

# William Frisbie's X-RAY Lamps

by Dave Thorpe

## Background: The Original X-RAY



X-rays are a form of electromagnetic radiation. They penetrate and pass through objects that even the strongest visible light can not. In the medical field, they can 'illuminate' objects in the dark. "X-RAY" was also the name Augie Hansen chose for the last lamp he designed for Justrite, and the logo was stamped on the bottom of these lamps. So popular was this new design, that other firms contracted with Justrite to make their own private-label versions (Ref. 1) When Hansen left the company in 1920,

his replacement William Frisbie began to dispose of Hansen's products. The remaining stock of X-RAY lamps were quickly sold off, and spare parts assembled into a similar, but modified version called the Hunter's Special that was marketed in 1922.

Frisbee worked furiously with his own patents, but they lacked imagination. While Hansen's work was artful, Frisbie's was practical. Like a newly elected politician eager to replace old policy with his own, he pushed his own design: the Victor. The name itself was a snub to his predecessor. Just as Dan Quayle was no Jack Kennedy, Frisbie's lamp was no radical #innovation. It merely borrowed the

design of Hansen's ribbed base and applied it to the tank. The lamp itself resembled that of Justrite's competitors more than any previous Justrite lamp. Plain as it was, trivial details of the brace, feed and water door evolved rapidly on a yearly basis throughout the 1920's (Ref. 2).



Design Patent for Victor Lamp. Wm. Frisbie, 1921

## The New X-Ray

Fate was not kind to Mr. Frisbie. The 1920's were tough times for all carbide light makers. The electric era had begun and no amount of quick-fix changes could save the Victor. In 1922, an ornamental change was made on a test series of Victor-style lamps (Ref. 3). The

ribs were replaced with raised dots...a design already used and rejected by Hansen due to their rapid wear (Ref. 4). This lamp was renamed and stamped "The Defender". Perhaps Frisbee's confidence as a 'victor' had diminished, and he needed to 'defend' his prized and evolving lamp. Doomed by the times (and the flawed raised-dot design), the Defender lasted for only a year while the wounded Victor soldiered on, still trying to reinvent itself with trivial changes to the brace and water door. By the mid-twenties an act of desperation took place for Frisbie and his Victor. Perhaps to reclaim the nostalgia of Hansen's golden era, the name "X-RAY" was resurrected, and stamped onto the tops of otherwise typical Victor lamps. Mr. Frisbee had been humbled.





In surveying existing X-RAY lamps, their details do in fact match those of the latest batch of Victors produced. They use the latest top stamping, the later water doors, and the latest hook/brace mounts. Most are ribbed. Like the last Victors, some X-RAYS even had chrome plated reflectors and a modern wing nut holding it in place (Ref. 5). Like the Defender, not many were made, making them highly collectable today.

When was the top-stamped X-RAYs made? Unlike the Defender, the X-RAY stamping does not appear to have been officially trade-marked, so this doesn't help us. Since the lamp is found with the same accessories as the later Victors, it would have been run in the mid-late 1920's. The very latest Victors used a

water door hinge that was integral with the neck of the opening, but no X-RAYs have yet been reported with this door.

The last Justrite Catalog that advertised the Victor was the No. 6, circa 1928 (Ref. 6), and so we may guess that the last X-RAYs were probably made through this date. Some of the X-RAYs reported have smooth stamped water doors and longer levers, and if we look at the time frame that these items occur on the 'horizontal' Justrite line (Ref. 7), it would seem that the X-RAY could have been made as early as 1923...and this is consistent with the fact that the raised dot Defender tank style (a 1922-23 item) is occasionally found on X-RAYs. A time frame of approximately 1924-28 is a fair guess.

