Mining Artifact Collector

Issue Number 16 Fall 1992

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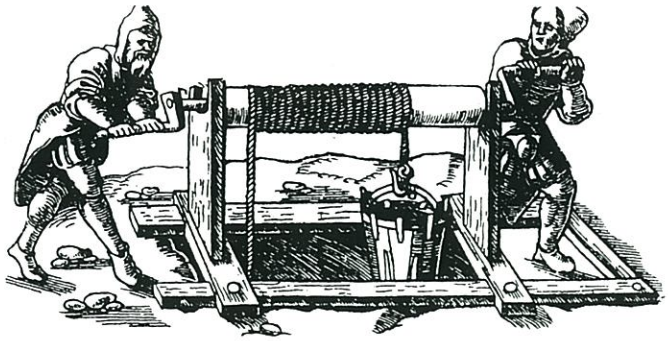
All back issues are currently available at $6 U.S. ($8.50 foreign) each, but supplies are limited. Order from Ted Bobrink.



Notes from the Editor

IT'S THAT TIME OF THE YEAR AGAIN!

Once again we end another year, it sure seems to have gone by fast. This, of course, means that it is renewal time. We hope that all of you have enjoyed reading the MAC as much as we, the editors, have enjoyed putting it together for you.

In January, we begin our 5th year of publication. We hope that all of you will continue to be a part of our valued readership.

As in previous years, the Mac continues to strive towards improvement. All of the editors, Wendell E. Wilson, Tony Moon, Ted Bobrink, Mark Bohannan and Jim Steinberg, are excited and itching to implement some of the special treats they have in mind for the next year. Articles, items for Collector's Talk, comments and suggestions have been, and will continue to be welcomed and encouraged from you, the readers and collectors of this unique subject of mining artifacts.

Enclosed with your copy of the MAC is a renewal sheet and a pre-addressed, stamped envelope for your convenience. Just fill out the renewal sheet and enclose it with your check or money order (made out to the *Mining Artifact Collector*) and you will be set to enjoy another full year of the *Mining Artifact Collector!*

A MINING POSTAGE STAMP?

The following letter was recently received regarding a mining postage stamp.

Dear MAC:

As you know, mining in the United States is what made our nation as powerful, politically and financially, in the 19th century and the early 20th. It was our mineral wealth that permitted us to stand alone during WWII and defeat a very formidable team of enemies.

Somewhere there has to be a form of recognition made available to the public. I would like to propose to Mac that we begin a campaign to have our mining heritage be brought to public attention via an every day item: POSTAGE STAMPS.

I am also writing to mineral clubs to also get them on the bandwagon.

If you could place this notice in MAC and urge other members to write in support of this idea, it would be appreciated. They should write to the following:

U.S. Postal Service
Citizens Stamp Advisory Committee
Room 5670
475 L'Enfant Plaza West, SW
Washington, DC 20260-6753

John A. Pawloski
New Milford, Connecticut

A MINING COLLECTORS' SWAP MEET

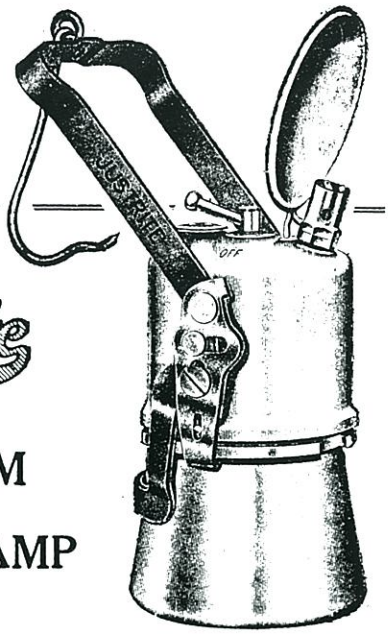
Errol Christman, of Cedar Ridge, California, who in my opinion is the premier mining carbide light collector in the country, held one of his mining collector swap meets at his spacious home on Saturday, October 10, 1992. Mark Bohannan and myself drove the 500 miles to attend, and it was worth every mile. About fifteen serious collectors showed up that saturday morning with a lot of neat things for trade and sale. Tim Callaway went home with one of the White Bros.'s fantastic miniatures of a hydraulic mining monitor. The White Bros. went home with a nice folding candlestick and some $$$. Errol traded me his early tin California mine bell sign for four pairs of my rare blasting cap crimpers. Steve Koeler went home with some rare powder boxes, Dr. Robert Kraft ended up with a nice folding candlestick from Keith Williams. Mark Bohannan made a trade with the White Bros. for a really nice Baldwin carbide cap lamp box for some nice, rare blasting cap tins. I can't list all of the trade and sales that went on that day, but as you can see, little get togethers like this are really worth while.

Errol will be having another mining collectors' swap meet sometime in January, and I would like to see as many MAC readers attend as possible. So right after Christmas, give Errol a call at 916-273-3268, as by then he should know the saturday it will be on. I know that Mark, Jim and I will try to make it, so throw some of your nifty mining items in your car along with some cold cuts, bread and drinks and you'll have a great day! See you there.

TedBobrink

JUSTRITE'S UNCLE SAM LAMP

by **Tony Moon**
2763 E. Willow Wick Drive
Sandy, Utah 84093



The most successful aluminum lamp, if longevity is any measure of a lamp's success, manufactured by Justrite was the 6 hour Uncle Sam lamp. The first dated reference that I have been able to find is a 1917 advertisement in the *Engineering and Mining Journal* (July 14, 1917). Three sizes of Uncle Sam lamps, with either conventional reflectors or the special umbrella for wet mines, were offered. Both the Jumbo and Little Giant aluminum lamps were referenced in the same advertisement. The 6 hour Uncle Sam and the Little Giant were both illustrated in the 1925 *Keystone* catalog, but in the Justrite catalog No. 5, only the Uncle Sam was shown. This indicates that the Uncle Sam was the last style of aluminum lamp offered by Justrite.

The lamp used the spiral water feed valve stem which was originally used on their cap lamps. The lamp had a unique toggle lock arrangement to close the lamp, thus doing away with threads which frequently froze on aluminum lamps. The lamp shared many features with the Little Giant such as the spring loaded water door (first used on the Jumbo), the spiral water feed, the wind guard and the fish-tail burner tip.

The three sizes of Uncle Sam lamps are shown in Figure 1. The key dimensions of the three known sizes are:

	No. 306	No. 308	No. 310
Capacity in hours	6	8	10
Height to water door	5 1/2"	6"	6 1/2"
Diameter of bottom	3 1/8"	3 3/4"	4 "

However, a set of instructions from an unfired lamp indicates that a fourth, largest, 12 hour size lamp was available although some parts numbers, such as gaskets and screens were not listed. I have never seen an example of this largest size. If anyone has one or has seen one, please let us know.

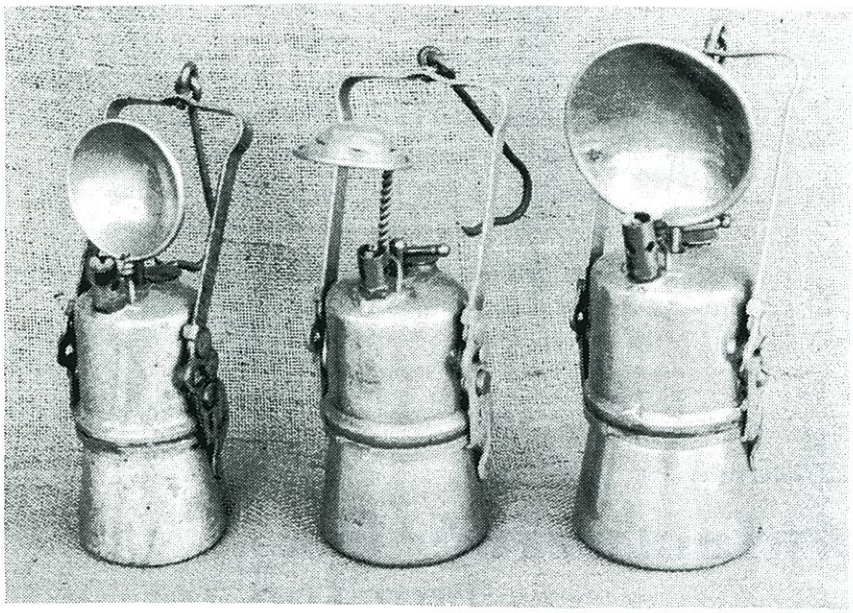
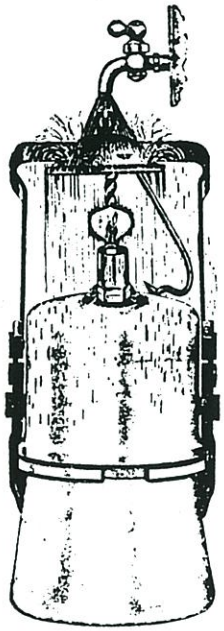


Figure 1. Three sizes of Uncle Sam lamps. From left to right: Model 306 (6 hour capacity); Model 309 (8 hour capacity); Model 310 (10 hour capacity). Tony Moon collection

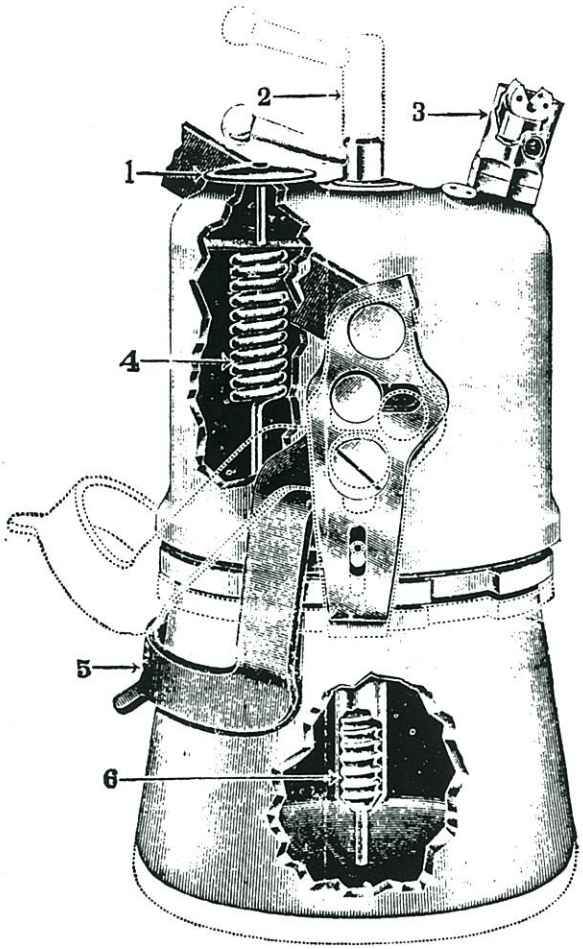
DIRECTIONS
UNCLE SAM CARBIDE LAMP

"MADE IN AMERICA"



WITH UMBRELLA
No. 307— 6 Hour Capacity.
No. 309— 8 " "
No. 311—10 " "

Showing Lamp burning under water faucet—flame is not affected by water when equipped with the Umbrella.



INSIDE CONSTRUCTION

1. Water Cap.
2. Removable Valve Stem.
3. Tip Protector.
4. Spring to hold Water Cap.
5. Locking Clamp.
6. Spiral Valve Stem.

WITH REFLECTOR
No. 306— 6 Hour Capacity.
No. 308— 8 " "
No. 310—10 " "
No. 306 and 308. With 3 inch Reflector.
No. 310 With 4 inch Reflector.

TO CHARGE

WATER—Lift the water cap and force it to one side—when filled, let it snap into position.

CARBIDE— 6 Hr. Lamp, 6 ozs., 1/4 in. Carbide
8 " " 7 1/2 " 1/2 " "
10 " " 9 " 1/2 " "
12 " " 12 " 1/2 " "

NOTE:—1/4 inch Carbide can be used in the 8, 10 and 12 hour lamp, but best results are obtained by using the 1/2 inch size.

TO OPEN

TOGGLE-LOCK—Let Bail fall back as far as it will go—place thumb on bail and finger on shoulder (5), it will open with a slight pressure. To take off the bottom—turn until the slots are in line with catch, then pull down.

Manufactured by

Justrite Manufacturing Co.

2061-2081 Southport Avenue CHICAGO, ILL.

DESCRIPTION

"Uncle Sam" Lamps are made of 1/8-inch seamless aluminum in four sizes, 6, 8, 10 and 12 hour capacity. They are wonderfully simple and sturdy and embody features never before incorporated in a carbide lamp. They are superior to the lamps of foreign make because they are built stronger, easier to operate, have fewer parts, and cost less to maintain. The principal features are:

1st. THE WATER FEED—The removable Spiral Valve Stem fits snugly in the water tube, forcing the water to travel around the spiral groove a distance of from 17 to 22 inches, while other lamps have a straight water course of from 1¾ to 3 inches. This increases the gas resistance about seven times greater than any other water feed and produces a steadier, more even burning flame.

2nd. THE SPIRAL VALVE STEM can be lifted out, cleaned and replaced without putting out the light or flushing the carbide—eliminates clogging of the water tube. Takes only a few seconds to clean.

3rd. THE WATER CAP is held in place by a strong bronze spring which is anchored to the bottom of water tank—can be replaced if broken.

4th. THE TIP PROTECTOR is made of brass, threaded and can be removed for cleaning or changing the tip—protects the flame from wind.

5th. THE TIP AND PILLAR—The burner is a fish-tail air hole tip made of imported lava and inserted in a brass pillar with screw threads. The air holes in tip prevent carbonizing.

6th. THE LOCKING DEVICE consists of a toggle lock with steel bail and swivel hook attached. It has no screw thread to corrode and stick, and is very easy to operate.

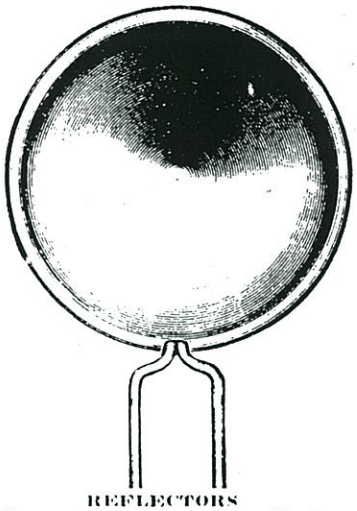
7th. THE FILTERING SCREEN, made of fine mesh brass screen, prevents the carbide dust and sludge from entering and clogging the gas tube—locks in place by a slight turn. No felt or other gas strainer is required. Keep the screen clean.

8th. THE RUBBER GASKET is square and of the highest grade rubber—very resilient and especially made to resist the action of acetylene gas.

9th. THE REFLECTORS are detachable and made of brass, nickel plated, and highly polished—rimmed with strong wire with 2 prongs which fit holes in lamp.

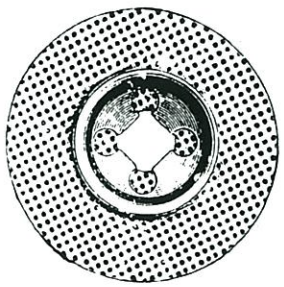
10th. THE UMBRELLA is made of brass with vents—rimmed with strong wire with two prongs which fit holes in lamp—constructed so it protects the flame from water. Illustrates severe test of lamp burning under a full force stream from faucet. Umbrellas and Reflectors are interchangeable.

Parts for Uncle Sam Lamps



REFLECTORS

No.		Each
326.	Size 3 inches. For No. 306 and 308 Lamp	$0.35
330.	Size 4 inches. For No. 310 and 312 Lamp	.50



SCREENS

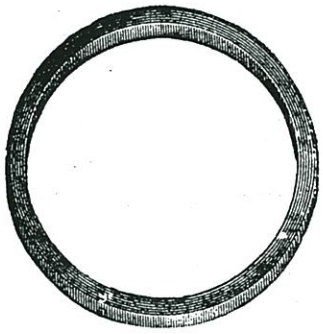
No.		Each
336.	For No. 306 Lamp..	$ .20
338.	For No. 308 Lamp..	.20
340.	For No. 310 Lamp..	.25

VALVE STEMS

No.		Each
346.	For No. 306 Lamp.	$ .50
348.	For No. 308 Lamp.	.50
350.	For No. 310 Lamp.	.75

UMBRELLA

No.		Each
324.	For all Lamps	$ .25



GASKET

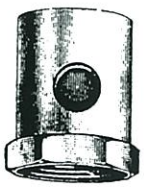
No.		Each
316.	For No. 306 Lamp..	$ .10
318.	For No. 308 Lamp..	.10
320.	For No. 310 Lamp..	.15

BURNER TIPS

No.		Each
354.	For all Lamps	$ .10

TIP AND PILLAR

No.		Each
344.	For all Lamps.	$ .25



TIP PROTECTOR

No.		Each
334.	For all Lamps	$ .25

THE MINERS' FUSE-LOCK: A PERCUSSION-CAP REMOTE FUSE LIGHTER

by **Wendell E. Wilson**
4631 Paseo Tubutama
Tucson, Arizona 85715

In 1805, many years before the idea of a cartridge bullet was conceived, the "percussion lock" (successor to the venerable flintlock) was invented by the Reverend Alexander John Forsyth in Aberdeen, Scotland. Basically it consisted of a small amount of fulminate of mercury which was placed in a pivoting magazine and struck with a hammer. The fulminate would ignite and send a hot jet of flame through a hole to set off a charge of black powder and thus discharge the gun. This was a tremendous improvement in speed and reliability over the flintlock.

With the financial backing of none other than James Watt, Forsyth patented his system in 1807. Napoleon is said to have offered him £20,000 for his secret, but he refused. It went through many stages of evolution by other inventors (the "patch lock," "pill lock," "tube lock," etc.), culminating in the "cap lock," invented by the English artist Joshua Shaw in the early 1820's. This innovation had the fulminate in a cap over the end of a tubular steel nipple. When struck by the hammer, the flame would shoot through the nipple and into the chamber. Within twenty years the cap lock had proven to be the most popular and practical form of firearm ignition.

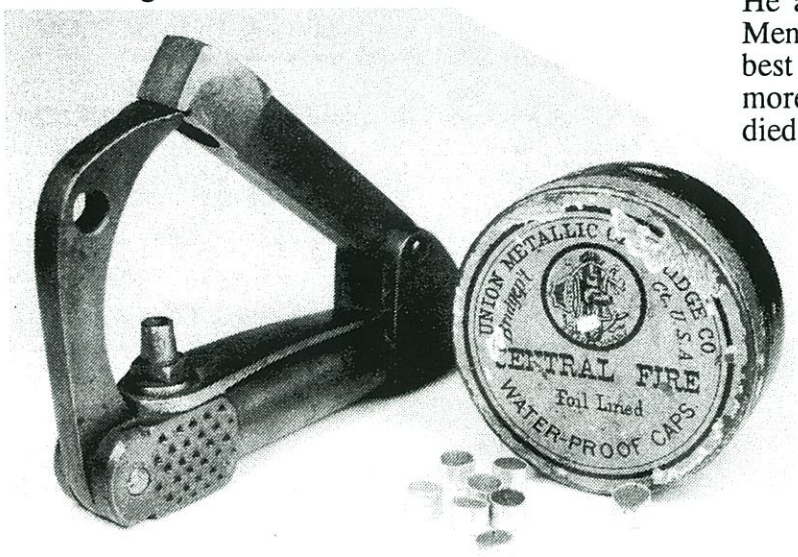


Figure 1. The original patent model of the "miners' fuse-lock" percussion-cap remote fuse lighter. It is all steel and is shown actual size (2.75 inches); Ted Bobrink collection. The percussion cap tin is from the author's collection.

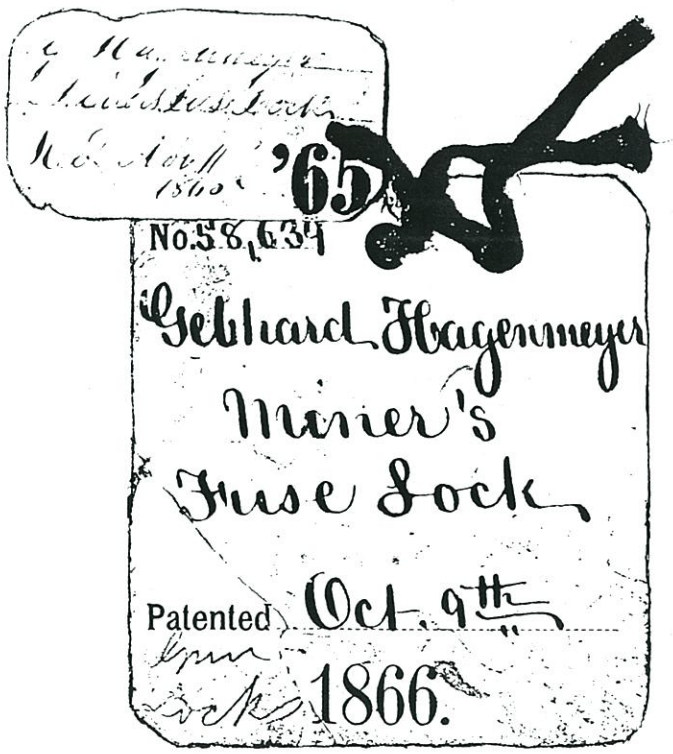
Prospectors and mining men from the 1830's to the 1870's carried percussion (cap lock) pistols, especially Samuel Colt's popular Paterson, Pocket, Dragoon, Navy and Army model revolvers. Consequently the percussion caps were universally available during those years, until the 1870's when metallic cartridges (modern bullets) finally took over the market.

