

MINING

ARTIFACT COLLECTOR

Issue Number 5 Fall 1989



In Cold Weather Warm Fuse Slightly Before Uncoiling



MANUFACTURED BY THE
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LIVERMORE, CALIFORNIA



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SPECIALISTS IN MINING EPHEMERA

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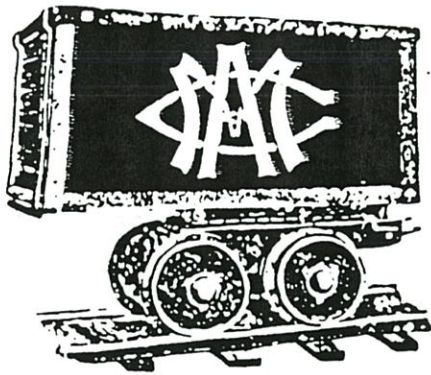
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Benton, CA, 1870s	65.00
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We also issue an extensive quarterly
MAIL BID CATALOGUE

which always contains large listings of mining-related documents, checks & other fiscal paper from mining towns, etc. Call or write for details.



MINING ARTIFACT COLLECTOR

On the Cover

A Dreadnaught fuse wrapper from
the Coast Manufacturing Company.
See article in this issue.

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Subscriptions

The MAC journal is published four times a year in the months of January, April, July, and October. The rate is \$20 for domestic delivery and \$30 a year for overseas airmail delivery. We will not accept subscriptions for more than one year (4 issues) at a time.

Mail subscription requests to: Ted Bobrink, 12851 Kendall Way, Redlands, CA 92373

Back issues are available for \$6 domestic delivery and \$8.50 overseas delivery.

Article Submission and Ad Policies

Articles and other submissions should be sent to the appropriate editor. Drawings and other artwork should be of high quality and ready for reproduction. Although we cannot guarantee publication of any submission, we will make every effort to do so. Articles should be submitted early and as a general rule, should reach the editor at least six weeks before the month of publication.

Ads for trade items are free and are limited to 80 words. Continuing ads must be resubmitted for every issue.

Ads with items for sale are charged at \$5 for up to 40 words for subscribers and \$10 for non-subscribers. Four consecutive ads are charged at \$15 for subscribers and \$30 for non-subscribers. Business cards may be submitted for publication at the same rate as for sale ads. Other types of advertising are available upon inquiry. All advertising artwork must be ready for publication. The deadlines for ads are December 15, March 15, June 15, and September 15 and acceptance is subject to availability of space.

We reserve the right to refuse ads deemed objectionable or otherwise inappropriate. We are not responsible for the accuracy of any ad or the honesty of any advertiser. Please report any problems to the editor.

Addresses

Editor/Carbide Editor: Len Gaska, 1688 E. Corson St., Pasadena, CA 91106 (818) 405-0647

Treasurer/Candlestick Editor: Ted Bobrink, 12851 Kendall Way, Redlands, CA 92373 (714) 794-5518

Oil and Safety Lamp Editor: Jim Steinberg, 2425 Cooley Place, Pasadena, CA 91104 (818) 791-3795

Blasting Item Editor: Mark Bohannon, Star Rt. Box 107E, Oro Grande, CA 92368 (619) 246-4418

All other articles that do not fall into the four main categories should be sent to Len Gaska.

The Editor's Page(s)

by Len Gaska

The MAC Carbide Cap Lamp Survey

The results are in and if you ever wondered why some carbide cap lamps are so hard to find, look no further than the results of the MAC cap lamp survey. The bottom line is this: **THERE ARE VERY FEW OF THE RARE CARBIDES OUT THERE!** I suppose that I shouldn't have been surprised, but I was astonished at how rare many carbide cap lamps really are. It is no wonder that collectors have to look at hundreds of Auto-Lites, Guy's Droppers, Justrites, and Butterflies before an uncommon or rare lamp is spotted.

In my early days of collecting, I decided to specialize in Justrite carbides as there seemed to be an endless variety, especially of the horizontal styles. Pity the poor collector who decides that he wants to only obtain one of each name or brand! His task is certainly more difficult than the collector who is satisfied with an occasional variety of the same lamp, or has interests that go beyond just carbide cap lamps. But I must admit that when I get a rare or desirable item, it goes into some obscure corner of a display case and is usually forgotten within a few days. I admit it. It is not so much the acquisition of a rare lamp as it is the **HUNT!** As I said in a previous editorial, plain old cash cannot build a good mining artifact collection. It takes patience, hard work, dedication, and a goodly amount of time. And despite the all-too-rare rewards, we continue the elusive hunt because it is enjoyable.

To those of you who are lucky enough to have a good sampling of rare carbides, we salute you for the time and effort that we know were necessary to build your collection.

Thanks, Guys!

One of the nicest parts of doing the MAC is receiving compliments from our readers. I can't quote them all, but the following excerpt from Ed Benjamin of Ft. Myers, Florida made my day!

"I have been collecting cap lamps for about 15 years in a very mild effort. I have learned more in 4 issues of your magazine than I had heard about in the previous 15 years."

Well Ed, I hope that I didn't embarrass you by printing your comments, but your letter is the type of reaction that keeps us going. I know that I have been harping on the point for some time now, but the sharing of information is one of the most enjoyable aspects of collecting. So, dear readers, thanks for all your support and kind remarks.

And Speaking of Support....

We owe much to many fellow collectors that have furnished us with information, articles, trade ads, and sale ads. All of which are vitally important to making the MAC interesting, informative, and valuable to our readers. I want to particularly thank the following collectors

who wrote articles for us during our first year of publication. In no particular order, they are: **Jim Van Fleet, Dave White, Don White, Brian Levine, John Shannon, Dave Thorpe, Mark Ballard, John Podgurski, Tommy Bish, Mike Puhl, and Wendell Wilson.** There are still too many of you out there that we have not heard from. Many collectors have knowldege that may be unique in the sense that no one else possesses that information. If you do not share it with others, it may ultimately be lost forever. Help us record, and in a sense, make history by sharing your knowledge through the MAC.

A Belated Thanks

to my wife **Sharon** who is an exellent proofreader and has improved the MAC by eliminating most of those nasty typographical errors.

100 Years of the UMW of A

On January 25, 1990, the United Mine Workers of America will celebrate their 100th anniversary. For a century, the UMW of A has been a major force in the entire labor movement. The union is encouraging the United States Postal Service to issue a stamp commemorating this historic event. Your support will help to bring this about. Write to the Postmaster General, Washington, DC 20260 to voice your support for a stamp commemorating 100 years of the UMW of A.

Our January issue will commemorate this event and we would love to hear from collectors with UMW of A related artifacts. Of particular interest would be candlesticks, carbide lamps, or safety lamps that are somehow connected to the UMW of A via engravings or tags. We are not even sure if such items exist, but considering the importance of the UMW of A in American mining history, we would not be suprised if we turn up some new information and artifacts.

Subscriptions

There still appears to be some confusion regarding subscriptions to the MAC. So, let me state our policy again, hopefully in a somewhat different manner. **All** subscriptions expire with the Summer (July) issue. We adopted this somewhat unusual policy to make our record keeping easier.

Trading

Is it my imagination, or does there seem to be a bit more trading going on in the mining artifact collecting community? I certainly hope so as I have stated before, trading is the lifeblood of collecting. It is as though every lamp, candlestick, blasting item, and mining stock certificate has a rightful "home." Trading (and selling) moves those items around until they settle in to a particular collection where they are most appreciated. I will bet that most collectors have items that they are not particularly fond of that another collector would love to have. Write or call your fellow collectors, talk war stories, make new friendships, renew old acquaintances, and get those mining artifacts moving!

The MAC Carbide Cap Lamp Survey

by Len Gaska

By all indications, the MAC carbide cap lamp survey is the largest and most complete cap lamp survey ever done. The results were from 73 collectors with a total of 3369 lamps in their collections. We present the results on the next page without any interpretation and just a few comments and observations. The old saying about surveys is so true: "If you torture statistics long enough, they will confess to what you want them to say."

First of all, although the survey represents more collectors and lamps than previous surveys, it has a higher percentage of new collectors. A significant number of major collections were not surveyed because the collectors are now inactive, or they just declined to participate. For those who declined to participate, we hope it was merely an oversight and we would still love to hear from you. Any significant change in the survey results will be reported in a future issue.

What, besides curiosity, is the primary purpose of the survey? It is to discourage you from collecting cap lamps so I can have less competition!! No, not really. In fact, the survey results should be a relief to most collectors. If you don't have many (or any) of the really rare lamps, take heart. Most other collectors don't have them either.

The survey results should be invaluable when buying, selling, or trading rare carbide cap lamps. It is a guide to relative value, although rarity is not the only consideration leading to desirability. See the article by Dave Thorpe on the next page. If someone suggests trading a Hansen for your Union Carbide, a simple check of the survey will point out that it would be a very bad deal in terms of comparative rarity.

A few further comments on the results. The Daylight, Demon Strike Light, and Ni-Ba are of questionable American ancestry. A few knowledgeable collectors are quite sure that the Daylight is of English origin. The Demon Strike Light presents more of a problem. Most of them have been found in Australia, but myself and at least one other collector feel that they were American made. But that is only theory and it is likely that the manufacturer will never be known. Virtually nothing is known about the Ni-Ba and only one example is known to the author.

There are a few areas where I believe there was confusion regarding the terminology we used, and that confusion led to incorrect reporting. The difference between a "pinchwaist" Grier and a "vertical style" Grier was one area in which we felt that lamps were incorrectly reported. The "pinchwaist" Grier has a shape similar to a Baldwin and is very rare. The number for "vertical style" Justrites is probably too high as we felt there was confusion with the Streamlined style. Therefore, in a few cases we "fudged" the data to more accurately reflect what we felt were more realistic numbers.

Personally, there were not many surprises in the survey results. "The Buddy," vertical Justrites, and Brite-Lites were more common than I would have guessed. But in most cases, the numbers reflect general knowledge in the advanced collecting community.

As an aside, a survey like this always makes me wonder what happened to all those lamps where there are only one or two known examples. Are there still many others yet to be found? Are many of them still lying dormant in garages and attics? Or are most of them buried in dumps to be discovered by future archaeologists? Your guess is as good as mine, but if you have any opinions, I would love to hear them.

Standard.....	0	X-Ray (Defender style).....	6
Anton (cubic top).....	1	Anthracite.....	7
Anton (cylindrical top).....	1	The Buddy (Justrite).....	7
Belcro.....	1	Arnold's carbide candle.....	9
Black Diamond.....	1	Brite-Lite (top water feed).....	10
Funk Bros.....	1	Squarelite (Guy's Dropper).....	10
Klun.....	1	Hansen.....	11
Ni-Ba.....	1	Maple City.....	11
Norleigh Diamond.....	1	Victor (Pre-Justrite).....	11
Oshkosh.....	1	Copper Queen hand lamp.....	11
Red Star.....	1	Defender (Justrite).....	12
S & S.....	1	Gee Bee.....	12
Schneiders.....	1	Scranto.....	12
Snell.....	1	Ever-Ready.....	13
Steindropper.....	1	Force Feed.....	13
American.....	2	Demon Strike Light.....	14
Dry-Lite.....	2	Gem.....	16
Fulton.....	2	Zar.....	16
Grier Bros. (octagonal style)....	2	Brite-Lite (side water feed)....	19
Imperial Hardsocg (X-Ray style)..	2	Pathfinder by Hughes Bros.....	19
Imperial Hardsocg (Grier style)..	2	Shanklin Metal Products.....	25
No. 50.....	2	Springfield.....	25
Pocahontas.....	2	Elkhorn.....	29
S.E. Simmons.....	2	Arrow.....	30
Sure Light.....	2	X-Ray (Fulton-Imperial style)...	32
Wolf (early).....	2	ITP Float Feed.....	41
Justrite No. 77 stick lamp.....	2	Grier Bros. (horizontal style)..	42
Hold-A-Lite (J. Simmons).....	3	Buddy (Ashmead Mfg.).....	50
Milburn.....	3	Wolf (dome top).....	50
Premier by Hardsocg.....	3	Lu-Mi-Num.....	54
Union Carbide.....	3	Sun Ray.....	63
Victor (Defender style).....	3	Victor (Justrite).....	65
What Cheer.....	3	John Simmons (Pioneer).....	73
X-Ray (Victor style).....	3	Grier Bros. (vertical style)....	75
Abercrombie & Fitch.....	4	Justrite (vertical style).....	96
Daylight.....	4	Baldwin.....	140
Grier Bros. (pinchwaist style)...	4	Justrite (Streamlined style)...	332
Shanklin Mfg.....	4	Guy's Dropper.....	518
Maumee.....	5	Auto-Lite.....	624
Scoby.....	5	Justrite (horizontal style)....	670
Scranton.....	5		
Wolf (flat top).....	6		

Cap Lamp Value: Not Just a Function of Rarity

by Dave Thorpe

Most mine lamp collectors have "favorite" pieces that exist either in their own collection or on their fantasy wish list. How many times have we heard each other say "I know this particular lamp isn't all that rare, but I just like it!" Well, worry not fellow collector, you are not weird, for your list of favorite pets is probably very similar to everyone else's. How can that be, isn't rarity the determining factor of value? The answer is probably closer to no than yes.

Let's look at five desirable lamps. Lamps which almost everyone wants, and yet whose desirability is much greater than their actual rarity.

Ever-Ready, X-Ray, Force-Feed, Zar, & Maple City

Well, yes, they're all rare, but not extremely rare. Just as a woman must meet some level of classical physical beauty to be desirable, so must a lamp be somewhat rare... but having passed that arbitrary threshold of physical acceptability, it is personality from there on..., and these lamps have **PERSONALITY**.

Any psychologist will tell you that many factors make up that nebulous term we call personality, and the same thing applies to lamps. The first thing a good lamp has to have is an identity... or a name (preferably stamped in). A lamp without a name will never make headlines, it can never be gossiped about, or even boasted about: "My Maple City has a knurled knob on top!" There is nothing sadder than an orphan or a lamp with no name. Just look how the "Non-Justrite Victor" has struggled for an identity, borrowing its name from an advertisement and another company. It would be so much happier just to be stamped somewhere. And that "Scoby" just stands around so stark and plain, can't it just say something like its sister, the Maumee? Yes, a good lamp needs its name, not just a patent date, stamped into its body. The Maple City proudly displays this on the side of the water tank, making it more desirable than the "anthracite", a lamp that is just as rare and made by the same company.

We like our lamps to be different, but not too different... to be unique, but not eccentric... in short: to be cute. Some lamps are just too far removed in design to be desirable. The Arnold's Carbide Candle is too tall and too weird; and God forbid, the Lu-Mi-Num looks more like a hand grenade than a lamp. Ah, but the elegant Ever-Ready: doesn't it remind you of an underwater diver with a bell helmet? And the graceful lines of the X-Ray transcend even its unique engineering design. It demonstrates art without being too gaudy or cutesy. An example of the latter is the Sun-Ray. Smiling Mr. Sunshine stamped on top surrounded by a halo of numbers would be a better logo for a box of margarine, than something a hard working miner would consider his companion. Even its close relative, the I.T.P. ("It's Trouble Proof... if you hadn't guessed) strays a little too far into the land of hokey.

So a lamp should be different and unique, but not weird or sappy. The ZAR certainly makes our grade. Even though the market has been infused with dozens of unfired examples, it remains highly coveted. Of the barrel-design lamp, it is the most complex in form. Its flint wheel juts forward, its waterfeed peeps up like a periscope, the top and bottom edges overhand the body... the lamp draws attention without being obnoxious.

A "fun" person either tells us or does something interesting. Behold the Force-Feed: its name tells us something about the lamp, and what's more, the feed (on some models) actually pumps up and down. The harder to find Hansen will always play second fiddle. The Maple City tells us the story of an industrial park, the Maple City oilers, and of the mysterious fire that ended the lamp's production.

Some lamps will just never get no respect relative to their rarity, but the lamps listed above will always be on most collector's top ten list. My personal favorite: the Maumee Duplex of course.

A New Style of Imperial Carbide Cap Lamp

by Len Gaska

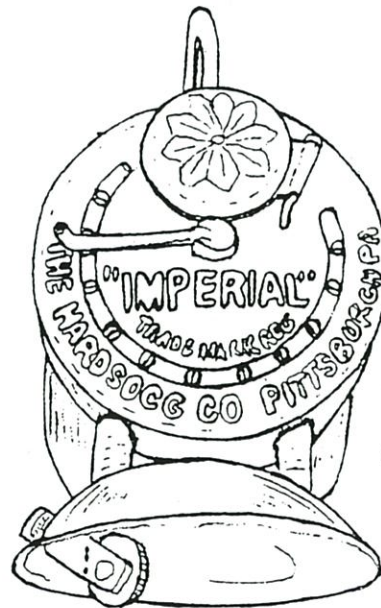
It is unusual when collectors discover two new styles of cap lamps of the same manufacturer within a year. Particularly when they represent radically different styles than previously known models. In the MAC, Issue 1, Fall 1988, we reported the existence of a "Premier" cap lamp from the Martin Hardsocg Company. The "Premier" was very similar in appearance to the horizontal Grier cap lamp. Now we are pleased to present a new style of "Imperial" cap lamp, also from the Martin Hardsocg Company.

The Imperial pictured below was found with a Baldwin bottom and with the hat braces broken off. Remnants of the braces show that the brace was 1/4" wide. The top of the lamp is strikingly similar to the familiar Grier Bros. model 96, illustrated below from an original lamp box end.

