

VICTOR - DEFENDER - X-RAY A Study in Variations of Lamp Design

by Mike Puhl

The Justrite Victor cap lamp, and its sister lamps, the Defender and X-Ray, have always been one of my personal favorites. The lamp has a distinctive ornamental design, and probably has more lettering on its various parts than any other lamp. The Victor lamp also went through the constant minor design changes that Justrite was famous for, and which makes collecting Justrite products a never ending quest. In an attempt to document many of these design variations, I have compiled the following article.

Justrite was not the first carbide cap lamp manufacturer to use the Victor name. There are in existence several non-Justrite Victor cap lamps. These lamps bear a strong resemblance to the Scranto style lamps, and the manufacturer is unknown [Editor's Note: See "Baldwin, Scranton, Victor and the Monogram WV & B" by Dave Thorpe in MAC, Issue 3, Spring 1989]. Even though these lamps do not have the Victor name stamped on the lamp, the name Victor is given to them because several have been found unfired in original cardboard boxes bearing the name Victor.

On May 22, 1920, William J. Frisbie, an employee of Justrite Manufacturing Company of Chicago, Illinois filed for a design patent which was eventually to be produced as the Victor carbide cap lamp (see design patent No. 57037, assigned to William J. Frisbie).

Justrite started producing Victor cap lamps before the design patent was granted, probably around May 1920. Why Justrite made the marketing decision to enter the cap lamp market with a different brand name, while its Justrite brand name was extremely popular, is unknown. Perhaps they felt they could implement new design changes into the market without risking any potential negative impact on their existing lamps, adding only those design changes which the marketplace had accepted. Lamps which were produced during this time period have the "Patent Appl'd For" marking (top mark 1). The design patent was granted on February 1, 1921, initiating a design change to incorporate that date into the marking on top of the lamp (top mark 2).

At approximately the same time, Mr. Frisbie was also applying for patents on other features which would be incorporated into the Victor cap Lamp. On May 3, 1920, Mr. Frisbie filed for a patent which was later to be incorporated into almost all Justrite cap lamps. Patent No. 1,407,141, granted on February 21, 1922 is for the polygon water feed found on all Victor cap lamps. As was normal for Justrite, they started producing this water feed before the patent was granted, hence the two different stampings on the water feed lever.

Another patent of note was No. 1,424,463, which was implemented as a method of improving the way side braces were attached to the lamp. These side braces went through various stages of development, which forced modifications to both the braces and the lamp body. The earliest Victor has round wire side braces which are soldered to the outside of the water tank. The next development has the round wire brace piercing the water tank high up. The wire brace was then moved down approximately 1/4 of an inch, requiring a tank modification. Flat strip braces were the next improvement, requiring yet another tank modification. The final

change came when Justrite went full circle, and ceased piercing the water tank with the braces, instead simply soldering them to the outside of the water tank again.

Other patents which are used on the Victor lamp include no. 1,424,464, which was for the reflector brace that was necessary for the vertical tank style of the Victor, and patent no. 1,431,447, which was for an improved felt retainer, which was later incorporated into both cap and hand lamps.

In April of 1922, Justrite retooled the body of the Victor, replacing the vertical stripes with raised dots. They named this lamp the Defender, and started to market it. The "Defender" trademark was applied for and on May 1, 1923, it was granted Trademark No. 167, 518.

Sometime soon after this, Justrite retooled again, and started to market the X-Ray cap lamp. This is not the first use of the X-Ray trademark. In Justrite's catalog no. 3, a lamp with an X-Ray trademark stamped on the bottom is shown. It is the belief of many collectors that Justrite was the manufacturer of this earlier X-Ray, and possibly its sister lamps, the Imperial and the Fulton. Evidence which points to this, besides the catalogs, is the similarity in bottom design, the similarity in striker design, and in Frisbie's design patent for the Victor, the top view is that of an early style X-Ray. Why Justrite discontinued the X-Ray trademark under one design style of lamp and reinstated it in another is unknown.

Victor, Defender, and X-Ray cap lamps can be found in both vertically striped tank styles, and dotted tank styles. This is possibly due to assembly error, or possibly Justrite planned on making all three lamps in both styles.

The bottom which is used on the Victor cap lamp is a normal Justrite bottom. This bottom comes in many variations, not all of which have been noted on Victors. There are five distinct bottom marks found, but only marks 3 and 4 have been found on Victors. There are also two variations concerning the number of raised ridges on the bottom. I believe this to be simply a retooling effort by Justrite, and any lamps, whether of the Justrite trademark, or Victor trademark, made before the retooling have 21 raised ridges. Those made after the retooling have 22 raised ridges. This retooling apparently occurred during the time period when bottom mark number 3 was being produced. Therefore all bottoms with marks 1 and 2 always have 21 raised ridges, and those with marks 4 and 5 have 22.