It occurred to one resourceful inventor, Gebhard Hagenmeyer in Big River, California, that the percussion cap system could be used to ignite fuse as well as firearms. The ingenious device shown here (patented Oct. 9, 1866) was the result.

Gebhard Hagenmeyer was born December 1, 1831, in Wurtemburg, Germany. His farther was a mechanic, and taught him the trades of gunsmithing, blacksmithing and machining. Hagenmeyer emigrated to the United States around 1852, and settled with his brother Joseph in the Mendocino area north of San Francisco; they were the first white men to live there. Gebhard became a naturalized citizen in 1863, and worked with his brother at their water-powered saw mill, then later as a blacksmith on the Indian reservation near Fort Bragg, and after that as an engineer at the Mendocino saw mill. He also built at least two water towers in the Mendocino area. He was considered one of the best machinists on the coast. By 1880 he had more or less retired, and on May 13, 1901, he died in San Francisco. (Information compiled by Wilma Tucker from articles in the *Mendocino Beacon* 7/2/1879, 9/20/1884, 8/27/1887, 5/15/1901, from the 1880 census, and elsewhere.)

Hagenmeyer's fuse-lock operates as follows: A fuse was split at the end to better expose its powder core, and then was inserted into the hole at the back (right) end of the device. It was pushed in about 2 inches. Then the hammer or striker arm was raised and latched into position with the brace arm. When raised, the hammer (powered a heavy bar spring) depressed a small spike at the back end of the bar spring into the fuse, securing the fuse against slipping out. A percussion cap was then placed over the nipple, and a cord was tied through the hole in the brace arm. The miner retreated to a safe distance, then yanked on the cord. The brace arm was disengaged, allowing the hammer to strike the cap, which fired a jet of flame through the nipple to the fuse, igniting it. When the hammer fell, the securing spike was withdrawn from the fuse, releasing it. The miner then reeled in his fuse lighter before it could be buried or damaged by the ensuing blast. I tried it myself and it works (my ears are still ringing).

Figure 2. The original patent model tag.



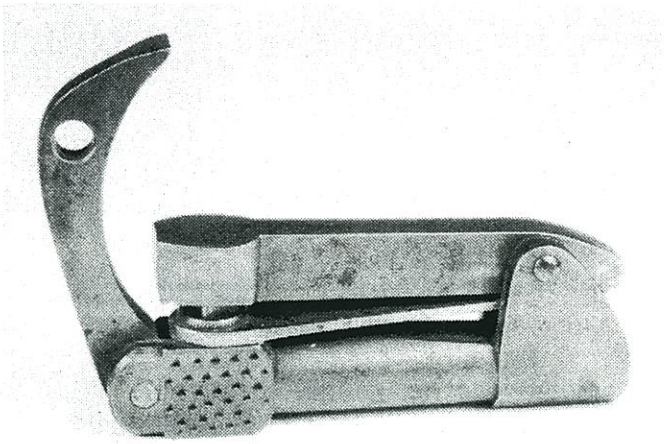


Figure 3. Side veiw of original patent model.

I am not aware of this device ever having achieved any popularity, probably because nervous miners simply allotted a longer length of fuse if they wanted more time. The patent model shown here is the only known example. But it was a clever idea for those circumstances when extracting one's self from the area set with charges might be awkward (and one didn't want to get hung up while the fuse was burning). Or for those miners who wished to economize on fuse.

Hagenmeyer's invention may actually have been inspired by an earlier device. His patent description clearly implies that percussion caps had previously been employed in some fashion for lighting fuse. He describes his own invention as "a new and useful *improvement* in miners' fuse-locks." However, I am unaware of any such earlier devices. Perhaps a reader can fill in the missing piece of the historical puzzle?

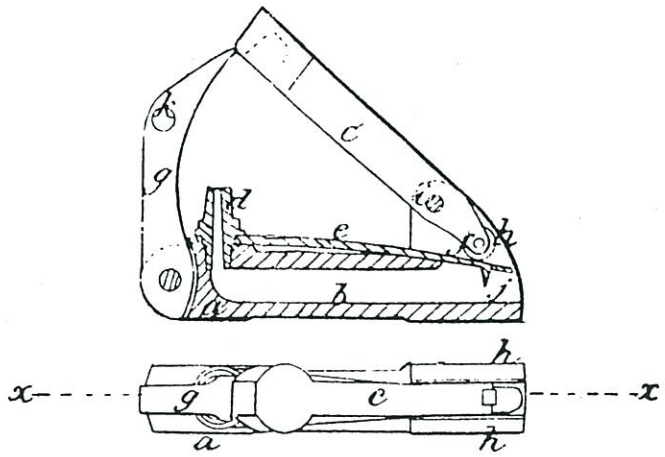


Figure 4. Original patent drawings.

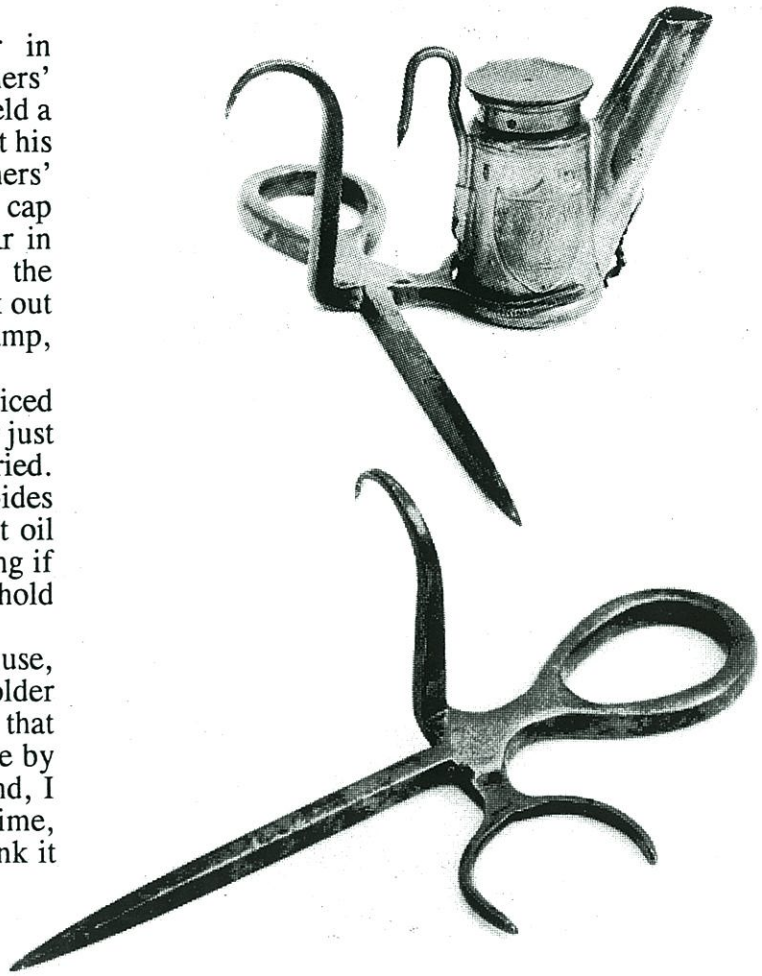
A Holder For Carbides Or Oil Lamps?

by **Ted Bobrink**
12851 Kendall Way
Redlands, California 92373

The other day an antique dealer in Pasadena called and told me he had a miners' candleholder that was made very well and held a larger than normal candle. When I arrived at his shop, I was surprised to find not a miners' candleholder, but a very well made carbide cap lamp holder. This carbide holder is similar in construction to a candleholder, except for the holder having two rounded prongs that stick out to firmly hold a narrow waisted carbide lamp, such as a Baldwin or early Guy's Dropper.

One day I was fooling around and noticed that an oil lamp would clamp into this holder just as readily as some of the carbide lamps I tried. The fact that only the small waisted carbides would fit, yet just about all of the different oil lamps I tried fit really well, has me wondering if the maker intended for this holder to hold carbides or oil lamps?

When the early carbides came into use, most of them had a small waist and this holder could very well have been designed for that purpose. The fact that this holder was made by a blacksmith, and is probably a one of a kind, I suppose we will never know. In the meantime, I am going to keep an oil lamp in it. I think it looks better that way. What do you think?



An Update To The 1989 MAC Cap Lamp Survey

Dave DesMarais is in the process of updating the carbide cap lamp survey conducted by the *Mining Artifact Collector* in the Fall of 1989. On the following page are the preliminary results of his on-going update.

Dave has concentrated his efforts in rarity groups seven thru ten up to this time. Groups zero thru six were ordered based on the original MAC survey and his perceptions of their recent availability. He is very interested in hearing suggestions and comments from the MAC readers as to whether another in-depth formal survey should be conducted.

Anyone who has lamps in these groups (7-10) are encouraged to contact Dave DesMarais, 1015 Woodland Ave., Menlo Park, CA 94025 (415-322-0778) or one of the MAC editors.

CAP LAMP RARITIES - AN UPDATE

Rarity	Lamp Name	MAC	DJD
0	Premier	Still Mfgd	
	Butterfly	Still Mfgd	
1	Justrite (Streamlined)	332	---
	Auto-Lite	624	---
	Guy's Dropper	518	---
2	Justrite (horizontal)	670	---
	Justrite (plastic)	---	---
3	Baldwin (Pinchwaist)	140	---
	Baldwin (Lighting Bug)		---
	Justrite (vertical)	96	---
4	Simmons Pioneer I	73	---
	Simmons Pioneer II		---
	Grier I (vertical)		---
	Grier II (vertical)	75	---
	Grier III (vertical)		---
	Victor (ribbed body)	65	---
	Sun Ray	63	---
	Buddy (Ashmead)	50	---
	Wolf (dome top)	50	---
	Grier I (horizontal)		---
	Grier II (horizontal)	42	---
	Grier III (horizontal)		---
	Lu-Mi-Num	54	---
5	Arrow	30	---
	X-Ray (Fulton-Imperial)	32	---
	ITP Float Feed	41	---
	Shanklin Metal Products	25	---
	Springfield	25	---
	Pathfinder	19	---
	Elkhorn	29	---
6	Demon Strike Light	14	---
	Zar	16	---
	Hansen	11	---
	Gem	16	---
	Brite Lite (side feed)	19	---
	Force Feed	13	---
	Gee Bee	12	---
7	Ever Ready	13	15
	Defender (beaded body)	12	15
	Maple City	11	14
	Scranto	12	14
	Square Lite (Guy's)	10	13
	Victor (non-Justrite)	11	12
	Brite Lite (top feed)	10	11
	The Buddy (Justrite)	7	11
	Scoby	5	11
	Wolf (flat top)	6	11

Rarity	Lamp Name	MAC	DJD
8	Anthracite	7	10
	Daylight (Pow & Han)	4	5
	(Autolite style)		5
	Maumee	5	10
	Sure Light	2	9
	Dry Lite	2	8
	Grier (pinchwaist)	4	8
	Milburn	3	8
	Fulton (X-Ray)	2	7
9	X-Ray (beaded body)	6	6
	Scranton	5	5
	Shanklin Mfg. Co.	4	5
	American	2	4
	Anton (rectang. top)	1	4
	Hold-A-Lite	3	4
	Pocahontas	2	4
	Schneiders Lamp	1	4
	Snell	1	4
	X-Ray (ribbed body)	3	3
	Belcro	1	3
	Oshkosh	1	3
	Union Carbide	3	3
	Victor (beaded body)	3	3
	Abercrombie & Fitch	4	2
	Black Diamond	1	2
	Defender (ribbed body)	---	2
	What Cheer	3	2
	Grier (octagonal)	2	2
	Imperial Hardsg. (Grier)	2	2
	Imperial Hardsg.(X-Ray)	2	2
	Justrite #77 stick	2	2
	Norleigh Diamond	1	2
	Number 50	2	2
	S. E. Simmons	2	2
	S & S	1	2
	Wolf (early cyl. top)	2	2
10	Anton (cylinder top)	1	1
	Funk Bros.	1	1
	H. Gall	---	1
	Ni-Bi	1	1
	Premier (Hardsocg)	3	1
	Red Star	1	1
	Steindropper	1	1
	T. R. Jones	1	1

Explanations:

Simmons Pioneer I: (See MAC #14, p. 24, Fig. 4)
Simmons Pioneer II: (See MAC #14, p. 24, Figs. 1 & 2)
Grier I (vertical): (See MAC #7, pp. 8 & 12)
Grier II (vertical): (See MAC #7, pp. 8 & 12)
Grier III (vertical): (See MAC #7, pp. 9 & 12)
Grier I (horizontal): (See MAC #7, pp. 5 & 12)
Grier II (horizontal): (See MAC #7, pp. 6 & 12)
Grier III (horizontal): (See MAC #7, pp. 6 & 12)

THE GIANT POWDER COMPANY

by **Mark Bohannan**
Star Route Box 107E
Oro Grande, California 92368

One of the most successful powder companies in America, especially in the West, was the Giant Powder Company. They were the first company to manufacture dynamite in America. The company was incorporated in California on August 13, 1867, and was the only company in America contracted to produce dynamite according to Alfred Nobel's patent.

There were many plant explosions throughout the Giant Powder Company's history, but the largest--in terms of material damage and explosives destroyed--occurred on July 9, 1892. The explosion basically destroyed the plant, magazines, warehouses and office buildings.

The cities of Berkeley, Oakland and even San Francisco received considerable damage. With the neighboring towns objecting to the Giant Powder Company's rebuilding of their plant at the same location, a new location was needed.

It so happened that at this time, the Safety Nitro Powder Company had a plant in the same general area. Unlike the Giant Powder Company--which had a considerable amount of business on its books but no plant--the Safety Nitro Powder Company had a plant but an insufficient amount of business to operate the plant at its full capacity.

On August 22, 1892, negotiations to combine the two companies were concluded and the Giant Powder Company, Consolidated was incorporated.

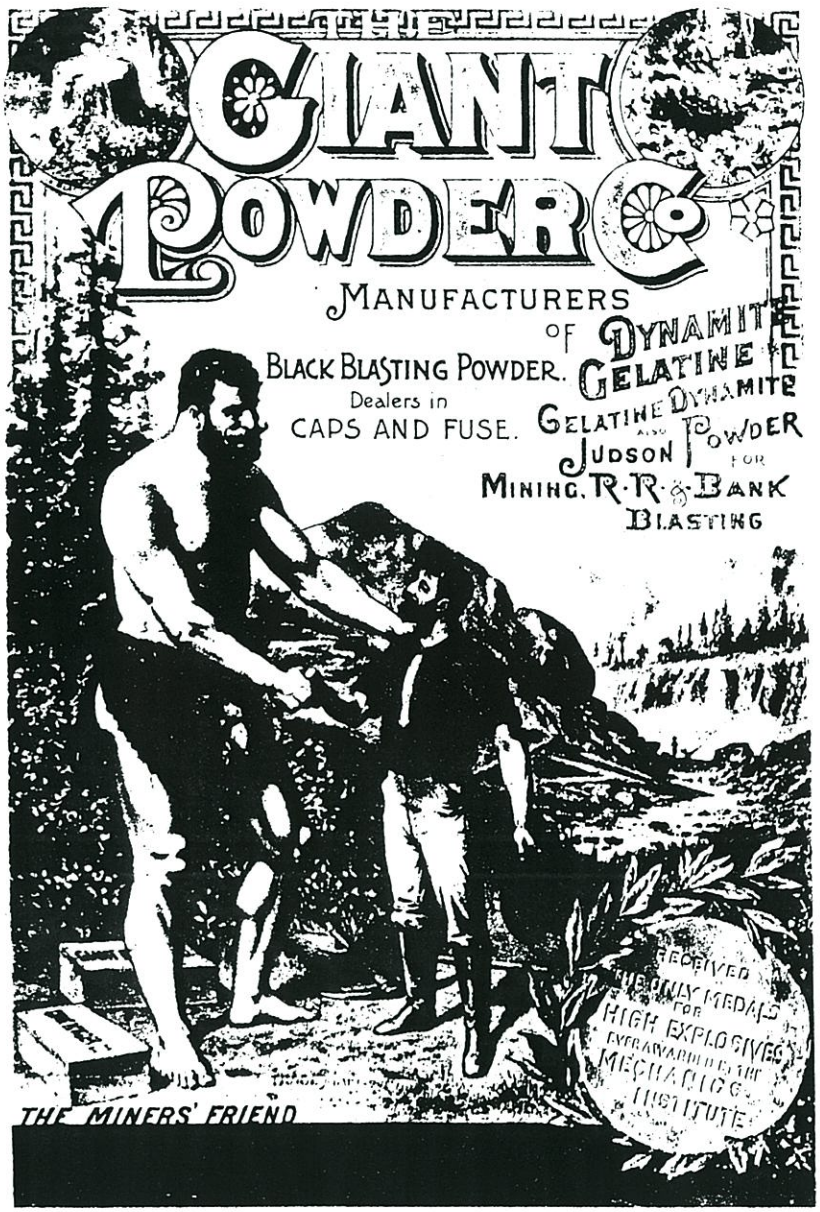


Figure 1. Reprinted poster (8" x 11.25") by the Atlas Chemical Industries, Inc.

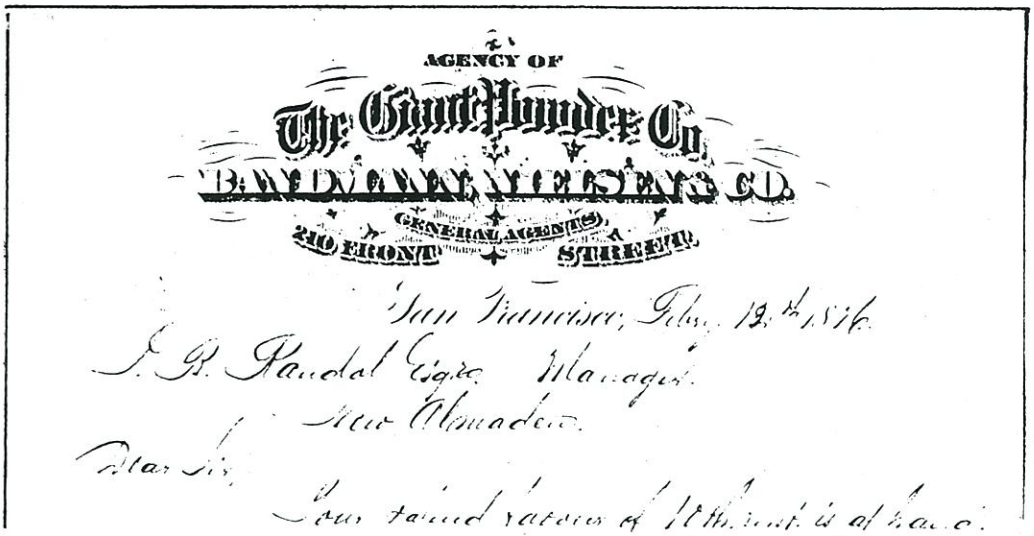


Figure 2. An 1876 Letterhead from the Giant Powder Company (8.5" x 11").

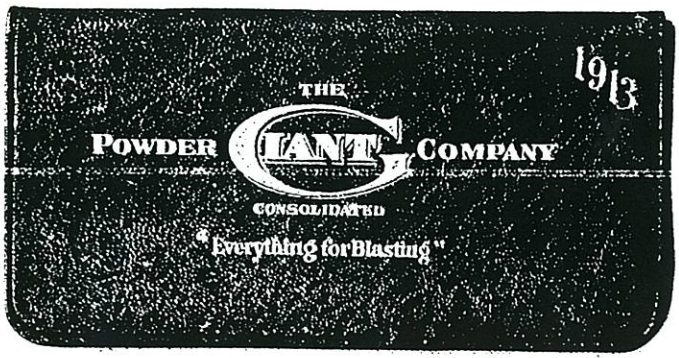
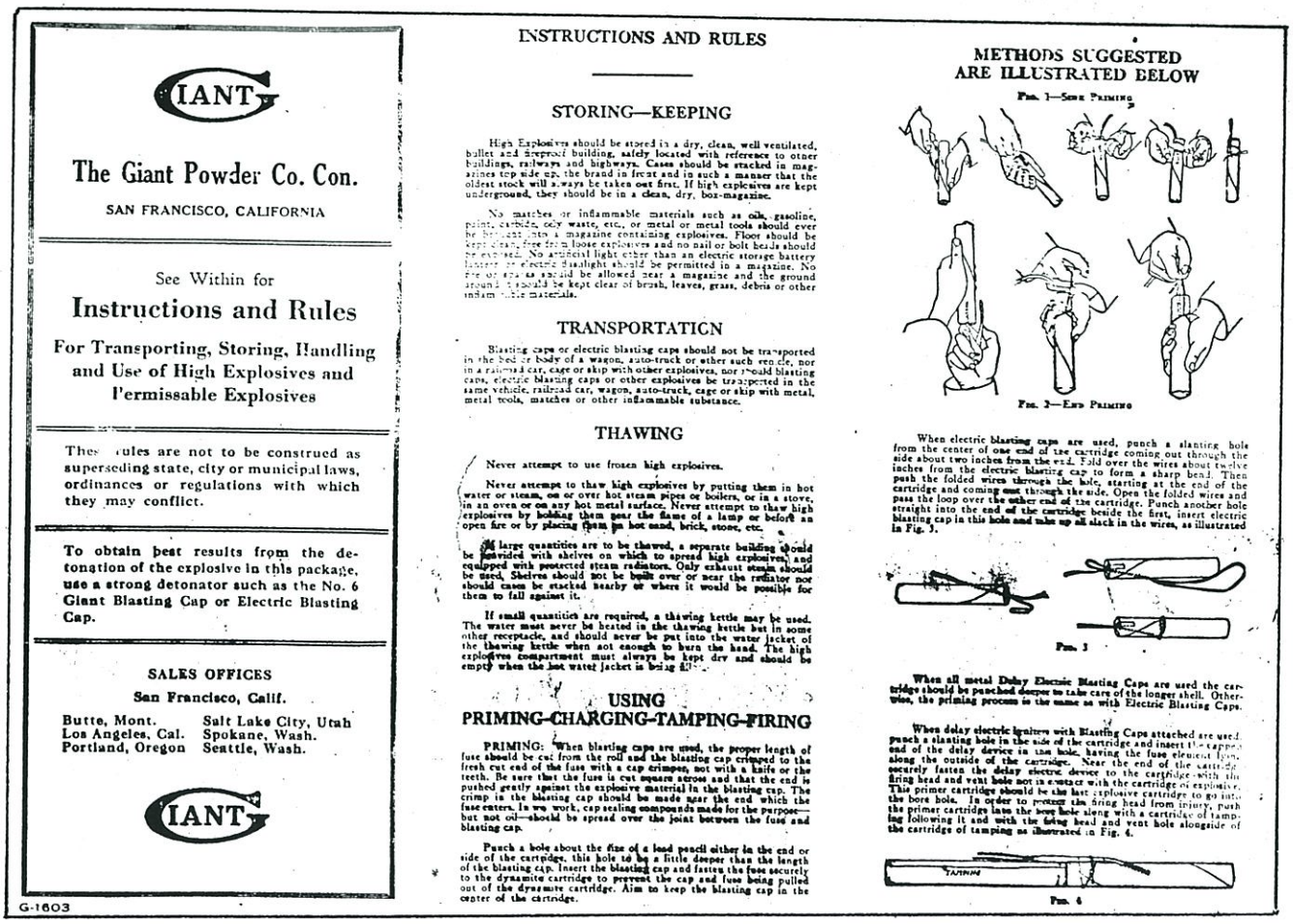


Figure 3. A 1913 light brown leather Giant Powder Company pocket calendar notebook.