The Imperial is nickel plated with a 2 1/4" reflector. Grier and Gee-Bee bottoms do not fit on this lamp, but Gem bottoms do. Besides the lettering, the water adjustment click-stops are quite different than those found on Griers, Gee-Bees, and Gems. Those three lamps have integral click stops that are stamped into the top of the lamp. On the Imperial, the click-stops are indented into a wire which is soldered to the top of the lamp.

The best known style of Imperial is identical in appearance to the well-known Justrite X-Ray cap lamp, with the exception of the markings on the very bottom of the lamp. See Wendell Wilson's lamp bottom guide in this issue.

There is no doubt that Grier Bros., or its successor, Gem Manufacturing, manufactured the Imperial cap lamp. Grier Bros. produced carbide cap lamps from 1911 to 1924 when it sold its equipment to the Gem Manufacturing Company. We are left with at least one mystery regarding the Martin Hardsocg Company. Who manufactured the X-Ray style Imperial?




References:

1. American Carbide Lamps, Greg Clemmer.
2. Mining Artifact Collector, Issue 1, 1988.

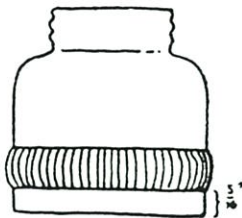
Type: Cap
Material: Nickel plated brass
Rarity: Possibly unique
Owner: Len Gaska

Nearly the Complete Bottom-Guide for Carbide Cap Lamps

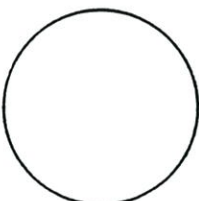
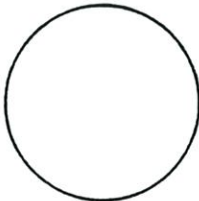


by Wendell E. Wilson © 1982 (continued from prev. issue)

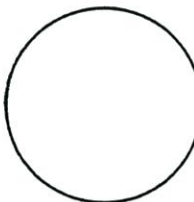




Note March Pat. date missing



Some Bottoms Unmarked



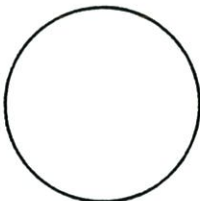
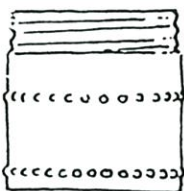
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JUSTRITE (horizontal) (very early)

JUSTRITE (horizontal) (early)

JUSTRITE (horizontal)

JUSTRITE (horizontal) 1/2-shift lamp



Some Bottoms Unmarked



Some Bottoms Unmarked

Justrite's THE BUDDY

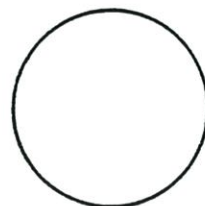
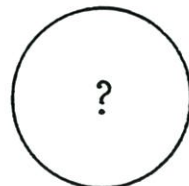
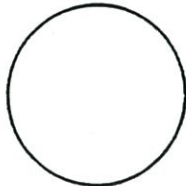
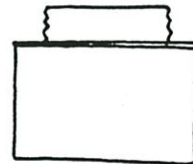
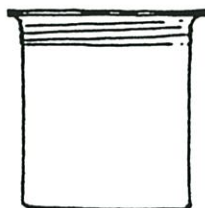
JUSTRITE

JUSTRITE

JUSTRITE (horizontal) 1/2-shift lamp

JUSTRITE

(bayonet mount)



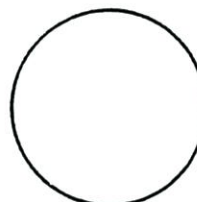
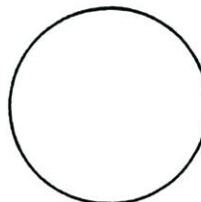
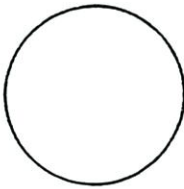
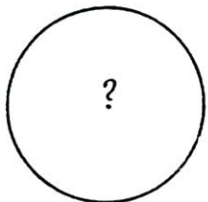
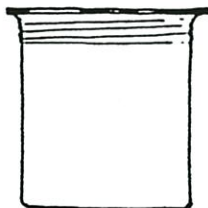
LU-MI-NUM (threaded model also known)

MAPLE CITY

Maumee DUPLEX

MILBURN

OSHKOSH



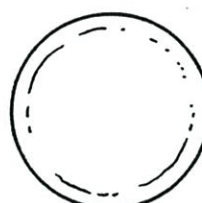
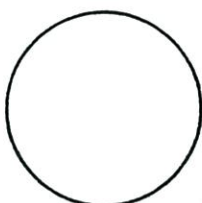
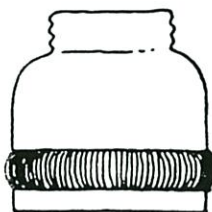
NI-BA

PATHFINDER

RED STAR

S & S

SCRANTO
(and)
SCRANTON?



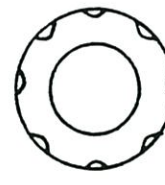
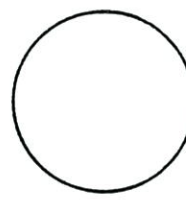
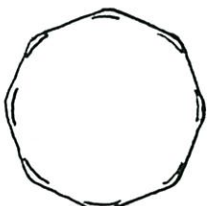
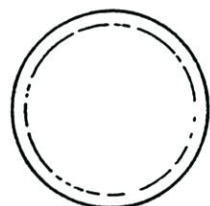
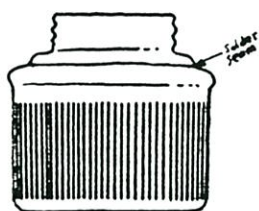
SHANKLIN METAL
PRODUCTS CO.

JOHN SIMMONS

JOHN SIMMONS
(PIONEER)

JOHN SIMMONS
(PIONEER)

THE SNEEL LAMP



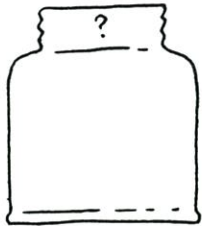
SPRINGFIELD
(early)

SPRINGFIELD
(later)

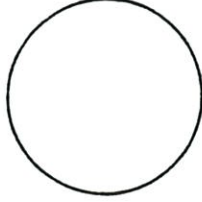
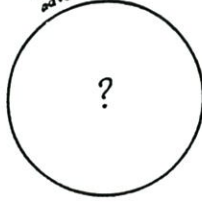
SUN-RAY

SURE-LIGHT

SCOBY
DUPLX



(Known only from ad and advertisement)



Some Bottoms Unmarked



Some Bottoms Unmarked



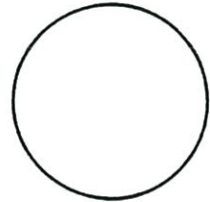
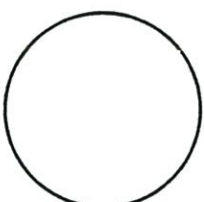
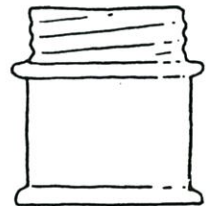
UNION CARBIDE LAMP

Early VICTOR (non-Justrite)

VICTOR

VICTOR

WOLF



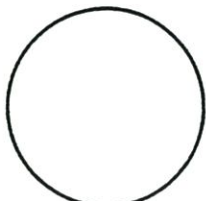
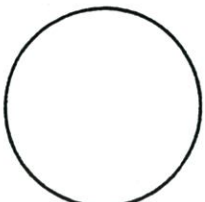
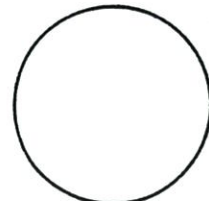
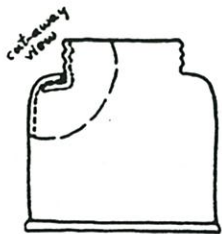
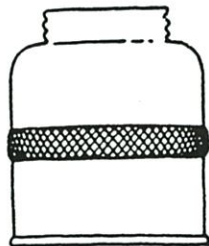
WOLF

Defender-style X-RAY

X-RAY

X-RAY

ZAR



?

?

?

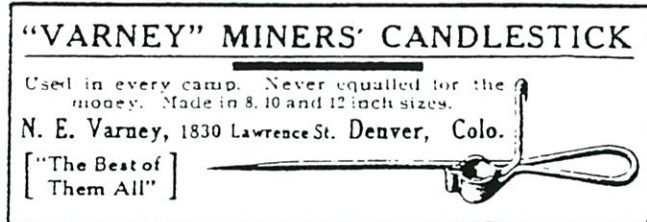
Do you know of any carbide cap lamp bottoms that are not represented here? If so, please send a good picture or accurate drawing to:

Wendell Wilson
4631 Paseo Tubatuma
Tucson, AZ 85715

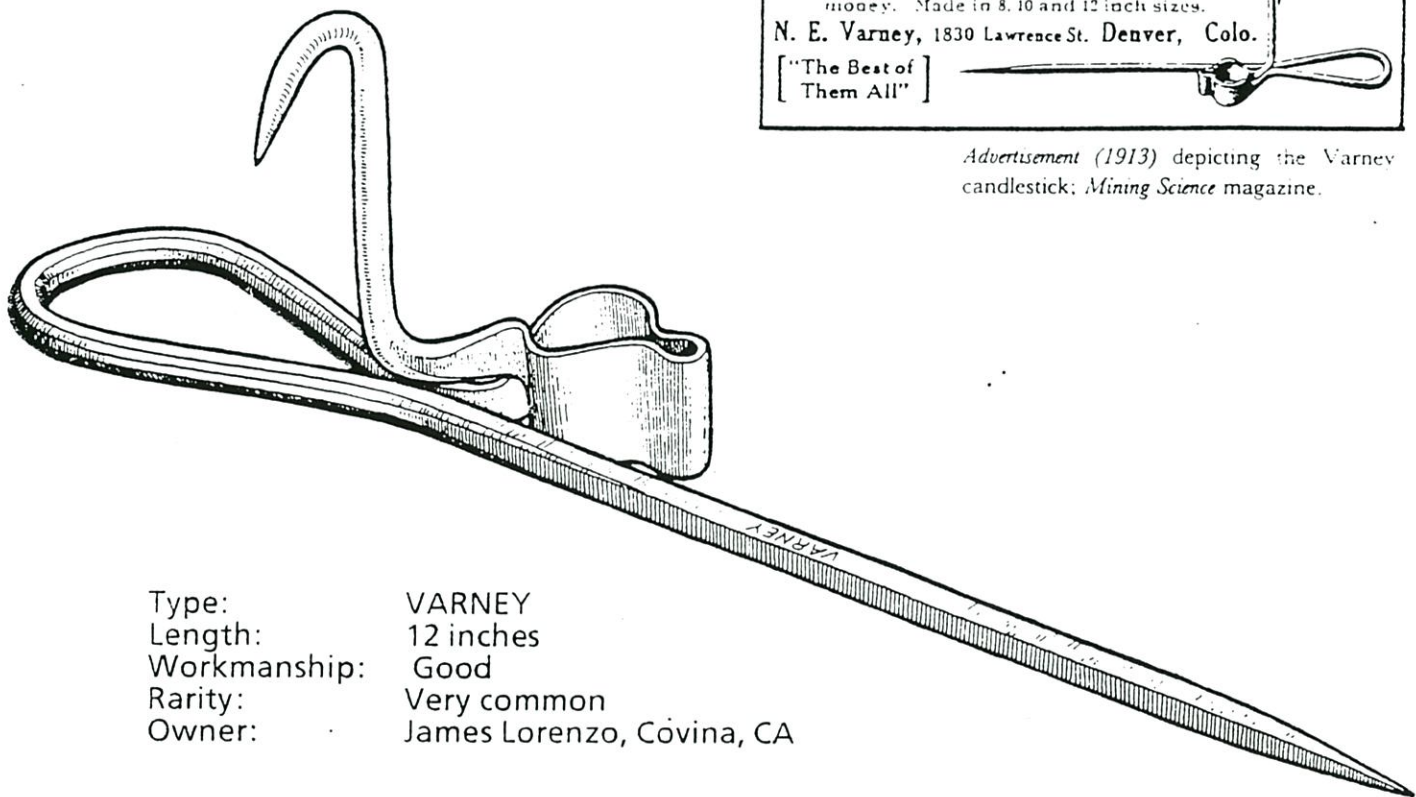
You may submit your pictures or drawings to the MAC and we will pass them on to Wendell.

The Varney Candlestick

by Ted Bobrink



Advertisement (1913) depicting the Varney candlestick; *Mining Science* magazine.



Type: VARNEY
 Length: 12 inches
 Workmanship: Good
 Rarity: Very common
 Owner: James Lorenzo, Covina, CA

The VARNEY is the most common and widely collected of all the brand-name candlesticks. The elegant one-piece design was invented by Nathan E. Varney sometime in the late 1800s, and it eventually came to dominate the candlestick market until carbide and electricity made candles obsolete.

Varney was born in Windham Center, Maine, in 1850 and, at the age of 20, moved to Creede, Colorado, where he opened one of the first assay offices there. He subsequently spent time in many of the important Colorado mining camps including Cripple Creek and Boulder. After 15 years in the mining camps he moved to Denver in 1885 and established a small manufacturing plant, where he eventually produced his new design of candlestick. In 1911 he obtained a patent for an intricate folding model, but by then candlesticks were declining in popularity and few were sold.

Because the Varney design required specialized manufacturing equipment, it is likely that all Varney candlesticks were made at Varney's factory in Denver, even though a variety of other brand names were stamped on them. For a time, Nathan Varney's son, Charles E. Varney of Milford, Delaware, also manufactured the candlesticks, and it has been reported that Varney sent equipment to Newark, New Jersey, where his design was manufactured by the L. A. Sayre Company and sold under the name of "Varney's Colorado Pattern."

The design itself is simple but sophisticated. Apparently beginning with a 1/4 inch square length of steel bar stock, the end that was to become the spike was forged to a square point. The spike shaft was left square, the portion which was to be bent into the handle was forged into an octagonal cross-section, the portion for the thimble was forged wide and flat, and the portion that was to become the hook was somehow converted into a round cross-section. This was bent into shape on special equipment and a brand name then stamped on the top side of the spike shaft just forward of the thimble.

Three sizes of Varney-made candlesticks were advertised: 8, 10, and 12 inch models varying only in length; a small model about 5 or 6 inches long and having a somewhat smaller handle is known, as are other examples over 13 inches long.

As mentioned above, the models stamped VARNEY are very common, as are models unstamped with any name. The seventeen other brand names that have come to light are:

BRAND NAME	RARITY
BONANZA	Common
CLEANCUT	Uncommon
CLEANCUT/TRADEMARK	Very Rare
COLONIAL	Very Rare
DENVER	Common
IMPERIAL	Common
MENLO	Uncommon
OCCIDENT	Common

ROYAL	Common
RUSSELL	Common
L.A.SAYRE & SON NEWARK, N.J.	Common
L.A. SAYRE & CO NEWARK, N.J.	Rare
L.A SAYRE & SON (Square Stock)	Unique
SIERRA	Uncommon
SIERRA UHM & CO (Union Hardware & Metal Co.)	Very Rare
SPARKLE	Very Rare
TRIUMPH	Common

Editors Note: When this article first appeared in 1983, the name COLORADO was listed as a Varney brand name. The name COLORADO has been removed from the list as it has been reported by several experienced candlestick collectors who have seen this unique candlestick, that the name COLORADO was not gang stamped. That is, the letters in COLORADO were stamped one at a time and not by a die that stamps all the letters evenly at once -- gang stamping. All the Varney names listed above have gang stampings. It was very common for a miner to have his name or something else stamped into his candlestick so he could identify his stick from those of his fellow workers.

Reference: *A Collector's Guide to Antique Miner's Candlesticks*, Wendell Wilson and Ted Bobrink.

A Varney Mystery Solved

by Tony Moon

One of the most difficult of the Varneys to find is the one marked CLEAN CUT/Clover TRADE MARK. The author is aware of only three examples and the one in his collection came via the Martin, Ramsdell, and Gresko collection. The marking is not clear with only the actual trademark and the words TRADE MARK plainly visible. It was not until the marking on the one in Ted Bobrink's collection was shown in the Wilson/Bobrink book on candlesticks that the remainder of the marking - the words CLEAN CUT - became known. The full marking from the candlestick book is shown below.

Some time after the Wilson/Bobrink book was published, I found a straight razor case marked with the same trademark and the words CLEAN CUT. The razor inside was not the original one and is only marked Sheffield, but the original instructions were still inside the case. A rubbing of the case marking and a copy of the instructions are illustrated. Now the hunt was on - who used this trademark? The answer came from a circa 1925 hardware catalog. The hardware company of Dunham, Carrigan, and Hayden Company of San Francisco used the trade mark on their cutlery.

One can speculate that this same hardware company was also responsible for the Varneys marked CLEAN CUT without the trademark. The larger stamp with the trademark was too wide for a candlestick and was probably designed for other objects (such as knives) and thus a smaller stamp was made when the larger stamp proved to be unreadable in its entirety.

Now that this mark seems to have been resolved, will somebody please figure out the origins of the MENLO and COLONIAL names?

