

# THE UNDERGROUND LAMP POST

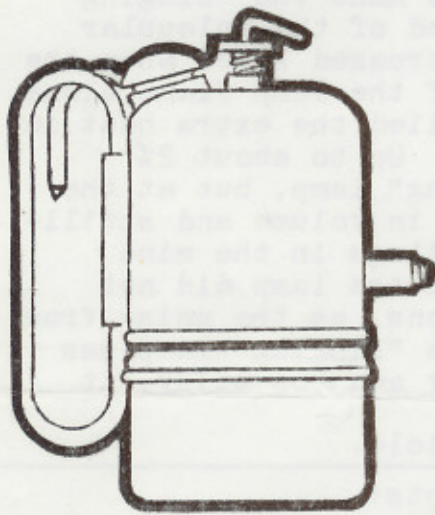
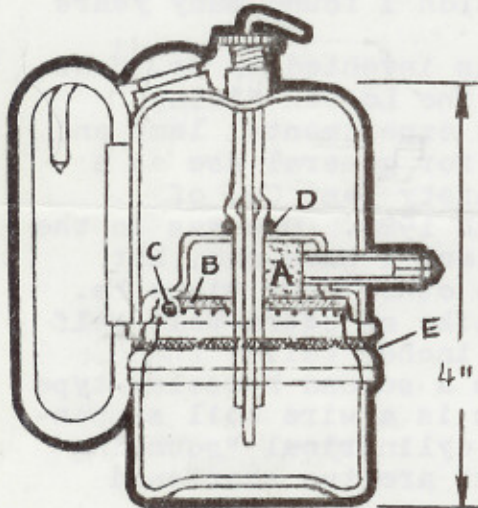
- NOT A HIPPIE NEWSPAPER -



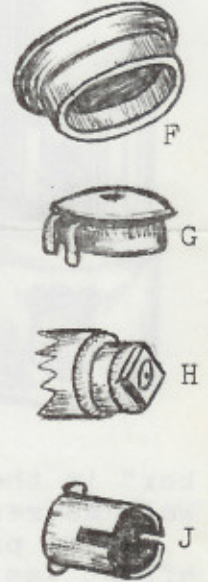
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The Underground Lamp Post, devoted to old mine lamps, carbides, and candle-holders. Mini-editor: Henry Pohs, 4537 Quitman St., Denver, Colorado, 80212



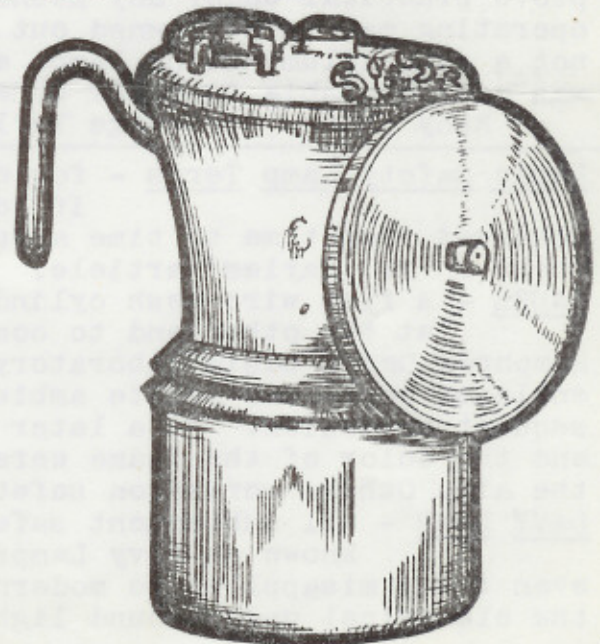
Unmarked Lamp - Steve Loftin in Nashville, Tenn., has sent us information on a "Whazzit" which he has just obtained. We have copied his very good illustration at the left for this issue and for all of our readers. Steve is asking for any information as to its name, make, dates, etc. Write: Steve Loftin, 2805 Westmorland, Nashville, Tenn., 37212. Descriptions keyed to the illustrations are: A, large block of white felt; B, conventional blue and gray felt; C, copper screen; D, strange, brick red ceramic bead, fits to make a needle valve out of the otherwise straight center wire and collar (broken by age); E, rounded red rubber gasket; F, G, water door hollow with usual bent wire attachment; H, diamond-shaped tip; J, split sleeve mount - all that is left of a push-on reflector with burrs where the reflector was. By now the Loftin Steve will have sent this information to the Wurzburger Steve for his unnamed lamp file. P.S. - nickle over brass.