Figure 4. Giant Powder Company dynamite box instruction sheet (10.75" x 7.75").



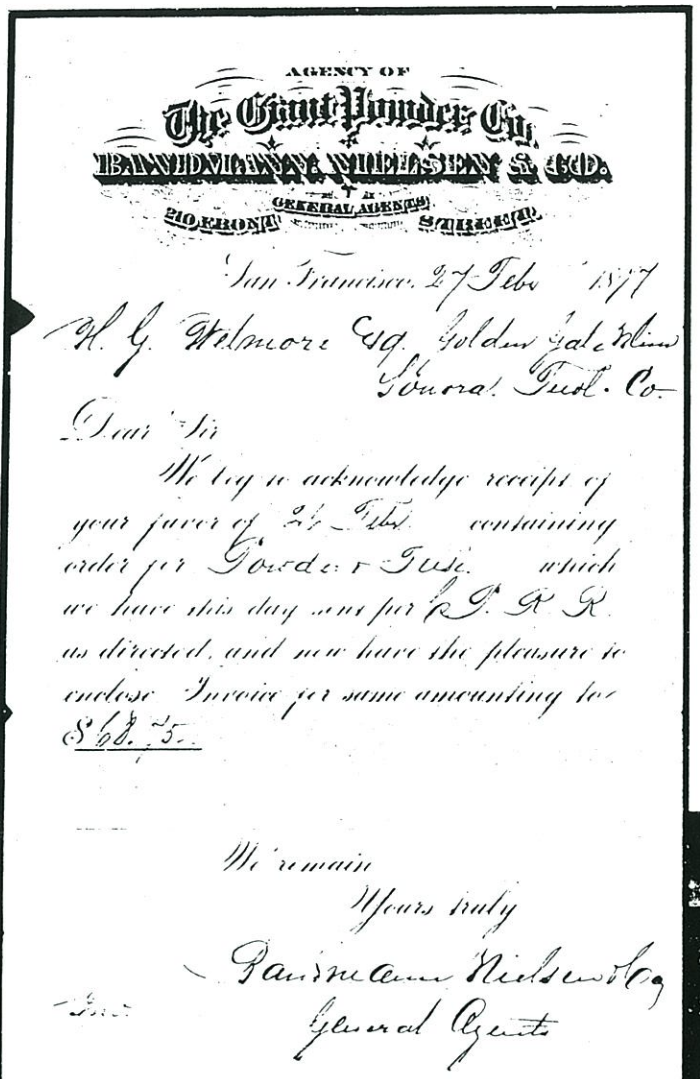
After the break-up of the E. I. du Pont de Nemours Powder Company in 1912, the newly formed Atlas Powder Company was left without an explosives plant in the West.

By 1914, the Atlas Powder Company had acquired a controlling interest in the Giant Powder Company, Consolidated. Although the affairs of the Giant Powder Company, Consolidated were managed by the Atlas Powder Company since 1916, the two companies maintained separate corporate structures.[1]

According to dynamite box instruction sheets, it appears that the corporate separation between the Atlas Powder Company and the Giant Powder Company, Consolidated was maintained until around 1935/1936. After this time it appears that the Giant Powder Company, Consolidated ceased to exist as a separate corporation. The "Giant" brand name was retained by the Atlas Powder Company for the dynamite that they sold in the West.

There are a variety of artifacts known from the Giant Powder Company, some of which are shown here.

Figure 5. An 1877 Giant Powder Company billing receipt (5.5" x 8.75").


AGENCY OF
The Giant Powder Co.
BALDWIN & WILLSEY S. F. CO.
GENERAL AGENTS
PIONEER STEAM WORKS

San Francisco 27 Febs 1877

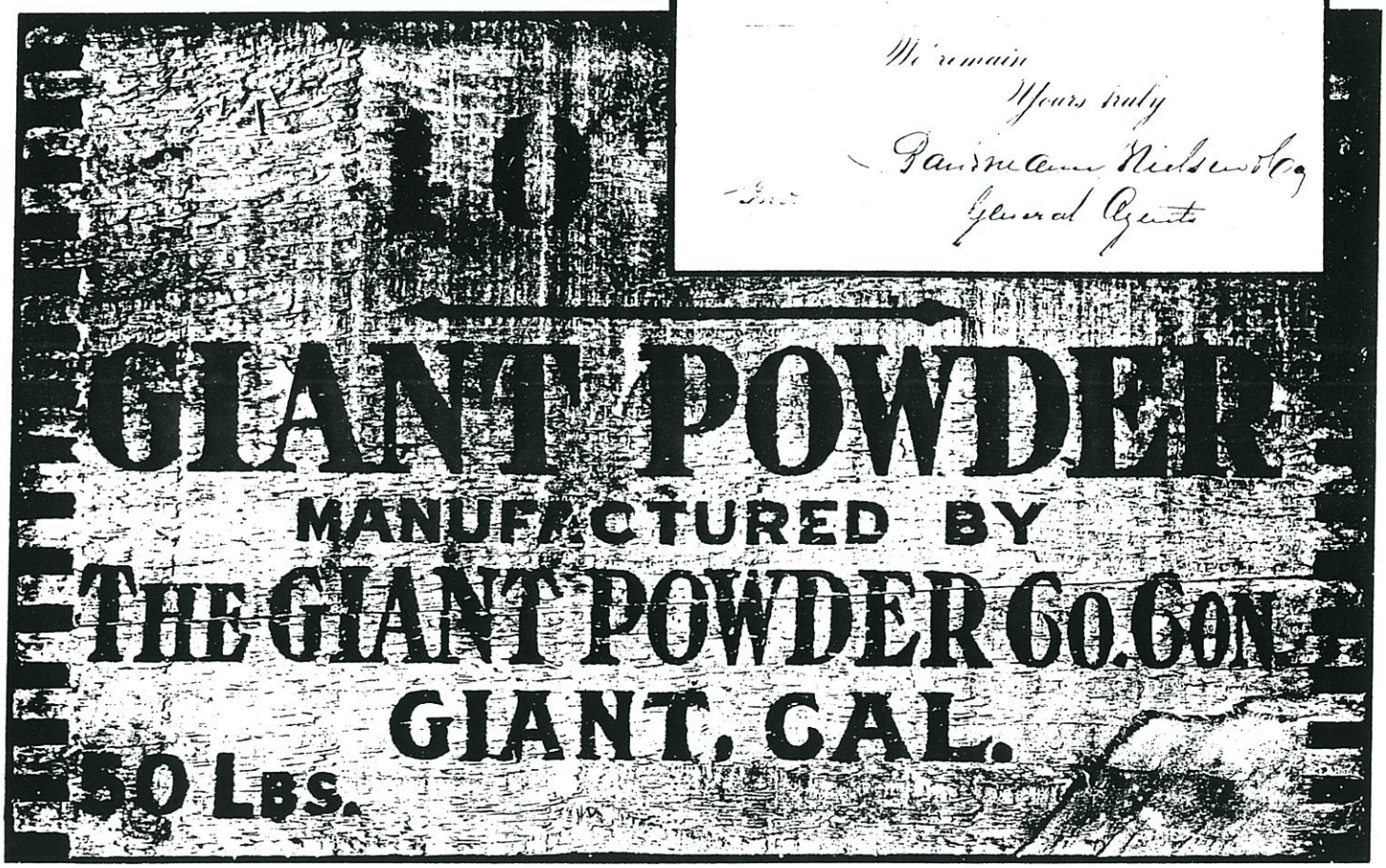
H. G. Welmore Esq. Golden Gate Mine
Consol. Gold Co.

Dear Sir

We beg to acknowledge receipt of your favor of 24 Febs containing order per Powder & Fuse. which we have this day sent per R. G. R. R. as directed, and now have the pleasure to enclose Invoice per same amounting to $68.75.

We remain
Yours truly
Baldwin & Willsey Co
Genl Agents

Figure 6. Powder box end (11.5" x 7").



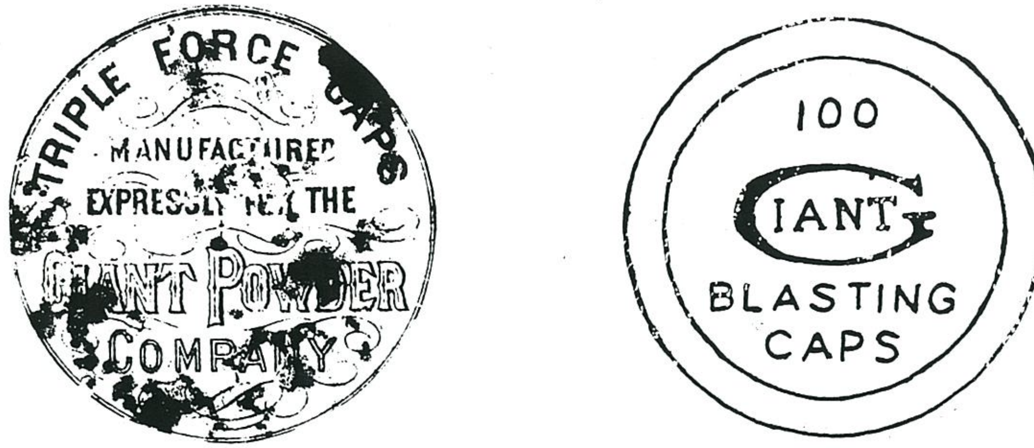


Figure 7. Two 100 cap blasting cap tins from the Giant Powder Company. The tin on the left is the earlier tin and has a black and white paper label on the lid (John Johnson collection). The tin on the right is a later tin and has an embossed lid (Don & Dave White collection).

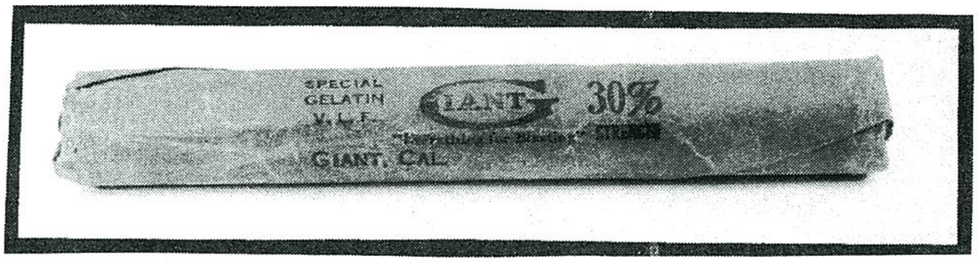
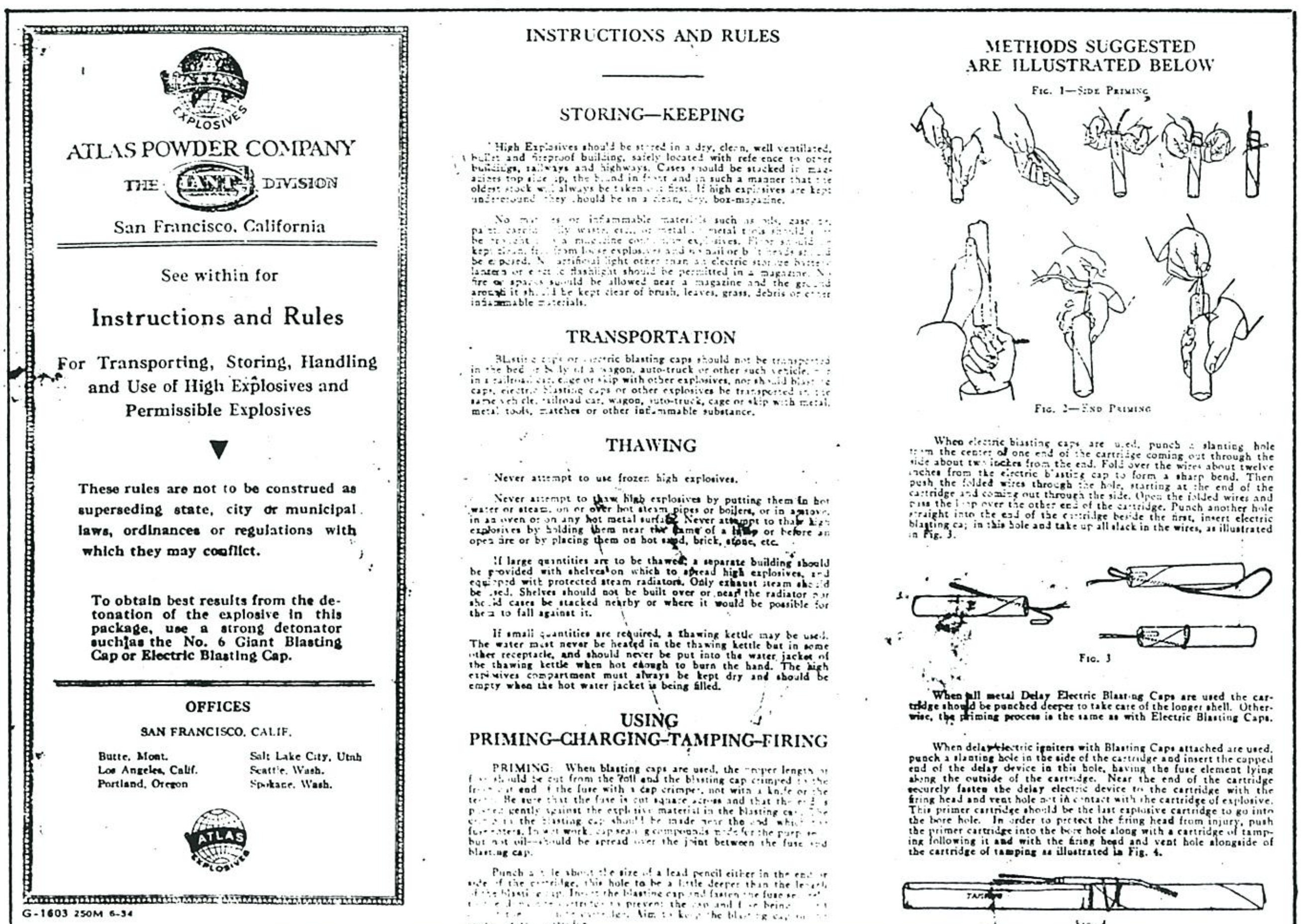


Figure 8. The wrapper from a stick of 30% dynamite from the Giant Powder Company. The size of the stick is 1 $^1/_8$ x 8. (Mark Bohannan collection)

Figure 9. 1934 Giant Powder Company dynamite box instruction sheet, probably just issued after to the dissolution of the company (10.75" x 7.75").



ATLAS POWDER COMPANY

THE GIANT DIVISION

San Francisco, California

See within for

Instructions and Rules

For Transporting, Storing, Handling and Use of High Explosives and Permissible Explosives

These rules are not to be construed as superseding state, city or municipal laws, ordinances or regulations with which they may conflict.

To obtain best results from the detonation of the explosive in this package, use a strong detonator such as the No. 6 Giant Blasting Cap or Electric Blasting Cap.

OFFICES

SAN FRANCISCO, CALIF.

Butte, Mont. — Salt Lake City, Utah
Los Angeles, Calif. — Seattle, Wash.
Portland, Oregon — Spokane, Wash.

G-1603 250M 6-34

INSTRUCTIONS AND RULES

STORING—KEEPING

TRANSPORTATION

THAWING

Never attempt to use frozen high explosives.

USING

PRIMING—CHARGING—TAMPING—FIRING

METHODS SUGGESTED ARE ILLUSTRATED BELOW

Fig. 1—Side Priming

Fig. 2—End Priming

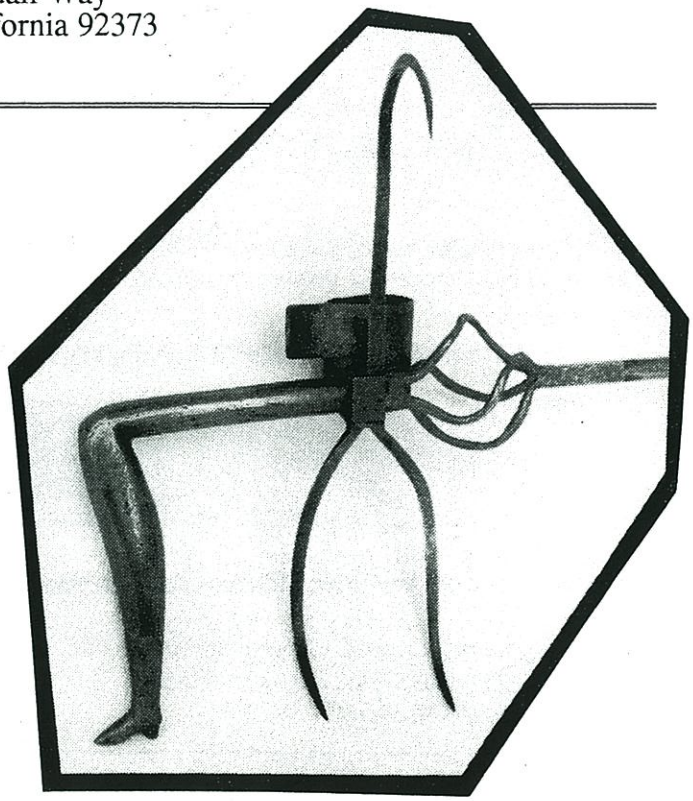
Fig. 3

When all metal Delay Electric Blasting Caps are used the cartridge should be punched deeper to take care of the longer shell. Otherwise, the priming process is the same as with Electric Blasting Caps.

Fig. 4

A Fancy Gal-leg From The Collection Of John C. Johnson

by **Ted Bobrink**
12851 Kendall Way
Redlands, California 92373



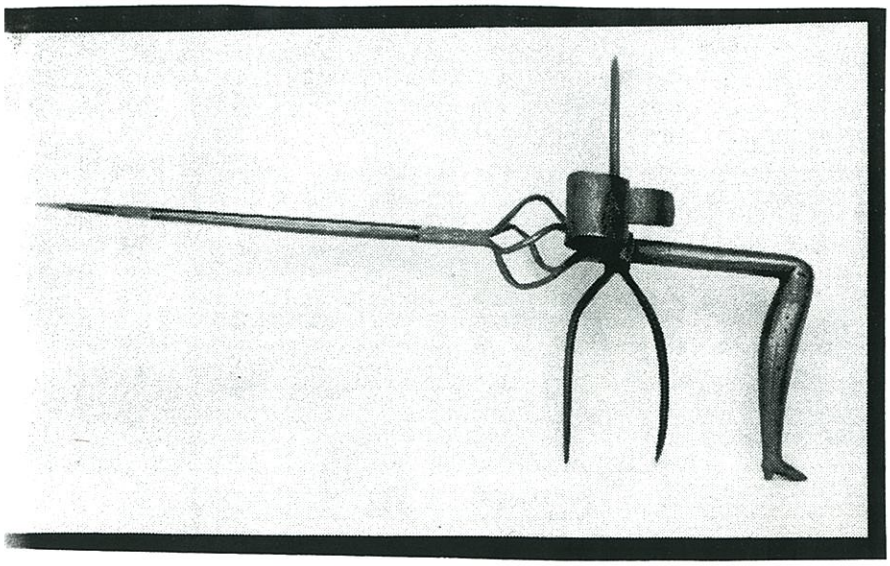
Over the years I have seen my share of gal-leg candlesticks, and the one that stands out as the best, and by far the most unique, is the one that John C. Johnson brought to our reunion this year. This fantastic candlestick is a full 12 inches long, and as you can see, the large gal-leg makes up the complete handle of the candlestick along with the long and elegant hook and claw.

What I find to be the most unique feature of John's candlestick is the one-piece split shaft. The shaft, as you can see, has been split into four separate strands to make it look somewhat like a rope that has come untwisted. I have seen this done before with wrought iron lamps, but never to a miner's candlestick. You may think, as I did, that the splitting of the shaft renders it weak at that point, but you can actually apply quite a bit of pressure to the stick in any direction and it remains very stout.

