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# THE 1867 - 68 GRILLS: WHAT WE KNOW AND WHAT WE DON'T KNOW

MICHAEL C. MCCLUNG

It has become apparent to me, through articles, auction lot descriptions, exhibits and discussions, that many of the old misconceptions about the grills still persist. This article is an attempt to dispel some of the old myths, confirm the facts we know to be true, and propose answers to some of the lingering questions. Also, this article deals only with the regularly issued grills found on the 1861 designs.

A grill can be defined as a pattern of parallel rows of small points embossed into the stamp paper to make it more porous, so that it will soak up the canceling ink, preventing cleaning and reuse. This pattern is rectangular for all the issued grills except the A grill which covers the entire stamp.

Although mention of the grills can be found in many nineteenth century publications and catalogs, credit for the first detailed study goes to William L. Stevenson, who is responsible for the modern classification using letters of the alphabet. This classification was outlined during the second decade of the twentieth century in a few articles as well as in a specialized handbook.<sup>1</sup> By 1930, most catalogs had adopted Stevenson's system, and they continue to use it to this day.

The modern-day definitive work on the grills is the article in the 1978 *Congress Book* by William K. Herzog. In this article Herzog pulled together all the known facts and data that had been published about the grills since the 1860s and assembled them in what he aptly named "The Story of the United States Grilled Postage Stamps."<sup>2</sup> Herzog's article complemented and completed Stevenson's work with very few disputes or corrections.

## What We Know

*Size doesn't matter...* That is to say that dimensions in millimeters do not define a particular grill. Although Stevenson supplied dimensions of his grill families in his publications, he used the number of rows of points and characteristics of the points to define the specific grills. If we used dimensions alone to define the grills, we would not be able to differentiate between Z and E grills, or, in some cases, between Z and D grills. Below are the definitions of the grill families:

Family	Orientation	Rows of Points (W X H)	Point Appearance
A grill	points up	covers the entire stamp	rounded
B grill	points up	22 x 18	blunt
C grill	points up	16-17 x 18-21	rounded
Z grill	points down	13-14 x 17-18	horizontal ridge
D grill	points down	15 x 17-18	vertical ridge
E grill	points down	14 x 15-17	vertical ridge
F grill	points down	11-12 x 15-17	vertical ridge

## Notes

There are only four known examples of the B grill, all of which originated on a single cover from Mason, Texas. There is a variety of the C grill that contains several partially erased vertical rows (presumably from planing down the A grill) adjacent to the grill proper. This variety is sometimes confused with the B grill. In fact, this was what Stevenson defined as the B grill, as he was unaware that the Mason cover would turn up decades later, conveniently matching his B grill size definition. Also, there was a single stamp (the Luff copy) with 22 x 18 full rows of points; students were aware of the existence of this

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<sup>1</sup>William L. Stevenson, *United States Grills* (Beverly, Mass. and Portland, Me.: Severn-Wylie-Jewett Co., [19—]). Subsequently republished together with Lester G. Brookman, *Notes on the Grilled Issues of the United States* (Weston, Mass., Triad Publications, 1980).

<sup>2</sup>William K. Herzog, "The Story of the United States Grilled Postage Stamps," *The Congress Book 1978* (n.p., The American Philatelic Congress, 1978), pp. 67-103.

item since about 1900, and, although some considered it genuine, it was dismissed as a fake or an essay by the majority.

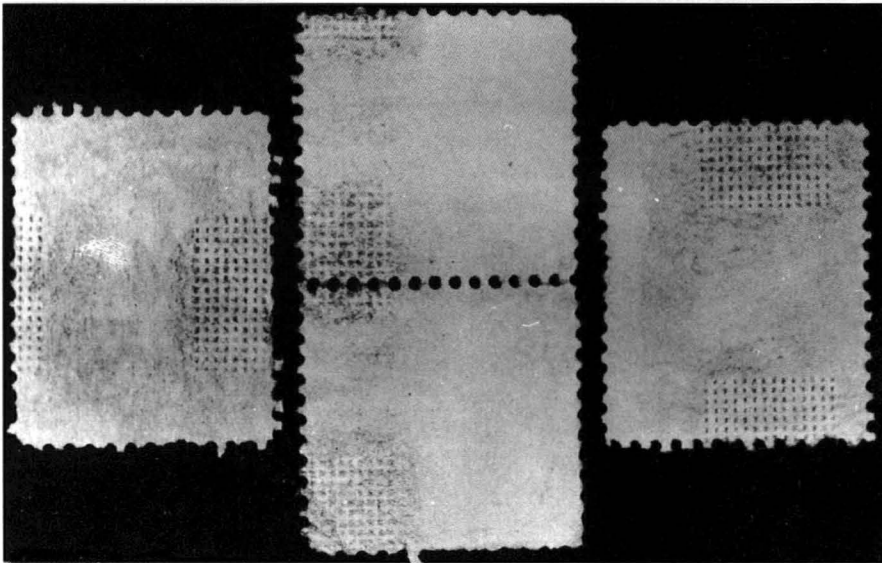
The Z grill is the only U.S. grill with point tips that are horizontal ridges. It has been written that one can find examples of the Z grill on the Peru general issues of 1874. This is incorrect, although the Peru postage due stamps of the same period have grills with horizontal ridges; however, these grills are smaller than the U.S. Z grill.

