pin the envelope again on the letter for identification.

Eighth.—CERTAINTY OF THE DATE AND PLACE ON THE LETTER, which are so frequently omitted by writers, in carelessness or hurry.

Ninth.—ORNAMENTATION; which, though some may think of small importance, certainly merits the approval of all persons of taste.

Tenth.—COST. Notwithstanding the many and unrivalled advantages of our "STAMP-SEALING ENVELOPES," they will be furnished at a very small advance upon the prices of those not having the benefit of this patent.

As indicative of the estimate placed upon this improvement by those perhaps best capable of judging of its importance, we subjoin a few out of a long list of leading public men, bankers, &c. who have united in recom-

Folded section of the circular showing the relevant paragraphs

The Prevention of Reuse

Morison-Leeds patent: a letter secures the Morison patent for the Leeds brothers, 11 February 1862

The purpose of the Morison patent was to secure '...upon a letter... legal evidence of the day or date upon which the said letter... was mailed...'

From Morison's letters patent 28,767 dated June 19, 1860

Morrison's office 11 1/2 AM
London 11 1862

Dear Brother

Have had considerable conversation with Mr Morrison and he has finally consented to the following agreement which is endorsed on the back of the original. "In consequence of the changed state of the money market, and has more generally the consequent want of that sum which was anticipated by Mr Leeds, I see at his solicitation hereby agree that the time of payment specified in this first days of January, February, May shall be extended respectively to that March, April, May, or either of them shall be made concluded to remain here till as to see what the does, had a day, has been such is get separate thy of

'Dear Brother

'Have had considerable conversation with Mr Morrison and he has finally consented....'



The enclosed letter is a record of Morison's agreement to sell his patent to the Leeds brothers for \$1 000 (\$23 750 today). Payment was to be made in four installments: March, April, May, July of 1862. The letter is from Barclay Leeds to his brother, Lewis, and is headed 'Morrison's office 11:30 am'.

The envelope neatly illustrates the original purpose for which the patent was intended, namely, to secure proof of a date.

In 1862, Leeds and Franklin added the prevention of reuse to the uses of the patent: 'Securing to the Government the destruction of the stamp in opening the letter...'

