The Purpose of This Exhibit is to show the development of the 1908 Third Bureau coil issues. It includes the coil stamps, production examples, and uses to domestic and foreign destinations.

Key Items Highlighted in Red

The 10 Cent Double Lined Watermarked Coil
This coil along with the rare 3 cent Orangeburg coil are a result of a special order placed by the Bell Pharmaceutical Company. In 1908 a business could place a special order with the USPS for stamps in coil format. This is the only recorded commercial use of this coil out of the six known.

One of Six Documented Uses
First class registered, 2 cents plus 10 cents registry fee. June 1, 1912 Philadelphia registry cancel.

PF 550778

Exhibit Plan

I. Production
A. Paper
B. Plates
C. Plate Markings
D. Coil Construction
II. Uses
A. Vertical Format
1. One Cent
2. Two Cent
3. Four Cent
4. Five Cent
B. Horizontal Format
1. One Cent
2. Two Cent
3. Four Cent
4. Five Cent
III. Conclusion/Transition to 1910 Issue
A. Key Production Changes
B. Earliest Documented Use

Reverse paste-up, tab with imprint. See production page for details on coil construction.

Major Production Characteristics of 1908 perf-12 Series
1) Printed on double line watermarked paper.
2) First panes of 400 had 2mm horizontal spacing between designs.
3) Later issues of the 1, 2, 3, and 4 cent values were printed on Star plates.
4) Star plates had varied spacing of 2mm to 3mm between designs.
5) Panes were cut into strips of 20.
6) Strips were pasted together by hand and rolled into coils of 500 or 1,000.
7) The entire process took 17 workers to complete the task.
First issue was printed on double line watermark paper.

- The first plates used to produce coils had 2mm horizontal spacing between all designs.
- Coils from the first plates can be identified by 4000 series plate numbers.
- The Star plates soon followed the first plates due to a production problem with spacing.

**Production Sequence**
- Design was printed
- Paper was folded
- Gum applied to paper
- Paper was unfolded.
- Paper was perforated and slit into coils.

**Flat Plate Coils**
- The Bureau produced 5 different issues from 1908 to 1914.
- The coil stamps were produced from existing sheet stamp stock.
- Production changes made in watermark, perforation gauge, plate configurations, and coil construction created many new varieties.
- A total of 32 different varieties of flat plat perforated coils were issued.

**Enhanced color enlargement with outline of detailed area showing paper folds.**

**Preprinting Paper Fold**

**Post Printing Paper Fold**

**Guide Line & Arrow**
- The guide line & arrow markings indicate where the panes were to be separated.
- Guide line pairs occur once every 20 stamps.
- The 1 and 5 cent vertical pairs, and 2 cent horizontal strip of 4 come, from the exact center of the 400 subject pane.
- The Star plates were developed with varied spacing to deal with a paper shrinkage problem.
- When the paper was moistened during printing it shrank unevenly as it dried.
- To correct the problem, horizontal spacing between designs was changed.
- An open star was added to the imprint to identify what type of plate was being used.
- Star plates are also identified by 5000 series plate numbers.

**400 Subject Star Plate Pane**
Highlighted areas in color pinpoint locations of reconstructed Bureau imprint, guide line and arrow, and strip of 6 with varied spacing.

- Inner 8 rows of plate had 2mm spacing.
- Outer 6 rows on each side had 3mm spacing.

**Strip of 6 shows the varied spacing from a possible location on the left side of the 400 subject pane.**

**Bureau Imprint, Star, & Plate Number**
Reconstructed imprint for new star plates.

**First issue was printed on double line watermark paper.**

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Coil Construction - Vertical Paste-Up

Step 1: The 400 subject pane was passed through a machine and perforated horizontally.
Step 2: The bottom margin was trimmed off at the frame line of the design.
Step 3: The top margin of the pane was trimmed leaving about 1/4 inch.
Step 4: The sheet was then passed through a machine that cut it into 20 strips.
Step 5: The bottom of a strip was then pasted over the top tab of another strip.
Step 6: This process continued until there were enough to make a coil of 500 or 1,000.
Step 7: A trailer strip was attached at the beginning and a leader strip at the end.
Step 8: The long strip was rolled up and sealed by the leader strip.

This process of hand assembly took 17 workers to complete the task.

Coil Construction - Horizontal Paste-Ups

The key difference between vertical and horizontal coil construction was the direction the sheet was perforated and which margins were trimmed off. Otherwise, the process was the same and took as many workers.

Reverse Paste-Up Construction - Horizontal Coils
- Right margin of 400 subject pane was trimmed off.
- Left margin was left on the 400 subject pane.
- Panes were cut into strips of 20.
- The right end of the strip was pasted over the tab on the left end of the next strip of 20.

