

This Day in History... August 13, 1867

First U.S. Grilled Stamp

August 13, 1867, marks the earliest known use of the first stamp produced with a grill, US #79.

Many early US stamps didn't have set issue dates, so for those, we go by the first known use, which for #79 was this day in 1867.

In the 1860s, US postal officials grew concerned that people were reusing stamps by washing the cancels off to use the same stamp twice. So Charles Steel, superintendent of stamp manufacture at the National Bank Note Company developed the grill process for which he was granted a patent on October 22, 1867.



As the first grilled stamp, this has the A grill.



Stamp with a C grill

According to Steel's patent, "The object of my invention is to produce a stamp which shall stick better than usual, and which it shall be impossible to fraudulently remove and use again." Steel's machine used a roller pitted with either small depressions or small raised pyramids to break fibers in stamp paper. The rollers with depressions created a "points up" pattern while those with raised pyramids made a "points down" pattern.

These broken fibers allowed cancellation ink to thoroughly penetrate the paper. This meant even regular pen ink, which was used to cancel stamps at smaller post offices, would be impossible to remove completely.

After a test run, Steel's machine applied the first grills to US #79, which was first known to be used on August 13, 1867. However, because the grill covered the entire sheet, it proved troublesome, weakening perforations and leading some sheets to fall apart. As a result, Steel modified the grilling process, resulting in 10 more major grill classifications. These grills are classified by the dimensions of the grill pattern and are measured in millimeters or by counting the number of grill points.



Stamp with rare Z grill

The letters that classify the various grill types do not denote the size, shape, or appearance of the grills. Rather, they simply indicate the order in which they were discovered.



Stamp with an E grill

The exception to the rule is the "Z" grill, which was identified by William L. Stevenson. Stevenson could not decide to which family of grills this particular type belonged. Nor did he know which other families it preceded or followed and so he designated it as "Z Grill," where "Z" signifies the unknown.



Stamp with an F grill

Visible in general from the back of the stamp only, grills may also be felt by lightly running a fingertip over the surface. Depending on which type of roller was used, the pattern may be "points up" or a "points down." The ridges on an indented roller force the paper into the recesses, creating raised points, while a roller with raised pyramids will cause the points to be forced down into the paper, forming a series of depressions.



Stamp with a G grill

The United States was the first country to issue grilled stamps and was the only country to do so until the mid-1870s, when Peru also began using grills. The National Bank Note Company was responsible for producing both countries' stamps.

This Day in History... August 13, 1867

First U.S. Grilled Stamp

August 13, 1867, marks the earliest known use of the first stamp produced with a grill, US #79.

Many early US stamps didn't have set issue dates, so for those, we go by the first known use, which for #79 was this day in 1867.

In the 1860s, US postal officials grew concerned that people were reusing stamps by washing the cancels off to use the same stamp twice. So Charles Steel, superintendent of stamp manufacture at the National Bank Note Company developed the grill process for which he was granted a patent on October 22, 1867.



As the first grilled stamp, this has the A grill.



Stamp with a C grill

According to Steel's patent, "The object of my invention is to produce a stamp which shall stick better than usual, and which it shall be impossible to fraudulently remove and use again." Steel's machine used a roller pitted with either small depressions or small raised pyramids to break fibers in stamp paper. The rollers with depressions created a "points up" pattern while those with raised pyramids made a "points down" pattern.

These broken fibers allowed cancellation ink to thoroughly penetrate the paper. This meant even regular pen ink, which was used to cancel stamps at smaller post offices, would be impossible to remove completely.

After a test run, Steel's machine applied the first grills to US #79, which was first known to be used on August 13, 1867. However, because the grill covered the entire sheet, it proved troublesome, weakening perforations and leading some sheets to fall apart. As a result, Steel modified the grilling process, resulting in 10 more major grill classifications. These grills are classified by the dimensions of the grill pattern and are measured in millimeters or by counting the number of grill points.



Stamp with rare Z grill

The letters that classify the various grill types do not denote the size, shape, or appearance of the grills. Rather, they simply indicate the order in which they were discovered.



Stamp with an E grill

The exception to the rule is the "Z" grill, which was identified by William L. Stevenson. Stevenson could not decide to which family of grills this particular type belonged. Nor did he know which other families it preceded or followed and so he designated it as "Z Grill," where "Z" signifies the unknown.



Stamp with an F grill



Stamp with a G grill

Visible in general from the back of the stamp only, grills may also be felt by lightly running a fingertip over the surface. Depending on which type of roller was used, the pattern may be "points up" or a "points down." The ridges on an indented roller force the paper into the recesses, creating raised points, while a roller with raised pyramids will cause the points to be forced down into the paper, forming a series of depressions.

The United States was the first country to issue grilled stamps and was the only country to do so until the mid-1870s, when Peru also began using grills. The National Bank Note Company was responsible for producing both countries' stamps.