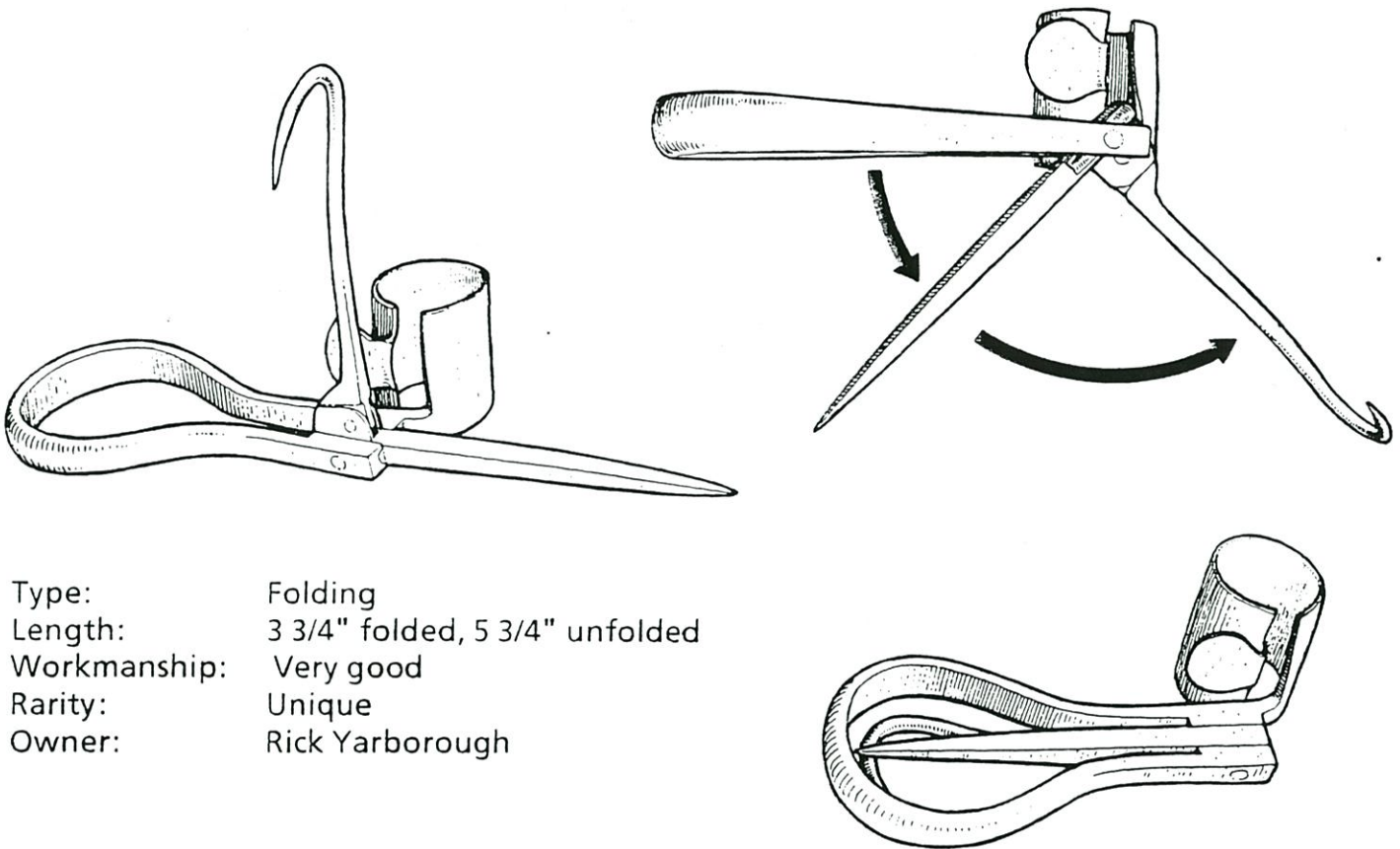


A Blacksmith Folder

by Ted Bobrink

All candlesticks might be considered to have been made by blacksmiths. However, I restrict the term "blacksmith candlestick" to those which are not patented, and which do not have brand names. Such candlesticks were generally made in small smithies in the neighborhood of operating mines, or by blacksmiths employed at the mines. You will also find that blacksmith candlesticks are almost always one-of-a-kind, each example having variations from all the others.

The folding candlestick illustrated here is unique in the way it folds. The hook is hinged on top of the spike. That means the hook has to be unfolded before the spike is unfolded. This design has a disadvantage in that you cannot unfold just the hook alone, as the hook will be upside down until the spike is unfolded. None the less, the stick is well made and will fit into the palm of the hand. Illustration by Wendell Wilson.



Type:	Folding
Length:	3 3/4" folded, 5 3/4" unfolded
Workmanship:	Very good
Rarity:	Unique
Owner:	Rick Yarborough

The First MAC Centerfold

by Ted Bobrink

The photo insert was taken in 1897 at the Last Dollar Mine near Independence, Colorado, and certainly tells a story. Not content to wait for the miners to come to him, this blacksmith decided to come to the miners to peddle his candlesticks. The question is: who is doing the selling? Is it the guy on the left, the guy on the right, or could it be the guy in the middle on the other side of the burro? From the Phil Casdorff collection, Redlands, CA.

Mining Candles

by Ted Bobrink

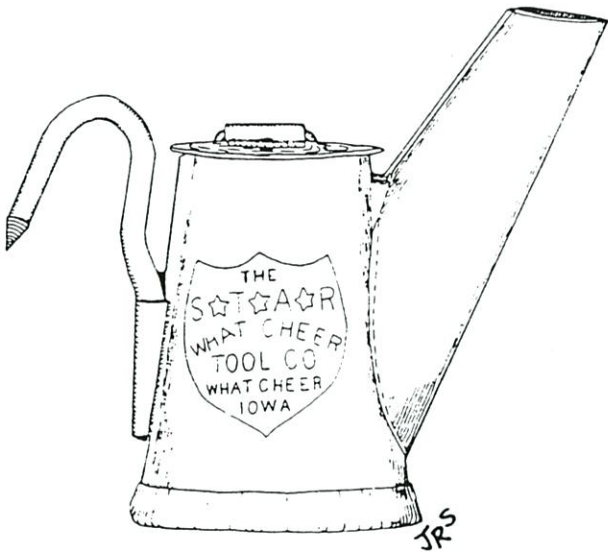
Herb Dick, of Woodland, California, sent us some nice photos of his Perry Candle box he recently found on a trip through Butte, Montana. Stamped in black ink on the end of the box is: STEARIC MINING CANDLES CHAS. T. PERRY & CO. HELENA-MONTANA. I hadn't heard of this company before, so I called the Lewis & Clark Library in Helena, and talked to Bruce Newell in the information department. He found the Chas. T. Perry & Co., 1510 Walnut St., Helena, Montana listed as a soap and candle manufacturing company from 1888 to 1921. After 1921, the company was listed only as a soap manufacturer. The sides of the box are also stamped with large letters reading PERRY MINING CANDLES. For some reason, most of the candle manufacturing companies that made mining candles did not use the word "mining" on their boxes. Thus it is always a plus when one finds a candle box that specifies the candles as "mining candles."



Oil and Sunshine Lamp Products of the What Cheer Tool Company

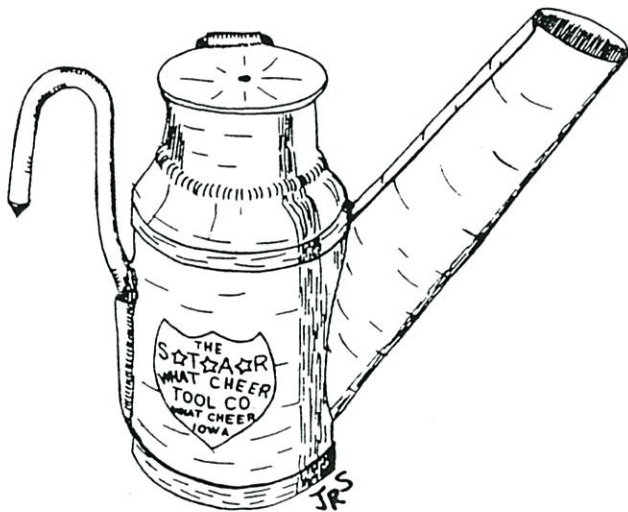
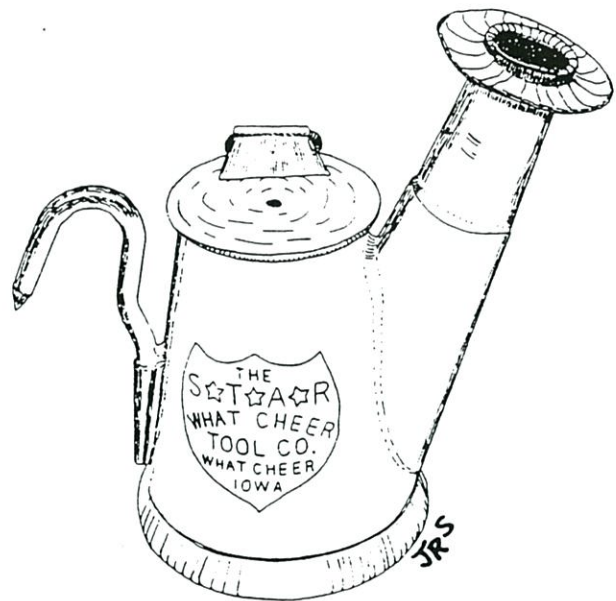
by Jim Steinberg

The What Cheer Tool Company of What Cheer, Iowa, distributed a variety of products for use by miners. Among them are axes, picks, and the very rare and desirable What Cheer carbide cap lamp. Less difficult to find but none the less desirable in a miner's wick lamp collection are the face and driver's lamps sold by What Cheer. At least one What Cheer oil lamp has been seen that has the Grier Bros. logo on the spout. Since The What Cheer Tool Company was primarily a distributor and not a manufacturer, it is likely that their oil lamps were made by Grier Bros. and other manufacturers.



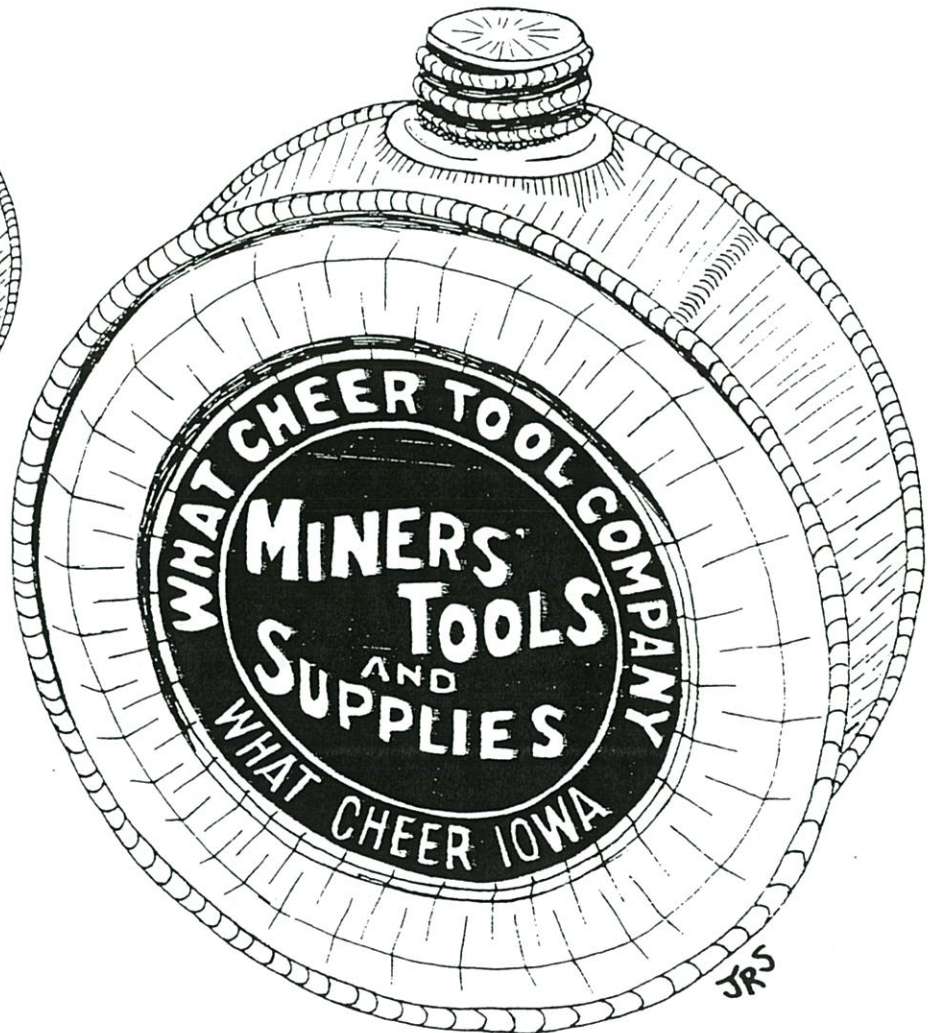
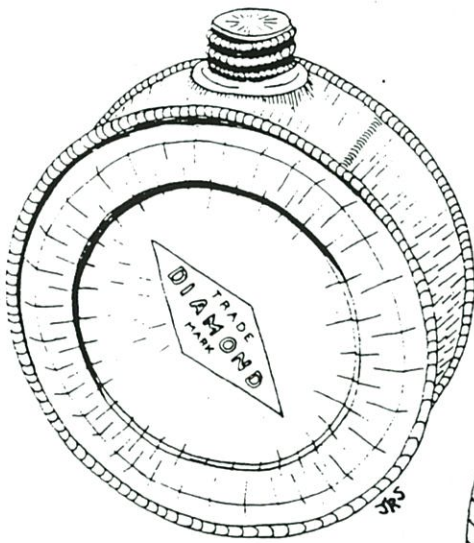
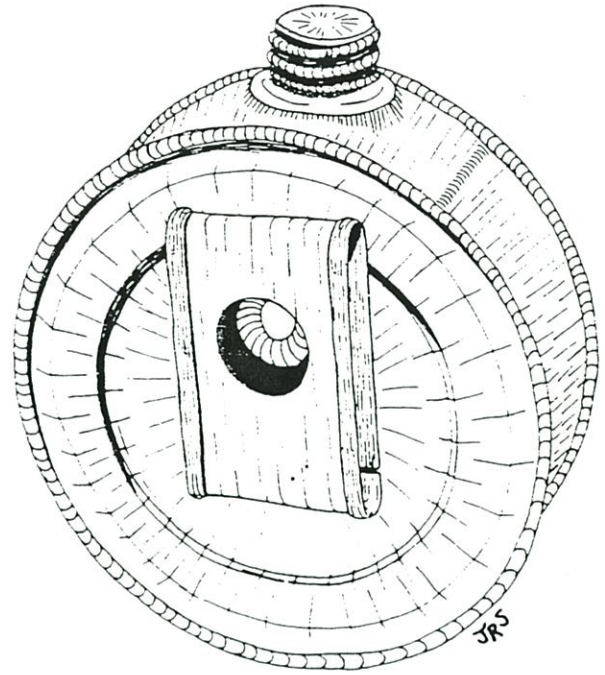
The lamp to the left is a miner's Sunshine face lamp as evidenced by the double spout. The lamp is made of tin and stands 2.8 inches tall at the top of the spout. From the collection of Jerry Spintig.

The lamp to the right is an oil lamp, visible in the single layer spout. Notice the drip collar on this face lamp. This lamp is made of tin and brass, with the brass comprising the main body and lower spout. The cap, the bottom, and the upper portion of the spout are tin. Standing 3.1 inches tall, this lamp is from the Jim Steinberg collection.



This somewhat larger lamp, measuring 3.5 inches tall, is a driver's lamp. The most striking feature of this What Cheer oil lamp is its solid copper construction. (Note: When considering a lamp to be copper, be sure to test with a magnet to determine if the lamp is solid copper or merely copper-plated steel). This lamp is in the Len Gaska collection.

The What Cheer Tool Company also distributed a miner's lamp oil canteen. Prominently displayed on the front of the canteen is the label in white lettering on a red background. Careful examination of the label will reveal that it has been applied over raised logo lettering of the words: "DIAMOND TRADE MARK" all enclosed within a diamond. On the reverse of the What Cheer oil canteen is a belt loop which is swivelled. This is a clever feature intended as a convenience to the miner. Just unscrew the cap and rotate the canteen to fill any oil cap lamp. The What Cheer oil canteen is 4.5 inches in diameter and 1.6 inches deep. Most known examples appear to have some numbers penned onto the paper label. From the Ted Bobrink collection.



The Davy Safety Lamp

by Jim Steinberg

On December 5, 1815, Sir Humphrey Davy announced to the world that wire gauze could be used to isolate a flame from an external explosive atmosphere.

