Two-cent stamps of the Series of 1894-1898, or the First Bureau Issue, were printed over a period of 8½ years, producing 21.7 billion stamps, using 560 sheet plates and 20 booklet plates.

For me, the First Bureau Issue’s two-cent stamp may well have been my first recognition that face-similar stamps exist as different collectable types. Not only did some stamps have “triangle” ornaments in the upper corners while others did not, but also there were differences to be found in the triangles.
Until a decade ago, the catalogues that we use listed three types for these stamps as determined by the design of the triangular ornaments. Diagrams like these have appeared in catalogues for many years, and they are still accurate to the extent that they depict the differences introduced into the triangles. The Mid-Continent Library has a 1922 Scott catalogue, and it has such diagrams.

I still remember my delight as a child when I was able to identify my one-and-only two-cent-triangle stamp as a Type III, and my equal disappointment when I discovered that it was the most common type.
When I resumed my stamp interest three years ago, and acquired a then-current Harris catalog, I discovered that, not three, but four types were associated with the listings for the First Bureau Issue. This was news to me. When did I miss this change?
All of the major catalogue numbers were the same as I had known before.

There are other overprinted and/or surcharged stamps for Cuba, Puerto Rico, the Philippines, Guam, and Revenue issues, but before the overprinting was added, each of them would have been either a 267 or a 279B.
And the entries for the First Bureau Issue were still divided into three subgroups:

1 – Stamps printed on Unwatermarked paper ...
2 – Stamps printed on Watermarked paper ...

3 – And, color changes made to conform to the Universal Postal Union guidelines (circled).

But, rather than being merely a dubious, after-thought addition to the UPU color-change group, catalogue number 279B was now listed as a separate type – Type IV. But, the Harris Catalog was devoid of any further explanation.

Years ago, I had acquired some stamps identified by the seller as 279B’s, but I had never been overly confident that the identification was correct since, at that time, it was based, solely, on the color difference.

Now, I had to know more about this Type IV …
I started with a review of some APS magazines I had accumulated while my collection was resting on the shelf, but before I let my APS membership lapse.

At first glance, I thought that this one, from 1991, might hold an explanation of the Type IV.
But, it was still consistent with the long-held notion that there were only three types of the First Bureau two-cent stamp.

In the cover article, Robert Picirilli wrote that the only difference between a 267 and a 279B was the color.

At this point I thought that I would need to find something more recent than 1991 to obtain my answers.
Consulting the Scott Specialized Catalogue at the Johnson County Library did shed some light on my query.

The diagram shown here had been added to describe the distinguishing features of the Type IV stamps. And, the diagrams of the ornaments had new identities. Doubtless, this results from the fact that Type III and Type IV stamps share the same style of the triangular ornaments.

I would later find that these changes first appeared in the 1999 Scott U.S. Specialized Catalogue – published more than 100 years after the stamps were printed.

Studying the references provided by the Scott Catalogue would prove even more enlightening.
What is a Type?

In the absence of a generally accepted philatelic definition, George W. Brett coined the following:

“The significance of ‘type’ as used in the standard works of reference is to indicate a design difference — no matter how it was arrived at.”

To fully appreciate the significance of this listing, I was given to further my knowledge of the four types and their origins, beginning with this definition that Mr. Brett provided when he was making his case for recognition of the Type IV.

The definition may be a bit all-encompassing since it could be interpreted to include differences that would be better described as plate varieties (specific to a single plate) or production varieties (specific to a single printed sheet). But, it does point toward discovering the sources of the differences.

To discuss the sources of design differences on intaglio printed stamps like the First Bureau Issue requires at least a cursory review of the plate production process.
First, the engravers (usually a team of three for vignette, frame, and lettering) prepare a die on which the design elements are cut into a softened steel plate in reverse of the image to be printed. Following approval of a proof printed from the die, the work passes to the siderographers.

After the die is hardened, a softened steel roll is pressed into the die one or more times to pick up the design.

The resulting subject on the transfer roll appears in relief, like the finished stamp, in that the design elements to be printed are raised above the surface, like the ink on the stamp.

After any needed cleanup, the transfer roll is hardened and then pressed, repeatedly, into the printing plate to produce the required number of subjects for the sheet layout. In this case, 400 per sheet.
However, when these stamps were made, the equipment used for producing the transfer rolls and the printing plates looked much like the press shown in this patent illustration. Mechanical advantage provided the force necessary to press the transfer roll into the die to pick up the subject and, subsequently, into the plate to lay down the subject.
In 1937, Hugh Southgate, then President of the Bureau Issues Association, published his research on the dies created for the production of the First Bureau Issue two-cent stamps. The information had been gleaned from an extensive review of Bureau of Engraving and Printing production records.