The water doors used on the Victor is also of standard Justrite design, changing with the improvements that were also being implemented on the normal Justrite lamps. The final design used on Victors uses the water door style whose hinge is integral with the door and has an insert which is pressed into the water opening. This style of water door lasted throughout Justrite's manufacture of brass lamps, and can be seen on the last Streamlined that Justrite made.

While the reflector nut found on most Victors is of the knurled round style, lamps do exist with a normal Justrite wingnut. This nut is also seen in many Victor ads.

The Victor cap lamp was eventually replaced by the vertical style Justrite. This lamp closely resembles an earlier brand name of Justrite, The Buddy. Once again, why Justrite dropped brand names, and changed lamp styles is unknown, but it must have been a marketing decision.

I have used the same cataloging system as Paul Kouts has started in his "Miner's Cap Lamp Reference" series. This system allows numerous variations to be listed, allowing the collector to readily identify each lamp. This list of known lamps is by no means complete, since I only surveyed several collections.

This article would not have been possible without the efforts of many other collectors, especially those who have seen fit to publish information in the past. I especially want to thank Henry Pohs, Gregg Clemmer, Tony Moon, Wendell Wilson, Paul Kouts, Bill Spence, and Dave Thorpe. Without their articles, books, and newsletters, this article would not have been possible. I hope this article will entice other collectors to start researching other brand names so we can all learn more about what is available to be collected.

List Of Known Variations

Victors

TA1 - NP - NR	with	[W1 - D1]
TA1 - BR - NR		[W1 - D1]
TA1 - NP - WRWE		[W1 - D1]
TA1 - BR - WRWE		[W1 - D1]
TA1 - BR - WIWI		[W1 - D2]
TA2 - NP - WIWI		[W1 - D2]
TB2 - NP - WRWI		[W1 - D3]
TB2 - BR - NS		[W1 - D4]
TB2 - BR - WRWI		[W1 - D4]
TC2 - BR - WRFI		[W1 - D4]
TC3 - BR - WRFI		[W1 - D2]
TC3 - NP - WRFI		[W2 - D2]
TC3 - BR - WRFI		[W2 - D2]
TC3 - BR - NS		[W2 - D2]
TD3 - BR - WRFI		[W2 - D2]
TC3 - BR - NS		[W2 - D5]
TC3 - BR - WRFI		[W2 - D5]
TC3 - NP - WRFI		[W2 - D5]
TC3 - BR - WRFI		[W2 - D6]
TC3 - BR - WRFE		[W3 - D7]

Victor Style Bottoms

BA2 - BR
 BA2 - NP
 BA3 - BR
 BA3 - NP

Defenders

TD4 - NP - WRFI	with	[W2 - D2]
TD4 - BR - WRFI		[W2 - D2]
TC4 - BR - WRFI		[W3 - D6]

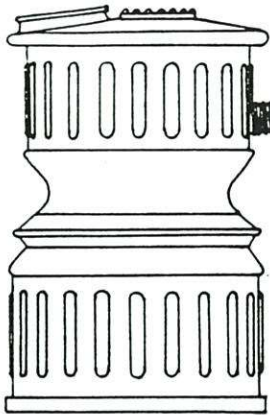
Defender-Style Bottoms

BC3 - BR
 BC3 - NP

X- Rays

TD5 - BR - WRFI	with	[W2 - D2]
TD5 - NP - WRFI		[W2 - D2]
TC5 - BR - WRFI		[W2 - D5]

Tank Style TA

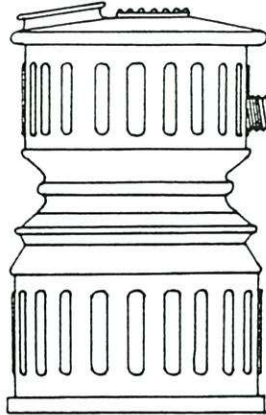


20 Raised Ridges

21 Raised Ridges
(see narrative)

Bottom style BA (21 ridges)
Bottom style BB (22 ridges)