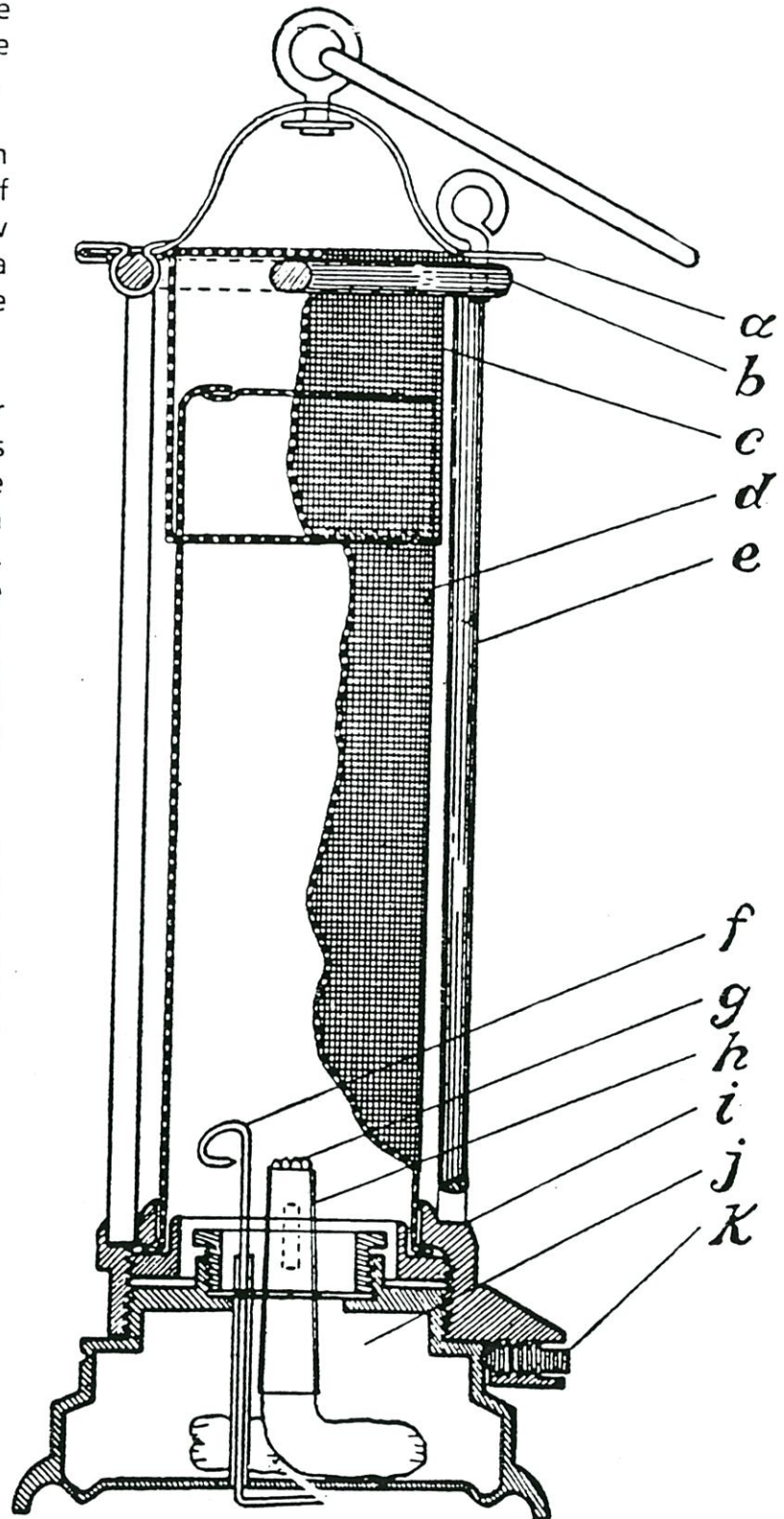
Davy created a lamp with an open gauze which allowed the free flow of air in and out of his lamp. This now allowed the miners to work with a greater degree of safety in explosive atmospheres.

The Davy lamp though, had room for improvement. Because the flame was completely enclosed within the wire gauze, the light output was poor. In areas where air flow was considerable, the flame would be blown against the gauze and quickly burn a hole through it. Obviously this could be disastrous. To remedy this problem, metallic wind shields were attached to the support posts to cover 2/3 of the gauze.

Over the years, many manufacturers have produced their own models of the famed safety lamp of Sir Humphrey Davy. Among the American companies to do this were Hughes Brothers and the American Safety Lamp and Mine Supply Company.

Components of the Davy lamp are:

- a) Brass hood
- b) Brass ring
- c) Gauze cap
- d) Main wire gauze
- e) Three iron support posts
- f) Wick snuffer
- g) Cotton wick
- h) Wick holder
- i) Brass ring
- j) Brass oil container
- k) Key lock



The Wolf Junior Safety Lamp

by Jim Steinberg

Smaller than the standard Wolf safety lamp, but larger than a pocket safety lamp, is the Wolf Junior. This lamp is also not as easy to find as its larger brother.

Following are the comparative heights of the three basic sizes of Wolf Safety Lamp.

1. Standard size - 11.75 inches.
2. Wolf Junior - 10 inches.
3. Pocket Wolf - 7.25 inches.

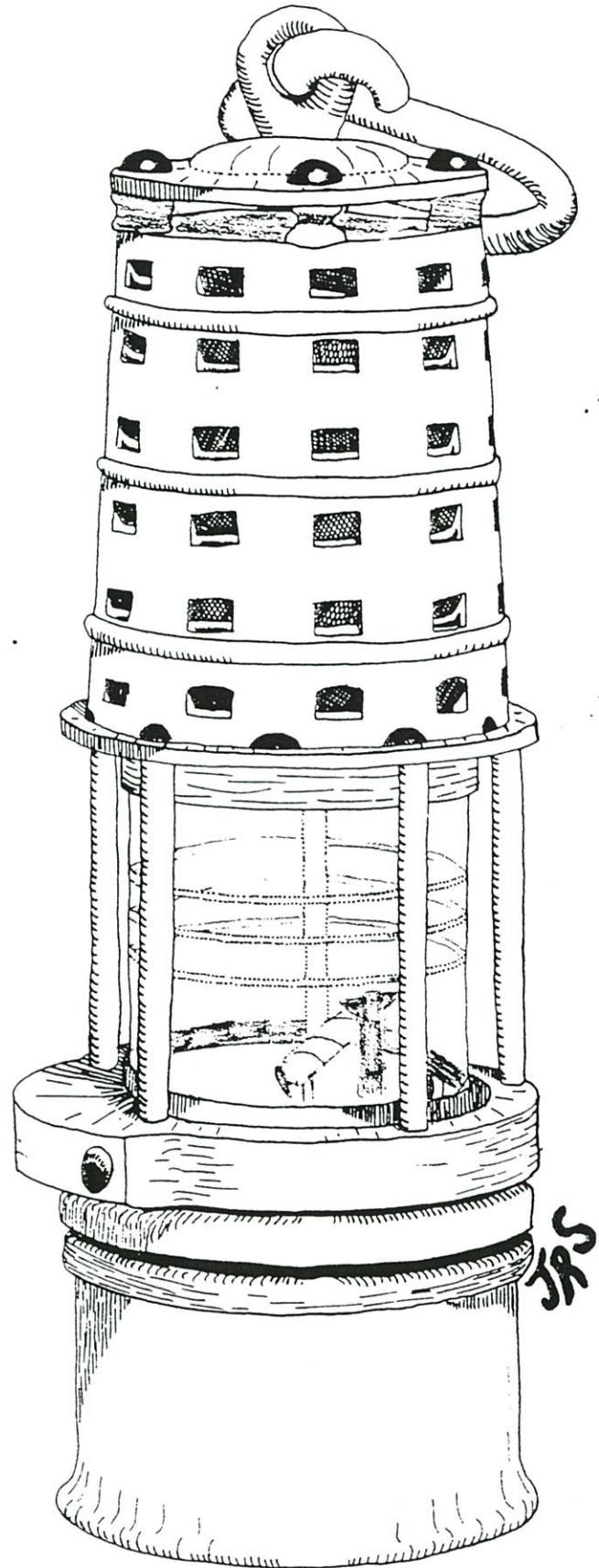
The standard size Wolf safety lamp has a vertically corrugated bonnet with a considerable number of stamped vents arranged in vertical rows. The Wolf Junior has a bonnet with 3 horizontal raised rings and fewer stamped vents.

The bonnet and body of the Wolf Junior are made of aluminum. The lamp shown here has a magnetic lock. This lamp is equipped with Wolf's standard spring loaded flint ignitor.

Just like the larger Wolf, the Junior has its air inlets below the locking ring in a ring with flame blocking vents.

Another feature that it shares with its big brother is nested double gauzes within the bonnet.

The Wolf Junior illustrated here is from the collection of Jim Steinberg.



Safety Fuse

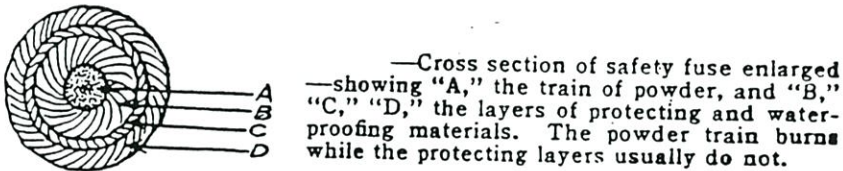
by Mark Bohannon

Safety fuse consists of a center thread surrounded by a train of potassium nitrate black powder manufactured specifically for fuse, and is enclosed in various wrappings of textiles and waterproofing materials (Fig. 1). Its purpose is to transmit fire to a blasting cap or other explosive charge. The center thread has no influence on the burning rate of the fuse but is used to aid in securing a uniform flow of powder into the fuse.

Safety fuse is made in two distinct burning rates of approximately 120 and 90 seconds per yard when burned in the open at sea level. All manufacturers of safety fuse state that they use every care and precaution to manufacture their fuse within an allowable variation of ten per cent either way from the standard burning rates. There is no absolute standard burning rate. Increased pressure as in the confinement of a bore hole may cause the burning rate to be considerably greater than in the open. The burning rate under these circumstances is highly variable due to the many different kinds of stemming material used and the different degrees of tightness of the tamping. A reduction in external pressure, on the other hand, slows the burning rate. Thus the altitude above sea level must be taken into consideration.

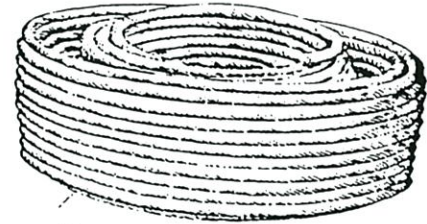
The powder train is protected from abrasion and penetration from water by the covering of tapes, yarns, and coatings of waterproofing materials such as asphalt and plastic. These protective coverings also prevent the transmission of fire between adjacent lengths of fuse and minimize the chance of prematurely setting off the explosive charge by stray sparks.

When the fuse is lit, the outside coverings of the fuse will smoke and sizzle due to the melting of the asphalt based waterproofing material, but all of the fire will be contained within the core of the fuse. Properly ignited, a jet of flame called the "ignition spit" shoots out of the end of the fuse the moment the powder core is lit.



—Cross section of safety fuse enlarged —showing "A," the train of powder, and "B," "C," "D," the layers of protecting and waterproofing materials. The powder train burns while the protecting layers usually do not.

Fig. 1



Double roll of safety fuse with paper wrapping removed.

Safety fuse was used extensively in early underground mining due to the fact that the delay electric blasting cap was still in the development stage, and safety fuse was simple to use. Unlike delay electric blasting caps, which required the purchase of not only the caps, but also a blasting machine and a galvanometer and rheostat, the use of safety fuse takes only the fuse, blasting caps, and crimpers. Any miner could set off a round of explosives with delays by using safety fuse of varying lengths. The shortest lengths of fuse will detonate their charges first.

The primary factor for the extensive use of safety fuse in underground mining was the low cost and the need for millisecond delays was unnecessary. Most miners preferred a second or more between each hole to insure adequate rock movement to avoid fracturing the surrounding roof and walls.

Coast Manufacturing and Supply Company

by Mark Bohannon

In 1867, Lemuel Stoughton Ellsworth, the son-in-law of Joseph Toy of the Toy, Bickford & Company of Simsbury, Connecticut, was sent to California to establish a branch office to manufacture and market safety fuse on the west coast.

In 1902, the California Fuse Company, the Western Fuse and Explosives Company, and the Metropolitan Fuse Company were consolidated with the California branch of the Ensign, Bickford, and Company (the name had been changed from Toy, Bickford, & Company in 1887 after Toy died) under the name of Coast Manufacturing & Supply Company. The fuse plant was located at Trevarno, near Livermore, California. Coast Manufacturing and Supply Company was sold to the Apache Powder Company in 1964.

Coast Manufacturing & Supply Company sold safety fuse packed in a number of different quantities. The most common packaging consisted of two 50 foot coils, each paper wrapped, with one nested within the other to make a 100 foot package. These were then packed in wooden cases containing 1,000, 3,000, or 6,000 feet. They were also packed in fibre cases containing 1,000 or 3,000 feet (Fig. 1).

Safety fuse was also sold wound on a light metal reel containing 3,000 feet and packed in fibre cases containing one reel, or in wooden cases containing either one or two 3,000 foot reels. Special metal lined wooden cases were also furnished at twenty five cents per thousand feet extra.

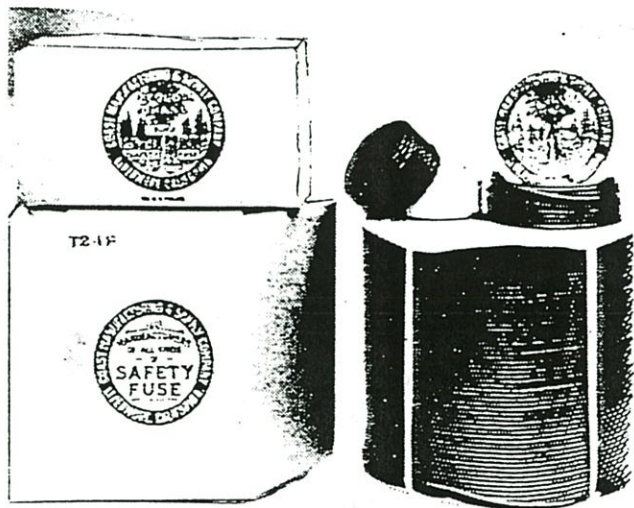
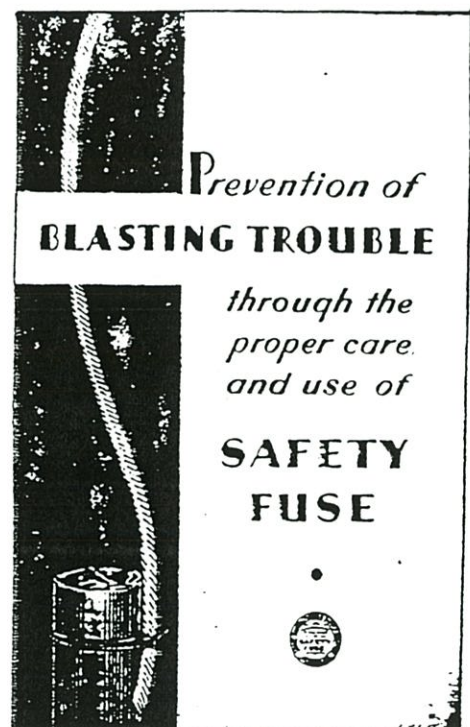


Fig. 1
(From Apache Powder Catalog)



A 20 Page, 9 x 6 Booklet

Many safety fuse manufacturers produced and sold a number of different brands of fuse that varied quite widely in their ability to withstand water, temperature changes, handling, and other aspects according to the different conditions under which the fuse was to be used. Of the many fuse companies in the United States, Coast Manufacturing & Supply Company probably sold the largest selection of fuse brands. Shown below are several brands of safety fuse along with a guide for the best brand for any particular blasting condition. Coast Manufacturing & Supply Company was sold to Apache Powder Company of Arizona in 1964.

VARIETIES AND USES OF SAFETY FUSE

Select from the following brands the one best adapted to your particular conditions of use. All of these brands have a burning speed of 120 seconds per yard when burned in the open at sea level with an allowable variation of 10%.

Brand	Comparative Qualities of Various Brands					Recommended for
	Price	Waterproofness	Freedom from side splitting	Freedom from smoke	Ability to withstand rough usage	
Blue Label	Seventh (lowest)	Fourth (poorest)	Fifth (poorest)	Third	Fourth (poorest)	Dry and Damp Ground, Agricultural and Dry Quarry Work. Use with non-inflammable explosives. Black finish, cotton countered.
Dreadnaught	Sixth	Third	Fourth	Fourth (poorest)	Third	General all-around use for surface and underground. Will withstand ordinary wet work. Black finish, cotton countered.
Sequoia White	Fifth	Second	First (best)	First (best)	Third	All uses in very wet work. Will withstand very heavy water pressure if not "laced", "half-hitched" or "kinked". Easy to light as powder core adheres to split ends. Especially recommended for warm climates and for use with inflammable explosives. White finish, cotton countered.
Sequoia Black	Fifth	Second	First (best)	Third	Second	Same as White Sequoia, except Black finish, cotton countered.
Comet Special	Fourth	Third	Third	Fourth (poorest)	Second	All uses in wet work. Especially resistant to acid mine waters. Black tape finish.
Bear	Third	Third	Second	Second	Second	All general underground uses in wet work. White finish, cotton countered.
Victor	Second	Second	First (best)	First (best)	Third	All uses in very wet work. Pliable and will withstand wide variations in temperature. White finish, cotton countered.
Triple Tape	First (highest)	First (best)	Second	Fourth (poorest)	First (best)	All uses in very wet work. Especially constructed to withstand heavy tamping. Black tape finish.



(Red)



(Black)



(Maroon)



(Black)



(Red-Brown)



(Orange)



(Black)



(Green)

Collectible items from safety fuse companies are usually difficult to find. Rolls of safety fuse can sometimes be found in garages or attics of mining communities, but most of the safety fuse wrappers and packing containers in collections were found underground in abandoned mines.

Most wrappers which are found are torn and wrinkled because the miners usually just tore open the wrappers, then wadded the paper up and threw it in a corner or waste area. In most mines, only one or two brands of fuse might be found, but sometimes a mine will contain many different brands, often from more than one company.

I would appreciate receiving good photocopies from anyone who has any brands of safety fuse wrappers to better document the variety of brands the different companies manufactured.