The D grill always has 15 full vertical rows of points.

The E grill always has 14 full vertical rows of points.

The F grill always has 12 or fewer vertical rows of points.

All the points-down grills can occur with partially erased rows of points; these appear as a series of horizontal or vertical dashes at the top, bottom or sides of the grill. They should not be counted when determining the type of grill. Sometimes, a partially erased row at the top or bottom of the grill will cause a collector to think he or she is looking at a Z grill because it is made up of horizontal ridges. This is why it is important to examine the entire grill to determine the characteristics of the points.

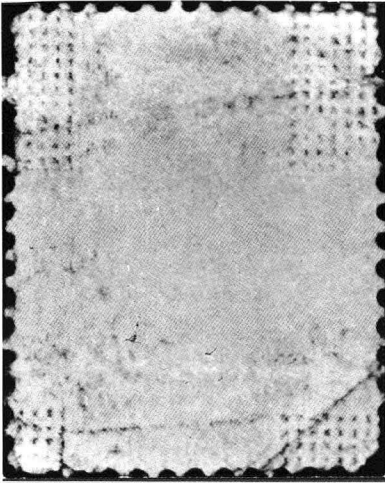


**Figure 1. Typical split grills**

*There are varieties.* Occasionally a grill was aligned so badly that it straddled two stamps (Figure 1); this variety is commonly called a split grill (not a double grill). If the alignment was so bad that the grill straddled four stamps (Figure 2), the result is what is called a quadruple split grill (not a quadruple grill). If a sheet, or part of a sheet, passed through the grilling machine twice, the result was a double grill (Figure 3). If the back of a stamp looks like Figure 4, we call it a double grill, one split. This is not a triple grill because it only went through the grilling machine twice; a true triple grill would result from three trips through the machine a handful of examples are known. A true quadruple grill, if one exists, would result from four trips through the machine. If a points-down grill is found with points up, or vice versa, it is referred to as an inverted grill. Only a few examples exist.

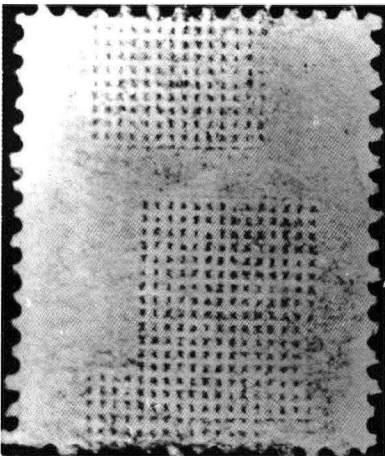
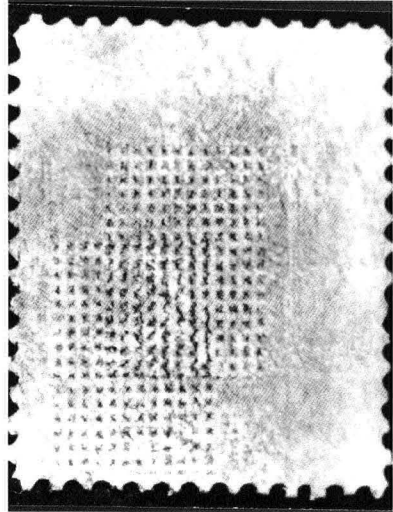
### **What We Don't Know**

*How were they made?* We know from contemporary sources that grills were embossed on printed postage stamps after they had been gummed, but before they were per-



**Figure 2. Quadruple split grill**

**Figure 3. Double grill**



**Figure 4. Double grill, one split**

forated. However, we don't know what the machine looked like. Charles Steele's patent for grilled stamps was very vague (as most patents are) and described the embossing as being accomplished by rollers or plates. Lester Brookman made sketches of what he believed to be the most likely apparatus—a modified proof press with a roller under which passed a sliding bed.<sup>3</sup> If this was the case, did the roller have the male bosses or did the bed? Or was the actual machine composed of two rollers or possibly two plates? Also, was the female roller or plate drilled or knurled to receive the male bosses or was it just made of a softer material? At present, we can only hypothesize about the answers to these questions. Also, we don't know that the so-called "female grills" (A and C) were actually made by a roller which pressed raised intersecting ridges into the stamp paper, thus forcing the paper into the recesses of the roller forming points. This theory has been around for about a century (or perhaps longer), but it may be completely incorrect. Hopefully, someday someone will turn up the evidence that answers these questions.

**Why are there so many different grills?** We know that the A, B, C, Z and D grills were issued in limited quantities and on limited denominations. For this reason and the fact that these grills were issued early in the grill period, they are often referred to as experimental grills. In fact, the Postmaster General, in 1868, referred to the early grilling efforts as an experiment. The more plentiful E and F grills are sometimes called production grills. Using Brookman's estimated quantities issued and various recorded usages, we can construct a hypothetical evolution of the grills.

