

## The Standard Wolf Safety Lamp

by Tony Moon

One of the most common safety lamps found in the United States is the standard size Wolf lamp. However, the origin and the early development of the lamp is not well known.

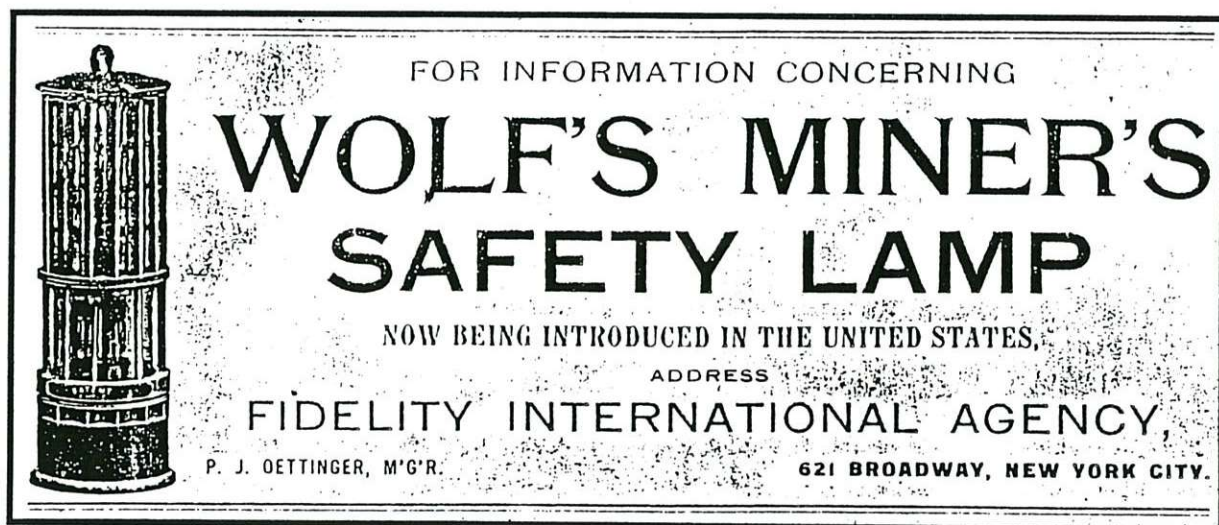
The Wolf lamp originated in 1883 when M. Charles Wolf of Saxony constructed a safety lamp using Naptha for fuel instead of the more commonly used oil. The illuminating power of the lamp was greatly improved over other types generally in use and the lower flash point of the fuel made the relighting of the lamp possible using a simple internal percussion relighter.

During the 1890's the lamp was introduced into the United States as shown in the advertisement from the April 1896 edition of "The Colliery Engineer and Metal Miner" (Figure 1). The Fidelity International Agency continued to import the lamp as sole agents in the early 1900's. Lamps were marked "Friemann & Wolf GMBH/Zwickau" and sometimes "Made in Germany" plus various patent numbers. Wolf had several factories including the main one in Zwickau Germany, 3 others in Germany, and others in Belgium, England and France.

In 1913 the Wolf Safety Lamp Company of America was established with offices in New York. The company was only a selling agent, not a manufacturer. Lamps were imported from Germany and a small brass oval tag was added bearing the address "Crystal Building, 47/49 West Street, New York". By 1915 Wolf claimed to have sold over 2,000,000 lamps world wide and almost 35,000 in Pennsylvania alone - the Wolf patents had expired by that time.

World War I put a stop to the import of lamps probably in about 1916. However, in 1918 the company surfaces again at the new address of 74-80 Washington Street, New York. Advertising indicates that the company was now making lamps in the United States.

By 1920 the company had moved to 227 Grand Avenue, Brooklyn and in 1922 they moved one more time to 220-224 Taaffe Place also in Brooklyn where they remained for several years. Lamps manufactured during this time period have an oval brass tag bearing the Brooklyn address. The first US Bureau of Mines approval for one model of the lamp was obtained in 1921 in contrast to Koehler who obtained their first approval in 1915.



FOR INFORMATION CONCERNING

# WOLF'S MINER'S SAFETY LAMP

NOW BEING INTRODUCED IN THE UNITED STATES,  
ADDRESS

FIDELITY INTERNATIONAL AGENCY,  
P. J. OETTINGER, M.C.R. 621 BROADWAY, NEW YORK CITY.

Figure 1

Advertisement from *The Colliery Engineer and Metal Miner* (April, 1896)