Grasselli Cap Tins

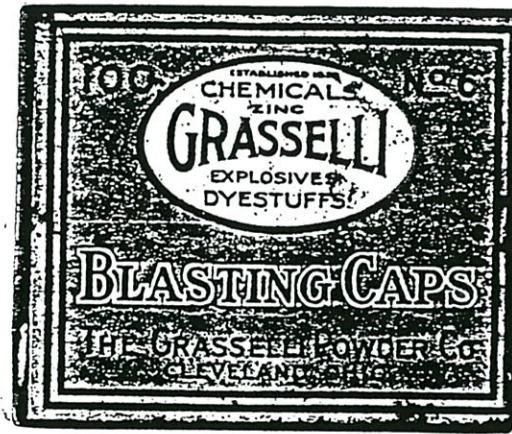
by Mark Bohannon

The Grasselli Powder Company, a subsidiary of the Grasselli Chemical Company, was incorporated in Ohio on July 1, 1917 as a consolidation of the Burton Powder Company, the American High Explosives Company, and the Cameron Powder Manufacturing Company.

No information on its length of existence is known. Shown below are the four different styles of cap tins known from the Grasselli Powder Company.



Lt. Blue, Drk. Blue, White Lettering
(Ted Bobrink Collection)



Green, Yellow, Blue Lettering
(Mike McLaughlin Collection)



Lt. Blue, Drk. Blue, White Lettering
(Mark Bohannon Collection)



Lt. Blue, Green, Drk. Blue Lettering
(From Andy Martin's Cap Tin Book)

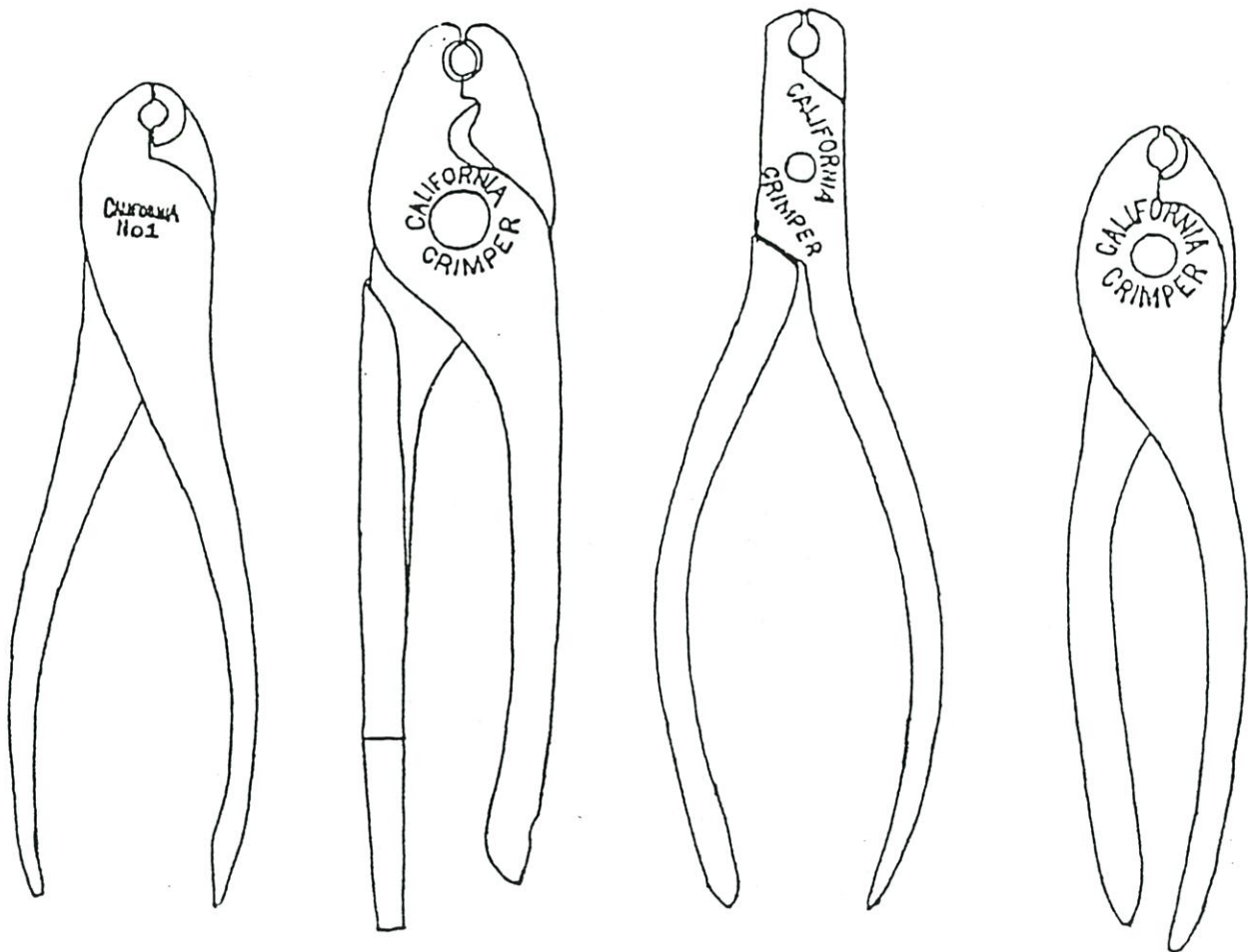
The California Crimper by Mark Bohannon

The California cap crimper sold by the California Cap Company of San Francisco, is one of the most sought after cap crimpers, especially for collectors in the western states.

Although the California Cap Company was probably the largest manufacturer of blasting caps in the west, the cap crimper sold by them is one of the hardest to find.

The main reason is that the California Cap Company sold most of their caps to powder company distributors and direct sales to mines or miners was very limited. These distributors usually offered cap crimpers with their own powder company name on them, and not those sold by the California Cap Company. Therefore, the California crimpers had to be ordered directly from the California Cap Company.

At this time, there are only four California crimpers known to the author and all four, as seen below, are different. Left to right, from the collections of Don & Dave White, Ted Bobrink, John Johnson, and Don & Dave White.



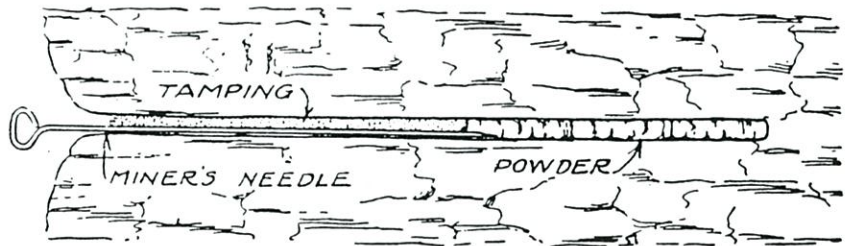
Squibs

by Brad Ross

The squib (also known as a match, reed, rush, etc.) was used in the Eastern states mostly by coal miners to detonate black powder explosives. The squib is a small paper tube filled with quick burning powder and has a slow match at one end. The match end acted as a fuse to give the miner time to evacuate the area. The quick burning powder propelled the squib into the drill hole much like a bottle rocket during the Fourth of July. Sparks from the squib would detonate the explosives when it reached the black powder.

Two types of squibs were used: Sulfur and Gas. The Sulfur squib match end burned with a flame when lit because it contained sulfur. The Gas squib match end was impregnated with a composition that glowed without a flame. The Gas squibs were supposed to be safer when used in gaseous mines because the match would not ignite methane in the area. Unfortunately, they proved unsafe because of the large amount of sparks that were produced by the rocket action. The miner used the following procedures when blasting with squibs and black powder:

- a) Drill hole
- b) Place black powder cartridge in the end of the drill hole.
- c) Place needle* into black powder cartridge.
- d) Tamp stemming into hole around the needle.
- e) Pull out the needle.
- f) Place squib in hole left by the needle.
- g) Light match end of squib and run like h--l.



A bore hole loaded and tamped with miner's needle in place. The needle is withdrawn, and a miner's squib inserted in the opening thus made.

* The needle is a thin copper rod, usually 5 to 6 feet long. It had a loop handle on one end and was pointed on the other, therefore the term "needle."

Following is a page from a mining catalog and two examples of squib boxes.

MINERS' SAFETY SQUIBS

FOR FIRING BLASTS IN COAL MINING

FIG. 4737.

Daddow & Beadle's (yellow label), burns with a flame, for general use, 6-in. long.
List price.....per 1000, \$1.50

Daddow & Beadle's (red label), burns with a spark, for use in mines containing gas or fire damp, also suitable for general use, 6 inches long.
List price.....per 1000, \$1.50
100 in a pasteboard box, 10,000 in a case, weight per case about 35 lbs.

Powell's rocket (yellow label), burns with a flame, for general use, 5 inches long.
List price.....per 1000, \$1.50

Powell's gas (red label) burns with a spark, for use in mines containing gas or fire damp, 5 inches long.
List price.....per 1000, \$1.50
100 in a pasteboard box, 10,000 in a case, weight per case about 26 lbs.

SAFETY SQUIB MFG. CO.'S "BLUE LABEL"

Considered the best squib for general use. Packed 100 in a box, 100 boxes to a case. Sold only in case lots.

List price per 1000. \$1.50

HOWELL'S "BLACK DIAMOND" SAFETY SQUIBS

We make these Squibs in both sulphur and gas and put them up in whole or half cases, as desired.

A case consists of 100 small boxes and each small box contains 100 Squibs, making 10,000 Squibs to the case.

Gross weight per case, 28 lbs.

Price per case..... \$10.00

SQUIB CASES

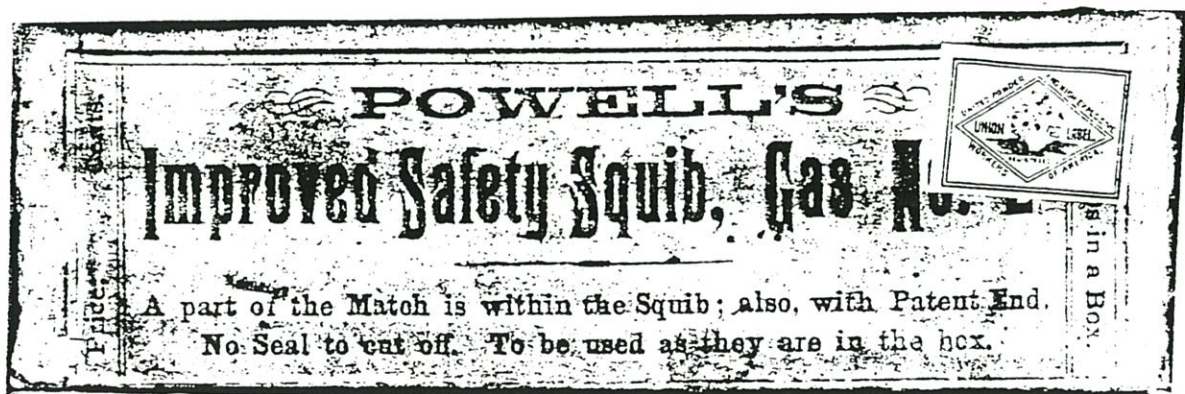
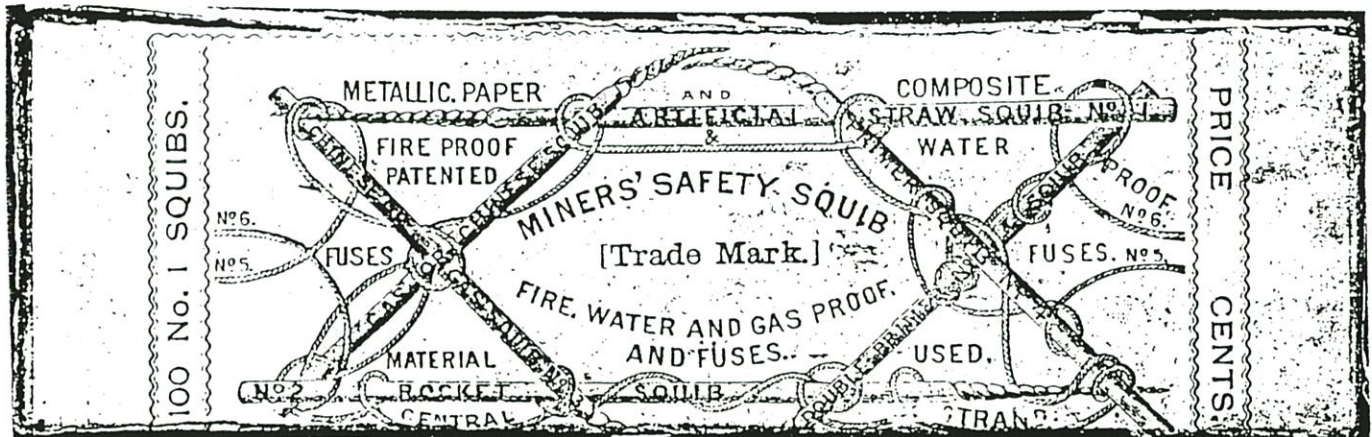


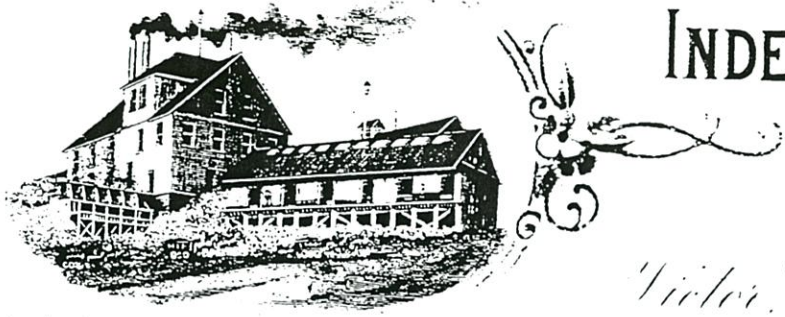
FIG. 4738.

Tin. Size 8x1½x¼ inch, holds 100 Squibs.

List price. per dozen. \$1.20

One dozen in a package, weight per dozen about 1½ lbs.





INDEPENDENCE MINE

W. S. STRATTON.
OWNER

Victor, Colo.

Brian Levine

SYZYGY GOLD MINING CO.

P.O. Box 465

Victor, CO 80860-0465

(719) 689-2155

A company for historians and collectors who want a share of America's mining past. Whether that be stock certificates, USGS publications, maps, prospectuses, photos, ore specimens, mining hardware, directories -- whatever history has to offer.

The Official Manual

by Brian Levine

What would we do without stock broker's handbooks? Really, what would we stock and information collectors do? We'd be lost!

These handbooks used to be the tools through which stock brokers sold shares in mining properties. So useful were these tools, Cripple Creek stock brokers sold 83,698,687 gold mining shares worth \$13,971,149.06 in the first 5 months of 1899. That is quite an impressive figure, especially when you consider only \$15,650,000 in gold was produced by Cripple Creek's 475 operating mines for all of that same year. It leads one to question who really made the most from mining!

Obviously stock brokers profited -- greatly. That would lead one to believe those brokers handbooks were extremely helpful tools indeed. So what exactly were they? And how could they possibly be so important to today's mining artifact collector? To answer these questions, let's look at several broker's handbooks issued on the mines of the Cripple Creek District.

Among the earliest was a pamphlet simply entitled "Cripple Creek." This 36 page publication was compiled by John W. Proudfit, owner of a mining investment in Colorado Springs. This pamphlet was published in January 1894, and gave the prospective investor a short history of the District (very short since the District had only been in existence since April 5, 1891), production records to-date, several small claims maps, details of specific dividend-paying companies, a list of "Leading Incorporated Companies," and a "Bird's Eye View" map of Cripple Creek. The entire layout was probably based on a basic format developed in other mining districts.

But Cripple Creek soon improved upon every aspect of mining camp life initiated in previous districts. It wasn't long before directors of stock exchanges dealing in Cripple Creek properties realized the potential of the promotional pamphlet. In 1895, The Board of Trade and Mining Exchange of Colorado Springs issued, "Some Facts About Cripple Creek, Colorado, America's Greatest Gold Camp." This pamphlet covered only briefly the history of the District. It was more concerned with the promotion of working mining companies. Twenty-six of its thirty-six pages centered on specified mining investments, listing capitalization, property owned, directorship, and, in some cases, production. This publication marked the distinct separation of the broker's handbook from the promotional pamphlet.

In 1896, H. L. J. Warren and Robert Stride compiled and published the extravagant book, Cripple Creek and Colorado Springs Illustrated. It was printed on enameled paper to give greater clarity to the hundreds of photos used. An accurate map locating the District's most productive mines was tipped into the front. And a large-sized (9 1/2" x 12") format, hardcover, gilt lettering, and ornate design work gave the Cripple Creek District the grand promotion Warren and Stride had intended. The contents of this book were mostly historical; however, it also contained a 17 page mining company listing.

Cripple Creek and Colorado Springs Illustrated, on the whole, proved to be more a collector's item even in its day than a useful broker's handbook. Stock brokers preferred the smaller, less expensive publications such as, "The Standard Handbook: A New Book of Reference to the Mines and Mining Companies of Cripple Creek and Other Mining Camps of Colorado, U.S.A." (July 1899), and "The Cripple Creek Claims Handbook, Complete Information of Cripple Creek Mines and Mining Companies of America's Greatest Gold Camp" (January 1901). These publications, usually 9 inches long and 4 inches wide, listed information most pertinent to the sale of mining shares, such as capitalization, directorship, property and location, development work, production, and dividends. Some contained maps displaying topographical detail; others, claim locations.

In 1899, a mining engineer named Fred Hills came up with the idea of an elaborate broker's handbook. One that would serve as the major reference for not only stock brokers, but also mining engineers, investors, corporate directors, mineral surveyors, cartographers, state and county officials, and many others. Hill's idea became *The Official Manual*: a 495 page volume on the discovery, geology, development, and active mining companies of the Cripple Creek District in 1899-1900.