## S & S Lamp -

Ole' reliable Chuck Young in Fairfax, Va., has reported on a new find.

His S & S carbide cap lamp is shown at the right. It's brass and standard height, 3-1/2" tall with a 2" diameter reflector. A small hole on the side and a spot of solder suggest that there may have been a name plaque at one time. The top stamping says "S & S Pat. apl'd for". Dropper, Hansen, and/or Baldwin bases do not fit: the threads do not even engage, reports Chuck. We got to visit with Chuck at his home on the tail end of our business trip thru Washington, D. C., in March. Chuck has 100's of rare lamps.







Fleissner "Singing" Safety Lamp - George Bayles in Cincinnati sent us information on the novel Fleissner "Singing" Safety Lamp several years ago. We've held it in our suspense file until we could complete a suitable illustration. Wonders never cease . . . the illustration is to the left and George's story follows.

In the famous USBM Bulletin #227, on page 176, the Fleissner "Singing" Safety Lamp is given a couple of paragraphs, but very little definite beyond the name and the general idea behind it. However, Mr. D. Anglada, former president of the Wolf Safety Lamp Co. of America, who died about 1964 gave me a lot more information on the Fleissner. I have one of the Fleissner lamps which I found many years ago in Tennessee, of all places.

The Fleissner "Singing" Lamp was invented by Dr. Hans Fleissner, an Austrian professor at the Loeben Mining College in Germany. The lamp was an experimental lamp and was intended for gas detection, not for general use as a source of illumination. The Wolf Safety Lamp Co. of America built only six of the lamps in 1920. One was in the USBM Pittsburgh Station collection, and I have one, but have never had any idea of where the other four might be.

In appearance, the lamp looks like an extra-tall Wolf flame safety lamp, about 1-1/2 to 2 inches taller than standard. Inside the glass there is a second Mueseler-type glass chimney, and inside that glass is a wire coil suspended by two more wires from a bronze cylindrical "sounding

box" in the upper bonnet. Above the "sounding box" are two shortened Wolf gauzes.

The principle on which the lamp was designed to make the "singing" effect was described to me as the change in the speed of the molecular movement in the metal of the wire coil due to an increased speed when the wire coil was heated above the normal temperature of the lamp flame alone. An increase in methane content of the mine air supplied the extra heat in proportion to the percentage of methane in the air. Up to about 2% methane, there was no audible sound from the "singing" lamp, but at the 2% level, a humming sound developed which increased in volume and shrillness as the methane content rose. When the surroundings in the mine were quiet, the "singing" effect could be heard. But the lamp did not prove practical under any mechanized mining conditions, as the noise from operating machines drowned out the sound. Since the "singing" lamp was not a good illuminating lamp, and also was too heavy and too bulky, it was not adaptable to other general uses.

Many thanks to George Bayles for the above article.

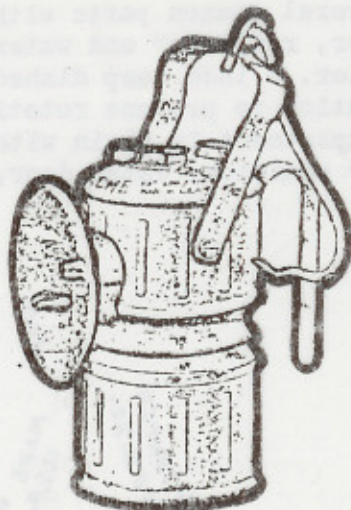
Basic Safety Lamp Terms - for carbide-only specialists!

