After a short period of time, the change from gauge 12 to gauge 10 perforations in 1914 was deemed to be unsatisfactory. Users found that the wide-spaced perforation holes between stamps caused tears when separated. A steady stream of complaints to the Post Office Department forced a new solution to the perforation problem.

Limited experiments were carried out in 1915 with perforation holes set at 11 per 2 centimeters. This was found to be satisfactory, but the Department was not able to change right away. World War I created an atmosphere of rationing and resource-conservation, so the change was brought about gradually. A switch was also made from single-line watermarked to unwatermarked paper in a cost-cutting effort, and perforations were changed to gauge 11 as the old 10-gauge wheels wore out.

A rare and interesting perforation exists on this series that appears related to the earlier compound-perf variety, but was caused by an entirely different set of circumstances. Twelve denominations are known Perf 10 at either top or bottom. When these were first discovered it was assumed that, like the compound perfs, these occurred during the transitional period from Perf 10 to 11. However, in the Perf 10 at Top or Bottom varieties, only part of the row is Perf 10. This is confirmed by the few known multiples where only a portion of the stamps has the perf variety.

It was not until 1934 that philatelists solved the mystery of how these varieties were produced. In that year a block of eight 25c 1922 stamps was discovered Perf 10 along one vertical row—the normal gauge was 11. The Perf 10 holes are vertical, because the 25c stamp is a horizontal format stamp. The Zoellner collection (Siegel Sale 804) contained this unique discovery block (lot 708). Research based on this block revealed that the error resulted from an improperly-repaired perforating wheel. This caused the nineteenth row of wheels on the plate to perforate stamps at gauge 10.

In 1918 new bicolored $2.00 and $5.00 stamps superseded the old 1902 Series designs perforated 10 on unwatermarked paper.

Due to a problem with inks, the Bureau discovered that high-volume plates were wearing out faster than they could be replaced. To meet the demand for 3c stamps created by the November 1917 rate change, the cheaper and faster offset-printing presses were used. The 1c and 3c 1918 Offset stamps are comparatively crude products, but they were necessary under the circumstances. In 1920 another ink problem arose and forced the use of offset printing for the 2c. The different types recognized by philatelists were created in the photo-lithographic process used to make the plates for offset printing. The imperforate offset-printed sheets were provided to vending- and affixing-machine companies for private perforation. Certain imperforate types were issued in extremely small quantities and are very rare.