Most likely Hills had derived his idea from those earlier promotional and broker's publications. Perhaps he'd even seen copies of the Transvaal directories. Undoubtedly he'd read Corbett's *Colorado Directory of Mines, 1879* and Corregan and Lingane's *Colorado Mining Directory, 1883*. What Hills did different, however, was take the best aspects of all these previous publications and synthesized them into one superbly laid out volume on one gold mining district -- that being Cripple Creek.

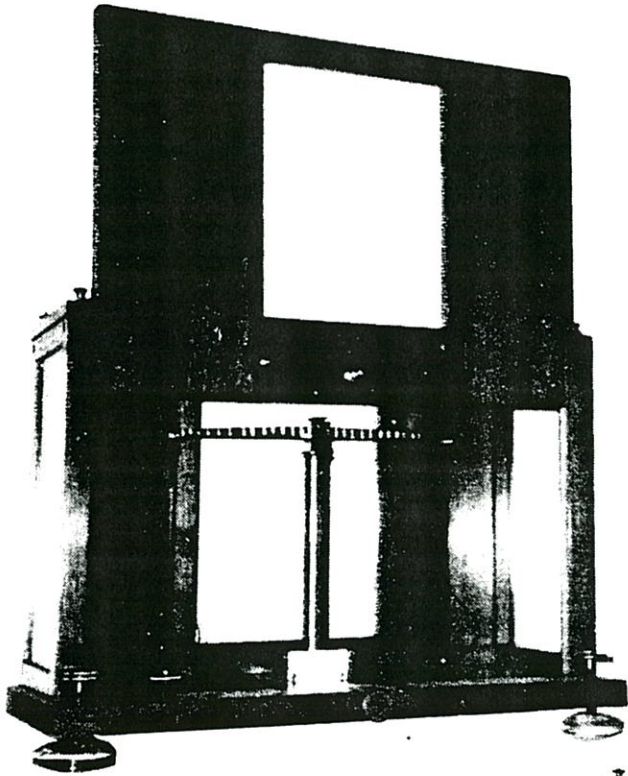
T. A. Rickard, State Geologist at the time, wrote the introductory history and geology sections. George R. Buckman -- author of several earlier Cripple Creek promotional pamphlets - wrote a section about stock exchanges and investments. Fred Hills compiled information on almost 500 operating mining companies in the District, listing directors, capitalization, property, development, production and dividends, and high and low stock quotations. He also provided accurate plats (maps) of each company's property -- certainly a new twist on the information circuit. Also included in this volume was a finely detailed colored map of the Cripple Creek District. All in all, one of the finest -- if not the best -- stock broker's handbooks ever published on a single mining district. A volume even the United States Geological Survey would have been proud to publish.

Today, Hills' *Official Manual* is sought after quite avidly by Cripple Creek stock collectors. Not only because it is an exquisite mining book, but because of its superb detail. After all, what makes collecting stock certificates intriguing and addictive is the information -- the history one discovers in the research. The personalities, astonishing facts, wondrous geology, and great wealth that makes mining so seductive.



A Traveling Assayer's Scale

by Don and Dave White

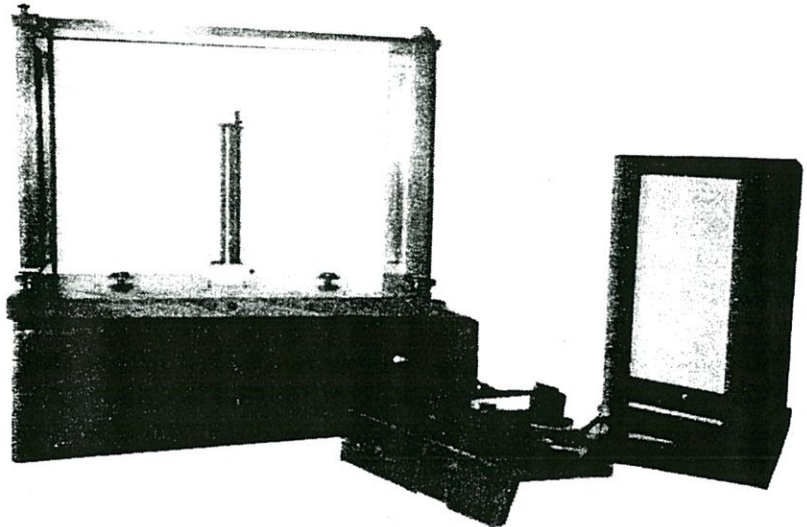


We recently obtained the balance-beam scale illustrated and have been unable to locate any specific information about it. Perhaps one of the MAC readers could help in identifying this uniquely hand-crafted collapsible scale with a leather carrying case.

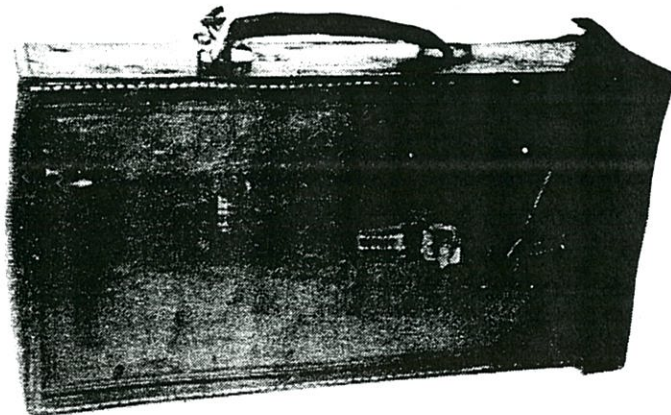
The ivory tag mounted to the beam post identifies the maker as BECKER & SONS, NEW-YORK.

The cabinet to the left measures 14-3/4" W x 10-3/16" H x 6-3/4" D. The cabinet is made of mahogany. The glass appears to be early because of the imperfections in its surface. The base is made of steel, the 1-5/8" pans appear to be nicked tin or silver. Other metal components are brass.

What makes this scale so unique is that it completely dismantles. All metal components fit into a form fitting wood holder. The front and rear cabinet doors are hinged and fold to half their original width. All of the components insert (in jig-saw fashion) into the wood box pictured to the right (directly under the cabinet).



Once all the components are placed in the box, the cabinet base inverts and acts as the box lid and is locked in place by slide locks. The box is then inserted into the leather case and it is then ready for travel. The leather case measures: 16" x 8 1/4" x 4-5/8".



The verbal history that came with the scale indicated that it was used by a traveling assayer in the Gold Fields of Canada in the late 1800s.

Mine Bell Signs

by Ted Bobrink

It was a cold day in February 1987, as I was about to take my first trip down the 3350 foot Junction Shaft, the deepest mine in Bisbee, Arizona. My good friend Steve Eady, in charge of exploration and development for Phelps Dodge in Bisbee, asked me if I would like to see the pumping station on the 2000 foot level of the Junction Mine. Not being one to turn down a chance of a lifetime, of course I said I would go.

With our hard hat lights and belt mounted battery packs, plus a self-contained respirator, we stepped on to a very open elevator cage. Directly in front of us was a beautiful blue and white porcelain Arizona mine bell sign. Steve reached out and pulled the bell chain three times with a pause then twice followed by six times, then twice again. This told the hoist engineer to lower men slowly, and stop at the 2000 foot level. They should change the word "slowly," for that was like no elevator ride I have ever encountered.

All the way down, the only light was from our hats. Suddenly, a flash of light went by and Steve said that was the 1200 foot level, then again at the 1500 foot level. We were going down so fast, I couldn't make out what I was seeing as each level went by. The levels are 100 feet apart and it didn't take long to go from one to another. Finally the cage started to slow and we came to a stop. The station area was very well lit, and hanging in front of us was another bell sign just like the one at the surface. Hanging next to the bell sign was another sign that read "2000 level for cage ring 6-2."

Steve then showed me the massive pumps that kept all the mines in Bisbee dry, and after a good look, we went over to the call bell and rang for the cage to take us to another level. In a few minutes, the cage came down and we got on. After Steve gave the proper signals, we went up to the 1700 foot level. Getting off on this station was a thrill as not only was there another nice bell sign to look at, but this being a working level, there were about six or eight side dump ore cars full of ore ready to go to the surface.

After viewing the mining operations, drilling rigs, and mucking machines, it was time to head for the surface. After giving the proper signals, the cage appeared and we went up nearly a half-mile to the surface thus ending my first experience with mine bell signs and the actual use of the signals.

The Arizona mine bell sign illustrated here was manufactured by J. W. Stonehouse of Denver, Colorado [see MAC, Issue 4, Summer 1989], and is 18" by 36". The sign is porcelain with white lettering on a royal blue background. The signs I saw in the Junction Mine were also by Stonehouse, but were 46" long as they had signals down to the 3900 foot level. I have also seen this sign done on white cloth with black lettering and the word "Arizona" in red; a very attractive sign.



The Noble and Holy Order of the Knights of Labor

by Jim Steinberg



The K of L was founded on December 9, 1869 in Philadelphia by 9 tailors. The leader of these men was Uriah Stephens, who also being a Mason, was instrumental in creating the elaborate rituals and secrecy of the K of L. So secret was the organization that rituals were passed along by word of mouth, and in published announcements the name of the K of L was shown only as 5 asterisks ***** (something to look for in old papers).

In 1878, when the K of L became national, Uriah Stephens was elected its first Grand Master Workman. These men created an organization whose intent was not to oppose industry, but instead to improve the lot of the working man through education and self help. The K of L was meant to be an organization for both tradesmen and workers in industry. It was set up as follows:



Grand Master Workman head of the General Assembly (the National Body)
District Master Workman head of the District Assembly
Master Workman head of the Local Assembly (5 or more to a district)

Initial growth of the order was slow. Religious aspects of the rituals kept some workers away. The secrecy of the Knights was opposed by the Catholic church which prohibited membership in the K of L. Furthermore, the unmasking of the Molly McGuires had created in the public mind a perception that secret organizations were inherently criminal.

Initiation in the coal mines reflected the secret and ritualistic nature of the K of L. It might start with a candidate walking to an abandoned coal mine. Men in black hoods and gowns would conduct the miner further into the tunnels where another hooded man would lecture upon the purpose of the K of L. Next, the hooded man would administer the oaths of secrecy, obedience, and mutual assistance. Ultimately, the frightened candidate would be led deeper into the mine to the Chamber of the 5 Stars where he would be announced as a new member of the Noble and Holy Order of the Knights of Labor.



The religious aspects of the rituals were reduced a bit in 1879 and objecting, Uriah Stephens quit. He would die in 1882 without seeing the K of L rise dramatically to power. The new Grand Master Workman was Terrance V. Powderly. In 1881 he had the remains of the religious aspects of the rituals removed and put an end to the secrecy of the Knights. None the less, a Vatican lift of the ban of the K or L did not arrive until 1887.

The 1880s were turbulent years for labor in America. With a depression following the Civil War and the host of strikes and failures of labor unions, industrial workers had few places to turn. Upon the collapse of the American Miners Association, subsequent small unions had difficulty building clout. It became apparent to miners that the K of L must be the wave of the future. In 1877, miners from Pennsylvania and Ohio were joining the Knights of Labor and held a state miners convention in 1880. In the 1870s Mary Harris herself, aka Mother Jones, joined the K of L while still a seamstress, and got her first taste of the labor movement.

Unfortunately for the miners, the K of L preferred arbitration of strikes (though K of L got deeply involved in many). So, impatient with the Knights, the miners formed the Amalgamated Association of Miners of the United States on May 15, 1883 under John McBride. The Amalgamated went down to bitter defeat in a strike in the Hocking Valley of Ohio in March of 1885. In September of 1885, the miners formed another union: The National Federation of Miners and Mine Laborers. Main officers were executive secretary Chris Evans

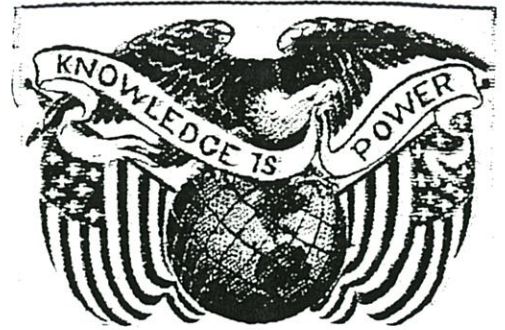
and treasurer Daniel McLaughlin. On February 24, 1886, the National Federation signed with operators, history's first wage contract.

The Knights of Labor were not pleased with the creation of these rival unions. A National Trade Assembly was formed for miner's Number 135, and the K of L demanded participation in Miner/Operator meetings. The Knights, National Trade Assembly and the National Federation held several joint conventions, but it was not to last. In December 1888, the K of L separated from the National Federation in disagreement. The National Federation renamed itself The National Progressive Union of Miners and Mine Laborers and joined with Samuel Gompers's new American Federation of Labor (AFL). The AFL couldn't have been more different from the K of L. Whereas the K of L promoted industrial unionism, which chafed the tradesmen within its ranks, the AFL single mindedly supported unionism strictly by trade. Ultimately, the K of L would fail to survive the difference.

It was in September of 1899 that the National Trade Assembly No. 135 of the K of L and the National Progressive Union decided to bury the hatchet. The National Progressive Union with 10,000 members and the K of L with 15,000 members bargained their way to reunion. On January 25, 1890, they formed a new organization that exists to this day -- the United Mine Workers of America.

The Knights of Labor lingered a few years more. In 1881, they had 19,000 members; by 1885, 111,000 and in 1886 membership exceeded 700,000 with many new members from Colorado and states further west. In 1886 the K of L appeared to have total control of the American labor movement, but after massive failure in a strike against the Gould Southwest System (a railroad), membership began to fall rapidly. In 1888 membership was 200,000 and by the time Terence Powderly was ousted in 1893, there were only 70,000 members in the K of L. The new Grand Master Workman, James R. Sovereign redirected the Knights toward political action, but with the dwindling membership, no longer possessed the power to translate words into action.

Years after leaving the K of L, Terence Powderly remarked of the miners: "In strikes, coal miners have always shown the most sublime fortitude and greatest endurance. From all I have witnessed, and from my study of strikes, I am impelled to say that the miner can endure hunger and privation until the front wall of stomach and his spinal column are about ready to lean on each other for support. The reason for this is that it requires the most heroic type of manhood to seek a living in the mine, and he who has the courage to make that step in the dark each day, which every miner does, must be made of the good stuff, must be endowed with great patience and capable of enduring privation and want."



The Mining Museum

by Robert L. Fox Jr.

The beautiful rolling hills of southeastern Wisconsin are home to lead and zinc mining towns such as Platteville, Mineral Point, Shullsburg, and Dodgeville. No longer will you find any mines in operation; the last, Eagle Picher, closed in 1979. This is however, an area where you can still enjoy eating the Cornish pastry while enjoying the history of the area. Lead mining was important enough that when Wisconsin became a state in 1848, the great seal of the new state showed a miner with a pick in one quadrant.

Located on East Main Street in Platteville is The Mining Museum and Bevan Lead Mine operated by the city of Platteville. Platteville and The Mining Museum are located in the heart of the Upper Mississippi Lead-Zinc District.

Through the use of graphic arts, miniature models, and dioramas, The Mining Museum strives to involve the visitor into understanding the heritage and history that mining played in shaping the history of the area.

The museum has displays showing the tools that were used in zinc and lead mining as well as a small collection of miner's lamps that include safety lamps, candlesticks, oilwick lamps, and carbide lamps. One diorama shows different stages of mining from early "digs" to post World War II adits. Specimens of lead and zinc-related minerals are also displayed.

No visit to the museum will be complete without taking part in a tour through the Bevan Lead Mine. Here you will be able to view additional displays including timbering, drilling and blasting, and ore "mucking."

The museum also has an operating 1931 locomotive which was manufactured by the George F. Whitcomb Company of Rochelle, Illinois. The locomotive was owned by the Vinegar Hill Zinc Company and was used near Shullsburg in the Blackstone Mine, a mine with seven miles of tunnels.

If by chance your visit to The Mining Museum is during late July, the museum hosts a special event demonstrating drilling, tramming ore, and hoisting.



The MacKay School of Mines

by Len Gaska

The museum at the MacKay School of Mines of the University of Nevada in Reno, is long on mineral specimens and short on mining artifacts. But what they do have will bring tears to the eyes of any mine lighting collector! Not only are the few lamps and candlesticks rare or unique, virtually every item is in mint condition. There are two Hoppe Brite-Lite carbide cap lamps, most likely an early design, with water doors very similar to the Ever-Ready. One of the Brite-Lites has hand handles and the other has a reflector hood complete with glass front. The display also includes an early nickel plated Wolf cap lamp in mint condition. Drool!! Also included were several very nice and unusual Wolf hand lamps, and a nickel plated Baldwin Lightning Bug with hand handles mounted on a soft cap, the likes which I have never seen before. For the candlestick collector, the display had three incredible sticks made by John C. Doerfler of Goldfield, Nevada in 1910 (see page 81 **A Collector's Guide to Antique Miner's Candlesticks**, Wilson/Bohrink). These candlesticks must be seen to be believed! Also included are several safety lamps and a very early blasting machine. The MacKay School of Mines museum probably has the highest concentration of rare and desirable mine lamps of any museum in this country. I wonder what all they have in storage??

Ask Dr. Lampbottom

Dear Dr. Lampbottom, why are folding candlesticks so rare?

Miners always seemed to gravitate toward simple and durable designs in their lighting equipment. Witness the success of the Varney candlestick and the Justrite horizontal carbide cap lamp. Folding candlesticks were certainly not as durable as a simple blacksmith stick or the Varney. But the primary reason for rarity of folders, no doubt, was the cost of a folding stick as compared with a simple non-folding stick. Folders usually cost about one dollar which was three times as much as a normal candlestick. And that dollar represented a half-days wages in some places. Folding candlesticks were generally purchased by surveyors, geologists, and superintendents, i.e, persons with higher incomes and whose jobs involved less wear and tear on the candlestick.