Of particular note is that, while 33 transfer rolls were produced from Die number 79, the Type II die, only six Type II plates were prepared. And …
That 207 Type III plates were produced prior to the creation of Die number 83, believed at the time to be “the” Type III die. (Of further interest is the fact that one of the six Type II plates was only partially Type II subjects while the remainder were Type III.)

The Type III design must have been created by modification of the transfer roll reliefs from the Type II die.

Mr. Southgate ended his article by issuing a challenge to any sharp-eyed philatelists to discern whether or not there existed any identifiable differences between stamps produced from the two sources of Type III stamps.
George W. Brett took on that challenge and, working with Mr. Southgate, discovered two major and fifteen minor differences between stamps produced using modified transfer rolls from Die 79 and stamps made from Die 83.

They published their results identifying Type IV in 1955, but anyone who was not a member of the Bureau Issues Association (now known as the United States Stamp Society) probably paid little attention to their work.

It was not until Mr. Brett published an update in 1993 and Kenneth Diehl published an extensive review of the First Bureau Issue two-cent stamps in a 23-part article from December, 1994, through August, 1997, that their work was recognized by Scott Publishing and shared with the larger philatelic community.

Armed with their scholarly work, we can trace the genesis of the four types.
It begins with the two-cent of the Small Bank Note Series produced by the American Bank Note Company. When the Post Office Department contract was passed to the Bureau of Engraving and Printing, all dies, transfer rolls, plates, and stocks of stamps were transferred from the American Bank Note Company to the Bureau.

The Bank Note two-cent stamps have two features—some might call them flaws—that figured prominently in the study of the Bureau’s types.

A very heavy line in the hair—often referred to as the “Gash in Forehead” and a dot in the center of the ‘S’ of “Cents.” possibly a layout mark for the lettering.
The Bureau did not have enough time to prepare new designs to meet postal needs, so the bank note designs were used with the triangular ornaments added to distinguish the Bureau-produced stamps.

The Type I triangles are usually described as having the background lines continuing through the triangles at a constant weight. A better description might be that the triangles go through the background lines because the original American Bank Note Company die was given a new identity as Bureau die number 35. After annealing, the triangles were engraved over the existing background lines.

The first confirmation of that fact is that the “Gash in Forehead” and the “Dot in S” appear on all the Type I stamps as well.

Type I stamps are about 6% of the total production.
Confirmation comes from the American Bank Note Company imprint that remained on the die after the triangles were added. The imprint can be seen here on a die essay printed from Bureau Die 35.
The Type II stamp came from the creation of a new die, number 79. The die was started with a light lay-down from a Type I transfer roll. When the engraver strengthened the background lines, only the portions of the lines outside of the triangles were strengthened. The lines inside the triangles were left at the lighter weight created by the lay-down. Lack of strengthening was also the case for the “Gash in Forehead,” effectively removing that feature from the design.

The “Dot in S” does appear on the Type II die, but it does not appear on any Type II stamps. The tiny protrusion that formed the dot was burnished off of the transfer rolls used to make the Type II plates.

Type II stamps are about 1% of the total production.
The Type III stamps resulted from a continuation in the progression of design cleanups performed on transfer rolls taken from die number 79. The light background lines between the inner and outer triangles of the ornaments were burnished out, leaving a clear border around the inner triangle. Any of the Die 79 transfer rolls not thus processed, would simply produce more Type II impressions.

While this process was being performed, the previously instructed removal of the “Dot in S” was overlooked on some of the rolls, creating yet another listed variety.

Type III stamps are about 36% of the total production.
The Type IV stamp came from the creation of another new die, number 83. The die was started with a lay-down from a Type III transfer roll – one without the “Dot in S.” When the engravers strengthened the lines of the design, two key differences, a line in Washington’s hair and shading of the toga button, were generated that distinguish the Type IV stamps from their Type III predecessors. Several other minor differences have also been identified, but they are more subjective and, therefore, less reliable means of identification.

Type IV stamps are about 57% of the total production.
As far as finding a reference for differentiating Type III and Type IV stamps, I like the guide provided by the 1847USA web site.
Thanks to Joe Kenton’s generous donation of philatelic literature, most of these references can be found at the Red Bridge branch of the Mid-Continent Library. The 1955 article by Brett and Southgate and the 23rd part of the series by Diehl are missing from the collection. If any of you have those journals and would be willing to loan them, I would be grateful to be able to read them.