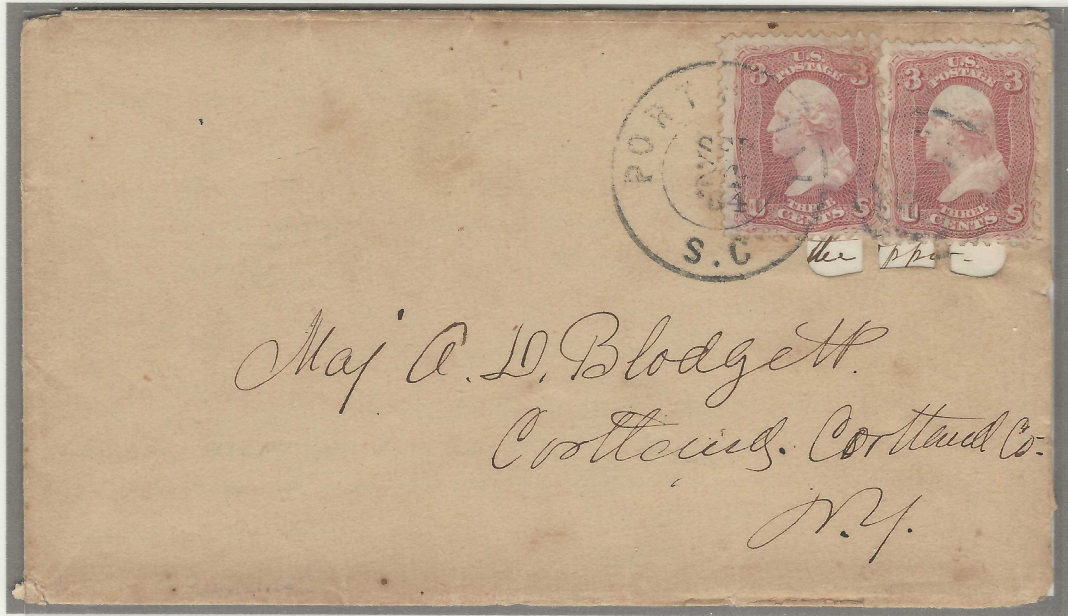
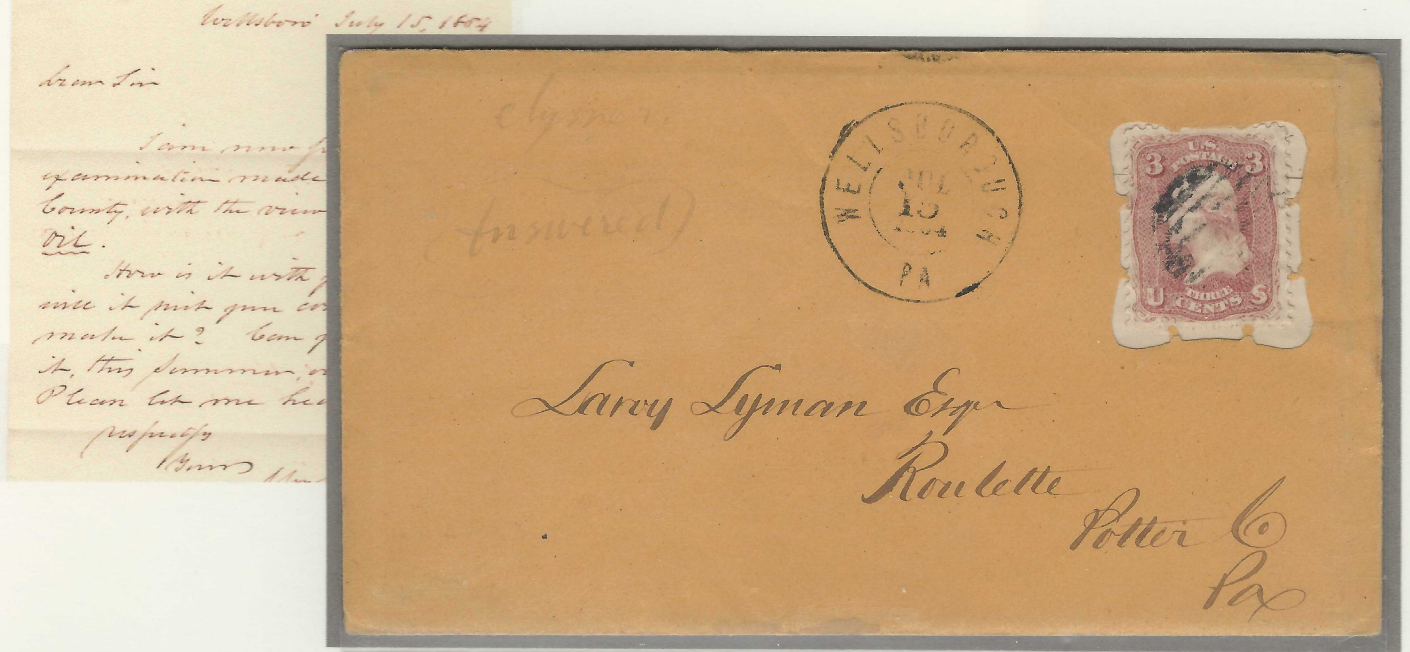
From advertising circular printed by William P Lyon in 1862

The Prevention of Reuse

Morison-Leeds patent: postally used examples of Type 1A with enclosed letters



Letter dated 1864. Taking out the letter successfully ripped the stamp from the envelope, but didn't destroy it. The stamp could be steamed off the letter, cleaned, and reused.

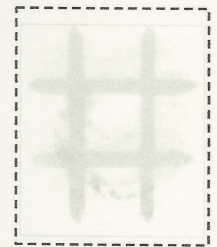


This pair easily survived the extraction of the letter.

The Prevention of Reuse

Morison-Leeds patent: Type 1A and Type 2

Type 1A lattice: note the rare embossed patent claim on the envelope



Type 1A
Backlit scan



Type 2
Backlit scan



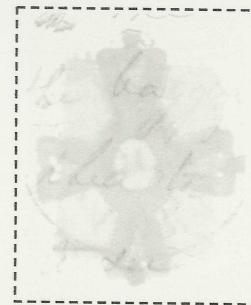
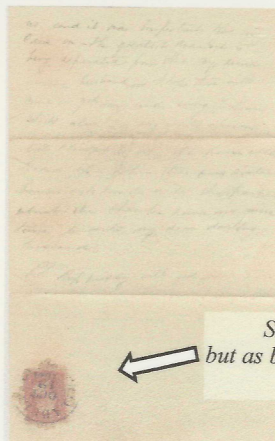
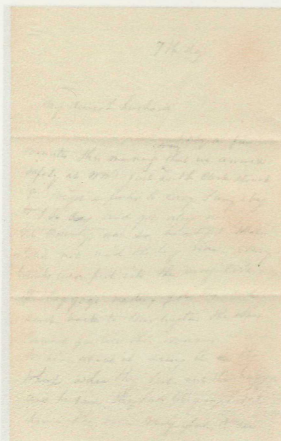
Type 2 lattice

The only known example of an envelope with two windows. The second window is probably there to capture a date stamp on the enclosed letter as per the original patent.