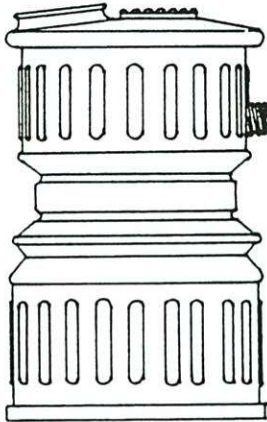
Tank Style TB



Top Mark 1



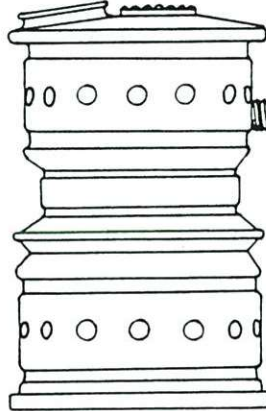
Tank Style TC



14 Raised Dots

14 Raised Dots

Tank Style TD



Top Mark 2

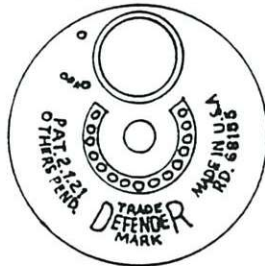


Bottom Style BC

Top Mark 3



Top Mark 4



Top Mark 5

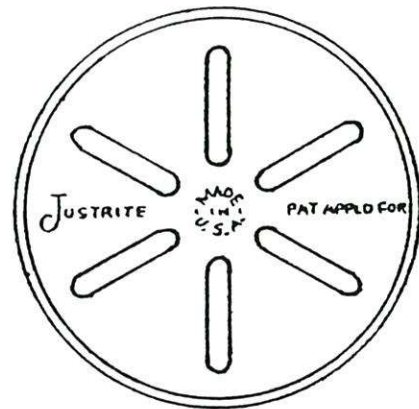


Bottom Mark 1



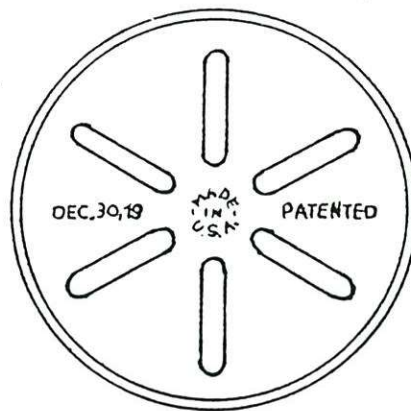
(always 21 notches)

Bottom Mark 2



(always 21 notches)

Bottom Mark 3



(both 21 & 22 notches)

Bottom Mark 4



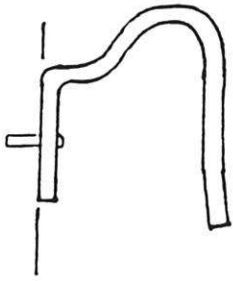
(always 22 notches)

Bottom Mark 5

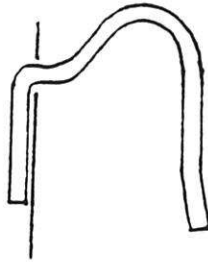


(always 22 notches)

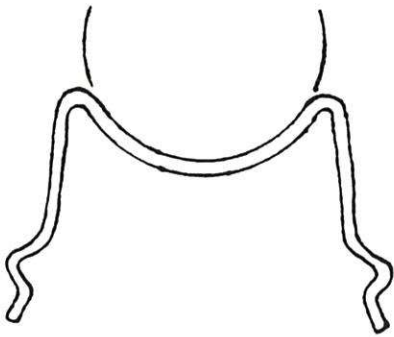
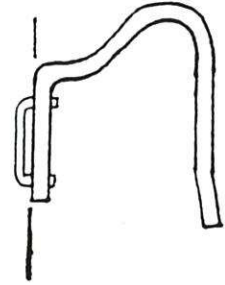
Round hook used with
brace style WRWE



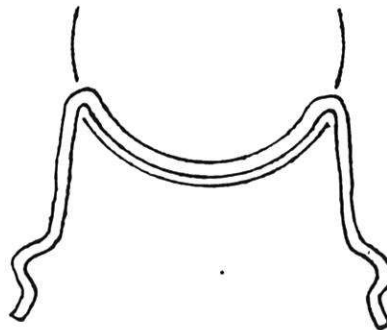
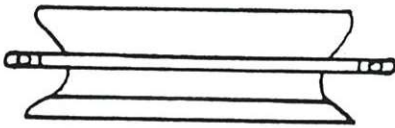
Round hook used with
brace style WIWI



