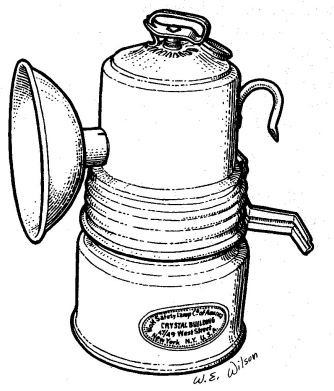
The Transitional State Wolf: A Rare Example

by Dave Thorpe, photos by Tim Bonelli, illustration by Wendell Wilson

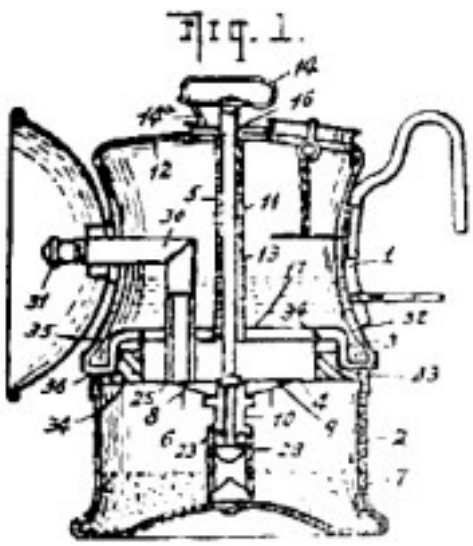
In the second issue of Eureka Magazine, April 1992, Jim Van Fleet documented the lineage of the Wolf cap lamp as it was sold in America, starting with the venerable 911a. The awkward looking lamp was imported from Germany, but was sold in the U.S. with an attached oval plaque displaying the New York, NY address.



The lamp debuted in 1914, and like many carbide cap lamps of this era, it had it was far different in design from competing lamps. By 1920's, most companies made lamps that were more "standard", that is they resembled each other. The 911a looked like a German beer stein, and stood a fair bit taller than other cap lamps. The size of the 911a was so large, it resembled a supervisor's lamp more than a cap lamp, and was also sold with a bail and hook in nickel plate. Unlike other US lamps, the gasket was tucked up inside the lamp atop the narrow threads. Most US lamps used a thick peripheral gasket that kept the threads free of dirt. The waterfeed lever was a delicate loop that resembled those on early German hand lamps.

Most collectors are quite familiar with the stout Wolf "dome-top" and "flat-top" cap lamps that were made in the mid to late 1920's. These are conventional cap lamps in every sense and were designated the 911c. To my knowlege, a 911b was never advertised, but one might guess that this number referred to a cap lamp that looked like the 911a, but was smaller so as to be similar to standard US cap lamp. This lamp, while considerably rarer than the larger and more commonly seen 911a, is known to exist (Errol Christman collection).

The interest of this article is with the transition period between the 911a and the modern 911c dome-topped Wolf. These transition lamps were also designated 911c and probably began to be manufactured after WWI around 1920, as evidenced by the patent application date of May 5, 1920 and a Keystone ad from 1921 . The patent diagram is shown at right. The oval plaque soldered to the side of the base now read New York, USA. The first ones carried an additional "Made in USA" plaque on the bottom (Jim Lackey collection, see Eureka, Issue 2 for photos). At some point this additional plaque was discarded, and the oval New York, USA tag was moved from the side to the bottom.



The early 911c lamps shared details with both the 911a and the modern Wolf lamps. Not yet ready to abandon the internal gasket, the lamp added an external gasket. With two gaskets, their claim was to a "double non-leaking joint". For the modern day collector, this is quite a prize...for the Wolf company it was a short-lived vestage that would not survive evolution through the 1920's.

Fine vertical knurling runs around both the tank top and base bottom, The tank and base are each concave, giving the lamp an oddly symmetric appearance. The first 911c lamps used the same loop water lever as European lamps, but this was soon modified to include a knurled wheel as shown on the lamp featured here. The striker has a tiny knurled knob that screws into the tube itself. Cap attachment is by hook and round-stock cap brace, but the brace is soldered over the base of the hook, a detail not seen on other American lamps. The first 911c lamps used a primitive and screw-in water door, but this too gave way to a hinged door.

The reflector is heavy spun brass and screws onto a threaded gas tube. There is no reflector brace, but a lock-nut holds it firmly in place. The lock-nut perhaps also served to allow precise positioning of the striker.

Details of the double gasket mechanism. A standard Britelite gasket is a perfect match for the outer gasket. Note the tiny knurled adjustment knob at the end of the striker.

In chemistry, when a molecule undergoes a reaction, it reaches a more stable and necessarily lower energy state. The object causing the reaction to occur may be heat, radiation, another chemical, or a catalyst. Any of these induction agents work by first bringing the molecule to a higher energy state which is an unstable form known as a transitional state. It remains in this state for only millionths of a second, then quickly finds a lower energy state which is the end result. In other words, the the sled wants to slide downhill, but it first needs to rise over over a large bump, a high-energy transition state. The induction agent is what pushes it over the bump. Scientists study high-energy transitional states (the top of the bump) to understand how molecules are formed and new ones might be synthesized. The ancient 911a Wolf cap lamp could be said to have been in an energy state that was at the top of the hill: it was unconventional and had features that needed to be reduced to a few simple tried and true designs. The dome-top Wolf we see today is the end result: simple and basic...it resides at the bottom of the hill. The early 911c, as shown here was a short-lived transitional design. As collectors we are lucky get an occasional glimpse of one, and as historians we recognize World War I as the catalyst.

References

Clemmer, G., American Miners' Carbide Lamps, 1987, pp 91-92.
Van Fleet, J., Eureka! The Journal of Mining Collectibles, 1992, Wolf Carbide Cap Lamps, pp 1-6.