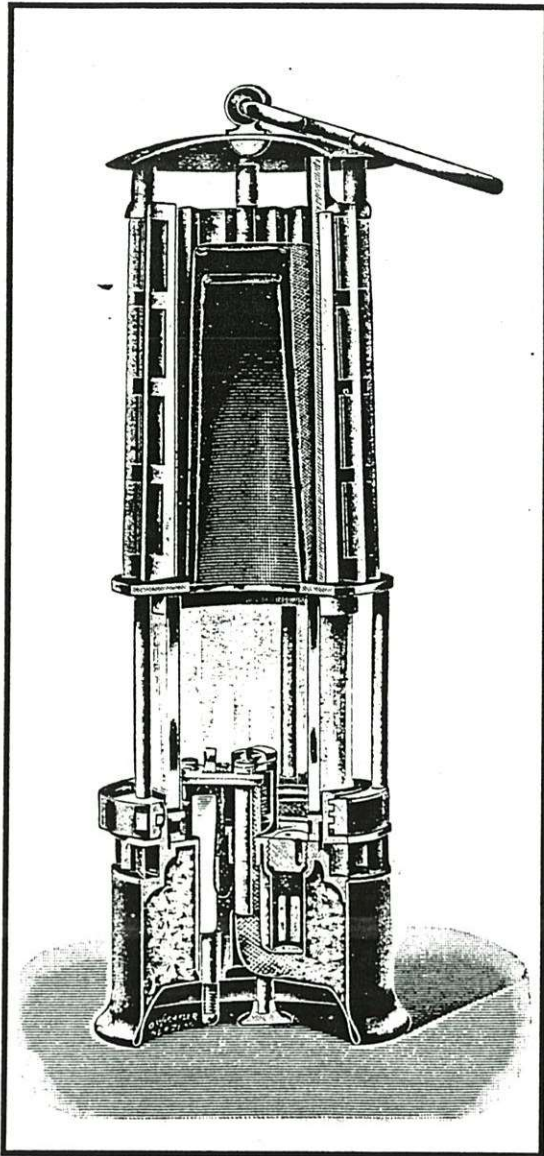


Figure 2



Figure 3

The standard Wolf came in two basic models with two styles of lock (magnetic or key), two types of burner (flat or round), and several different metal combinations including brass, brass and steel, aluminum, and Magnalium - an alloy I have never heard of. The major difference was in the style of bonnet as shown in Figures 2 and 3. There was either the corrugated type popular in the United States or the smooth type which was more popular in Europe.



## Wolf Safety Lamps (cont.)

The only major design change over the years was in the relighters. The earliest percussion version consisted of a coiled strip of paper with small drops of fulminate which could be ignited with a blow - similar to a toy cap gun. This evolved into a friction type using a paraffin wax igniter roll which contained phosphorous caps which were ignited using a scratcher. Six different models of the paraffin friction igniter were produced starting in 1893 and continuing until 1914. The model 1897 igniter is shown in Figure 4. Finally in about 1914 the familiar metal spark igniter was offered which used a special flint and wheel.

The most common variations of the lamp are either the US Bureau of Mines approved version in steel and brass with a magnetic lock or the all brass version with a key lock. However, the early versions are quite hard to find as are the ones made of lightweight alloys - aluminum or the mysterious Magnalium.

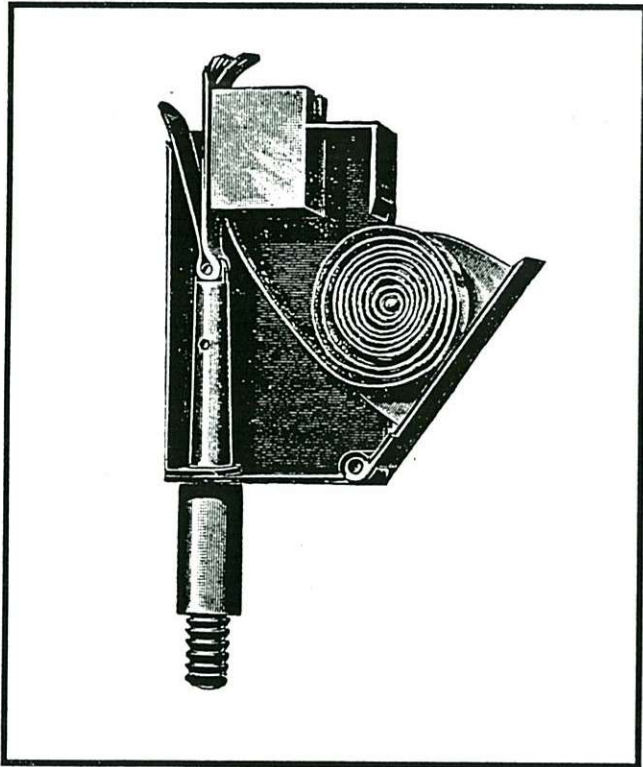
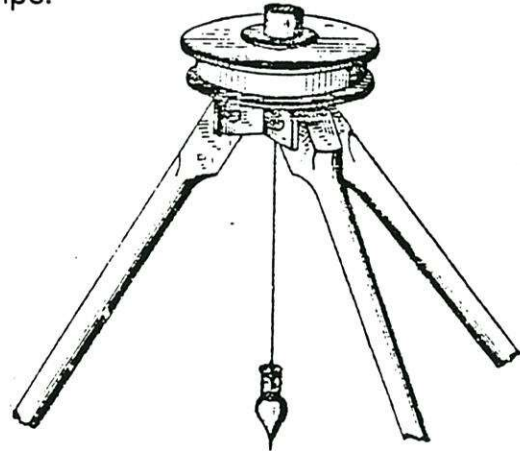


Figure 4  
Early percussion style lighting device.

## Yet Another Plummet Lamp

by Tony Moon

This is the second on what I hope will become a series on mine surveying lamps of all types. This is a subject that has fascinated me for several years and my files contain details on quite a range of different types. This article and probably a couple more will finish off the plummet lamps.



On October 30, 1883, Mr. John Roach of San Francisco was granted patent number 287,580 for an improved plummet lamp. The illustrations from the patent are virtually self explanatory but an excerpt from the original patent wording provides the rest of the details as follows:

"The instrument can be suspended, as described, from a tripod or other implement by means of a wire or other material. It will be readily seen that my invention is peculiarly adapted for use in mining operations, and in like places wherein the sun's light cannot be admitted. By means of the lantern frame, with gas or chimneys, I obviate disturbance of the flame or current of air, obtaining a steady, clear flame, the point of which coincides with the point of suspension and point of the plumb bob."

I know of one example of this lamp in a collection. The lamp is made primarily of brass with a steel point on the bob and the whole assembly is about 6 to 8 inches long. The lamp is engraved "Patent applied for" in script.