

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.

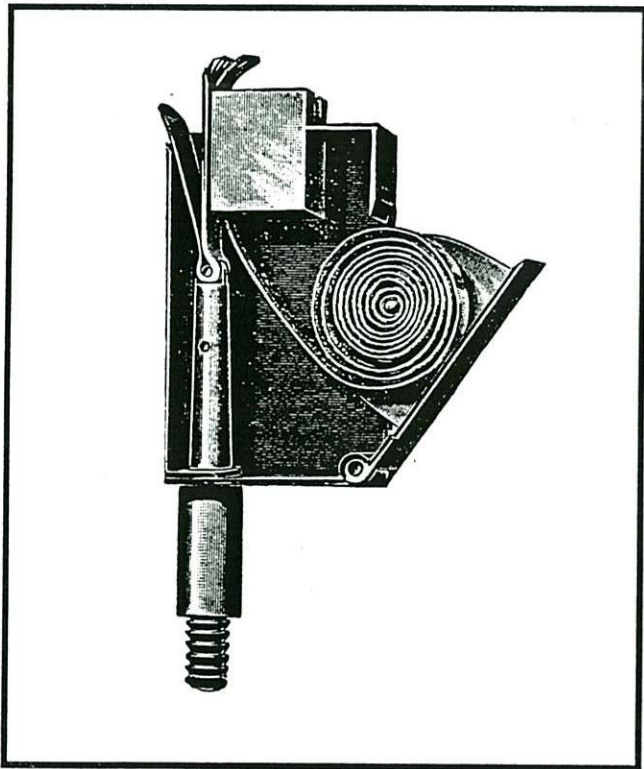
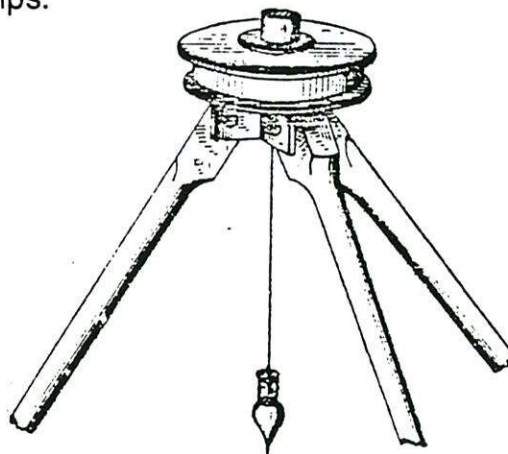


Figure 4
Early percussion style lighting device.

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.

United States Patent Office

JOHN ROACH, OF SAN FRANCISCO, CALIFORNIA.

PLUMMET - LAMP.

SPECIFICATION forming part of Letters Patent No. 287,580, dated October 30, 1883
Application filed July 28, 1883 (No model)