Dear Dr. Lampbottom, what do you know about a large steel handlamp marked "Challenger, Product of Japan, Made in the Bamboo Islands? "

Well, you stumped the old Doctor on that one! Dr. Lampbottom knows almost nothing about foreign made carbide lamps. So, we ask our readers for any information regarding the "Challenger." You may write to the editor of the MAC or directly to Ed Benjamin, 1941 Courtney Dr., Ft. Myers, FL 33901. Perhaps one of our overseas readers can help.

Dear Dr. Lampbottom, why can't I seem to find many brass Sunshine lamps?

As explained above why folding candlesticks are so rare, cost was a big consideration. Consider the differences in prices for Sunshine lamps from a page from an old hardware catalog (name and date unknown).

Anton Miner, tin	12 cents
Anton Miner, brass	28 cents
Anton Driver, tin	19 cents
Anton Driver, brass	34 cents

Brass lamps generally cost twice as much as tin lamps. For the coal miner with nearly starvation wages, there was no advantage in paying more for a brass lamp.

Do you have any questions of a technical or historical nature for Dr. Lampbottom? If so, please submit them to the MAC editor and we will forward it to the good Doctor. Of course Dr. Lampbottom is an avid collector and is almost always on the road looking for good mining items. For that reason, Dr. Lampbottom cannot send personal answers to each and every one of you. And by all means, if you have information that contradicts one of Dr. Lampbottom's answers, please contact us. Dr. Lampbottom is a snooty old fellow and the editors love to prove him wrong!

Sale and Trade Ads

For Trade: Mineral postcards for mineral postcards. Mining scenes OK if ore or mineral is in picture. Please, no Reo Pickens cards. Write first with your list. Pat Barker, PO Box 810, Campton, NH 03223

For Trade: Milburn No. 22 area lamp, Shanklin Guy's Dropper in box, unfired. Vertical style Justrite. Many rare parts. Parts needed: valve stem for Lu-Mi-Num cap lamp. Rich Finch, Tennessee Technological University, Box 5062, Cookeville, TN 38505

Trade, Sell, and Buy: Mining stock certificates. Send for free list of mining stock certificates for trade or sale. I buy or trade for non-coal mining stock certificates, mining directories, mining company prospectuses, mining books, mineral books, gem books, etc. What do you have? Russ Filer, 13057 S. California St., Yucaipa, CA 92399. (714) 797-1650.

Wanted: New collector wishes to purchase candlesticks and carbide lamps. Also need photo or good copy of miners with candlesticks. Ken Schneider, 7156 Jay St., Arvada, CO 80003.

For Trade: Mining stock certificates from South Dakota and Montana. Some miscellaneous mining tools plus other odds and ends. Interested in trading for Justrite "Uncle Sam" reflector and bracket, carbides, candlesticks, stocks, etc. Bob Otto, 516 Miners Ave., Lead, SD 57754, (605) 584-1552

For Trade: Blasting: Hercules 25 No. 6 blasting cap tin, Trojan 100 No. 6 blasting cap tin, Dupont 100 No. 6 blasting cap tin, DuPont #4 cap crimpers. Carbides: Shanklin Metal Products cap lamp, Wolf No. 856 (sm) hand lamp. Miscellaneous: "Lenticular" oil lamp. Will trade for blasting equipment and supplies (pre-war). Don & Dave White, 1500 Olympic Dr., Milpitas, CA 95035 (408) 946-3288

For Trade: Brass J. Anton oil wick, John Davis and Son anemometer, Shanklin Metal Products carbide, Simmons carbide, Baldwin carbide, Hughes Bros. Davy (1/2 aluminum), Hughes Bros. open bonneted Clanny, Brass Koehler safety lamp, and Concordia trip lamp. Wanted: safety lamps, brass instruments, and carbides. Brad and Linda Ross, 107 Westminster Dr., St. Clairsville, OH 43950. (614) 695-1468.

For Trade or Sale: Beal Bros. pick (hardrock, no handle). Fold-out postcard "A Trip Through the Anthracite Coal Mines" 27 photos, 1913. Stereo photos: 1) Iron miners at work in an underground drift, Seller's Mine, Hibbing, Minn. (candlesticks); 2) Mule train on 1100-foot level, Rarus Mine, Butte (oil wicks); 3) Miners going into the slope, Hazelton, Pa. (oil wicks); 4) An open-pit copper mine (Bisbee, Arizona); 5) The Pewabic and Old Town Mines, Russell Gulch, Colorado; 6) Coke ovens, Rochester Mines, DuBois, Pa. Spoons: Louisiana Purchase Exposition - Official Souvenir - Mines and Metallurgy Bldg.; Independence Gold Mine - Cripple Creek, Co.; and Telluride, Co. All sterling and all excellent. Desire carbide or oil containers for lamps, and mine flashlights. Bill Collins, 9525 Mission Gorge Road #33, Santee CA 92071 (619) 258-7921.

For Trade: "Bonanza" candlestick; will trade for "Fort Pitt" blasting cap tin. John Johnson, Rt. 1 Box 199, West Sacramento, CA 95691

For Trade: United States Standard 20 Hole blasting machine, Hughes Bros. Davy safety lamp, other carbide, oilwick, and blasting items. Have many anthracite railroad items for trade also. Send SASE for complete list. Tom Stranko, 2478 Stephanie Lane, Binghamton, NY 13903

For Trade: Hercules, Atlas, and Apache Powder dynamite boxes; National Carbide can; Auto-Lite carbide cap lamp; miner's lunch buckets, 1 aluminum, 1 enameled steel. Wanted: eastern or northwestern area dynamite boxes, blasting equipment, candlesticks, carbide lamps, or ?? Bob Allgood, PO Box 1368, Jamestown, CA 95327

For Trade: Signs: "Miner's Sunshine" 3' x 1' yellow with black lettering. Marked TDC, Baltimore (bottom right) MAC #3, page 16. "Chute Closed" yellow with black lettering, enamel. "Warning, Don't Pass Cross Bar, etc" Gold scales: Black tin oval (eye glass) 6" x 3 1/4" Gold eagle & floral inscription. Black oval (eye glass) 5" x 2 1/8" inside top silk lined. Wooden box 7" x 3 3/8". Other: "Miner's Root-Beer" mug, blue & white glazed Utica ware. Shows mine car, miners working, lamps, and picks. Wanted (trade or buy): Miniature Hughes Davy, Baby Wolf (all brass or open bonnet type), Copper oilwick cap lamps. antique statues of miners, Standard oil miner's Sunshine tin (MAC #3). Jim Ewing, 26 River Hill Road, Louisville, KY 40207.

Wanted: carbide lamps, carbide flasks, advertising, parts for carbide lamps, and most other items pertaining to mining. Edward Miner, 1337 Broadway N.E., Canton, OH 44730

Wanted: Will trade mining items or cash for lamps marked "Queen & Co." David Crawford, 1808 Harlem Blvd., Rockford, IL 61103

Wanted: Flame safety lamps including foreign made models. Will buy or trade. Have several oil wicks for trade plus several blasting machines and a rare bird cage with slide out bottom. D. Mark Ballard, 1204 Anderson Dr., Marion, IL 62959 (618) 993-8482

For Trade: Always available for trade: European safety lamps, carbide hand lamps, and oil lamps. Ask for details. Interested in American-made lamps. Manfred Stutzer, Madenburgstr. 6, 6700 Ludwigshafen 15, Westfalian, Germany

For Trade: I have a good collection of blasting cap tins for trade. Most are California Cap Company and some are in excellent condition. Interested in trading for tins not in my collection (want list available on request). I am always interested in information on rare tins and the companies that made them. I also collect powder boxes and candle boxes. Andy Martin, PO Box 94, Piscataway, NJ 08855 (201) 699-6131.

PARTS FOR TRADE	MISC.	WATERFEEDS
BOTTOMS	(7) Shanklin reamer cases	(1) Water feed for Maple City, unused
(1) Justrite double bead bottom, unfired	(4) Baldwin screen filters	(2) Auto water-feed with lever
(1) Pathfinder, unstamped, unused	(12) Hansen tips	(4) Justrite early raking wires
REFLECTORS	(3) Early Justrite raking wires	(3) Justrite spiral feeds (one without-spring style)
(1) Guy's 2", brass, unused	(5) Round brass waterdoors (Justrite, Guy's)	(3) Justrite wheel-cutoff feed for early style
(2) Justrite 198, 2" brass, unused	(3) Old style, Justrite brass tip cleaners	(3) Luminum waterdoors, unused
(2) Pioneer, unusual cross-slot nut, unused	(6) Screw-caps for high style J&T tip cleaner	
(1) Sunray, radial ribbed, unused		LAMPS FOR TRADE OR SALE
[1] XRAY unused	TIPS	Grier vertical, unfired
(1) Autolite deep dish setscrew, unfired	(~50) Krakerjack ceramic	Simmons, Pioneer, near mint
(1) Autolite early flat setscrew, unfired	(21) Simmons nickled cross-slot screw-on	Justrite Streamline, unfired in box
(1) Guy's form-fitting type, unfired	[1] Gee Bee cross slot flame protector	Justrite, streamline w/ 9" refl, unfired in box
(1) Guy's set-screw, flat, unfired	(6) Hooded brass Shanklin tips	Baldwin lighting bug, no refl, hook rough
(4) Boxes of Justrite 3" nickle reflectors	(4) Justrite burner hoods	Baldwin pinchwaist
NEEDS	ADDRESS	Squarelite, no hook
Simmons brass bottom, unfired	David H. Thorpe	Scranton, Pat. Applied For, no reflector
The Buddy, reflector	P.O. Box 477	PHONE
Hansen, reflector bracket, complete	Peoria, Arizona 85380-0477	602-974-0534
		602-978-4687

For Trade: Anton wick box and wicks (see MAC #4) for any blasting cap tin I do not have. Ted Bobrink, 12851 Kendall Way, Redlands, CA 92373

For Sale or Trade: Lindahl solid thimble candlestick, nice condtion. Hughes Bros. Davy safety lamp. John Coons, 1127 Adams St., Denver, CO 80206

Wanted: Mine surveying instruments of all types. Also, gimbaled plumb-bobs, assay related instruments and kits, early microscopes, and goniometers. Dale Beeks, Box 2515, Coeur d'Alene, ID 83814 (208) 667-0830

Wanted: Justrite plastic cap lamp, unfired. Mike McLaughlin, 10211 Leonard Lane, Spotsylvania, VA 22553

For Trade: Mining stock certificates for candleholders. Several Tom Reed Gold Mines Co. Will trade one for any style candleholder. Numerous other more common certificates. Send SASE. Fred M. Johnson, Box 2162, Durango, CO 81302

Free Service: If anyone has any black and white coal mining pictures they would like copied, they can send them to me by certified mail. I will copy them at no charge and return the original plus a copy. Jon S. Koenig, 205 South Main St., Fort Branch, IN 47648 (812) 753-4008

For Sale or Trade: Blasting items, carbides, and oil wicks. Send SASE for list. Chuck Frase, 1015 Noelton Lane, Nashville, TN 37204 (615) 297-0139

Wanted: Buying candleholders, carbides, oil wicks, and safety lamps. Ray Setteur, 6917 Regency Dr., Parma, OH 44129 (216) 843-6649

For Trade: F. Schmidt Leadville, Colo. hutch soda, circa 1883; Cripple Creek Bottling Works, Cripple Creek, Colo. blob top beer, circa 1897; A. W. Kenison, Auburn, Cal. blob top beer, circa 1900; Victor, Colo. sterling silver souvenir spoon, circa 1910; **Wanted:** mining town bottles and souvenir spoons. Michael Ebers, 122 Susanne Drive, Clinton, TN 37716 (615) 457-5019

Trade ads up to 80 words are free and encouraged. For-sale ads are only \$5 per issue or \$15 for four consecutive issues. Send ads to the editor: Len Gaska, 1688 E. Corson St., Pasadena, CA 91106. Continuing trade or sale ads should be resubmitted for guaranteed publication. We cannot guarantee publication of general "wanted" ads unless they are paid for at the same rate as for-sale ads.

The **National Scrip Collectors Association (NSCA)** was founded in 1972 by a group of dedicated coal scrip collectors. Beyond the collecting of scrip, many of the members are actively researching the history of coal mining in the United States. Membership is only \$10 per year and includes a newsletter, free ads to members, mail auctions, and national meetings. Membership and/or books can be obtained by completing the application and sending it to **Walter Caldwell, Secretary, NSCA PO Box 29, Fayetteville, WV 25840.**

NATIONAL SCRIP COLLECTORS ASSOCIATION MEMBERSHIP APPLICATION	
Mail to: Walter Caldwell, Secretary P. O. Box 29 Fayetteville, WV 25840	
Name:	_____
Address:	_____ _____
Recommended by:	_____
\$_____	Annual dues — \$10.00
_____	Edkins Catalog of Coal Company Store Scrip
_____	Copies - Vol. I - All states except WV
_____	Copies - Vol. II - West Virginia only
	\$24.00 each volume, postpaid, for members.
	\$30.00 for non-members — Quantity prices available for dealers

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Brad & Linda Ross

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St. Clairsville, Ohio 43950

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Weekends and Evenings
Before 9:30 PM EST

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WESTERN MINING DOCUMENTS: ASSAY,
STOCKS, BONDS, CHECKS, SCRIP, DEEDS,
MAPS, PHOTOS, STEREOVIEWS, ETC. IF
IT'S PAPER, I AM INTERESTED. SEND
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Scientific
Instruments



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303-232-1534

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Your business card here
for only \$5 per issue or
\$15 per year (four issues).

Sierra Hills Antiques
 134 E. Main St.
 Grass Valley, CA 95945
 (916) 273-9095

Mining Items for Sale

Open 7 days 10 - 5

Visa and Mastercard accepted

Candlesticks:

#4241	Folding, like pg. 112 fig. 220, mkd. S.D. 1902	\$825
#2856	Semi-fancy, 12 3/4" well made, some file work, like pg 36, fig. 32, 1 piece	\$249
#2319	13 3/4" well made 1 piece flat spike marked G.R.	\$249
#2626	11 3/4" semi-fancy 1 piece some file work, nice	\$268
#2147	Montgomery Ward, unmarked 10" pg. 40 fig. 46	\$179

Oil lamps:

#3976	C. George, brass top, Pat. 1908-09	\$195
#2766	Trethaway Bros. MINIATURE , 1 1/4"	\$398
#3973	Star Grier Bros. mostly brass	\$198
#3431	No markings, 2 1/2" all tin with brass threads, screw lid	\$98

Carbide lamps:

#2117	Big Boy 8 hour, all brass	\$169
#3783	ITP unfired all steel 8 hour	\$148
#4196	Victor top only, tank style TD top mark 3, no bottom or reflector, mint condition	\$300
#3649	Miniature working model of Justrite 8 hour, all brass, 4" tall, excellent workmanship	\$375

Miscellaneous:

#4215	7" Justrite carbide flask with screw top	\$54
#3847	7" Guy's Dropper carbide flask with screw top	\$58
#3945	Bird cage with water bowl marked "Germany"	\$89
#3767	"Miners Puddlers" lunch pail	\$245

Also: cap tins, mine books, other lamps and candlesticks

Note: Page numbers refer to Wilson/Bohrink candlestick book

Len Gaska
 1688 E. Corson St.
 Pasadena, CA 91106
 (818) 405-0647 evenings or leave message

For Sale or Trade

Allow for shipping and include SASE for check return in case item is sold

1.	Copper Queen aluminum hand lamp. Fair condition, but a quite rare lamp that I was happy to have until I paid \$\$\$\$ to get a better one.	\$300
2.	Nobel blasting cap tin, good condition.	\$15
3.	Fire assay mold. Hard-to-find 6 cup "solid" model. Weighs about 12 pounds	\$60
4.	Fire assay mold. Hard-to-find 2 cup "solid" model.	\$50
5.	Arrow brass carbide cap lamp, complete and in excellent condition	\$250
6.	Lu-Mi-Num carbide cap lamp, complete and in excellent condition	\$225
7.	"The Justrite" carbide supervisors lamp. Nickel plated and in very good condition	\$125
8.	American blasting powder can. The nicest blasting powder can I have seen!	\$40
9.	"Giant" blasting machine, good condition	\$225
10.	Demon Strike Light carbide cap lamp complete and in good condition	trade only
11.	Broken Hill (Australian) candlestick, surface rust	\$50
12.	Anton wick box (see MAC issue #4)	trade only
13.	Blue globe marked "Justrite" for the No. 10 or No. 12 lantern. Very rare!	trade only
14.	Dunlap's driver's oil lamp in box	trade only
15.	Justrite #2 repair kit with a few parts, outside is fair, inside is very good	\$85
16.	Justrite Np Victor carbide cap lamp, no hat braces, reflector may not be original, good condition	\$100
17.	Pinnacle carbide hand lamp, good condition	\$60
18.	ITP Np carbide hand lamp, good condition	\$50
19.	Grier horizontal carbide cap lamp, no hat braces, stress cracks in base (I think Griers were MADE that way!)	\$125
20.	Early Pinnacle aluminum hand lamp	\$50
21.	"King Koal" tobacco lunch pail, mining items depicted. Rare!	offer??
22.	UMW ribbon from Deluglia, Colorado. Western UMW items are rare!	trade only
23.	Baldwin brass cap lamp, very good condition	\$185

Wanted: Senior Conflow calendar #1, Justrite "Jiffy" cap lamps, stick for Justrite Anaconda Special, Guy's Dropper repair kit, carbides or related items I don't have.