Early August 1867: 250-300 sheets of stamps were impressed with the A grill; they were mostly 3c with a few sheets each of 5¢ and 30¢. This entire operation probably took an hour or two. The stamps were then shipped to postmasters, perhaps with a message requesting feedback about performance. Most likely this feedback was not good because the all-over grill weakened the paper and made separation of the stamps along the perforations difficult. So the smaller C grill was the next to be tried.

Early November 1867: about 1,500 sheets of 3¢ stamps were impressed with the C grill which appears to be a cut down version of the A grill. This operation was probably completed in one day. Again the stamps were issued to postmasters. This grill was also considered ineffective or undesirable since it was never used again.

Late December 1867 or early January 1868: about 3,000 sheets of stamps were impressed with the Z grill. They were mostly 2¢ with several hundred sheets of the 12¢, a couple hundred of the 3¢ and only a few sheets each of the 1¢, 10¢ and 15¢. This operation could have been completed in a day. Although the Z grill appears to have been superior to its predecessors, it was not put into full production.

January 1868: about 3,000 sheets of stamps were impressed with the D grill. They were mostly 3¢ with about one fourth being 2¢, and could have all been embossed in one day. These stamps were issued to postmasters but the grills were probably considered too big since the next grill to come along was a smaller version of the same style.

February 1868: all the newly printed stamps received the E grill on a continuous basis. The E grill remained in use until June or July of 1868 and is found on all the denominations of the issue except the 5¢, 30¢ and 90¢. Perhaps the National Bank Note Company had enough surplus inventory of these values to last until after the E grill was discontinued. Official records of deliveries support this view.

Late March 1868: the F grill was put into use and continued into the first two or three months of 1869. All denominations of the issue are known with the F grill.

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<sup>3</sup>Lester G. Brookman, *Notes on the Grilled Issues of the United States* (Federalsburg, Md.: The American Philatelic Society, 1940), p. 11. Also in the reprinted edition cited in footnote 1, above, same pagination.

## Notes

As grills evolved during 1867 and 1868, the trend was to get smaller. Most likely this was to facilitate centering the grill on the design and to avoid interfering with the perforations.

We do not know when the B grills were made. They may have been essays that, for one reason or another, were delivered to the Post Office Department.

There seems to be no pattern to the selection of denominations of stamps to receive the experimental grills (A, B, C, Z and D). Each of these grills was the product of a trial run that probably was completed in one day, so it is likely that the experimenters used whatever sheets of stamps were available that day in the desired condition (printed, gummed, but not perforated).

Stevenson believed all the 5¢ and 30¢ A grills to be essays and that none were actually used before about 1890. He did not offer any evidence to support this assertion; we know that these values exist with all-over essay grills different from the real A grill, but there is a handful of each value currently considered to be genuine A grills.

At some point, during the first quarter of 1868, the government started paying an extra charge for grilled stamps. Official records show that the Stamp Agent recorded grilled and ungrilled stamps separately by denomination beginning in that first quarter and in each quarter to follow. We do not know if this accounting started on January 1 or at some time later in the quarter. It is apparent that, once this extra payment began, all newly printed stamps were grilled. At the same time, previously finished stamps in the inventory of the printer were delivered without grills at the old price; this took place over the course of several months with some of the higher denominations being delivered without grill until the fourth quarter of 1868. These previously finished stamps were probably not grilled because they were already perforated, and the grilling process may have caused some unwanted separation.

It has been written that the 15¢ Z grill should not exist because the earliest appearance of the grilled 15¢ denomination in the Stamp Agent's records is the second quarter of 1868, and known usages of Z grills indicate they were all probably made in January 1868. However, it is quite possible that the Stamp Agent did not start recording delivery of grilled stamps until after the Z grills were made and delivered.

Based on known usages, it appears that two grilling machines were in concurrent use from March through July 1868; one produced E grills, the other made F grills. If the second machine was put into service in March 1868, presumably it was needed to keep up with the demand for stamps. Since the demand for stamps did not diminish in July 1868, and since the known usages of E grills dramatically fell off at the end of that month, it seems that both machines produced F grills from July 1868 until February or March 1869.

It has been speculated that some of the grilled stamps were printed on thin paper so that more than one sheet could be run through the grilling machine at the same time. Many denominations of grilled stamps exist on thin paper (as well as on other paper types), but I have never seen any evidence, nor even an indication, that two or more sheets were run through the machine at once.

Another speculation that seems to have no substance is that more than one grill type could exist on one sheet of stamps. Although it is possible that D and E grills or E and F grills could exist on the same sheet, I have not seen any evidence that they do.

**Where can we get the details?** Stevenson's handbook and the 1978 *Congress Book* containing Herzog's extensive article can often be found in the inventories of dealers in philatelic literature. Each of these works would be a valuable asset to any student of the classic issues of U.S. stamps. □





A hundred years ago the New Orleans World's Exposition drew thousands of tourists with exhibits and excitement such as the balloon ascension. A century later the magic of an Exposition at New Orleans glitters undimmed. Photo courtesy of the Historic New Orleans Collection.