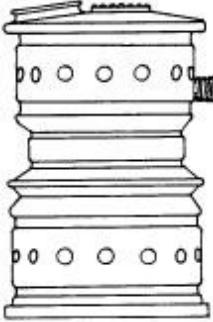
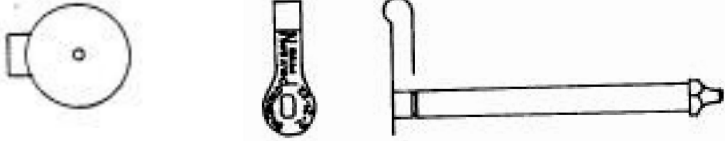
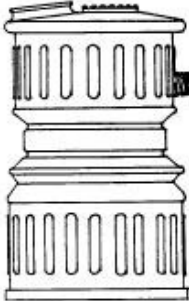
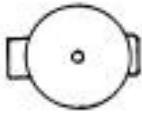
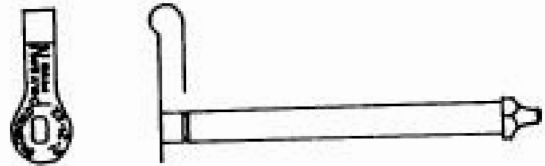

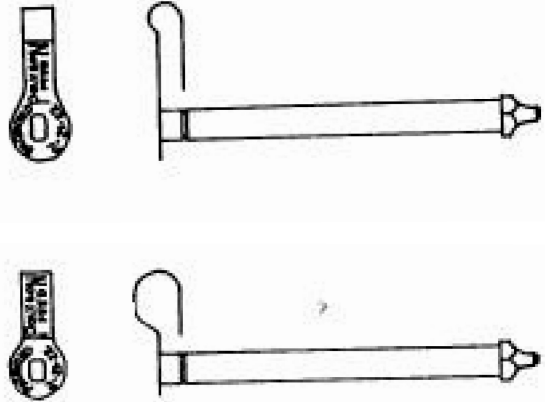
*(lamp shown in photos from author's collection)*





## Styles of Top-stamped XRAY Lamps

The table below demonstrates the four basic varieties of the X-RAY. This does not address the variations in hook vs. spade mount. See table to to view the detailed variations as reported.

Body Style	Water door and Feed combinations	
		
 <p data-bbox="228 1780 461 1850"><i>Illustrations by Mike Puhl</i></p>		
		

## Variations of Reported X-Rays

Body Style	Brass vs. Nickel	Water door	Hook vs. Spade	Lever Type	Reflector	Owner
Raised dots	Brass	Smooth no tab	Hook with flat brace	Long Patented 2-21-22 Polygon Feed	3" Brass round knurled nut	M. Puhl
Raised dots	Nickel	Smooth no tab	Hook with flat brace	Long Patented 2-21-22 Polygon Feed	3" Nickel round knurled nut	Reported by M. Puhl but not con- firmed
Ribbed	Brass	Smooth with tab	Hook with flat brace	Long Patented 2-21-22 Polygon Feed	3" Brass round knurled nut	M. Puhl A. Quamen
Ribbed	Brass	Raised rings	Hook with flat brace	Long Patented 2-21-22 Polygon Feed	3" Brass round knurled nut	D. Thorpe D. Des Marais
Ribbed	Brass	Raised rings	Narrow spade	Short Patented 2-21-22 Polygon Feed	3" Chrome-plated wing nut	L. Click



*Above lamps from Mike Puhl's collection. If you look carefully, you can detect the differences in water door and tank design compared with the X-ray shown previously.*

**References:**

1. Emmons-Hawkins Hardware Co. of Huntington, WV as well as Hardsocg used their own base stamping on models of the X-RAY.

2 For an in depth review of these changes, the reader is refered to Mike Puhl's excellent article in The Mining Artifact Collector, Vol. 4, 1989.

3. Trademark #267,518 filed: 6-17-22, awarded: 5-1-23, claimed continuous use since 4-28-22.

4. In 1982, Chuck Young pointed out to me several Defender lamps showing extensive wear of the raised dots resulting in holes through the lamp. Mr. Young believed this to be a design flaw, and believed the lamp was taken off the market due to this problem. Justrite cap lamps made in the late teens used raised dots as a gripping surface. These were replaced in 1919 by Hansen with vertical ribs.

5. L. Click collection, see table

6. Gaska, Mining Artifact Collector, No. 10, Winter 1991, p. 17.

7. Thorpe, Mining Artifact Collector, No. 10, Winter 1991, p. 14.

\* It should be noted that "The Miner's Flame Light Book" (Henry Pohs) attributes the Victor design patent to Augie Hansen. This is incorrect. Design Patent 57,037, Feb 1, 1921 was that of William F. Frisbie.