The Prevention of Reuse

Morison-Leeds patent: Type 3, a letter from Mrs Leeds to her husband, Lewis

The envelope is an example of the elaborate Type 3 'Maltese Cross' created for Leeds & Franklin, probably by the envelope manufacturer, George Nesbitt. Although designated 'Type 3', it predates Type 1A.



Type 3
Backlit scan

Scan of the enclosed letter

'My dearest husband

'Only a few minutes this morning that we arrived safely at Mom's just as the clock struck eight... the country was so beautiful that I did not mind the long ride.

They were very glad to see us... the greatest drawback is being separated from my dearest darling husband. Have no more time to write...

The Prevention of Reuse

Loewenberg patent 40,489: Process for transferring prints

Patent 40,489 was for transferring a design from transparent paper to any surface by printing the design on the back of the paper and then 'by the application of an adhesive substance over the printed characters...' to ensure that '... the design, together with the adhesive..., will adhere to the surface on which said design is to be transferred...'.
From Loewenberg's letters patent dated November 3, 1863

Research: my research suggests that these essays were never gummed (The Chronicle, 67:4). Perhaps the N.B.N.C. were so disappointed by the quality of the printing that they didn't proceed to the next stage.

National Bank Note Company: imperf experiments using 1861 plates of 200



The Prevention of Reuse

Loewenberg patent 42,207: Printing on starch coated paper

Patent 42,207 involved coating the paper so as to '...prevent the penetration of the ink'; and then printing on the coated surface with the gum applied to the opposite side. 'Any attempt to wash off the canceling mark would... result in the removal or defacement of the print itself.' Loewenberg suggested 'size applied to paper' i.e. starch.

From Loewenberg's letters patent dated April 5, 1864

Research: my research shows that these essays have been incorrectly described as 'decals' (patent 40,489) for more than 100 years (i.e. since Mason, 1911). They aren't decals. They are tests of intaglio printing on starch coated paper.



N.B.N.C. experiment: intaglio printing on starch coated paper. Perf 12, ungummed.

Rose. Imprint block of four.

The concept: printing the stamp on a coating would prevent the design from reaching the paper. Any attempt to wipe away a cancellation would also wipe away the coating; and with it, the design.

Research

It is easy to lift flakes from the surface of the stamp. This is not how a 'decal' would behave. It is therefore an early example of printing on starch coated paper.



The stamp with flakes removed



Scans of the stamp before and after the hardened flakes of starch had been removed



The actual flakes



The Prevention of Reuse

Loewenberg patent 45,057: Destroying the design when trying to lift the stamp

A year after registering **Patent 40,489** for 'decals', Loewenberg registered **Patent 45,057** for self-canceling stamps: 'The nature of my invention consists in applying an adhesive substance to transparent paper..., and afterwards producing any... design upon the surface of the said adhesive...'

From Loewenberg's letters patent dated November 15, 1864

Research: patent 40,489 for 'decals' involves printing between paper and gum; patent 45,057 involves printing over the gum. Although these essays are traditionally catalogued as 'decals', my experiments show that they are tests of both patents.

The N.B.N.C. returned to Loewenberg's patents in the when they started experimenting with lithographic printing to cut costs.



Research

The stamps have been cut from the same sheets. The sheets look identical, even under magnification. But the stamps behave differently when soaked and wiped. The N.B.N.C. clearly tested both of Loewenberg's patents on lithographically printed stamps.

Proof that both sheets are gummed



From a red sheet



From an orange brown sheet

Scans of the stamps on the right before soaking



Soak each stamp for an hour in lukewarm water. Brush the surface lightly with cotton wool.