If you are into carbide lamps only, you may have wondered from time to time about a couple of safety lamp terms, especially those in Mr. Bayles' article. We'll mention a few here.

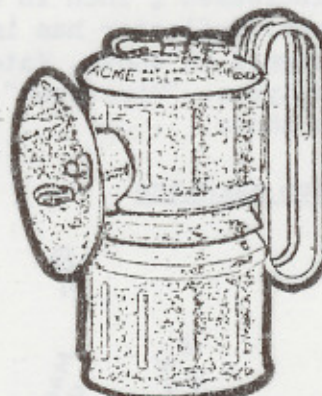
GAUZE - A fine wire mesh cylindrical tube, enclosed at one end, and sealed at the other end to completely enclose the flame. It was Sir Humphrey Davy's basic laboratory discovery that determined that a flame so enclosed would not ignite ambient gas in a gaseous mine and cause a subsequent explosion. As a later development, it was found that the height and the color of the flame were proportional to the percentage of gas in the air. Others worked on safety lamps, but Davy gained the fame.

DAVY LAMP - All subsequent safety lamps with a gauze cylinder came to be known as Davy Lamps, often in ignorance of the meaning and even today misapplied to modern safety lamps, much as Wheat lamps in the electrical underground lighting systems. Cont' on page 5.



Development of the ACME Carbide Lamp - by Tony Moon, Sandy, Utah

No. 50—With Bail and Hook Steel



No. 60—With Folding Handle Steel.

No. 80—Nickleplated—For Superintendents.

The ACME lamp was made by the Justrite Manufacturing Company between approximately 1921 and 1930. Three basic models were available:

- No. 50 (also referred to as 50A) lamp with tinned finish, bail and hook and nickel plated reflector.
- No. 56 (also referred to as 56A) lamp with tinned finish, folding handles and nickel plated reflector.
- No. 80 lamp with nickel plated finish and folding handles (superintendent's lamp).

In the early 1930's the ACME series of lamps were superseded by Justrite lamps models 50B, 50C, 56B, and 56C which in turn were replaced, in about 1937, by models 50D, 50E, 56D, and 56E.

Three basic varieties of the ACME lamp have been found by the author. The major difference in these varieties is in the size of carbide container which was progressively increased in an effort to increase the burning capacity from 5 to 6 hours to a full 8 hours. If any other varieties are known to other collectors, I would like to hear of them. Also if any collector has further information regarding the date when production of the ACME ceased, I would like to know.

Type 1

This is original style manufactured between 1921 and 1925. Overall height of lamp to top of water door is approximately  $5\frac{1}{2}$  inches. 3 inch reflector normally marked "Patent appld for - made in USA" around lighter hole used and attached with round knurled nut. "Polygon" water feed. Water door, valve stem and top markings as shown.

Type 2

Manufactured after 1925. Height of carbide container increased by  $\frac{1}{2}$  inch making the overall height to top of water door approximately 6 inches. Both 3 and 4 inch reflectors used which are occasionally marked as in type 1. Reflectors attached with either knurled nut or wing nut. "Polygon" or "Wire feed" water addition. Water door, valve stem and top markings as shown.

Type 2a

Same as type 2 except only 4 inch reflectors used and reflectors not marked. "Wire feed" water addition. Water door, valve stem and markings as shown.