Obviously, this candlestick was made as a presentation piece and intended to be admired for its workmanship. To me, that is the one thing that sets miners' candlesticks at the top and apart from all other mining artifacts. Of all of the different types of American mine lighting--carbide lamps, safety lamps, oil-wick lamps and candlesticks--the candlesticks, taken as a whole, show the most imagination in the many different designs.

As you can see by John's candlestick, some examples are truly sculptures--one-of-a-kind works of American folk art.

Of course not all candlesticks were intentionally artistic, some were just mass produced, machine made mechanical devices too. But there is that category of "Fancy Candlesticks" with many fine examples, of which one is illustrated here.



Shown from left to right are Andy Martin, John Johnson and Herb Dick

A Patented Oil Wick Reflector

by **Tony Moon**
2763 E. Willow Wick Drive
Sandy, Utah 84093

On June 1st, 1909, Zachariah Hough and Leslie Weaver of Banning, Pennsylvania, were granted patent number 923,655 for a reflector that attached to the lid of an oil wick lamp. The primary objective was to provide a movable reflector which would help (or not interfere) when the lamp was being filled with oil (I doubt this was much of an improvement as most reflectors would not interfere when a lamp was filled). The second objective was to allow the miner to observe the interior of the lamp as it was being filled. This sounds a little more effective as all conventional reflectors would cast a shadow over the lamp lid area and one would have to fill the lamp by feel. The patent drawing for this improved reflector is shown in Figure 1.

Two examples of this reflector are shown in Figures 2 and 3. Both reflectors are marked "PAT JUNE 1ST 1909" and the reflector on the Grier lamp has the additional marking "WEAVER & HOUGH, BANNING PA." The larger reflector on the Grier has a bracing system similar to the patent drawing with the brace assembly soldered to the lid. It is certainly possible that the reflector was added after the lamp left the factory, but somehow I doubt it. The brace on the Hardsocg lamp is an integral part of the lid with double "U" raised reinforcing with the reflector.

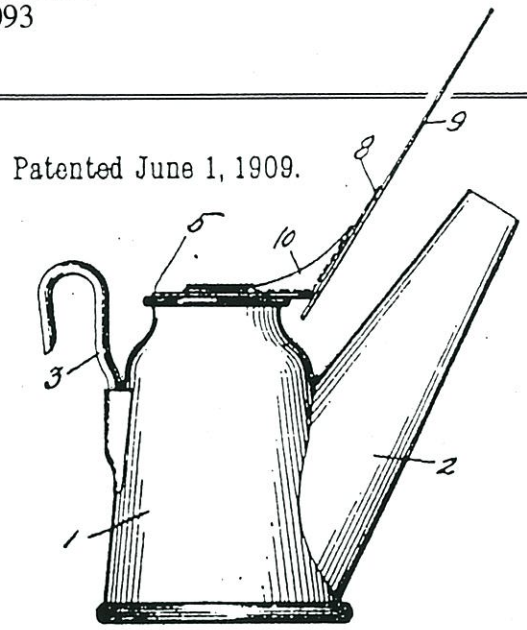


Figure 1. The patent drawing for an improved reflector by Zachariah Hough and Leslie Weaver.

I have seen only one other example of this reflector and it was on a Grier identical to the one in my collection. I would be very interested in hearing about other examples, especially if they are on other brands of oil wicks.

Many thanks to Henry Pohs for tracing the patent number for me.

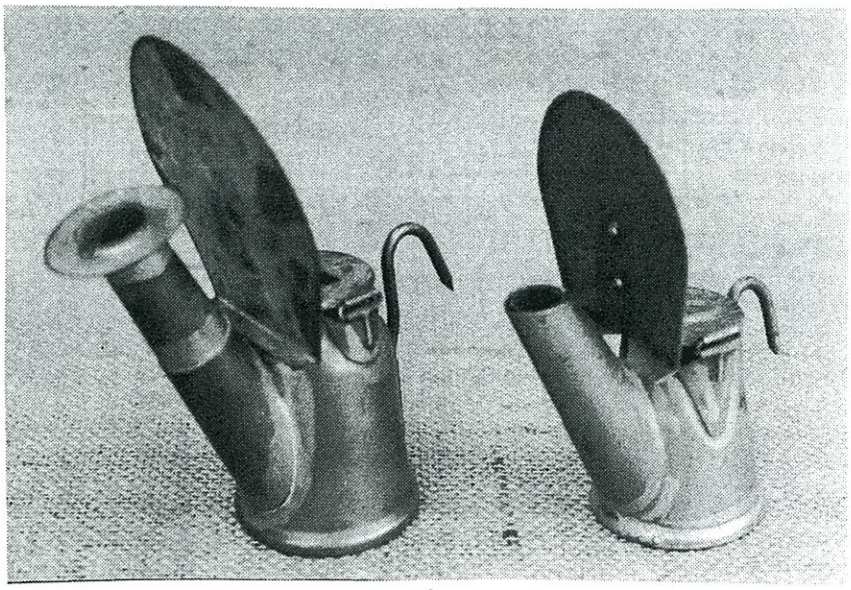


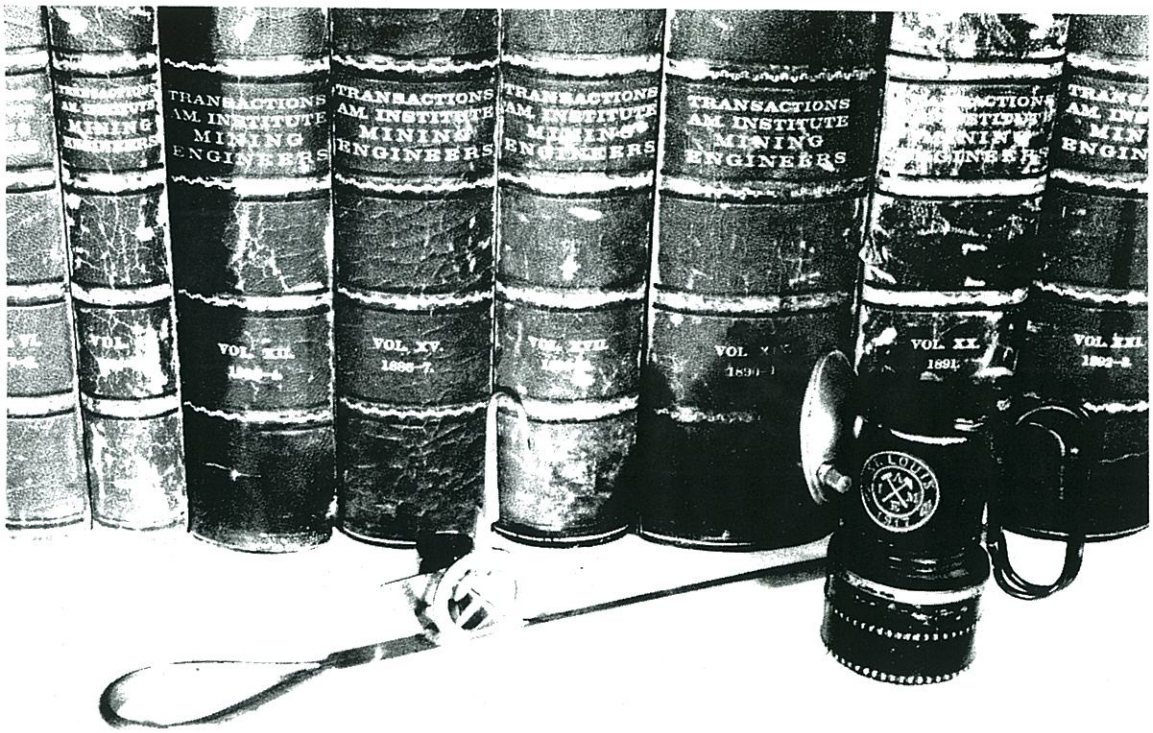
Figure 2. Left: Brass and tin drivers lamp marked on the spout with Grier star marking in shield; single spout with drip ring. Right: Tin face lamp marked on the side with Imperial, Hardsocg marking in shield; double spout. (Both lamps from the author's collection)

ITEMS FROM THE AMERICAN INSTITUTE OF MINING AND METALLURGICAL ENGINEERS

by **Jim Steinberg**
2425 Cooley Place
Pasadena, California 91106

The American Institute of Mining and Metallurgical Engineers (AIME) was founded on May 16, 1871, in Wilkes-Barre, Pennsylvania. The purpose of the twenty-two founders was to further the knowledge of the members in mining and metallurgy. The AIME began publishing its *Transactions* in 1873. These volumes contained papers written by experts in their respective fields. The bulletin of the AIME was started in 1905, initially as a bi-monthly publication, but eventually as a monthly. In 1919, the bulletin was replaced by the magazine: *Mining and Metallurgy*.

Figure 1. Perhaps the most well known AIME collectible is the Brite-Lite carbide lamp that commemorated the 115th meeting in October of 1917 in St. Louis, Missouri. While the Brite-Lite itself is not an extremely rare lamp, the version with the AIME tag on it has only a few examples known at this time. This lamp is 3.75 inches tall to the top of the water tank. It is a superintendents' style lamp equipped with a hat hook and folding hand handles. The AIME tag on the side of the water tank is 1.125 inches in diameter. (Author's collection)



Perhaps the most famous member of the AIME was Herbert C. Hoover. Herbert Hoover was a world renowned mining engineer, who published a number of technical books including *Principles of Mining*. Together with Lou Henry Hoover, he translated Georgius Agricola's 1556 Latin mining manual *De Re Metallica* into English for the first time. He became the president of the AIME, and incidentally in case the reader has forgotten, also the thirty-first president of the United States of America.

The AIME continues to meet and publish to this day.

A number of items are known to collectors which are related to the activities of the AIMe. Many of these are associated with the regular meetings of the organization. The common element in these items is the crossed pick and hammer logo of the AIME, somewhat reminiscent of the symbols so often seen on frog lamps.

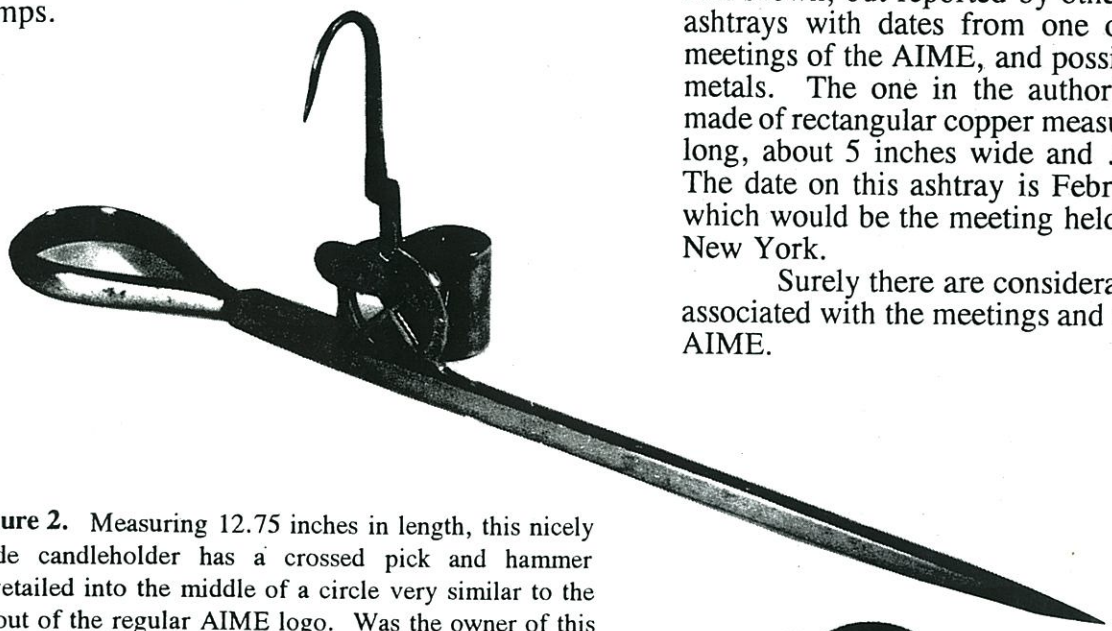


Figure 2. Measuring 12.75 inches in length, this nicely made candleholder has a crossed pick and hammer dovetailed into the middle of a circle very similar to the layout of the regular AIME logo. Was the owner of this stick an engineer at a hard-rock mine or just a member of the AIME? (Author's collection)

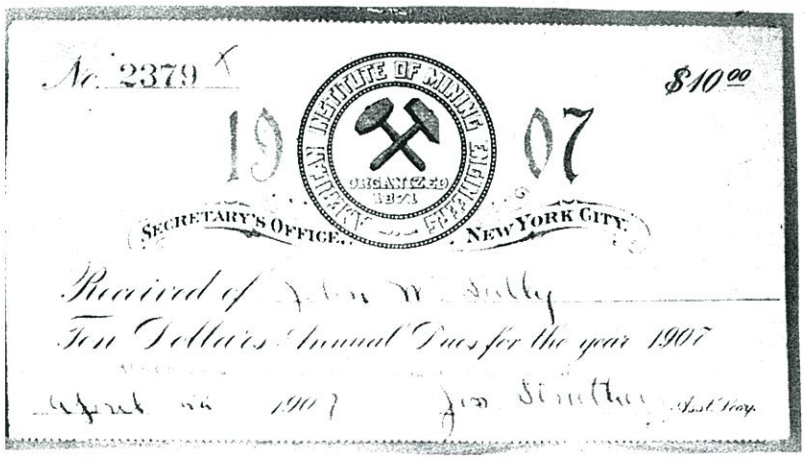


Figure 5. The receipt shown here is self explanatory and measures 5.75 inches wide by 3 inches high. (Author's collection)

Figure 3. The aluminum token shown here measures one inch in diameter and is from the meeting held in Colorado in June of 1889. (Mark Bohannan collection)

Not shown, but reported by other collectors are ashtrays with dates from one or more of the meetings of the AIME, and possibly in different metals. The one in the author's collection is made of rectangular copper measuring 6.5 inches long, about 5 inches wide and .5 inches deep. The date on this ashtray is February 19, 1930, which would be the meeting held in New York, New York.

Surely there are considerable other items associated with the meetings and members of the AIME.

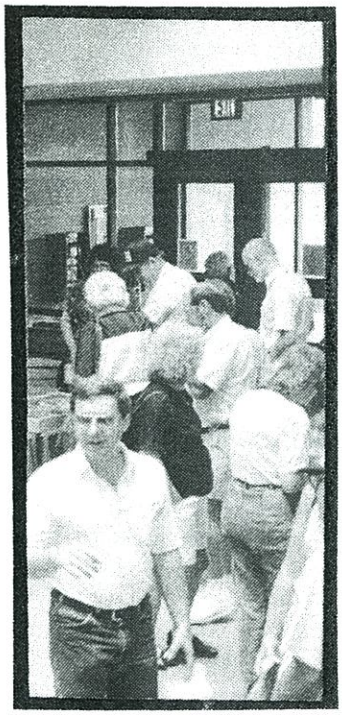
Figure 4. This lapel pin measuring .5 inches in diameter is brass on a blue enamel field. It was reportedly distributed at the Butte, Montana meeting in August of 1913. Note the design between the hammer and pick which appears to be either a derrick or some sort of headframe. (Author's collection)

THE THIRD ANNUAL EASTERN MINING ARTIFACT COLLECTORS' SWAP AND REUNION

by **Tony Moon**
2763 E. Willow Wick Drive
Sandy, Utah 84093

Congratulations and many thanks to Gary Bindocci and Kelley Deem for hosting the third annual reunion--held on Saturday, July 25th in Morgantown, West Virginia--which was the biggest and best ever! Action started early on Friday at the Morgantown Holiday Inn and by mid-evening twenty-eight rooms were registered to collectors and dealers. As many were two to a room, there must have been at least forty people busy wheeling and dealing! Keith Williams, Harry Cairns, Dave Gresko, Paul Johnson and others all had many items for sale and business was brisk. Jim Van Fleet once again sold buttons to commemorate the event. Several collectors from the western part of the country flew out to the show. Bob Schroth and Dave Des Marais from California, Ruth and Tony Moon from Utah, Keith Williams and Henry Pohs from Colorado, and Brad Ross from Wyoming all made the long trip.

Set up was early Saturday morning at the Comer Building on the campus of West Virginia University. Approximately 25 to 30 tables had been reserved and were set up in the atrium. It was an ideal setting with the adjacent museum, and its fine collection of safety lamps, available for browsing. Mark Ballard had a nice display of UMWA items with some rare safety lamps for trade or possible sale, and Ken Rupp's underground mining diorama was also on display. Mike McLaughlin brought his Union Carbide cap lamp for show and tell. Other cap lamps seen included a Snell, TWO steel Ever Ready lamps, Two Schneider lamps, a What Cheer (looks like a Grier, looks like a Baldwin--no wonder there was a patent suit!), and last but not least an Anton. For the safety lamp fanatics there were several Ashworths (some for sale), several Pielers (some for sale), and a Clowes Hydrogen lamp (available for trade only from Lester Bernstein). I lost track of the oil wicks!



Who is this guy?

Lots of nice goodies to choose from on the tables.

The University arranged for the showing of several old movies, a blues singer and a short drama about life in the coal fields entitled "Coal Camp Memories." I am afraid the attendance may not have been too good at these events as the action on the trading floor was so brisk. At times the attendance on the main floor must have been close to 100. I never did get an accurate count.

Icing on the cake was an auction od Saturday night at the Holiday Inn. Kelley Deem kindly volunteered his professional services as auctioneer and he and his team went to work. Highlights included a nice nickel plated Elkhorn (missing cap braces) at $375, an early brass unbonnetted Baby Wolf safety lamp at $625, an unfired Auto-Lite in the box at $45, a Lu-mi-num cap lamp with spade mount at $230, an Improved Ideal candlestick at $140 and a Shoulder patent candlestick at $160. Bob Schroth came away with a hoard of bargains--watch out, the antique malls of Southern California will be full of Bob's goodies (Guy's Droppers anyone!). Unlike Christie's and Sotheby's, no 10% buyer's premium was charged (don't get any ideas Kelley!).

Ruth and I plan to make it to the Fourth Annual and hope that the airlines co-operate with low fares next year!

Jim Van Fleet (sitting with his back against the wall) talking to Henry Pohs. Andy Martin in middle foreground. Kelley Deem looking at a "blue coal" sign.

Bob Guthrie (far left), and Chuck Young (center) talking to Keith Williams (far right) at Keith's table.

EASTERN MINING ARTIFACT COLLECTORS
COMER MUSEUM
WVU
1992
MORGANTOWN, WV

THE ZAR AND HOLD-A-LITE CARBIDE LAMPS

by **Mark Bohannan**
Star Route Box 107E
Oro Grande, California 92368

Over the years, there has been considerable debate as to whether the Hold-A-Lite carbide lamp was manufactured before of after the Zar carbide lamp. Many collectors believed that the Hold-A-Lite lamp was in the initial stages of production when Baldwin left Simmons and took the Hold-A-Lite with him and redesigned it into the Zar. I do not believe that this is the case, and my interpretation of the information available is as follows.

After leaving the John Simmons Company in 1913, Frederic Baldwin formed the Zar Manufacturing Company. The Zar Manufacturing Company was established at 320 Broadway, New York City--which had been Baldwin's address for other business activities for more than a decade. As Baldwin manufactured and patented his new Zar lamp, the John Simmons Company continued to manufacture and sell the earlier style "pinchwaist" Baldwin lamps.

It appears--according to ads--that sometime around 1914 or 1915, an arrangement between Frederic Baldwin and the John Simmons Company was reached for the later to market the Zar lamp.

By around the end of 1917, the Zar Manufacturing Company was in the process of going out of business. This is probably what prompted Baldwin to sell seventeen of his patents to the John Simmons Company. Almost all of these patents related to the Zar lamp. Probably prior to the actual purchase of these patents, the John Simmons Company had acquired the rights to these patents.

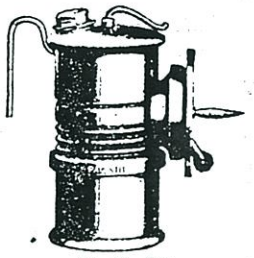
JOHN SIMMONS COMPANY

Manufacturers

Baldwin and Zar Carbide Lamp

(The Miners' Lighting Bug)

San Fransisco, Cal. NEW YORK Montreal, Can.



No. 71, Zar.

No. 25A.

No. 29.

No. 30.

No. 32A.

No. 38.

No. 29—38—30 are fitted with the Baldwin Patented Automatic Water feed, but have in addition a water cut-off operated by turning a screw at the top of the lamp. The No. 29 and 38 are nickel plated and are used by Superintendents, Engineers, Surveyors, Samplers, Foremen and Fire-bosses.

List prices—No. 29, $1.50; No. 38, $2.00; No. 30, $1.00.

No. 32—This is the most generally used lamp made. It is equipped with the Patented Automatic Water feed and gives the most satisfactory service with least attention from the user.

List price—$1.00.

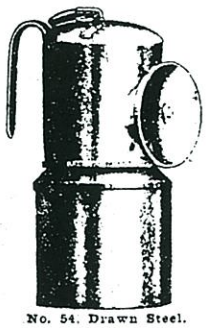
No. 25A—71 Zar, these are unquestionably the most satisfactory valve controlled lamps made. The water feed and flame size are controlled by means of the lever at the top.

List price—$1.00.

Drawn Steel Lamps—While these lamps are mostly used in Metal Mines, they are beginning to be used very generally in the coal fields. Many are now used as motor head lights and tail lights.