40,489: Printed between paper and gum



45,057: Printed over the gum

The Prevention of Reuse

They were printed in sheets of 25

A complete sheet of the **Violet** color



A complete sheet of the **Blue Green** color



The rarest shade is **Gold**
This may be the **only** complete sheet



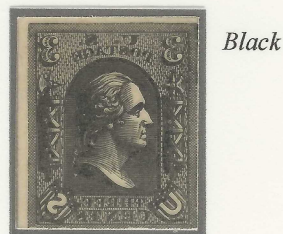
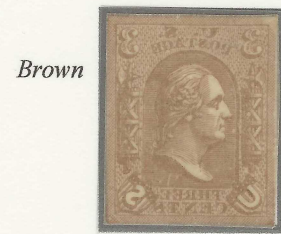
The Prevention of Reuse

The thickness of the paper varied



The above stamps were originally blocks of 4. I cut them into pairs so that a pair from each block could be turned over. The variations in paper thickness can readily be seen from a comparison of the opacity of the resulting images.

There were many shades



The Prevention of Reuse

Sheets were prepared with wide spacing to test perforations

Uncatalogued

On transparent paper. Gummed. Printed in reverse on the gummed side.



The Prevention of Reuse

Perforations were tested, but not on the widely spaced sheets: perf 12

*A pencil annotation is just visible. It says 'Lowenberg patent 1867'.
It spells his name incorrectly and is wrong about the patent date. This is one of the ways in which cataloguing errors accumulated – pencil notations by uninformed collectors.*



Only four complete sheets have been recorded

The Prevention of Reuse

Samples were produced for potential sales in Europe

The block on this page appears to be a sample produced by the N.B.N.C. for potential sales to European postal authorities. Prussia briefly used stamps based on Loewenberg's patent.

e: Calvet
Se-tenant stamps of France
and the United States



Only five blocks have been recorded.
This is the biggest.

The Prevention of Reuse

The N.B.N.C. retested Loewenberg's starch coated paper in the mid- 1860's: imperf, ungummed

Research: The essays below are often described as 'Gibson starch coated paper'. Yet Gibson never patented a starch coated paper. My research suggests that they are tests of lithographic printing on Loewenberg's starch coated paper.

Research

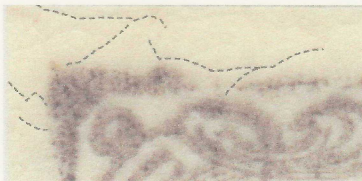
Cotton wool dipped in hot water dissolves the surface. The design comes away with it, as intended by the patent.



Light grey
Light blue



Brown



Both Brazer and Scott describe these essays as 'Gibson patent starch coated paper'. But Gibson's patent (41,118) was for a network overprint. Under magnification these essays show the **surface cracking** that's typical of Loewenberg's patent 42,207 (cracks have been picked out by dotted lines on the scan).

Additional shades

Yellow orange



Pink



Black



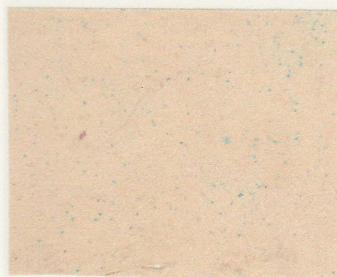
The Prevention of Reuse

Loewenberg patent 53,081: Chemically treated paper

In 1866, Loewenberg patented a stamp to be printed on **chemically treated paper** that would turn blue when wet (**patent 53,081**). To quote: '... when any chemical agents as would remove writing or printing ink from (the) paper are applied... they will instantly discolor the paper...'. Loewenberg suggested prussiate of potash or oxalic acid.

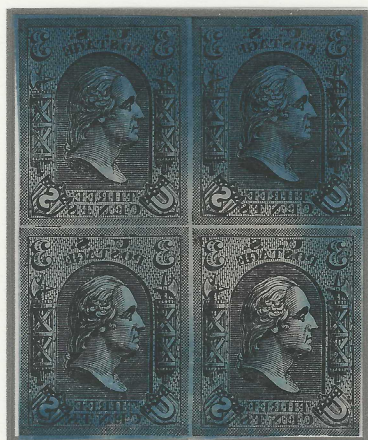
From Loewenberg's letters patent dated March 6, 1866

*Chemically treated paper
Orange, unstained*



This scan of the back shows the chemical flecks that stain when wet

*Black on white wove
Imperf, ungummed*



Prussian blue on white wove. Imperf, ungummed



Prussian blue on heavy white wove, perf 12

The scan of the back clearly shows the staining and laid paper



Scarlet on white vertically laid: imperf, ungummed

Uncatalogued on laid paper