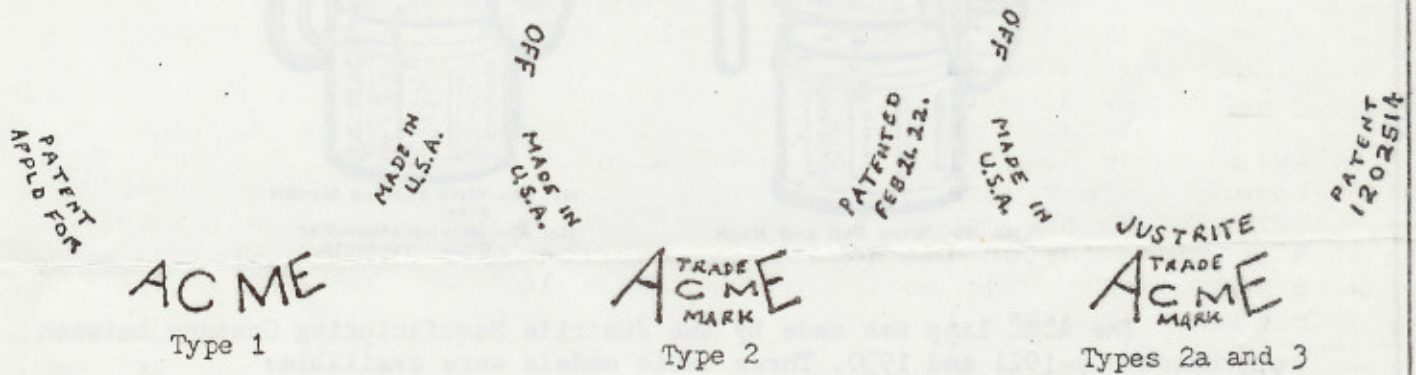
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Type 3

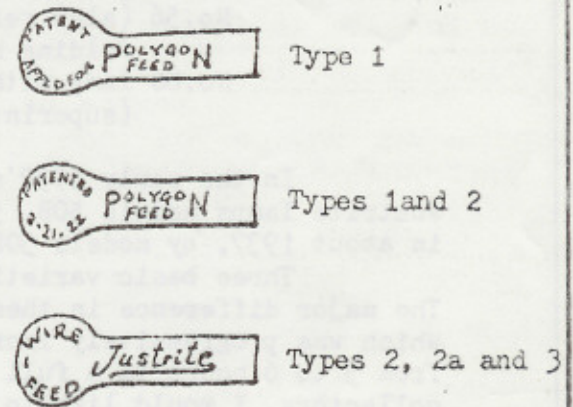
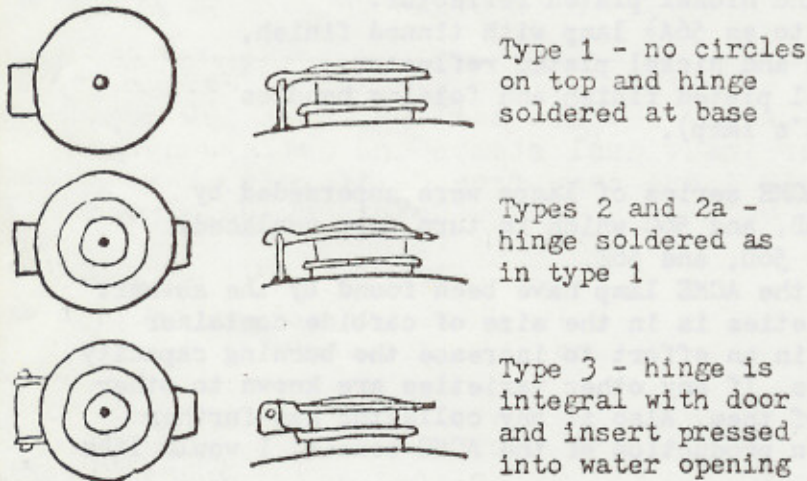
Last type of ACME manufactured. Several common parts with Justrite types 50B and 56B including carbide container, reflector and water door. Carbide container increased  $\frac{1}{4}$  inch in diameter. 4 inch deep dished reflector with no markings used. Reflector has indentation to prevent rotation and reflector brace designed as shown. Water compartment is plain with no vertical ribs as in previous types. "Wire feed" water addition. Water door, valve stem and top markings as shown.