Made in two sizes with hand hooks or bail chains, and can be furnished with other attachments and special reflectors.

List prices range from $2.40 to $2.85.



No. 54. Drawn Steel.

There are but a few of the sizes and styles we manufacture. If further information is desired, kindly write us.

1915 MINING CATALOGUES

A PATENT CHART FOR THE ZAR/HOLD-A-LITE LAMPS

Patents on the Zar with plate.

June 6, 1911 (#994,365)
July 1, 1913 (#1,066,241)
Oct. 14, 1913 (# 1,075,960)

Patents on stamped Zar.

June 6, 1911 (#994,365)
July 1, 1913 (#1,066,241)
Oct. 14, 1913 (# 1,075,960)
Jan. 6, 1914 (#1,083,427)
Mar. 31, 1914 (#45,514)
Apr. 21, 1914 (#1094,358)

Zar related patents not on lamps.

#1,099,908 (June 16, 1914)
#1,101,982 (June 30, 1914)
#1,174,036 (Mar. 7, 1916)
#1,174,037 (Mar. 7, 1916)
#1,237,449 (Aug. 21, 1917)

Patents sold to Dewar Dec. 11, 1919.

#1,094,358

Patents sold to Dewar May 25, 1921.

#1,083,427

Patents sold to John Simmons Co. Oct. 11, 1918.

#821,580
#994,365
#1,066,241
#1,070,000
#1,075,960
#1,077,582
#1,083,427
#1,094,358
#1,099,908
#1,101,982
#1,115,157
#1,174,035
#1,174,036
#1,174,037
#1,174,112
#1,237,449
#1,237,450

Released

Patents unrelated to the Zar lamp.

Patents on Hold-A-Lite.

Dec. 17, 1901 (#688,926 or 689,163)
Mar. 11, 1913 (#13,542)
July 29, 1913 (#1,068,931)
Oct. 14, 1913 (# 1,075,960)
Jan. 6, 1914 (#1,083,427)
Mar. 31, 1914 (#45,514)
Apr. 21, 1914 (#1094,358)
June 13, 1914*
Oct. 27, 1914 (#1,115,157)

A reflector-mounted flint striker patented to Alonzo Roach, sold to Percy G. Dick on April 7, 1914 and resold on the same day to the Dewar Mfg. Company.

* This is a misprinted patent date. Patents were always granted on the Friday of each week. In June of 1914, patents were granted on the 2nd, 9th, 16th, 23rd and 30th. There were two Zar related patents granted in June of 1914, #1,099,908 on the 16th and #1,101,982 on the 30th. One of these is probably the intended patent date.

Figure 1. A circa 1914 Zar advertisement.

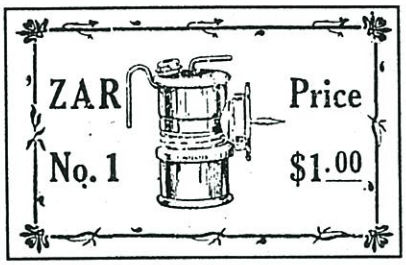


Figure 2. The top and one end flap of a Zar lamp box. The box is brown cardboard with black lettering and is 6 inches long by 3.25 inches wide by 2 inches high. (Bob Schroth collection)

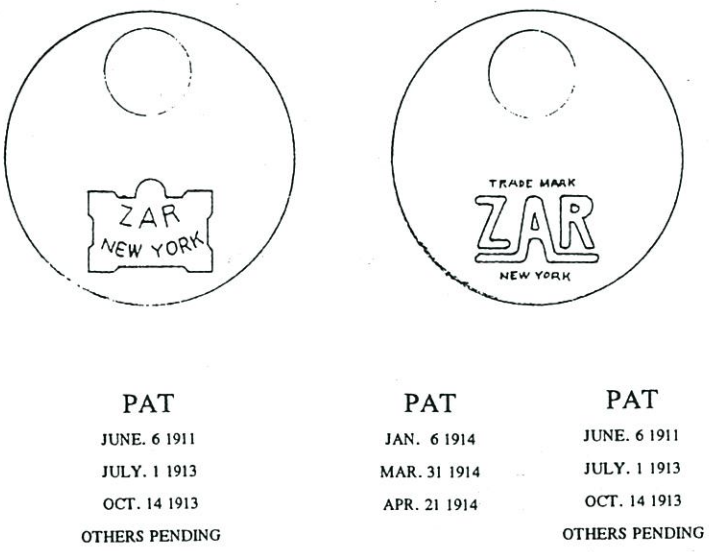


Figure 4. Drawings of the tops of the water tanks and the patent dates stamped on the side(s) of the lamps illustrating the two styles of Zar lamps. The style on the left is the earlier, yet more common style Zar lamp. (Drawings from Paul Kouts' *Miner's Carbide Lamp Reference,* Vol. V)

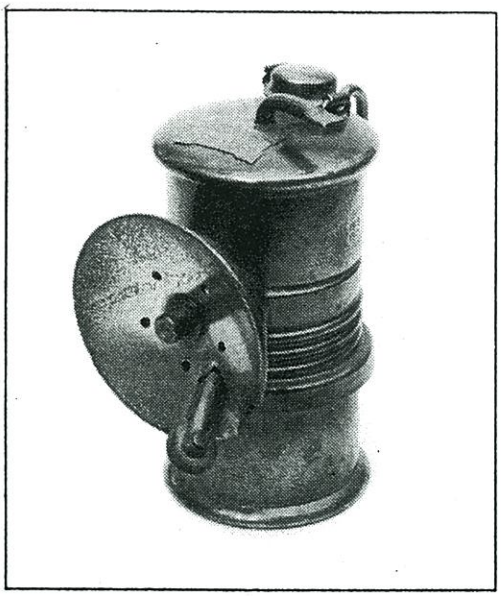


Figure 3. The Zar carbide lamp (3.875 inches tall). (Mark Bohannan collection)

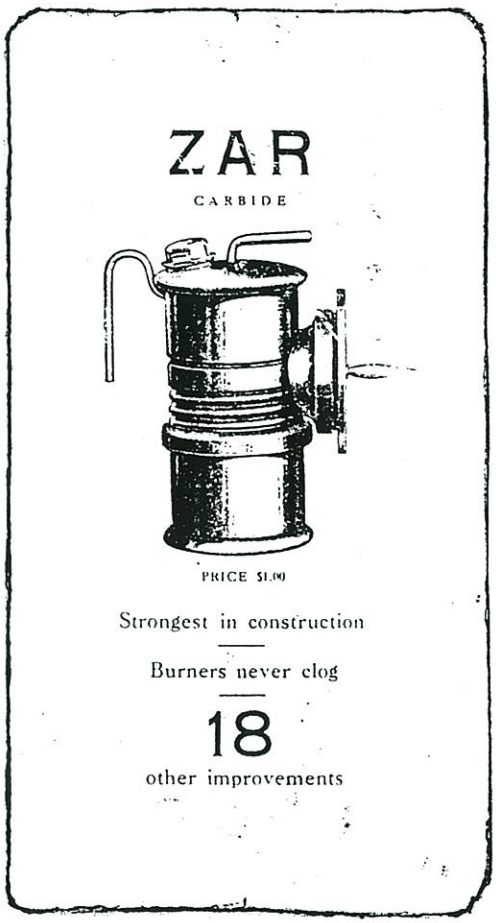


Figure 5. A four page, 3.25 inch by 6 inch pamphlet with blue-black printing describing the advantages of the Zar lamp that was enclosed in the lamp box in Figure 2. (Bob Schroth collection)

F. E. BALDWIN.
MINER'S LA[illegible].
APPLICATION FILED [illegible]

1,094,358. Patented Apr. 21, 1914.

Fig. 1.

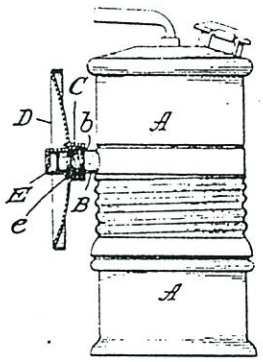


Fig. 2.

Fig. 3.

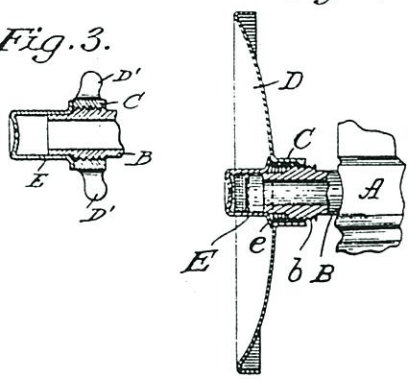


Figure 6. Zar patent filed May 16, 1913. This is the other major Zar patents Baldwin sold to Simmons on October 18, 1918, and was then sold to the Dewar Mfg. Company on December 11, 1919.

DESIGN.

F. E. BALDWIN.

LAMP BODY FOR MINERS' LAMPS.

APPLICATION FILED SEPT. 18, 1913.

45,514. Patented Mar. 31, 1914.

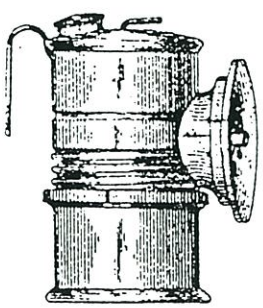


Figure 8. Design patent filed on September 18, 1913, by Frederic Baldwin for the "Zar" carbide lamp.

F. E. BALDWIN.
ACETYLENE LAMP.
APPLICATION FILED SEPT. 12, 1[illegible]

1,083,427. Patented Jan. 6, 1914.

Fig. 1.

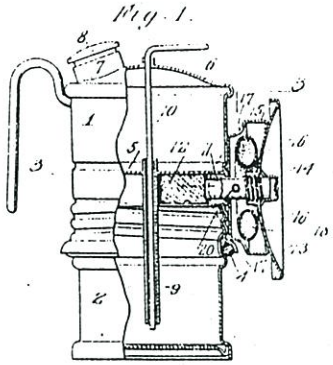


Fig. 2.

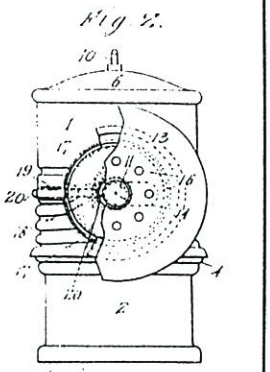


Fig. 3.

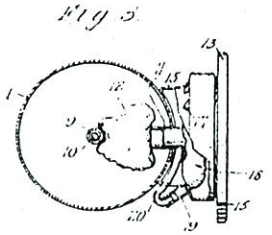


Figure 7. Zar patent filed September 12, 1913. This is the other major Zar patents Baldwin sold to Simmons on October 18, 1918, and was then sold to the Dewar Mfg. Company on May 25, 1921.

DIRECTIONS FOR OPERATING

The ZAR Lamp

ONLY carbide called granula- ted, or ¼ inch, should be used in this lamp. Larger sizes are liable to break the water tube.

Fill the carbide contain- half full of carbid-

The

p
ot
tin
Aft
of w
the
tube a-

To
it abou
down sl
top of th
right pos
burning.

Should
a half turn c
bring the fla
size; too muc
lamp to make

Water sho
end of the poki
25 drops per mi
it should drop slo
water valve and fo
from where it co
valve tube, scrape t
a little thinner.

Should it be impo
the lamp, owing to wa
on the burner, heat the
a lighted match unt
ignites.

The lamp is perfect- can be operated ting it

DIRECTIONS FOR OPERATING THE SPARKER

When the lamp is making plenty of gas, the palm of the hand is laid almost flat against the reflector with the lower part of the palm resting on the sparker wheel. The palm of the hand is held in this position momentarily, in order to collect the gas between the reflector and the palm of the hand, then by a rapid motion downward of the hand the wheel is rotated by the palm, and the lamp never fails to light. We would also state that these wheels have teeth like those of a circular saw, and operate only when turning in the proper direction. The part of the sparker carrying the wheel is flattened on one side. This flattened portion should rest on the reflector support, and when in this position the wheel is operating as required.

burners are easily cleaned by a fine needle or pin.

Figure 9. Instruction sheets enclosed in the bottom of the Zar lamp. The instruction sheets are printed in black and are shown at 64% actual size. (Bob Schroth collection)

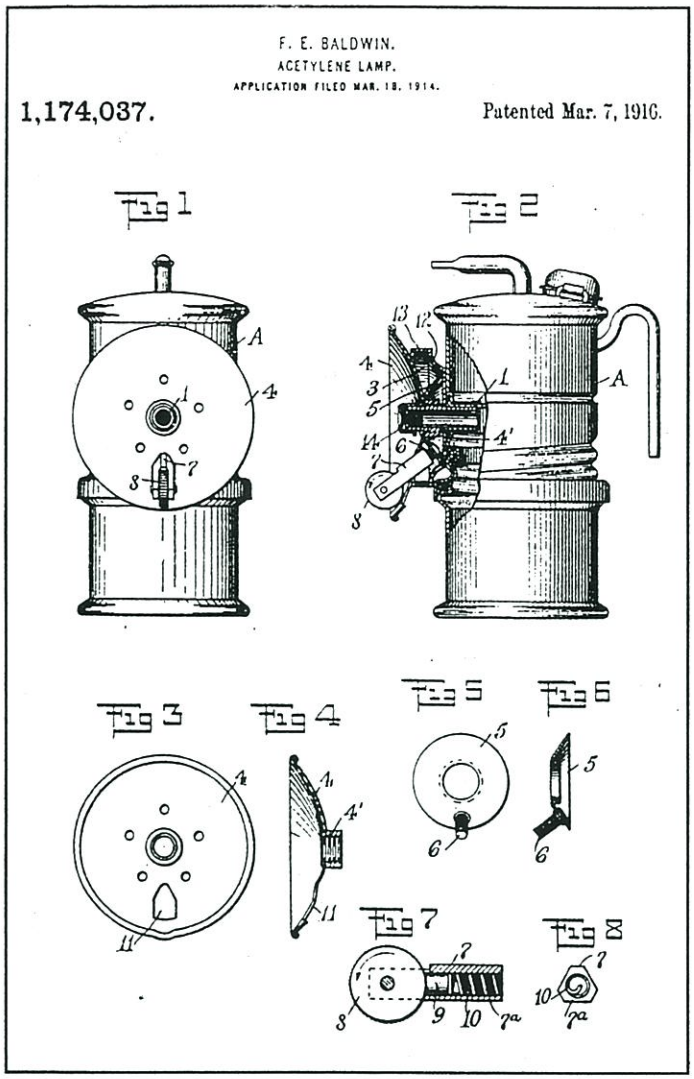


Figure 10. Zar patent filed March 18, 1914, detailing the unique Zar reflector and striker.

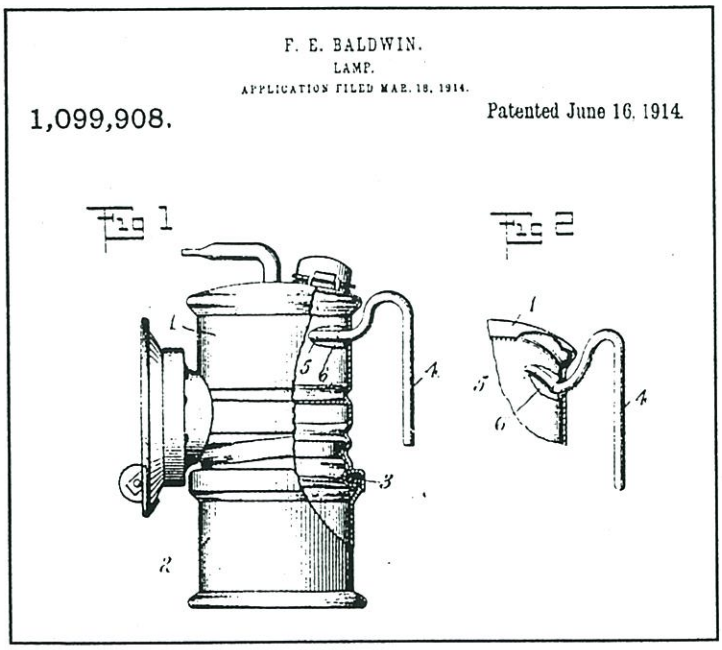


Figure 12. Zar patent filed March 18, 1914, detailing the attachment of the cap hook to the inside of the water tank.

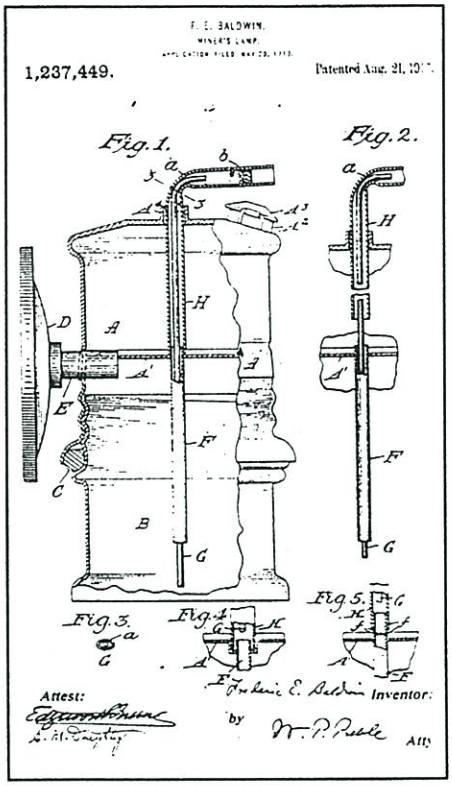


Figure 11. Zar patent filed May 20, 1913, detailing the Zar water control valve mechanism.

Again, according to ads, 1917 seems to mark the introduction of the Hold-A-Lite lamp by the John Simmons Company. This lamp is very similar in appearance to the Zar lamp. The water tank design is identical to the Zar except that the Hold-A-Lite tank had water lever notches added to the top of the tank. The base of the Hold-A-Lite was changed to resemble the base of the Simmons "Pioneer" lamp which had just begun to be manufactured. The Zar reflector was also replaced with a modified deep dished Simmons Pioneer reflector. The bottom of the Hold-A-Lite lamp is marked with the Simmons name and logo (Figure 14).

At the same time that the John Simmons Company bought the seventeen patents from Baldwin, they were also beginning to phase out the manufacturing of their carbide lamps. For this reason--and the scarcity of the Hold-A-Lite lamp--it appears that the lamp was manufactured for a very short time.

This is further illustrated by the fact that the John Simmons Company sold one of the major Zar patents (No. 1,094,358) to the Dewar Manufacturing Company on December 11, 1919. Then, on May 25, 1921, they sold a second major Zar patent (No. 1,083,427) to Dewar.

Even though in the 1921 Thomas' Register, there is listed in the section of leading trade names, "ZAR - DEWAR MFG. CO.," it appears that the Dewar Manufacturing Company never manufactured a Zar/Hold-A-Lite style lamp.

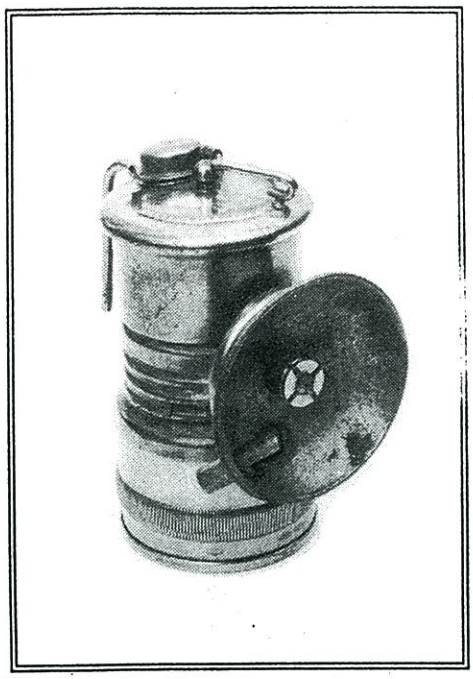


Figure 13. The Hold-A-Lite carbide lamp (3.75 inches tall). (Mark Bohannan collection)

One final comment, there is some evidence that when Frederic Baldwin began to manufacture his new lamp, the name "Zar" was not going to be the name of the lamp. According to a correspondence from Errol Christman to the *Lamp Post* in 1980, Errol had removed the Zar name plate on one of his lamps and discovered that under the plate the lamp was stamped:

BALCO
NEW YORK

The name "Balco" probably stood for Baldwin Company, in which a 1918-1924 New York Business Directory lists the "Frederic Baldwin Manufacturing Company" until at least 1924. Could these be the same companies? This is further exemplified by the fact that most of the Zar patents were filed for in the middle of 1913, yet the Zar trademark was not applied for until April 10, 1915, and then its usage date was stated as not being until January 1, 1914.

There are two styles of the Zar Lamps as shown in Figure 4, while only one style of Hold-A-Lite lamp known at this time.

References:

Clemmer, Gregg s., *American Miners' Carbide Lamps: A Collector's Guide to Americam Carbide Mine Lighting,* Westernlore Press; Tucson, Arizona, 1987.

Kouts, Paul L., *Miner's Carbide Lamp Reference,* Volume V; Published July 1982.