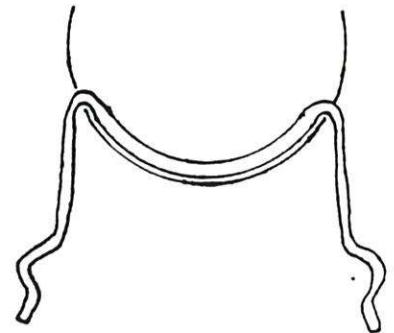
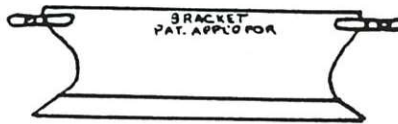
Round hook used with
styles WRWI, WRFI, WRFE



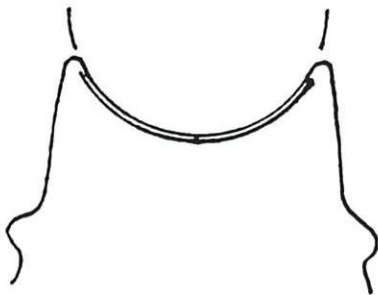
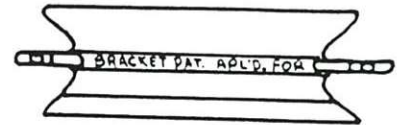
Wire Brace
Style WRWE



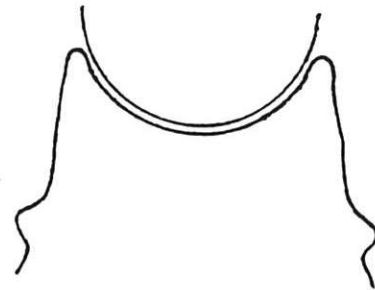
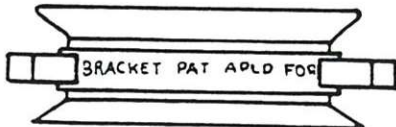
Wire Brace
Style WIWI



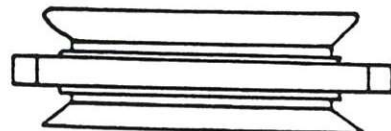
Wire Style
Style WRWI



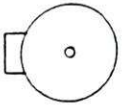
Flat Strip Brace
Style WRFI



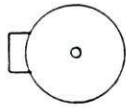
Flat Strip Brace
Style WRFE



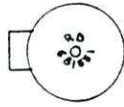
WATER DOORS



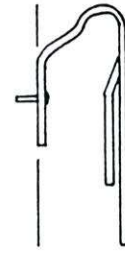
Style D1



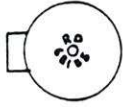
Style D2



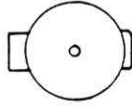
Style D3



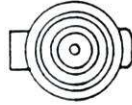
Narrow Spade
Style NR



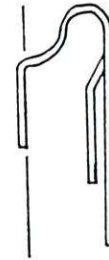
Style D4



Style D5



Style D6
Style D7
(integral hinge)

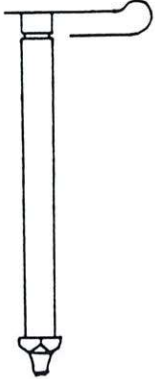


Narrow Spade
Style NS

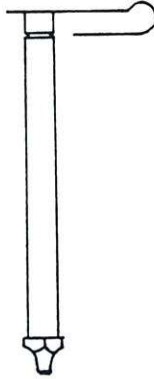
WATER FEEDS



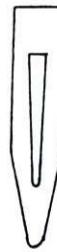
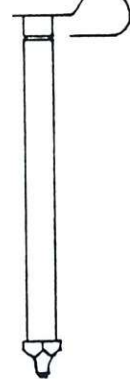
Style W1



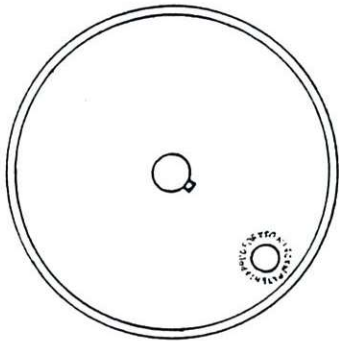
Style W2



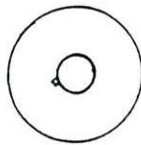
Style W3



Back View
Both Styles



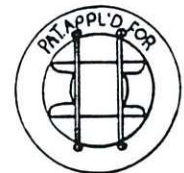
Reflector (back view)
(some without raised notch)
(some without lettering)



Reflector Brace
(some without notch)



Reflector Nut



Felt Holder

1,424,463.

Patented Aug. 1, 1922.