Water compartment top markings

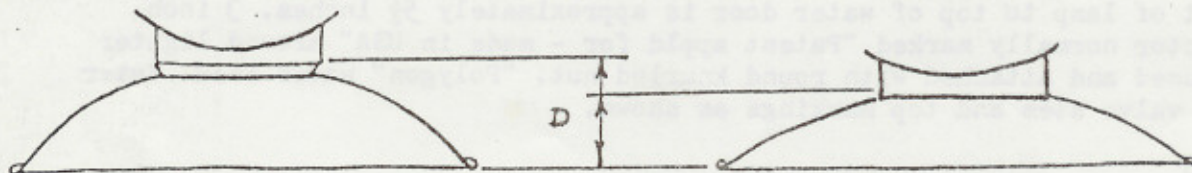


Water doors

Valve stem markings



Reflector types



Type 3

Types 1, 2 and 2a

4 inch reflector with dimension D  $1 \frac{1}{8}$  inch. Indentation to prevent rotation. Reflector brace bevelled as shown.

3 and 4 inch reflectors with dimension D  $\frac{5}{8}$  and  $\frac{7}{8}$  inch respectively. No indentation to prevent rotation. Some reflectors marked around lighter.



Basic Safety Lamp Terms - continued.

CLANNY LAMP - Dr. William Reid Clanny was an English contemporary of Davy who added a glass cylinder below the gauze to provide better light from the flame in addition to protection from igniting any gas by the gauze. Lamps with both a gauze and a glass are properly known as Clanny lamps. This lamp was also once known as the "Glenny" lamp.

MUESELER LAMP - Dr. J Mueseler, a Belgian, developed a Clanny-type lamp with a conical, bell-mouthed sheet metal chimney supported by a wire gauze diaphragm inside the gauze cylinder.

MARSAUT LAMP - Frenchman J. B. Marsaut introduced a full metal bonnet outside the gauze for protection as well as multiple gauzes. He also developed mathematical formulas for the sizes and proportions of the inner and outer gauzes.

WOLF LAMP - C. H. Wolf, a German, designed a very successful mine safety lamp which has survived with only occasional modifications as today's common flame lamp for gas testing. It includes the following features: safety wire gauze (Davy); glass cylinder (Clanny); confined 'burnt air' in the upper part of the lamp (Stephenson); spring-type expansion rings (Upton and Roberts); underfeed air intake (Eloin); double wire gauze (Marsaut); metal bonnet, often louvred (Marsaut); naphtha fuel; independent internal lighter; wick feed screw; magnetic lock.

Thanks, Tony - Many thanks to Tony Moon who sent us the fine, definitive story on the Justrite Acme lamps on pages 3 and 4 of this issue. We really appreciate this type of help with the Lamp Post. Anyone else with any kind of informative information is urged to send it on to us for use in future issues.

Postage Thanks - We are always so thankful for the postage offerings which arrive between issues. We are mailing about 140 copies this spring, so you know that your individual stamps and dollars were appreciated. Postage help for this issue came from California, West Virginia, Washington, New Mexico, Oklahoma, Texas, Colorado, Ohio, and New Jersey. Many thanks again to each of you good friends.

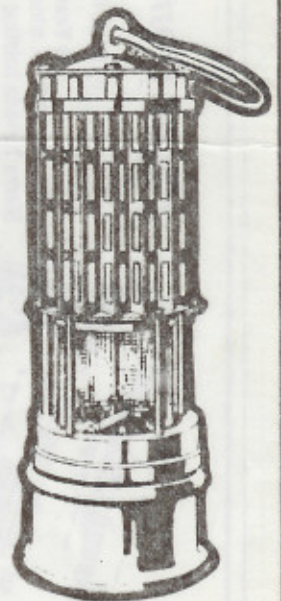
Trade or Sell - New Denver correspondent John W. Coons, 2321 S. Race St., Denver, Colorado, 80210, has included the following list and request for items in a recent letter. Who will respond?

"Other collectors might be interested to know that I have recently acquired a sizeable collection of Kohler Flame Safety Lamp Parts including the following;

Glass Chimneys  
Lamp Fonts  
Air Admission Rings  
Assorted Spacing Rings and Gaskets  
Inner and Outer Gauzes  
Fuel Hole Stoppers/w.Leather Washers  
Spacer Tubing and Nuts  
Magnetic Lock Poles  
Strike and Igniter Parts-large selection  
Fuel Hole Stopper Spline Wrenches

This collection of parts was assembled in Scranton, Pa. and I would be glad to trade or sell. I am interested in all forms of early mine illumination and specialize in Flame Safety Inspectors Lamps.