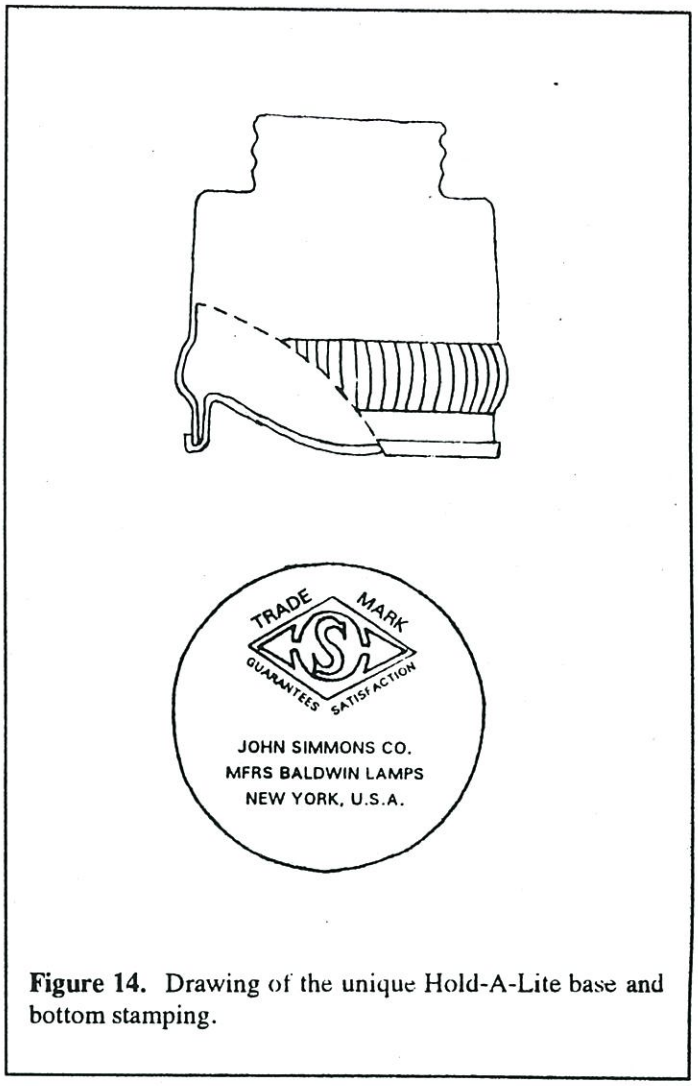
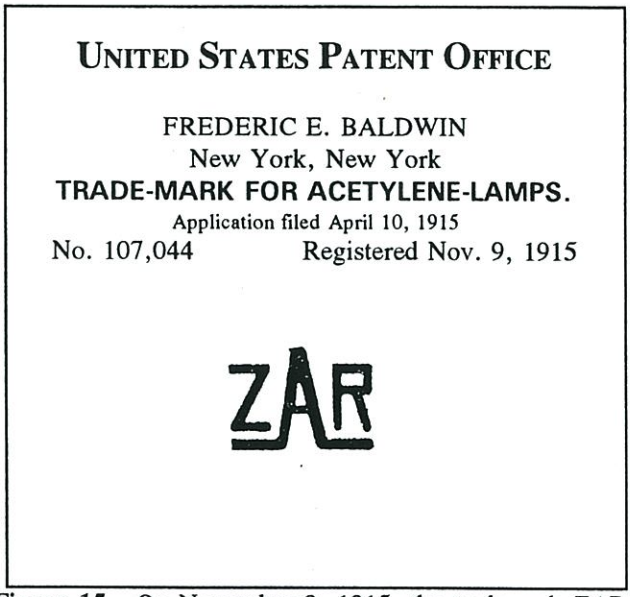


Figure 14. Drawing of the unique Hold-A-Lite base and bottom stamping.



UNITED STATES PATENT OFFICE

FREDERIC E. BALDWIN
New York, New York
TRADE-MARK FOR ACETYLENE-LAMPS.
Application filed April 10, 1915
No. 107,044 Registered Nov. 9, 1915

ZAR

Figure 15. On November 9, 1915, the trademark ZAR was registered by the Frederic E. Baldwin. Prior to being registered, this trademark had been used by Baldwin since January 1, 1914.

REPORT ON THE IMA HOKES COLLECTION

by **Wendell E. Wilson**
4631 Paseo Tubutama
Tucson, Arizona 85715

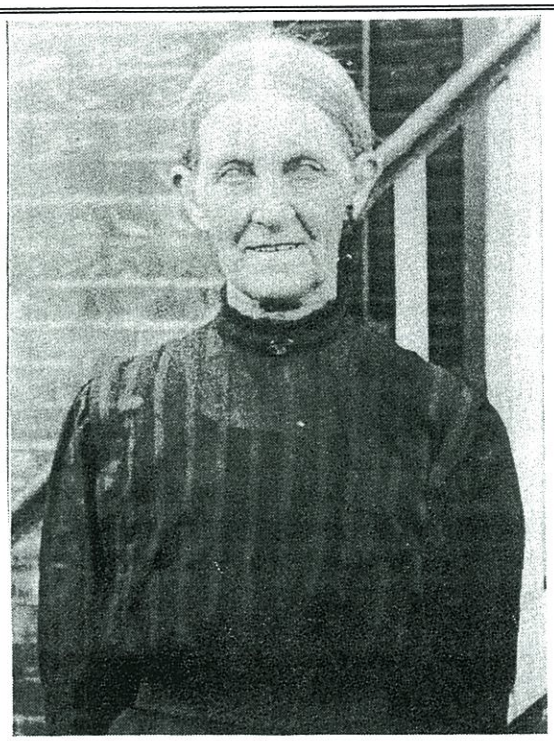
As mentioned in the editorial in an earlier issue of *Mining Artifact Collector,* the editors have harbored some doubts about artifacts in the collection of Ima Hokes of Goshen, Indiana. Suspicions were raised by the odd coincidences that (a) Ima's name sounds like "I'm a hoax," and (b) all of her patented items seem to have April 1st patent dates (April Fool's Day). Furthermore, no one can figure out how the square Blemus lamp from her collection (pictured in Issue #3, page 3) could have been screwed together. And doubts persist that her "droop-snoot" Trethaway lamp (Issue #7, page 31) and her Bodie 4-shot derringer/candlestick (Issue #11, page 13) might be fraudulent.

As a service to MAC readers, the editors dispatched me to Goshen, Indiana, at MAC expense, to check out Ima and her collection. Here is my report:

Flying first-class from Tucson to Indianapolis, I checked out my new camera equipment (purchased for this assignment) and composed in my mind a series of penetrating questions for Ima. The stewardess was kind enough to leave the bottle of Chivas on my tray table as I went through my arduous preparations. Deplaning at Indianapolis, I picked up my Mercedes 500 SL rental car, stopped on the way out of town for a quick dinner (I always like the prime rib and lobster combo, when in season), and drove out to Ima's sprawling farm in the country. Ima greeted me warmly and invited me in for cinnamon rolls and spiked lemonade, during which she told me something of her life.

Ima Ruth Hokes was born on April 1, 1899, of Albanian immigrant farmers, and was the eighth of eleven daughters, all given the middle name Ruth (after their mother). Ima always refused to use her middle name, however, and was unkindly referred to as the "Ruthless" Hokes.

She learned about mining by listening to stories at the knee of her two uncles, Irving



"Swifty" Hokes and Psalter Hokes, who had worked their way through many early mining camps, along with their brothers, Security Hokes and Jim "Diamond" Hokes. Security was unfortunately shot over a matter of some counterfeit mining stock certificates, and Diamond was hanged in 1881 for claim-jumping. The surviving two Hokes uncles had many exciting tales to tell, and it is from them that Ima later inherited several dozen rare and fascinating mining artifacts with which she started her collection. In 1918 Ima married Charles Patterson, the local gunsmith; under his tutelage she learned the gunsmithing trade as well, and contributed greatly to the success of the family business. Charles died tragically in 1933 after selling some forged Medieval German flintlocks and wheel-locks to an Italian gun collector in Chicago. His body was never found. Ima retired on a handsome insurance policy, reverted to using her maiden name, and coincidentally took up residence in Chicago for a few years with the very same gun collector. He died in 1936, after a shooting accident in his own home, and Ima inherited his enormous gun collection (excepting some recent models that were still in service among the family).

Returning to the Hokes farm in Goshen, she evicted those of her sisters who were still unmarried and rented out her extensive farmlands to tenant farmers. Over the succeeding 54 years she has had plenty of spare time to build her various collections.

The mining collection is housed in a fine series of antique glass cabinets. Each piece is cataloged and its history or provenance recorded in ledgers shelved above her roll-top desk.

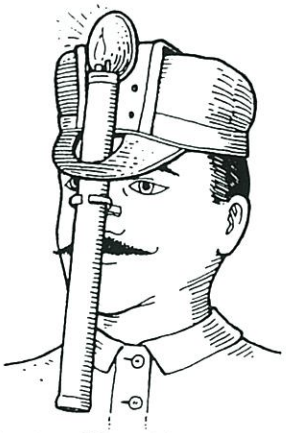
I first examined the "droop-snoot" Trethaway oil-wick lamp. Ima says it's the sole surviving example, which she bought in 1931 from Arlo Trethaway (son of the manufacturer). Arlo had kept it, against his father's wishes, as a humor item. Apparently the elder Trethaway had destroyed all the others, in embarrassment, after someone mentioned what they reminded him of. They never sold but a few examples anyway. In any case it's a beauty, and Ima says she paid $1,800 for it (in 1931!), so if anyone expects to buy it off of her they'd better be prepared to pay heavy money.

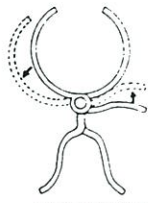
The Blemus lamp came next to hand, and I must admit I've never seen a miner's lamp made from bismuth before. Ima said it does screw together, despite being square, but only with great difficulty, and she preferred not to demonstrate because it is so old and brittle.

The magnificent Bodie 4-shot derringer/candlestick is an item she inherited from uncle Swifty, who worked claims in Bodie until things there got too hot for him. Why it bears the initials "T.B.," she doesn't know, but uncle Swifty may have obtained it from "T.B.," and always warned her something about never challenging someone to draw when your gun is stuck tight in a mine timber.

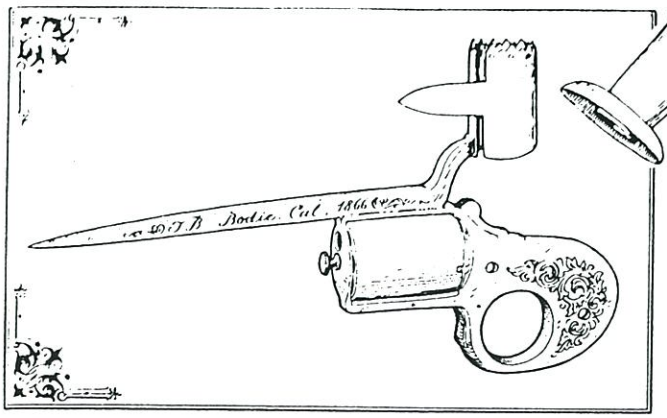
Having carefully examined the previously published artifacts and found them all unquestionably genuine, I moved on to the many other items, and found treasures galore. Among may favorites were a solid gold Varney candlestick marked "John A. Sutter, 1848"; a "Copper Queen" carbide lamp made of copper; a Maumee Triplex carbide cap lamp (a very strange looking thing); a Jewish Hanukkah candlestick with no less than nine thimbles; stock certificates from a number of unknown mines on the Comstock Lode (and I thought I knew them all); Adolf Sutro's personal miner's pick; three odd prototype carbide lamps stamped "Guy's Dribbler," "Guy's Sprinkler" and "Guy's Piddler"; and many many others.

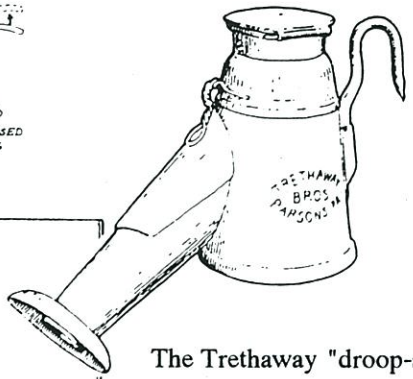
In future issues I'll be illustrating some of the many lamps I photographed while at the "Hokes Museum." Ima cordially invites any other collectors to stop by as well. If any of the MAC readers happen to pay her a visit and have a favorite lamp of hers they'd like to see illustrated, I invite them to write to me. I probably have a photo of it and will expedite a drawing for publication.





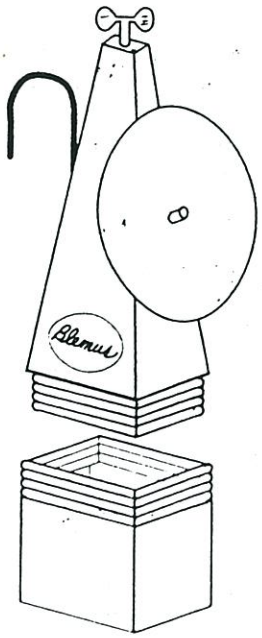
The Arnold Carbide Candle cap.





The Trethaway "droop-snoot"

Items from the
Ima Hokes collection

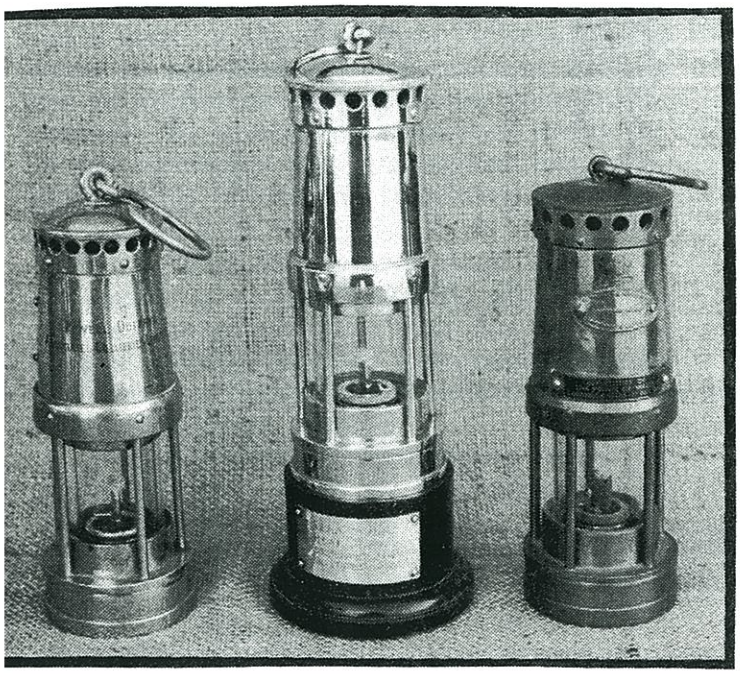


The Blemus lamp.

MINATURE SAFETY LAMPS FROM THOMAS AND WILLIAMS

by **Tony Moon**
2763 E. Willow Wick Drive
Sandy, Utah 84093

E. Thomas and Williams of Abedare, South Wales, have manufactured safety lamps since 1860 and are one of the most famous manufacturers of safety lamps in Great Britain. For many years they have manufactured a miniature lamp, some 6.5 inches high by 2.25 inches in diameter, as a presentation or commemorative item. The lamp was never intended for use underground and has no lock. However, they are very well made with a single copper gauze, typical wire wick adjustment, glass retaining ring, etc. The workmanship has deteriorated slightly over the years with the latest versions having coarser mesh gauze with poor soldering, no wrench indentations in the glass retaining ring, and a split eye (instead of a ring) for the hook. The early versions are marked "ET & W" and all have the Prince of Wales three feather symbol (shown in Figure 1) stamped on the bonnet or, in the latest versions, in a raised design on the nameplate. This symbol is found on nearly all Thomas and Williams lamps and sometimes is the only mark on a lamp (take note, I have early unbonneted lamps with this symbol and they were sold in the United States!).



The earliest example that the author has seen is in the Lester Bernstein collection and is nickel plated with the following inscription:

VISIT OF
H. E. THE ARGENTINE AMBASSADOR
DR DON M. E. MALBRAH
TO
THE POWELL DUFFRYN BARGOED COLLIERY
3RD MAY 1932

Other examples are shown in Figure 2. Incidentally, the Powell Duffryn Company was one of the largest, if not the largest, coal mining company in South Wales and owned several hundred collieries. These mines were nationalized after World War II and Powell Duffryn ceased to exist as a mining company, although it is still in business today. The lamps were still available in gift stores ten years ago for about $50. They may still be available today although I have not noticed any recently, but then I have not been looking for one either!

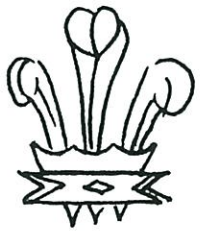


Figure 1. The Prince of Wales three feathers symbol.

Figure 2. Left: Pre World War II nickel plated version engraved "POWELL DUFFRYN ASSOCIATED COLLIERIES LIMITED." Middle: Post World War II chrome plated version mounted on wooden plinth with the silver plate engraved "Vera and Don from Beat and Fred in remembrance of their visit to the States - June 1952." The lamp has only the three feathers symbol. Right: Recent brass version with embossed manufacturers plate and commemorative plate stating "Investiture of the Prince of Wales Caernarven Castle - 1st July 1969." (All lamps from the author's collection)

MINING ARTIFACT COLLECTING IN NEVADA

by **Lane A. Griffin**
4600 Kietzke Lane #145
Reno, Nevada 89502

Earlier in the week we had planned our mining trip for Saturday to go back to the district we had touched upon the previous weekend. It was another one of those turn-of-the-century mining camps that had been developed mostly by shafts, like so many other districts already behind us.

On this particular Saturday, we did not have to stop to buy ice on our way out of town since a winter snowstorm had decided to blow in--the entire week before having been sunny and clear. This untimely weather change made the travelling and exploration a bit different that the norm, but otherwise posed no serious setbacks.

Upon reaching the district, we located ourselves on the topo maps and proceeded to seek out and check several small shafts. Nearby adits were passed, having very likely already been cleaned out. The isolated shallow workings proved fruitless, being characterized either by having essentially no levels or crosscuts, or by the presence of minor concentrations of humidity, thus rendering all the wood and paper products depressingly uninteresting.

Moving off to another portion of the district was the first right thing of the day we did since we had not found any artifacts up to now. We saw a shaft with an intermediate size dump which appealed to us. Seeing no road to it, and with the clouds descending and the rate of snowfall increasing, we headed for it anyway. Descending into the shaft, a level appeared at about 150 feet down. There, illuminated by our miners' lamp, were a complete 25 pound Giant powder box, a mint condition candle box and various metal cans and cap tins. Further exploration of this short level turned up one more perfect 25 pound Giant powder box. The bottom level was uninspiring, having seen at some time in the distant past a lot of mud, now present as a mud-cracked layer on the floor.

Being re-energized by our success, a shaft close by with a bit larger dump provided the next target. At about the 50 feet down was a clean, dry level with two mint 50 pound 1908 Hercules powder boxes and a assorted cap tins. The bottom level here was also mud-caked and deficient of any artifacts, and so we exited.

It was now getting late and there was no sign of the snow letting up, but mental persuasion pushed us to one more smaller dump and shaft nearby. Descending, a level about 50 feet down showed nothing, but the bottom level this time--at about 100 feet down--proved worthwhile. The now familiar mud-caked floor was present, but at the end of the short drift, around a tight curve and sitting on a pile of muck, was a complete 10 pound Giant powder box about half full of old sticks of powder. This was recognized immediately as being quite uncommon, and it is probable that, at this time, our day was made, so to speak.

Aside from having to place all of the artifacts into plastic trash bags to keep them from getting wet, the drive home was uneventful. Leisurely discussions of the day's results, as well as plans for the next trip, were made with the anticipation of other as-yet uncollected mining artifacts awaiting our discovery.

FROG LAMPS

PART IV

by **Wendell E. Wilson**
4631 Paseo Tubutama
Tucson, Arizona 85715

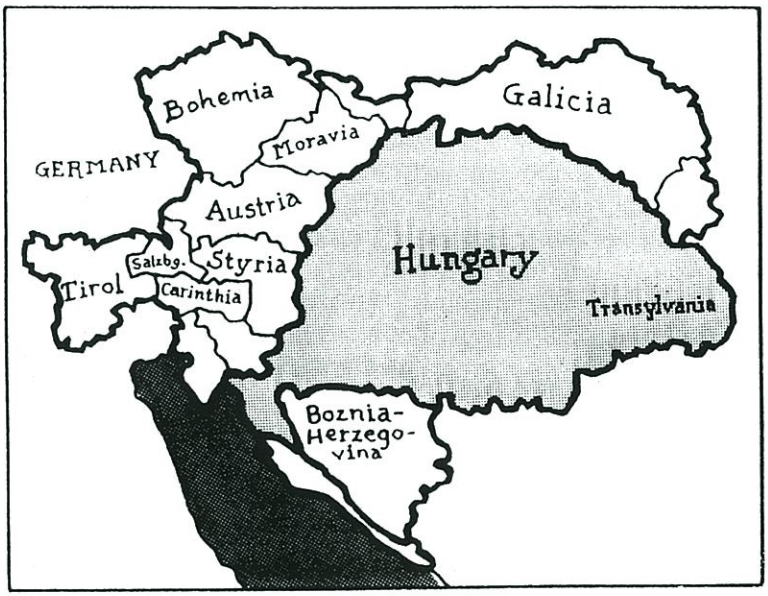


Figure 48. The Austro-Hungarian Empire as it existed from 1871 to 1914.

AUSTRO-HUNGARIAN FROGS

Frog lamps from the Austro-Hungarian Empire (which included Bohemia) are easy to recognize because of their larger size and elongated font. Whereas the font on German frog lamps is typically 9 or 10 cm long from front to back, the Austro-Hungarian fonts can be twice that size.