Only Recorded Use of a Reverse Paste-Up
PF 278274

Only Recorded Plate Number with Tab on Left
This plate number pair is from a reverse paste-up strip of the one cent horizontal coil.
PF 482468

Only Recorded 4 Cent Reverse Paste-Up
The pair on the left is a usual paste-up pair, the pair on the right is the reverse paste-up pair. Note, the arrows point out the tab of the paste-ups.

APEX 51473

Trimmed Paste-Up
Note, the left edge of the top coil has been trimmed at the point where the trailer strip was attached so the coil would be in alignment.
PF 273103

Trimmed Paste-Up
Note, the top and side edge of the 2 cent paste-ups have been trimmed to even up the coil. This was needed in some cases due to the hand assembly of the coils and the edges being sometimes out of alignment.

Only Recorded Paste-Up Detail
Color enlargement of right side of 1 cent horizontal coil on post card. Note, paste-up tab is under the right edge of
Unique Double Repair Splice
Due to the fragile nature of gauge 12 perforations, the coil would sometimes separate in production. A perforated piece of craft paper was used to repair the break. Note, the thumb print from the Bureau worker who repaired the strip.

Color photo copy of reverse side of double repair splice. Note, the perforated craft paper used to repair the two breaks.

Splice
Splice

Color photo copy of reverse showing splice repair with a perforated strip of stamp paper.

Leader & Trailer Strips
A piece of craft paper was attached at the beginning of the roll and the end. The trailer strip formed the center, or core of the coil. The leader strip was attached at the end and sealed the coil until it was used.

First class, 1 cent per piece.

Third class, printed matter, 1 cent per 2 ounces.
Two Cent Issue

Vertical Format

First class, double weight, 2 cents per ounce plus 10 cents registry fee. New York, U.S. foreign oval back stamp, May 11, 1912. The treaty rate was in effect from January 1, 1909 until February 5, 1915.

Earliest Documented Use

First class registered, 2 cents plus 10 cents registry fee. March 22, 1912 New York Registry cancel. Apex 156672

One of 5 Documented Uses

Domestic/Treaty

First class, treaty rate, 2 cents per ounce.

Two of Five Documented Uses

This is the only example sent to a foreign destination PF 513441

Domestic/Treaty

Four Cent Issue

Vertical Format

German Treaty Rate

First class, double weight, 2 cents per ounce plus 10 cents registry fee. New York, U.S. foreign oval back stamp, May 11, 1912. The treaty rate was in effect from January 1, 1909 until February 5, 1915.

Earliest Documented Use

First class registered, 2 cents plus 10 cents registry fee. March 22, 1912 New York Registry cancel.

One of 5 Documented Uses

Domestic/Treaty

First class, 2 cents per ounce.
Largest Known Franking on Cover
First class, 2 cents per ounce plus 10 cents registry fee.

Earliest Known Use
First class, 2 cents per ounce, plus 8 cents registry fee. Registry date, June 16, 1909. Receiving back stamp June 18, 1909 Sherman, Texas. One of 9 documented uses. PF 550772

One Cent Issue
Horizontal Format

First class, 1 cent per piece.
Two Cent Issue

Horizontal Format

First class, 2 cents per ounce.

Four & Five Cent Issues

Horizontal Format

Earliest Documented Use
First class, registered, 2 cents letter rate plus 10 cents registry fee. Pine Lawn registry cancel, May 31, 1912. One of 6 documented uses.

Largest Recorded Multiple
First class, quadruple weight, 2 cents per ounce, plus 10 cents registry fee. Pine Lawn registry cancel, May 31, 1912. One of 6 documented uses.

Earliest Documented Use
First class registered, 2 cents letter rate plus 10 cents registry fee. One of Five Documented Uses

One of Three Documented Pairs on Cover
First class, double weight, 2 cents per ounce.

One of Five Documented Uses
First class, double weight, 2 cents per ounce.
Early fourth class mail before the change in 1913 was sent at 1 cent per ounce independent of distance as long as it weighed 4 pounds or less. This wrapper most likely sent samples of Bell & Company antacid pills. The 9 cents in postage paid for 9 ounces of samples.

**Key Changes In The Transition From The 1908 To 1910 Issue**

**Single Line Watermark**

In an attempt to strengthen the paper the Bureau changed from double line watermark to single line watermark paper.

**Auto Wound Paste-Up**

The 1 cent pair on the right shows the clean, neat, straight edges that match up exactly. This characteristic is evidence of the “Auto Wound” process. This was a major production change from the first issue that was hand assembled. The key change was cutting the pane of 400 into 2 half panes, pasting them together, then slitting the roll into ten coils. This also is what lead to the change in perforation gauge for the 1910 perf-8,5 issue.

**Earliest Documented Use**

First class, 2 cents per ounce. PF 167963

This is the earliest documented use of any single line watermarked issue.