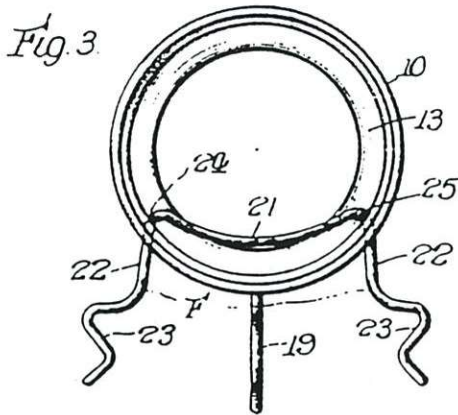
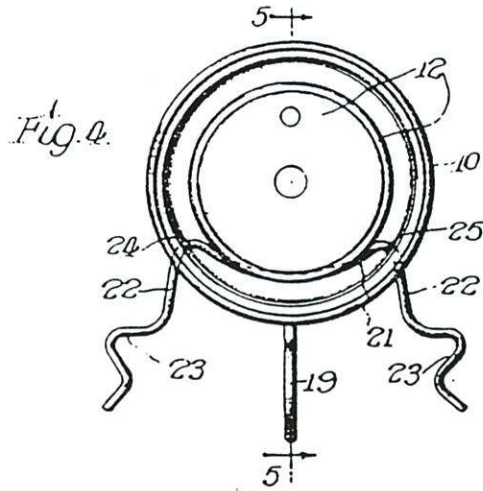
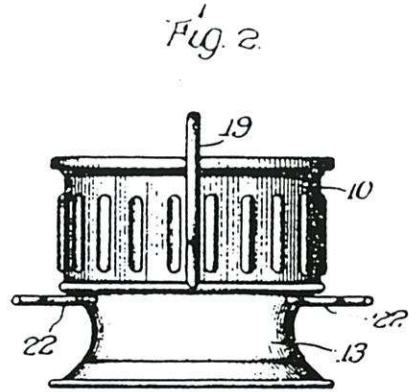
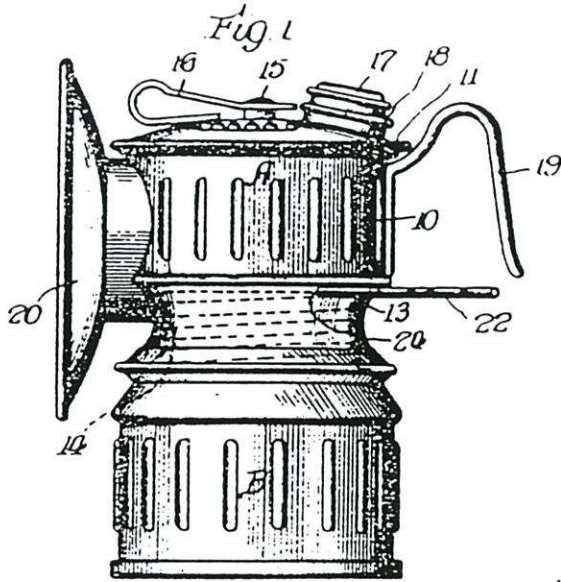
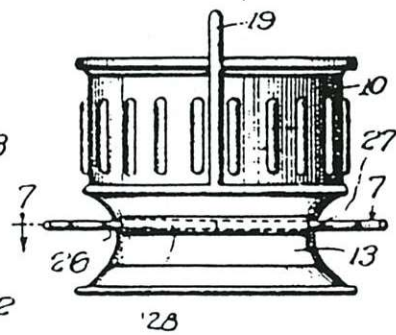
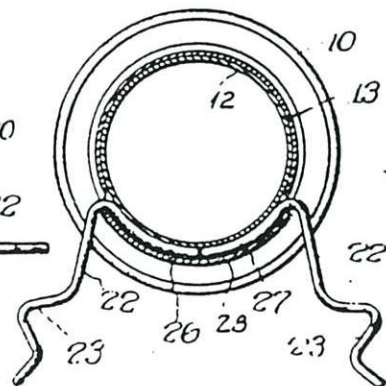
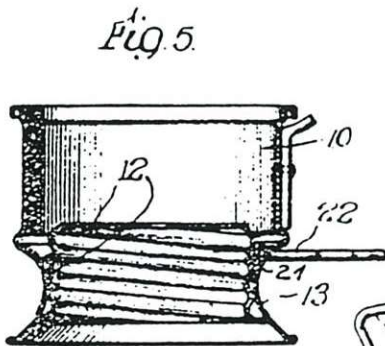


FIG. 6.

FIG. 7.



Witness
 A. J. Sawyer

Inventor
 William J. Frisbie.
 by Charles J. Schmitt