Differentiating the regions within Austria-Hungary is much more difficult and prone to error. In general it is thought that the lamps from Steiermark, Austria, are characterized by a recumbent bail, a bail which folds back on itself at the top end. Bohemian frogs are thought to be similar in appearance but without a recumbent bail. Hungarian frogs are thought to have a screw set in the sliding font lid for tightening the lid in place. But there are sufficient known exceptions to suggest that perhaps this is not a reliable basis for distinguishing between the regions.

Another feature distinguishing Austro-Hungarian lamps from their German counterparts is that the *Schlagel und Eisen,* the crossed mallet and gad, are raised on the shield rather than incised (if present at all). Another typical though not universal feature is a full loop in the shaft of the hook. Finally, Austro-Hungarian frogs are very likely to have tweezers on a chain for pulling up the wick, whereas this feature is almost unknown in German lamps.

For some reason, hardly any Austro-Hungarian frog lamps were exported to the United States or brought along by immigrants.

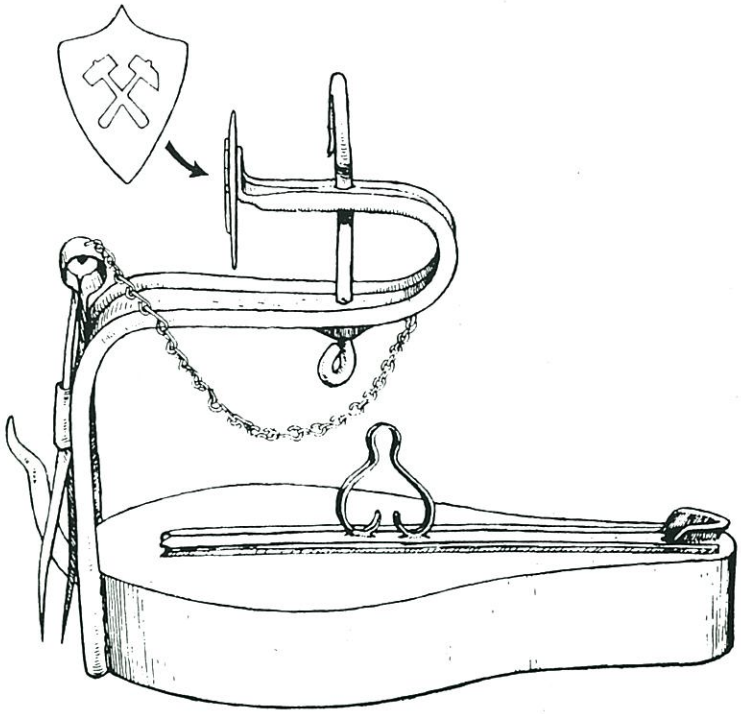


Figure 49. Steiermark Frog. The style pictured, with sliding font door and backward-facing shield, is characteristic of examples from Steiermark, Austria. This one is all brass. (Owner unknown)

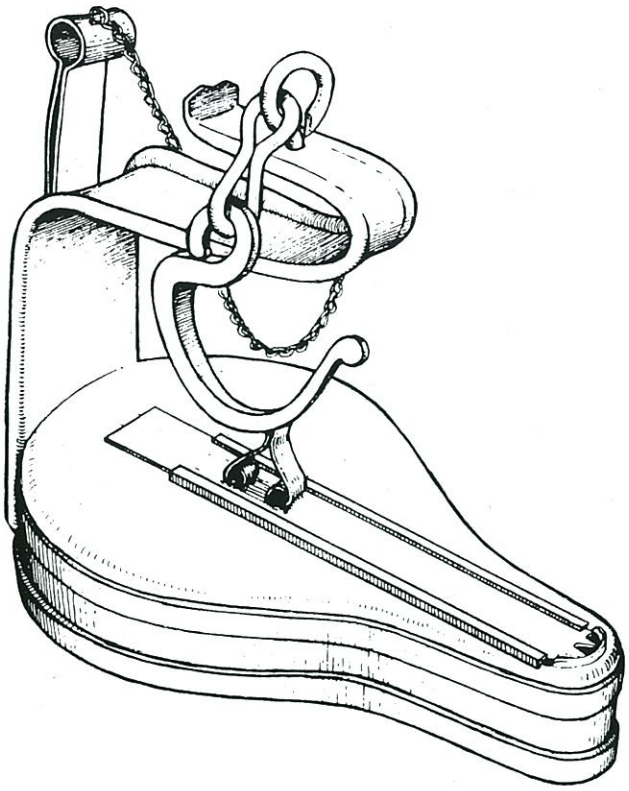


Figure 50. Steiermark Frog. This example, made by Franz Grebenz, Trefail, in Steiermark, is rather similar to the previous illustration. The unusual hook and the bands about the font serve to distinguish it. It may have carried a reverse-facing shield originally, which is now missing, though many similar examples have no shield. (Drawn from another drawing, not a photograph, so details are less reliable.) Late 1800's. (Owner unknown)

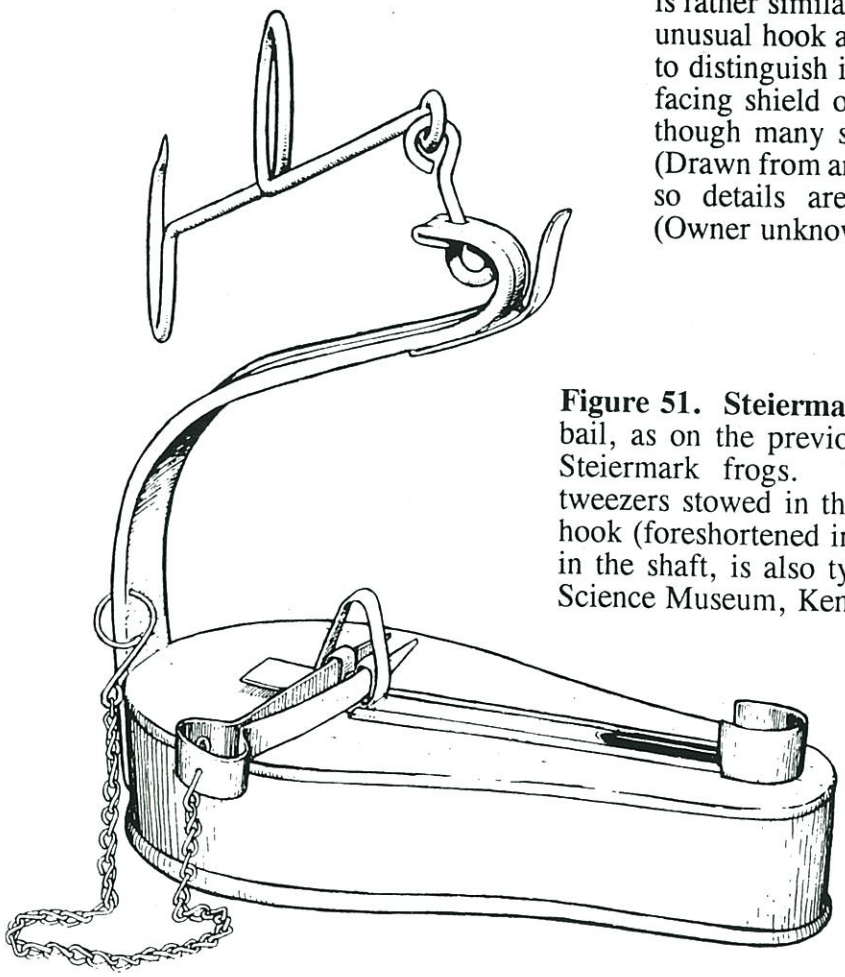


Figure 51. Steiermark Frog. The recumbent bail, as on the previous example, is typical of Steiermark frogs. This one has the wick tweezers stowed in the sliding latch. The long hook (foreshortened in this sketch), with a loop in the shaft, is also typical. (Collection of the Science Museum, Kensington, England)

Figure 52. Austrian Frog. The Mining Museum in Freiberg dates this all-brass frog lamp as having been made in the late 1800's. The heart-shaped shield with the small, raised crown-like designs is unusual, as is the raised flap of large size across the top of the font. The large mass of wicking must have yielded a large and bright flame. (Collection of the Mining Museum, Freiberg)

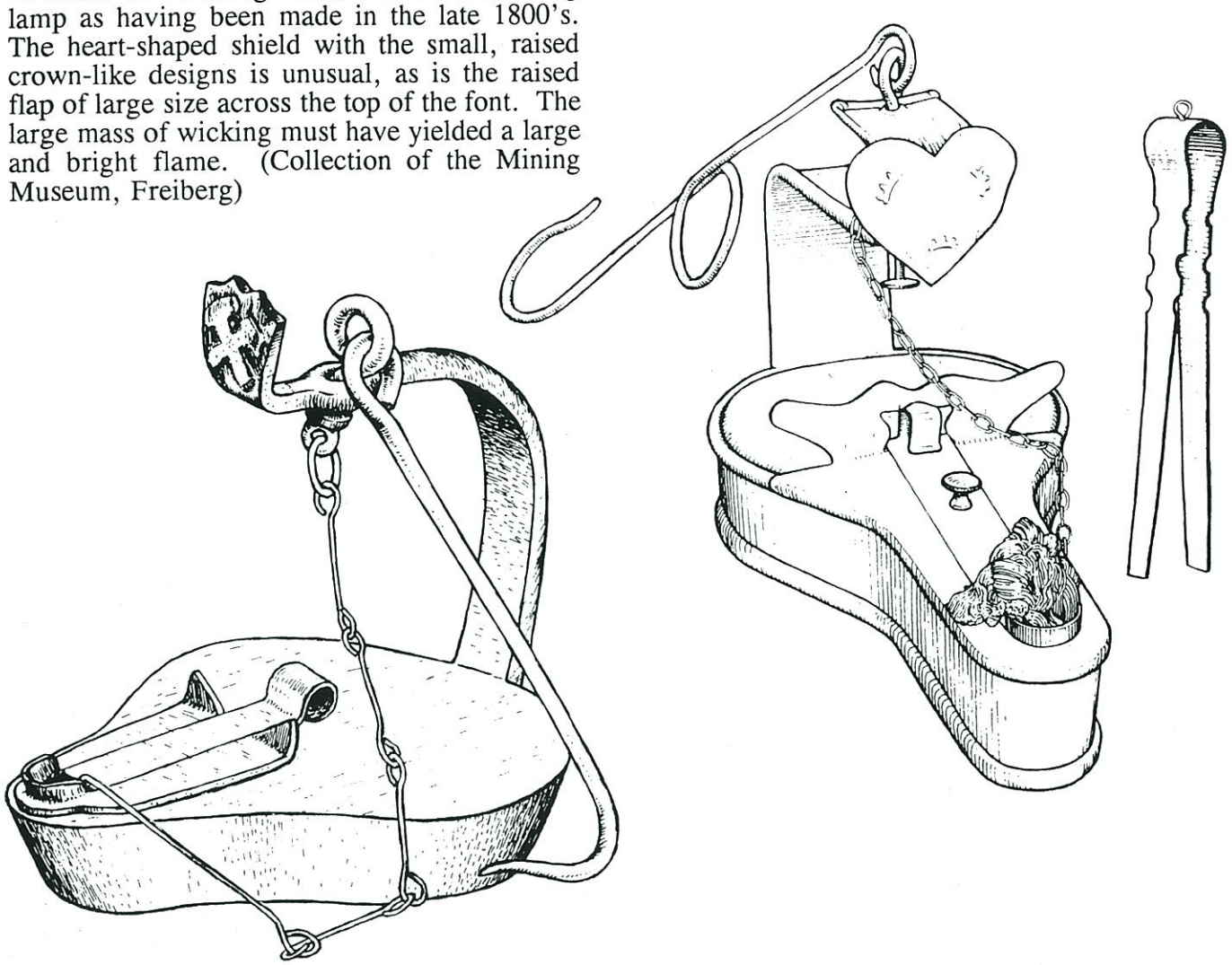


Figure 53. Pirringer Frog. This frog was made in Graz, Austria, and is marked "P. PIRRINGER, GRAZ." Pirringer also made a French-style lenticular lamp. The lamp shown here has the typical Austrian sliding font door and shield with raised hammers. All in iron. (Karsten Porezag collection)

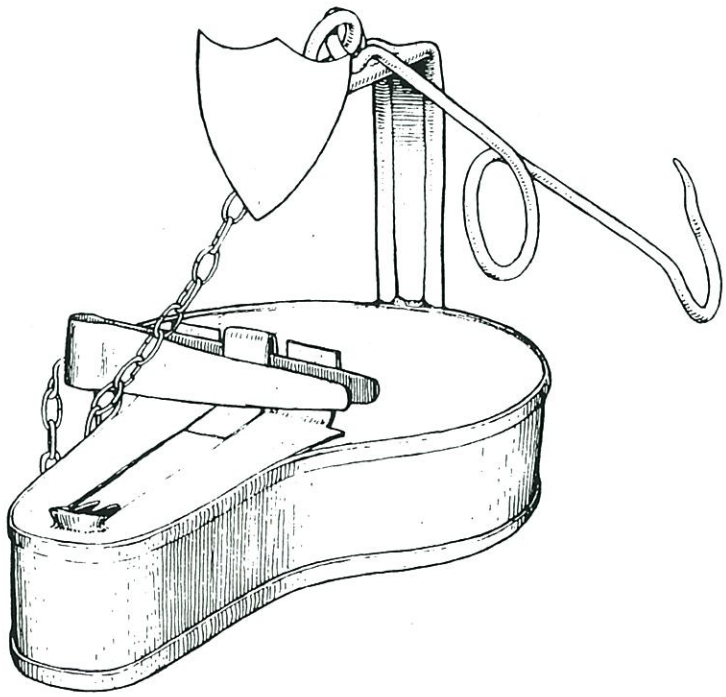


Figure 54. Bohemian Frog. This is a typical Czechoslovakian frog, made completely of thin tinned steel, except for the brass chain. (Collection of the author; found in the U.S.)

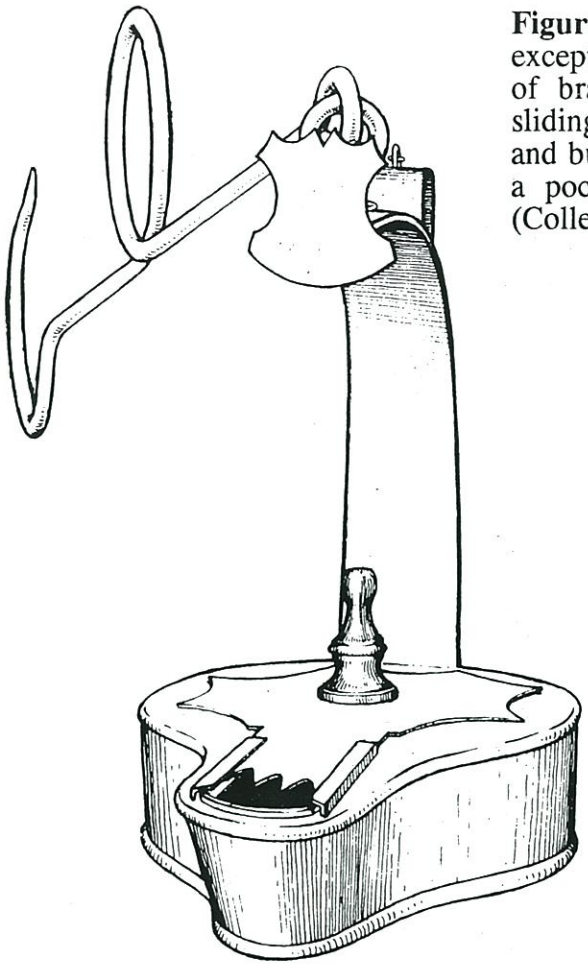
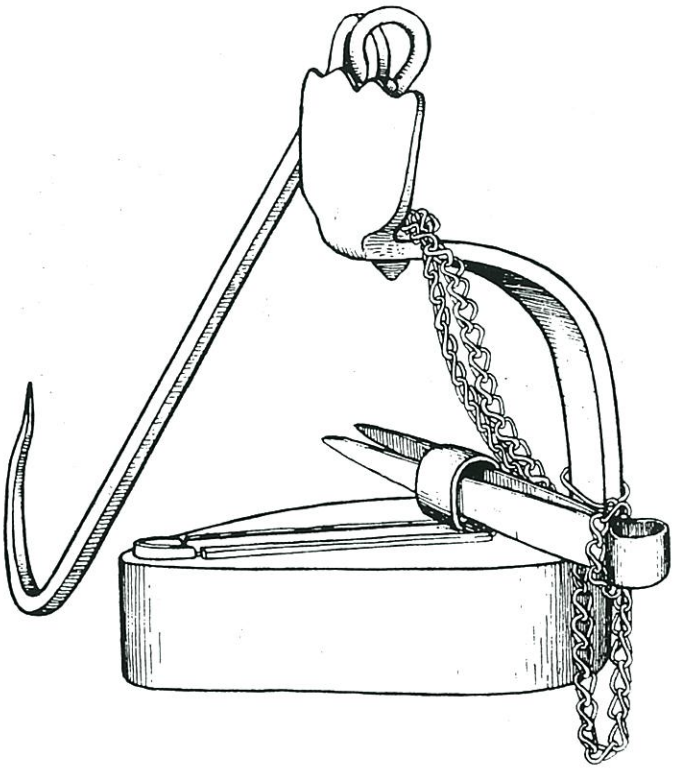


Figure 55. Bohemian Parade Frog. This exceptionally nice parade lamp is made entirely of brass, and has an interesting star-shaped sliding font door. It dates from the late 1800's and burned rape oil. Note the tweezers held in a pocket mounted on the back of the bail. (Collection of the Bochum Mining Museum)



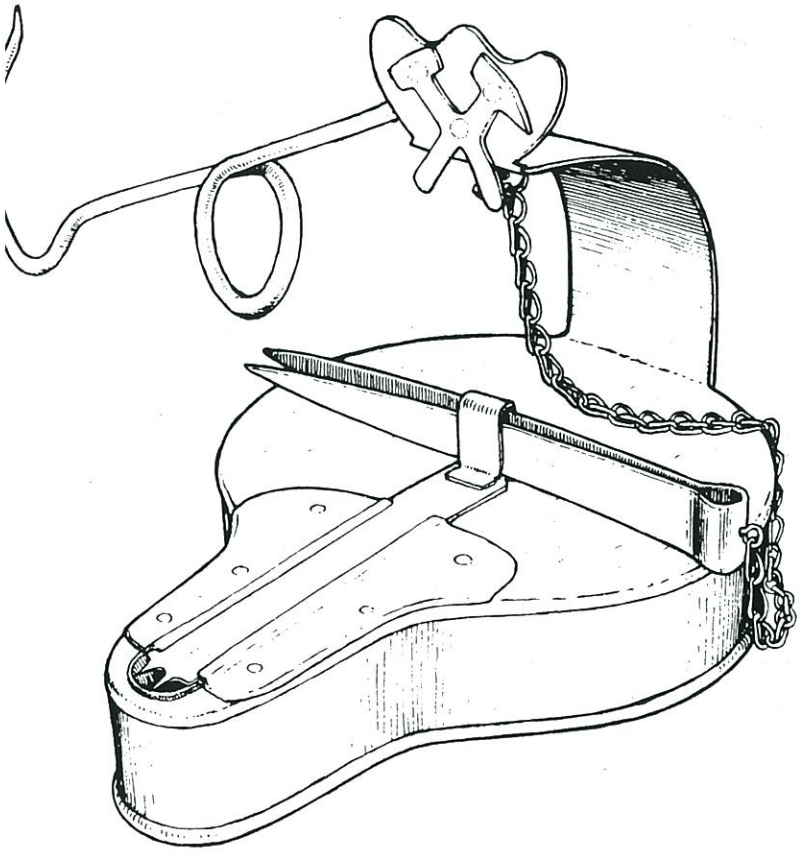


Figure 56. Small Austrian Frog. Not all Austrian frogs are of the large type, as evidenced by this small frog with a Steiermark-style sliding font lid with tweezer-holder. The tweezer's chain is so long that it has been looped around the base of the bail ring. Aside from some Oberharz frogs, German frogs in general do not have tweezers. (Collection of the Osterreichisches Museum für Volkskunde, Vienna)

Figure 57. Brass Bohemian Frog. Here is a fine example of the Austro-Hungarian frog, all in brass, with tweezers and looped hook. Unusual are the *Schlagel* and *Eisen,* which are of copper and are so large that they overlap the shield. (Collection of the author; found in the U.S.)