At the present I am particularly interested in finding a Brass Baby Wolfe, a Carbide Candle, and Folding Candlesticks."



Modern-day  
WOLF  
Safety Lamp



seems to understand. It is generally thought that some one had left a candle burning in a miner's candlestick, and that when it was consumed to the end dropped to the floor and ignited the planks, which are as dry as so much match wood. Thousand dollars. No insurance.

..44..  
**DR. AND MRS. JAMES THOM** — are the parents of a baby daughter...

..19..  
**SAFeway** — turkey prices — 35 cents a pound...

tunnel running north and opening upon the canyon, which was barely possible. The company, however, has very widely provided a good supply of water, hydrants and hose for such emergencies. A large tank on the hill to the west provides abundant water, with a pressure of about 300 feet and there are no less than ten hydrants conveniently located. In the course of ten minutes streams were playing upon the burning building from all directions, and both cages were rushed with lightning speed in hoisting the miners from the depths, which was accomplished without accident. The fire originated in the dressing room, but how, no one around the works

## Pages from the past

By BILL DOLAN

..100 Years Ago..

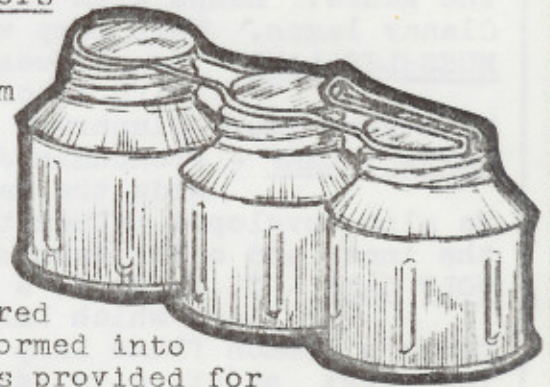
**OF A FIRE** — which took place at the Sierra Nevada hoisting works yesterday, the Gold Hill News says: For a brief space the wildest alarm prevailed, as the Sierra Nevada has no communication with any other mine, and it was certain that should the fire spread and get into the shaft, the sixty miners working below would most certainly perish unless they could escape by a small drain



Mine Fire - Jack Ramsdell down in Carson City, Nevada, has sent us the newspaper clipping we have pasted in at the left. Very interesting story with the underlines by Jack.

### Spare Carbide Containers

Our collection now includes the keen item shown here. It consists of three brass carbide containers and caps (lamp bottoms, for sure) joined by a single 1/8" steel wire soldered around the caps and formed into a belt hook. This was provided for us by Jim Lackey in Huntington, West Virginia, via Roger Weir who was at a business meeting in Denver.

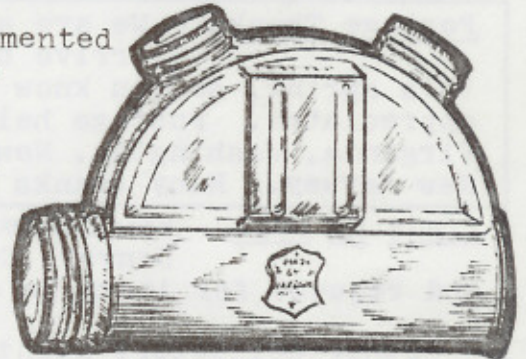


Zar - Chuck Young asks that we tell everyone that an unfired Zar carbide cap lamp, the type with the name plate on top, is available for trade. Not his, but the present owner asked him to spread the word. Chuck Young, 4021 Hallman St., Fairfax, Virginia, 22030.

Hardsocg #21 - Compartmented canteen with belt loop

Tinned steel  
 4-1/2" tall over crown

1/2 lb. carbide  
 1/2 pt. water  
 24 matches



VICTOR  
 Carbide Cap Lamp  
 Early pre-Justrite  
 design



Justrite VICTOR  
 Carbide Cap Lamp  
 ca. 1920

No. 661 Brass  
 No. 663 Nickel plated