MINING ARTIFACT COLLECTOR

Issue Number 18 Spring 1993

MINE SIGNAL CODES

PUBLISHED BY THE [illegible]

HISTORY OF STONEHOUSE STEEL SIGNS

[illegible] publishing the many [illegible] signal codes now in use in many states and foreign countries, for the purpose of securing uniform signals from many [illegible] men as to whether or not it is possible to select a universal code.

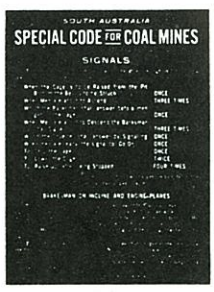
The Stonehouse Steel Sign Company, of Denver, Colo., designed and prepared a sign [illegible] from the Colorado metal mine code [illegible] the Alaska Mine Workers [illegible] and met with such favor that the Golden Cycle Mining Company, Independence [illegible] Mines Company, Ross Consolidated Gold Mining Company, [illegible] many others adopted this sign code. [illegible] these large mining companies were using this code many other companies of different states and [illegible] same or very nearly the same manner.

[illegible] the code of Alaska.

[illegible] company to adopt the universal code, was the Superior Coal Company, of Illinois followed by [illegible] Colorado [illegible] and [illegible] one of the larger mines in New Mexico, Wyoming, Colorado [illegible]

[illegible] coal signal codes for [illegible] mines being manufactured by the Stonehouse Steel Sign Company [illegible] 18 gauge steel, porcelain enameled on the steel with [illegible] degrees of heat.

These enameled steel mine signs, made up in a blue background with white letters, are in line with the safety movement in all parts of the world.



Mining Artifact Collector

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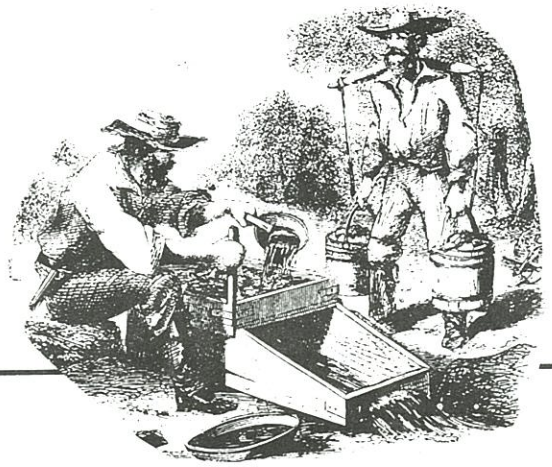
Notes from the Editor



WESTERN REUNION

Be sure to make your plans to attend the 8th Annual Mining Artifact Collectors' Reunion on **Saturday, June 19**. It is being held at the same location as last year (see back cover) at the Holiday Inn, 1801 East G Street, **Ontario, California**. Great lamps, great deals and great conversation will be had by all, from 9 a.m. to 4 p.m. Some people show up the night before for a little early action.

A block of rooms have been reserved for reunion attendees. If you wish to make a reservation for a room, please tell them that you will be there to attend the Eighth Annual Mining Artifact Collectors' Reunion.

See you there!

ANOTHER ERROL CHRISTMAN SWAP MEET

Once again Errol Christman opened up his home in Cedar Ridge, California, to hungry collectors from all over the country on Saturday, March 13, 1993. Errol had been working on many deals with early bird collectors on Friday and I heard that some trades went on as early as Thursday. I did not get to the show until about eleven am Saturday and at least twenty-five avid collectors were already there and I arrived to a full house.

Keith Williams brought an excellent blasting cap tin collection, along with many rare cap lamps and other assorted mining collectibles and Errol had a table full of very nice carbide and oil wick lamps. Some collectors had to set up in the garage because the lamp room was packed full of mining items and there was standing room only. So many things were offered for trade and sale that everyone came home with at least one new piece. Changing hands were a Brite-Lite on a trade/case deal to Keith Williams, a nice Hansen and several candlesticks went to Rick Yarborough, a Maple City went to Dr. Bob Kraft along with many uncommon and rare oil wicks, and a nice Scranto hand lamp was either traded or sold. The White brothers were in on many deals along with Charlie Moore, Herb Dick, John Johnson and Dave DesMarais. Craig Stolburg brought some replacement hat braces he had made.