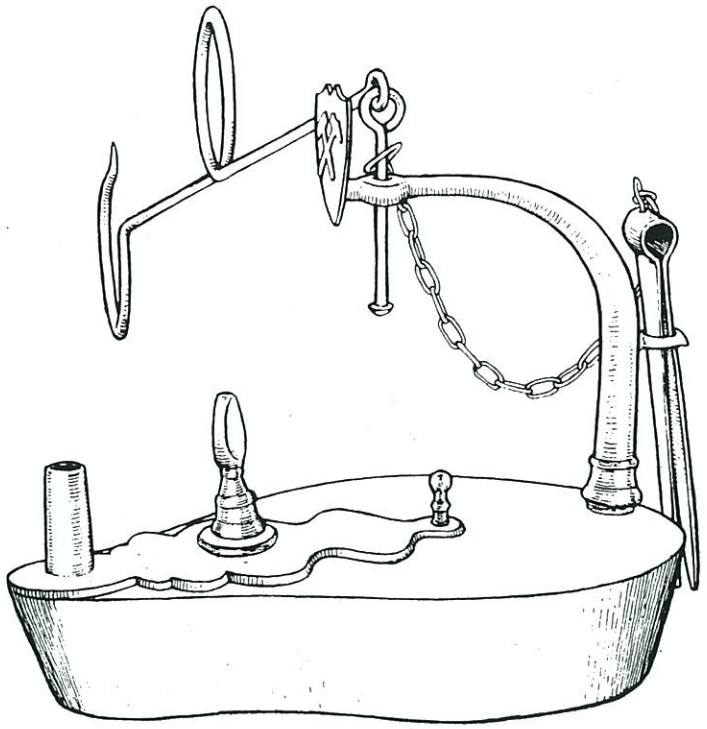
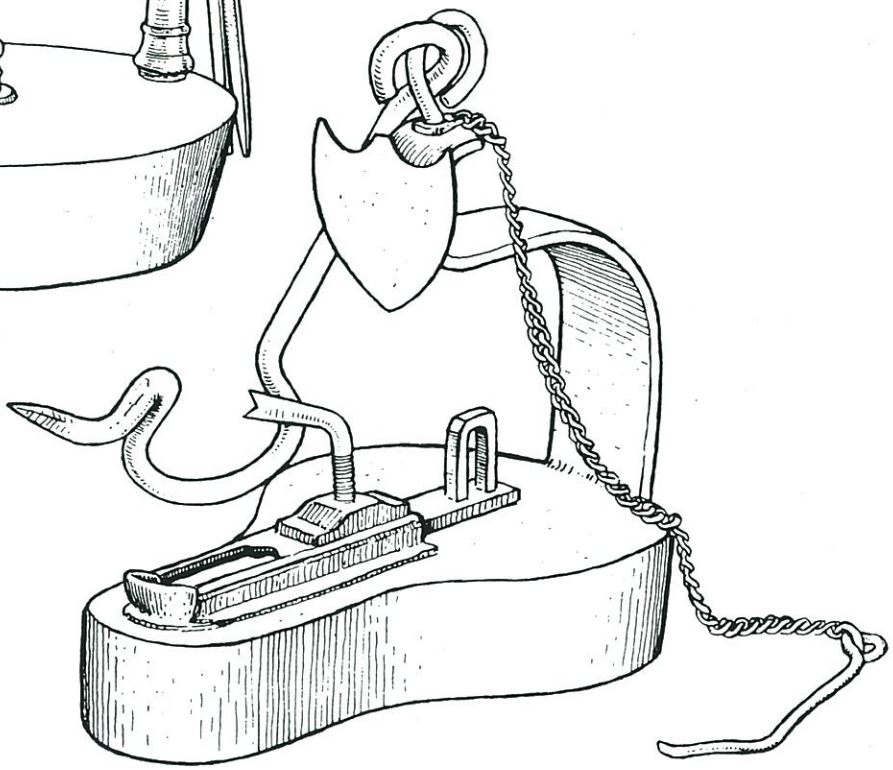


Figure 58. Austrian Frog. This is a particularly fine example of an all-iron Austrian frog lamp of the latter 1800's. It has the typical hook with shaft loop and the crossed hammers on the shield. The long wick support is rather unusual, as is the cylindrical shape of the bail. (Collection of the Osterreichisches Museum für Volkskunde, Vienna)



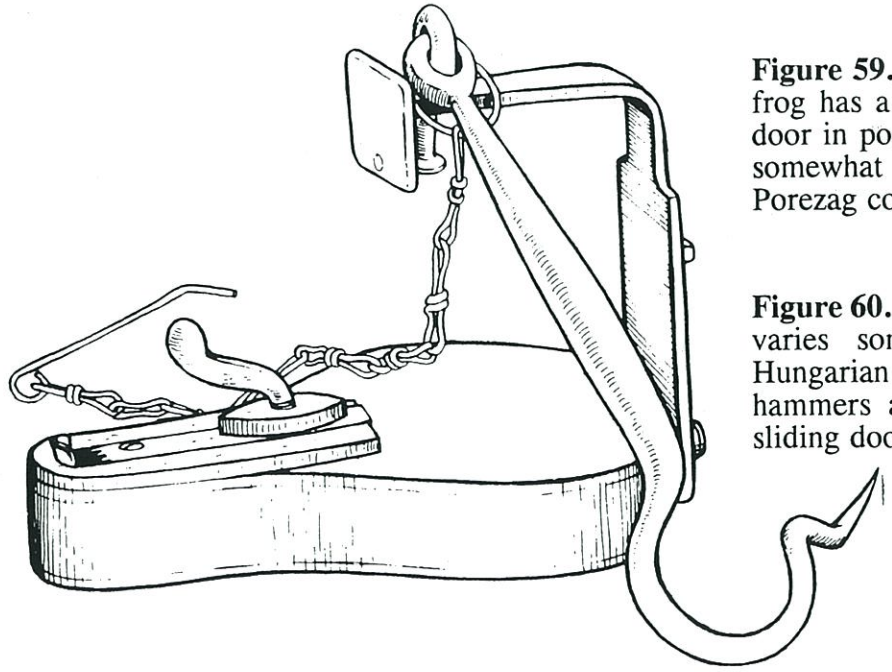


Figure 59. Hungarian Frog. This Hungarian frog has a screw for clamping the sliding font door in position. The formation of the hook is somewhat unusual as well. All iron. (Karsten Porezag collection)

Figure 60. Hungarian Frog. This all-iron frog varies somewhat from the typical Austro-Hungarian design in its square shield without hammers and its unusual latch handle on the sliding door. (Karsten Porezag collection)

Figure 61. Bohemian Frog. The hook with a loop in the shaft and the shield with raised hammers suggest a Czechoslovakian origin for this frog. The screw-tightener on the sliding door is an unusual touch. (Banska Stiavnika Mining Museum)

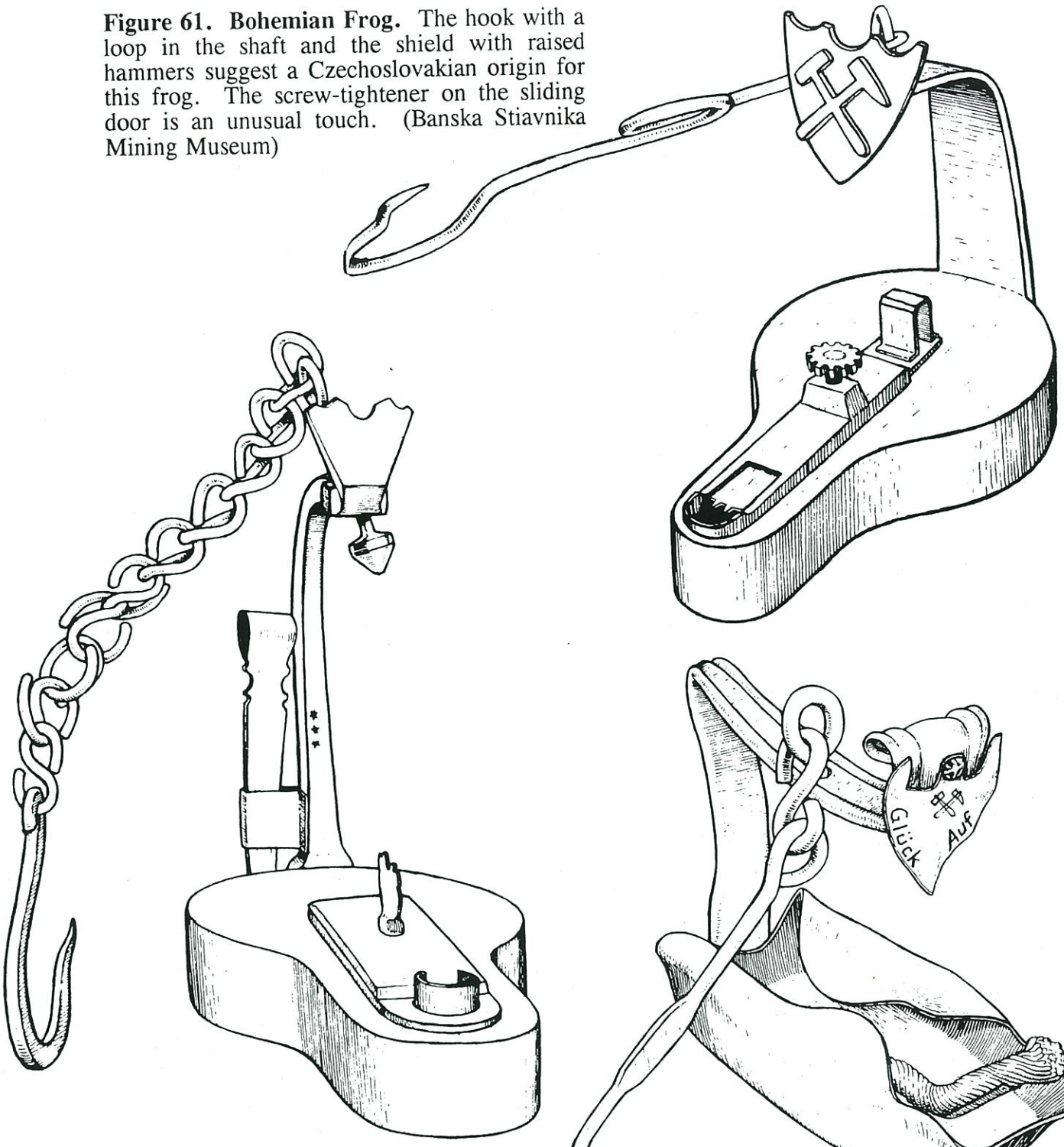


Figure 62. Austrian Frog. Though obviously a large frog of the Austro-Hungarian type, this example has too many peculiarities for its origin to be accurately located using current knowledge. The interesting shield shape, the extremely large-link chain used to connect the hook, and several other features make this a very interesting and, as far as I know, unique lamp. (Collection of the Science Museum, Kensington, England)

Figure 63. Tyrolean Frog. This drawing was taken from another drawing, and so the details are not as reliable as if it had been taken from a photograph. The original illustrator referred to it as a *Schiffchen* lamp, but it has all of the features required of a frog lamp, in particular the shield (which is brass). Lamps of this type date to the early 1800's. (Owner unknown)

MINE SURVEYING TARGET LAMPS FROM GERMANY - AN UPDATE

by **Tony Moon**
2763 E. Willow Wick Drive
Sandy, Utah 84093

In the Winter 1992 issue of the MAC, the author described two types of German target lamps (oil and carbide) that are in his collection. This style of lamp had been described in detail by Karsten Porezag as a mine surveying lamp. The hooks are a typical mining shape and the fact that the lamps are completely non-magnetic gives credence to the association with surveying.

However, it now appears that these lamps are NOT related to mining at all. When Siegbert Zecha of Germany visited us in January of this year, he said that he believed that the lamps were of military origin--possibly artillery related. Then a few months later I received a letter from Otto Winter, also of Germany, who provided some more details. Otto stated that the lamps were "Wehrmacht Einheils Laterne" and that I would find an army eagle stamped on the back of each lamp--usually on the hook (handle). Sure enough, both examples of the carbide lamps in the author's collection have the eagle marking. Later versions of the lamps have the eagle and swastika marking (I have seen this on the brown plastic versions mentioned in the original article). Sketches of the markings on the author's lamps are shown in Figure 1 and the other markings are as follows:

D.R.P. 395351
F.F.A. Schulze. Berlin
1927

and stamped by hand is: 3.6./R.R.16.10.

Another lamp is marked:

D.R.P. 395351
F.F.A. Schulze. Berlin

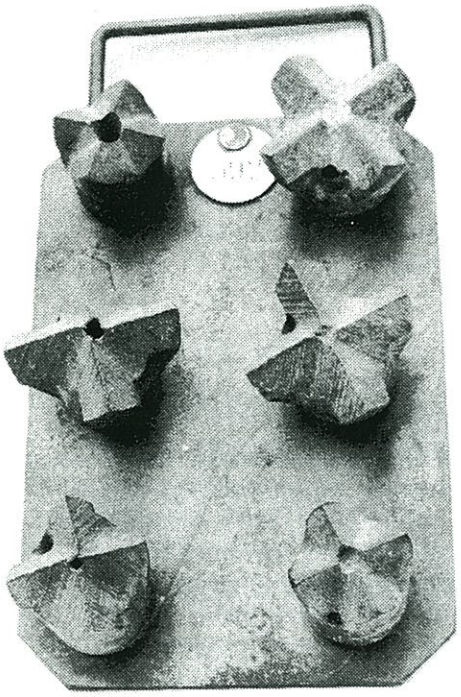
and stamped by hand is: Pi.B.2.Pi.K

The hand stamped lettering could possibly be unit designation (Platoon, Company, Regiment, etc.). Do any readers out there know any German military collectors who might give us more information? Please let me know!

The oil lamp in the author's collection has no such markings. In fact the only marking is on the ceramic burner tip which reads "Barton's Trade Mark." There is no makers name and no clue as to the country of origin except that the shape of the hook, which is typically German. The lamp was found in England. I am not totally convinced that this lamp is not surveying related. Stanley of London adapted the famous policeman's bull's-eye lantern for underground surveying with a door with a slit very similar in shape to the ones on these lamps.

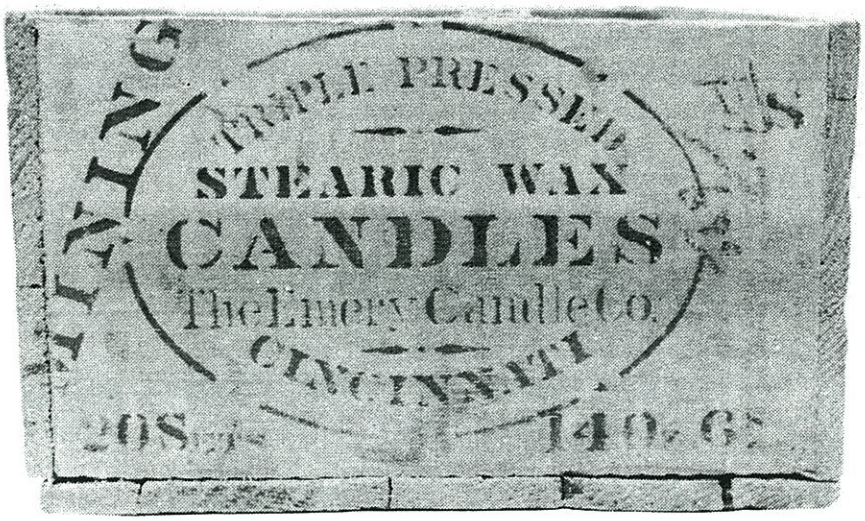
I believe that these lamps were used as a target of some type, but an artillery gunsight has many similarities to a surveyor's transit. Hopefully by studying more examples of these lamps, the unresolved question will be answered. There is no question in my mind that lamps with the eagle markings are military in origin and not mining.

Collector's Talk



Drill Bit Carrier

Steve Eady, of Stafford, Arizona, picked up one of these drill bit carriers complete with the drills and brass check-out tag. I wonder how often the miners had to change bits on a shift? Does anyone else have any drill related items in their collections that they would like to share with the MAC readers?

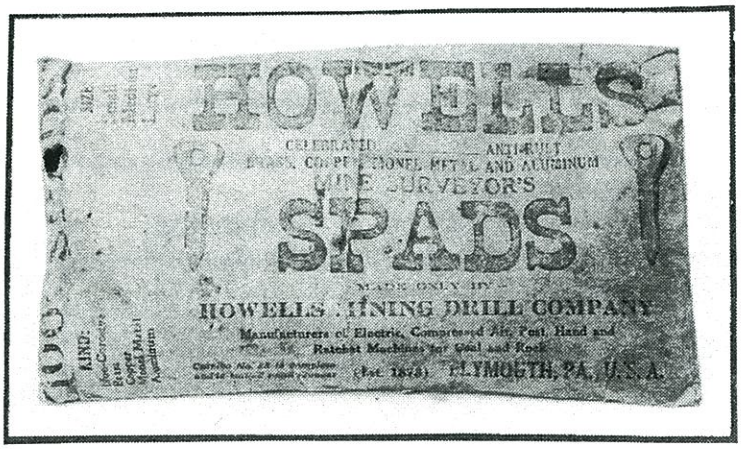


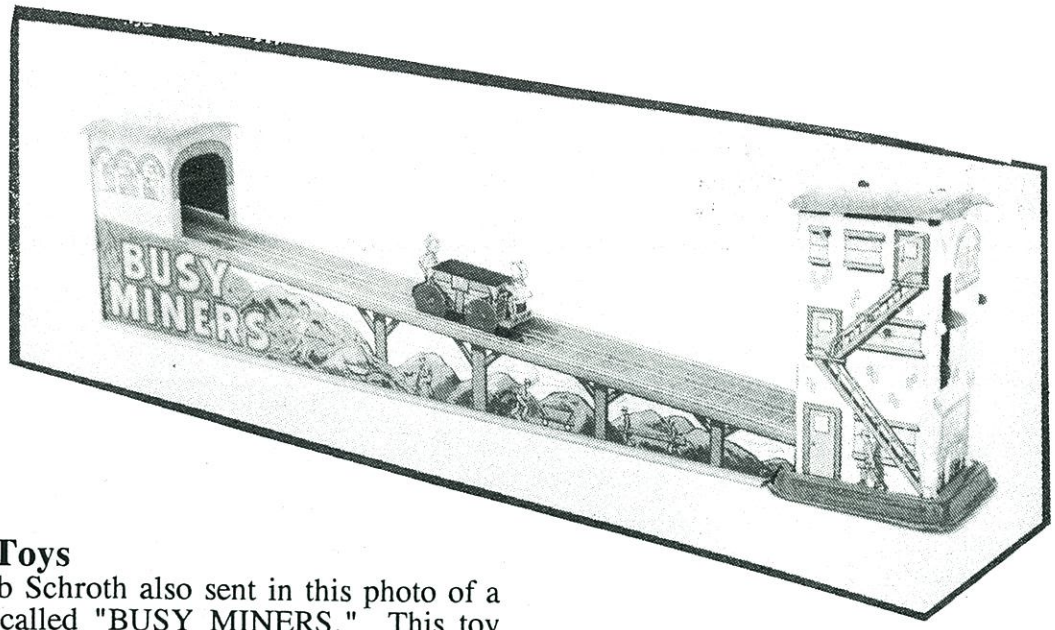
An Unique Candle Box

We have all heard the saying, "It's the squeaky wheel that gets the grease." Well, that's how Mark Bohannan ended up with this great candle box. For about the last five years, just about every mining artifact collector in Southern California has been trying to buy this candle box setting on a display shelf in a small General Store in Randsburg, California. Now we all know that Mark can tell either the biggest lie or the saddest story, as he is now the proud owner of this box. Congratulations Mark!

Surveyor's Spads

Bob Schroth, of Twin Peaks, California, sent in this photo of a bag of surveyor's spads made by the Howells Mining Drill Company. Anyone who likes to climb around in old mines will recall seeing these sticking in a wooden wedge in the middle of the roof of a drift or tunnel. A round brass numbered tag usually accompanied one of these spads to indicate a certain location in the mine during a survey. How about someone sending in a nice description all about how these tags were used?



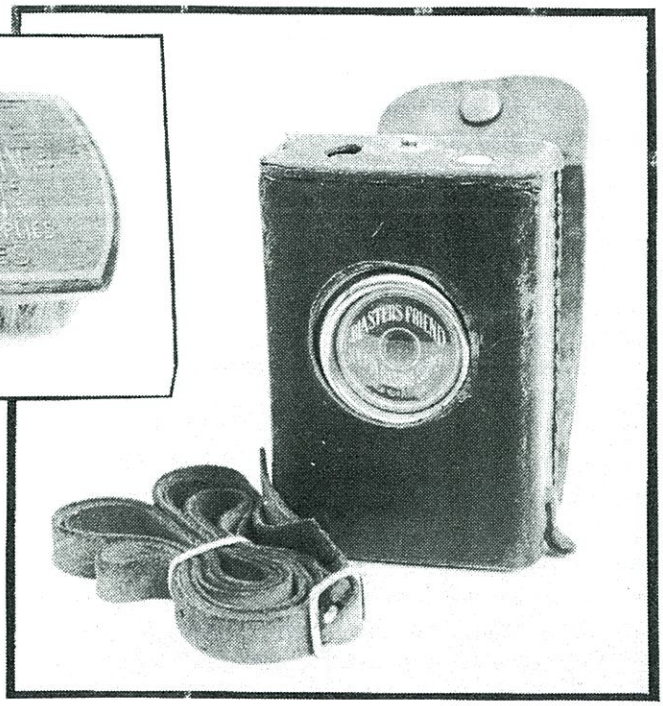


Mining Toys

Bob Schroth also sent in this photo of a great toy called "BUSY MINERS." This toy was made around the early 1950s and is in mint condition. It is nicely painted in many colors, and as you can see, the mine is on the left and the mill is on the right. I assume that the little ore car in the middle runs from the mine to the mill with some kind of dumping action at the mill. The MAC would like to know if anyone else has any other toys related to mining that they would like to share with our readers.

The Blasters Friend

John Coons, of Denver, Colorado, came up with this super blasting galvanometer that says "Blasters Friend - The New York Blasting Supply Co." I recall picking one of these up at the Powder Catch Antique Shop in Georgetown, Colorado, a while back. If you want to know more about blasting galvanometers, see MAC #7, page 24.



Advertising Brush

Bob Hooks, of Pasadena, California, sent us a photo of this early advertising brush from the Pacific Mill & Mine Supply Co., Inc. As I recall, this was a major mining supply company for the Mother Lode in its hay day.

Trades & Sales

Advertising Rates
Rates (per ad per issue) are: Full page, $100; half-page, $50; quarter-page, $35. Ads must be submitted camera-ready; we are not responsible for errors. Any ad may be rejected at the editor's discretion. Classified-style ads for trades or exchanges only (no sales) are free, subject to the availability of space.

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