Mining Items For Sale!

Dave Gresko

2331 Shoreland #129

Toledo, OH 43611

(419) 729-4577

Oil Lamps

1. Unmarked "High Spout," dome lid, steel, good cond. - \$75
2. EUREKA, tin w/ copper lining, unfired - \$90
3. J. ANTON & SON, w/ Eagle, brass w/ copper spout, very good cond. - \$125
4. TRETAWAY BROS., tin w/ brass dome lide, good cond. - \$85
5. DUNLAPS, face miner's lamp, tin, very good cond. - \$45
6. CROWN, brass w/ tin spout, very good cond. - \$100
7. STAR GRIER, BROS., brass, good cond. - \$85
8. HUSSON A, tin, good condition - \$45
9. HARDCOG IMPERIAL, early Grier style, good cond. - \$65
10. HUSSON 6, unfired, small hole in bottom - \$50
11. MONONGAHELA VALLEY, tin, fair cond. - \$35
12. Same as No. 3, but brass and tin, tin pitted, fair cond. - \$65
13. HUSSON 2, tin unfired - \$60
14. Same as No. 3, but brass & tin, good cond. - \$100
15. DUNLAPS, driver's lamp, excellent cond. - \$50
16. Unmarked brass lamp, good cond. - \$60
17. HUSSON MINER'S LAMP, NO. 6, steel w/ copper heating rod, narrow flat hook, place for stick attachment, very good cond. - \$120

Candlesticks

1. SHOLDER, PAT. JUNE 17, 90, mint - \$275
2. SIERRA, Varney type - \$85
3. SAYRE & SON, Varney type - \$95
4. CLEAN CUT, Varney type - \$125
5. BONANZA, Varney type - \$75
6. IMPERIAL, Varney type, pitted - \$50
7. VARNEY, mint with bluing - \$60
8. IRON RANGE, tip broken - \$150
9. WASHINGTON, California pattern - \$225
10. CRESCENT, California pattern - \$150
11. FIELDING & PETERSON, folding, excellent - \$1250
12. FIELDING & PETERSON, folding, pitted - \$800
13. SHANKLIN carbide lamp stick, mint - \$75

Carbide Lamps

1. UNCLE SAM, 12 hour, complete, excellent - \$400
2. UNCLE SAM, 8 hour, complete, excellent - \$400
3. GRIER BROS., cap lamp, brass, complete, body very good, reflector cracked - \$150
4. JUSTRITE, cap lamp, Pat. 1901, 1912, smooth bottom, wire water feed, German Ni reflector, early lamp, excellent - \$175.
5. SUN RAY, cast reflector, Ni-plated, bottom dented - \$75.
6. ITP, supt. Ni-plated hand lamp, very good cond. - \$75
7. JUSTRITE, supt. Ni-plated hand lamp, cap lamp size, beaded bottom, excellent cond. - \$65.
8. JUSTRITE, No. 10 carbide lantern, good cond. - \$75
9. JUSTRITE, No. 12 carbide lantern w/ original container & instructions, excellent cond. - \$225.
10. JUSTRITE, No. 44 belt generator, totally complete & original - \$200
11. ITP MINE LAMP, Pat. 1913, 1916, steel hand lamp w/ brass name tag, unfired & mint - \$125.
12. TAIYO LAMP, unusual brass hand lamp, excellent - \$50.

13. BIG BOY, brass hand lamp, made by Universal, good cond. - \$50
14. DEW-R-LITE, brass hand lamp, no dents, complete and excellent - \$55
15. ITP, 8 hour hand lamps, steel w/ Al bottom, no rust or dents, excellent cond. - \$45
16. ITP, 8 hour hand lamp, early style w/ cast reflector, excellent - \$55.
17. ACME, supt. hand lamp, steel, very good cond. - \$50
18. FISMA PATENT, steel hand lamp, very good cond. - \$45
19. Same as No. 18, but unmarked - \$40.

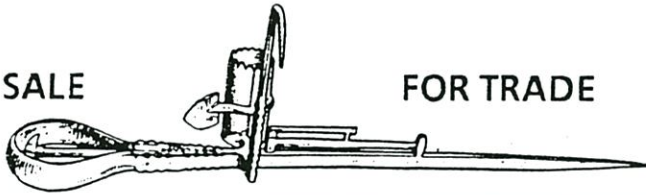
Safety Lamps

1. HUGHES BROS., unbonnetted Clanny, brass, excellent cond. - \$285
2. AMERICAN SAFETY LAMP & SUPPLY CO., Davy, brass, bell bottom type, very good - \$250
3. I. Mills, Maker, New Castle, Davy, brass, w/ spike on hook, excellent, rare! - \$250
4. PROTECTOR LAMP, brass & stainless, well used, good cond. - \$55
5. WOLF, Aluminum & Ni plated brass, tall type, magnetic lock, mint - \$80
6. KOEHLER, Aluminum, well used - \$40
7. HUGHES BROS., unbonnetted Clanny, steel & brass, unfired - \$285
8. UNMARKED HUGHES BROS., Davy, steel & brass - \$250

Miscellaneous Items

1. Horseshoe magnet to open safety lamp w/ brass plaque - KOEHLER SAFETY LAMP CO. - \$150
2. GIBBS self-contained breathing apparatuses for mine rescue, ca. 1918-1924, complete and in good condition, very rare - \$350
3. Souvenir spoon, PORTLAND MINE, CRIPPLE CREEK, CO, engraving of mine & mill - \$100
4. Stock, THE CRIPPLE CREEK TUNNEL TRANSPORTATION AND MINING CO., 1898, rare and in very good cond. - \$100
5. Unmarked oval oil cadger can w/ baffle inside, tin, mint - \$20
6. GRIER BROS. brass cap lamp base, smooth type, unfired - \$50
7. GRIER BROS.. brass cap lamp base w/ three ribs, used but in very good cond. - \$40
8. JUSTRITE, brass cap lamp bottom w/ lid, smooth type, unfired - \$35
9. JUSTRITE, brass cap lamp bottom w/ lid, Air-Cooled grip, unfired - \$15
10. SHAWINIGAN two pound carbide can, unopened - \$15
11. AUTO-LITE, brass cap lamp base, pre-1932, contains spare parts, unfired & mint - \$25
12. NATIONAL CARBIDE two pound can, red & white type, very good cond. - \$15
13. Turtle shell type coal miner's hard hat, well used - \$35
14. CONCORDIA ELECTRIC CO., Permissible hand lamp, one of the first permissible electric lamps used in U.S. mines, unused and mint! A beauty! - \$200
15. Same as No. 15, but a trip lamp, cell removed, used but in excellent cond. - \$65
16. M.S.A. self-resuer, ca. 1925-35, unopened & very good cond. Rare! - \$75
17. DOUBLE-SAFETY canvas cap, new-old stock, mint cond. ca. late 30's - \$25
18. Mine bell sign, blue & white enamel, marked MONTREAL MINING CO., SHAFT NO. 4, w/ signals to the 35th level, fair cond., signs with mining co. names are very rare! - \$350

FOR SALE



FOR TRADE

Ted Bobrink
 12851 Kendall Way
 Redlands, CA 92373
 (714) 794-5518

Carbide Cap Lamps

- | | |
|---|------------|
| 1. BRITE-LITE, A.I.M.E. presentation, 1917, see cover of "American Carbide Lamps" by Gregg Clemmer.
Only two known, mint | make offer |
| 2. BALDWIN, first style unstamped pinch waist. Very rare and in very good condition | \$375 |
| 3. X-RAY, Justrite style good condition | \$185 |
| 4. SIMMONS, Pioneer, very good condition | \$250 |
| 5. ARNOLD, carbide candle tube with bag, stamped "PATENT PENDING," mint (lamp not included) | \$150 |
| 6. ARROW, Np bottom, mint | \$75 |
| 7. X-RAY, bottom, good condition | \$35 |
| 8. BALDWIN, Np bottom with lid, mint | \$65 |
| 9. GUY'S DROPPER, early Np, mint | \$55 |

Carbide Hand Lamps

- | | |
|--|-------|
| 1. GUY'S DROPPER, Tall Boy, brass, mint | \$175 |
| 2. BIG BOY, brass, mint | \$150 |
| 3. JUSTRITE #10, lantern. Np, mint | \$250 |
| 4. WOLF, pinch waist, good condition | \$85 |
| 5. WOLF, canister style 6 hr. No reflector, good condition | \$85 |
| 6. JUSTRITE, #35 carbide stick | \$95 |

Candlesticks

- | | |
|--|------------|
| 1. COLORADO, #32 Wilson/Bobrink, three known, mint | make offer |
| 2. FAVORITE, #16 Wilson/Bobrink | \$150 |
| 3. HUSSON, mechanical, see MAC #1 page 11 or #175 Wilson/Bobrink | \$375 |
| 4. SCHNEIDER, stearic acid candle, stamped and mint, very rare | make offer |

Oil Lamps

- | | |
|---|-------|
| 1. STATUE OF LIBERTY, Sunshine, tin, mint and unfired | \$200 |
| 2. DUNLAP, mint unfired in original box | \$275 |
| 3. GRIER, brass drivers with reflector, mint | \$185 |
| 4. LEONARD, face, early, nice condition | \$65 |
| 5. DUNLAP, face, good condition | \$40 |

Miscellaneous Items

- | | |
|--|-------------|
| 1. BLASTING MACHINE, DuPont Powder Co. | \$250 |
| 2. TAMPING BAGS, Apache Powder Co. | \$35 |
| TAMPING BAGS, DuPont Powder Co. | \$15 |
| 3. BELL SIGNS, from California, Colorado, Arizona, Montana, and Nevada | \$175-\$500 |
| 4. CAP TINS, Aetna Powder, Gold Medal, Hercules round brown, Hercules square red, Peerless blue, California Cap - five different | \$20-\$125 |
| 5. CAP CRIMPERS, DuPont #1 | \$40 |
| 6. GOLDFIELD HOTEL KEY, Goldfield, NV | \$150 |
| 7. TONAPAH & GOLDFIELD railroad seal | \$50 |
| 8. GOLDFIELD Mascot Mining Co., paper weight | \$35 |
| 9. ORE CAR TAG brass Hendrie-Bolthoff, Denver, CO | \$50 |
| 10. TOMBSTONE Arizona brass dog tag | \$35 |
| 11. TOMBSTONE Arizona lodge ribbon | \$65 |
| 12. SPOON, Cripple Creek, CO, fancy | \$85 |
| 13. SPOON, Dawson, Alaska with real gold nugget | \$150 |
| 14. ASSAYERS SAMPLE BAG, Bullfrog Noth Star Mining Co., Bullfrog, NV | \$150 |
| 15. ASSAYERS SAMPLE BAG, Chas. R. Kehoe, Rochester, NV | \$150 |
| 16. ASSAYERS SAMPLE BAG, Colorado Assaying Co., Denver, CO | \$85 |
| 17. BOTTLE, hutch, F. Schmidt, Leadville, CO | \$65 |
| 18. BOTTLE, No. Western Bottling Co., Butte, MT | \$60 |
| 19. BOTTLE, Bisbee Drug, Bisbee, AZ | \$60 |
| 20. BOTTLE, Lernhart Drug, Virginia City, NV | \$50 |
| 21. BOTTLE, G. R. Lewis & Co., Cripple Creek, CO | \$45 |
| 22. BOTTLE, J. Jones, Gold Hill, NV | \$50 |

Williams Minerals

Keith and Brenda Williams
P.O. Box 1599
Idaho Springs, Colorado 80452
303-567-4647

MAPS

Map of Colorado Territory to accompany Hollister's Mines of Colorado corrected from the public surveys of 1866 - color coded, map size: 21 x 16 inches framed size: 28 1/2 x 23 1/2 \$375.00

Leadville, Lake County. Colorado **Map of the Leadville Mining District** Edition of June, 1913 map size: 49 x 21 inches Framed size: 56 3/4 x 28" Map Lists major mines of the District with 25 feet contour interval. \$450.00

Map of the Leadville Mining District - compiled from official records and other reliable sources by: Chas F. Saunders January 1901 Scale 1200 feet to the inch Copyrighted 1901 by Chas. F. Saunders Map size: 38 1/4 x 30 3/4 inches Framed size: 46 1/4 x 38 3/4 inches map shows patented mining claims with partial color coding. \$395.00

Claims **Map of The Gold Belt of Lower Clear Creek and Gilpin County** near Central City, Colorado circa 1902 S.A. Rank Mining Engineer. Published by: The Williamson - Haffner Engraving Company of Denver. Two color coded claims map showing Central City, Nevadaville, and Northern Idaho Springs Districts. Also noted is the Gilpin Tramway. Map size: 38 3/4 x 26 1/4 inches Framed size: 46 1/2 x 33 1/2 inches. \$750.00

Preliminary Map of Central Colorado showing The region surveyed in 1873 Department of The Interior U.S. Geological and Geographical Survey of The Territories F.V. Hayden U.S. Geologist in charge map size: 23 x 17 inches Framed size: 30 1/2 x 24 3/4 inches. \$375.00

Topographical Map Gilpin County, Colorado Mineral Belt Gold Production \$125,000,000. Topographical colored map showing various mining areas of the district with Central City as the focal point. Back side Lists major production history for the district. Map size: 24 x 17 1/2 inches Framed size: 27 1/2 x 21 1/2 inches. \$595.00

PHOTOGRAPHS

1. W.H. Jackson chromolithograph of the **Las Animas Canyon** with The Silverton - Durango narrow guage railroad. Circa 1890's. Two engines with six passenger cars. Picture size 20 x 16 inches Framed size: 26 x 21 3/4 inches. \$375.00
2. W.H. Jackson Photograph of **Pitkin, Colorado** #01049 Pitkin, The Valley of Quartz Creek and Alpine Pass. Detroit Publishing Co. circa 1890. An original solar print from Jackson's glass plate negative. Picture size: 20 x 17 inches Framed size: 26 x 23 3/4 inches. \$375.00
3. **Arkansas Valley Smelter** panoramic photograph, photographer: unknown. Photograph shows the entire smelter operation from the south, MT. Massive on extreme left in background. D & RG rail yard in foreground of buildings circa 1950 Picture size: 46 x 8 inches Framed size: 52 1/2 x 14 inches. \$350.00
4. Panoramic photograph of **Bonanza, Colorado** by: Hume of Del Norte, Colorado. Circa 1915 - view shows "downtown" district with a few buildings and some homes. Mine operation on extreme left side of photograph. Some trucks present in scene. Picture size 27 1/2 x 7 1/2 inches Frame size 33 1/4 x 13 3/4 inches. \$300.00
5. Panoramic view of **Leadville, Colorado** August, 1909 Large panorama looking west over the downtown district. Features include: The Arkansas Valley Smelter, The Harrison Smelter, The Colorado Midland railroad Tressel, MT. Elbert, MT Massive, and downtown Leadville. Picture size: 34 x 8 1/2 inches Framed size: 41 x 15 inches. \$595.00

The Great Gold Rush Collection

P.O. BOX 5690
AVON, COLORADO 81620
USA
Beaver Creek Village Plaza
(303) 949-5605
(303-567-4647-Evenings)

CANDLEHOLDERS

1. Justrite carbide Lamp Stick 8 1/2 inches long, holds a Justrite carbide Lamp (included). \$150.00
2. Simple model, 11 1/4 inches long with tear drop shaped handle, all one piece steel, excellent condition. \$200.00
3. Samuel Nash, Georgetown, Colorado patented 8 inch wire candleholder. Stamped June 2, 1896. \$200.00
4. Varney style stamped "Russell" 11 1/2 inches good condition. . . . \$125.00

CARBIDE LAMPS: (Hand held)

1. ITP patented Dewar Mfg. Co. Brooklyn, New York (with label) complete good condition. \$125.00
2. Brevete S.G.D.G. "Simplon Lamp" Brass top, cast iron base. Swiss, overall 17 inches circa 1900. \$295.00
3. Austrian Lamp Made by Bleco circa 1910 complete with 4 3/4 inch brass reflector with brass Tag 1. Lamp Locks Together with screw Type hinging bracket. \$350.00
4. Wolf Safety Lamp Co. of America Patented 1673930 stamped "Wolf Hand Lamp-Made in U.S.A." 4 1/2 inch Tin reflector. . \$195.00

OILWICK CAP LAMPS

1. Beall Bros. Alton, Illinois Trade Mark 4 inch spout, unfired with wick. \$100.00
2. Dunlaps, Pittsburgh 2 1/2 inch spout plated metal. \$65.00
3. Star Grier Bros. Pittsburgh, PA brass with drip ring unfired 3 inch spout. \$150.00
4. Stamped on Brass screw Top is Pat'd March 30'58 Ext'd March 30, 72, Hubbard, Ohio? 3 inch spout. \$85.00
5. Brass font with hinged Tin Top unknown make, 3 1/2 inch spout. . \$125.00
6. C. George Hazleton, PA stamped Pat May 26'08 on Lid, 3 1/4 inch spout. \$95.00

MISCELLANEOUS

1. What Cheer Tool Company, What Cheer, Iowa "canteen" type carbide holder 4 1/4 inch diameter with belt hook. Complete with original red and white lettered label. . . \$95.00
2. Pocket size Clinometer English Manufacturer circa 1900 all brass abney type level used for sighting relative height measurements between two points. Cased in an all wood mahogany box. \$275.00
3. TYPE CARBIDE HOLDER 4 1/4 IITP carbide cap Lamp Float Feed "It's Trouble Proof" The Dewar Mfg. Company Lamp patented 2 3/8" reflector excellent condition. \$295.00