I traded for several blasting cap tins and then held a mini auction before I had to head back to the airport. I had recently thinned out my collection due to a long and slow winter and brought 20 uncommon to rare carbides, 35 oil wicks and several cap tins. As fast as I could hold up a lamp someone would buy it. Everyone got in on the fast action and low prices.

I can't remember all of the people that were there, but we all had a great time and we all thank Errol and his wife for putting up with all the noise and commotion.

Bob Schroth

AN INTERNATIONAL MINING LAMP COLLECTORS' MEETING

The First International Mining Lamp Collectors' Meeting will be held on Saturday, June 12, 1993. The meeting will be in Germany at W-5244 Daaden (Bürgerhaus) from 10:00 am to 5:00 pm. For more information contact: Verlag Zander/Schardt, Auf dem Hof 1, W-5241 Emmerzhausen.

UNDERGROUND MINE EXPLORING

The following letters concerning underground mine exploration have been received by the MAC editors.

I was interested to read the various notes and articles regarding mine exploration in the Winter 1993 issue. My spouse and I have been actively exploring the history and mines of the Upper-Mississippi Lead/Zinc District for the last several years. We also have invitations to look at some significant iron and copper mines in Michigan's Upper Peninsula later this year.

This activity (which we now find consuming) was originally a spin-off from our

years of active involvement in mainstream caving. It is for us an end in itself, and we generally enter mines to map and photograph rather that collect artifacts.

Nonetheless, we undoubtedly have many interests common to explorers like yourselves, Lane Griffin and Martin Jensen. And because exploring disused mines is such a very specialized pursuit, we would very much like to establish a liaison (through the MAC, or otherwise) with others involved and experienced in it. Lynn and I have already established loose ties with NAMHO in the U.K. (the Brits are, in many ways, far ahead of us in the areas of mine exploration, research and preservation).

If you or any of your readers plan to attend the Mining History Association conference in Deadwood, South Dakota in July, perhaps we could meet informally there to talk mine exploration.

Mark L. Langenfeld
2020 Harley Drive
Madison, WI 53711

THE CATS OUT OF THE BAG

Most of the major collectors of carbide lamps have heard about the auction in Pennsylvania that sold a Dry-Lite with a Justrite bottom to one of our colleges for $2,650.00. And lets not forget about the Imperial (bottom only) that brought $1,550.00. What someone pays for an artifact to put into their collection is of no concern to me, although I must admit that I was certainly surprised to have had no less than ten people either write to me or call me about the article that appeared in the *AntiqueWeek* magazine on February 1, 1993.

I suppose that the cat has now been let out of the bag to just about anyone and everyone who knows what a carbide light is. I feel sorry for you guys and gals back East who have had the pleasure of picking up your rare-named carbides for a song. I wouldn't be a bit surprised to hear about some swap meet seller asking $500.00 for an Auto-Lite! Believe it or not, I have a mint Dry-Lite bottom with a screw-top lid. Can I get any bidders?

TB

24B—*AntiqueWeek*—Mon., Feb. 1, 1993

Dry Lite carbide lamp nets $2,650 bid

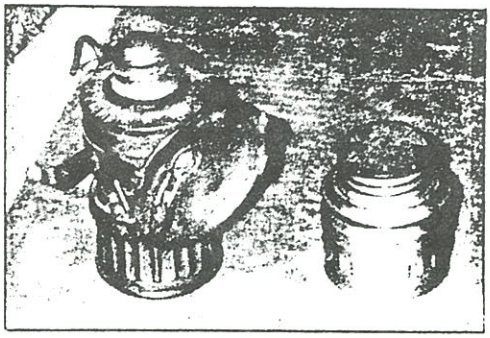
STOYSTOWN, Pa. — Ever heard of Stoystown? Its a community situated on U.S. Route 30, south of Johnstown, in a county that has mostly small towns and villages. Two miles east of Stoystown, on Old Route 30, Clyde and Lorrie Ware built an auction barn for their son Shawn, a licensed auctioneer, and established Blue Bell Hall & Auction Service. Shawn is assisted by Ron Jubick, a veteran auctioneer of 18 years and auctioneers Merle Mishler and Stanley Claycomb.

It is at this seemingly remote site that on Nov. 3, a carbide lamp, advertised in advance of the sale in *AntiqueWeek*, sold for $2,650 to an Altoona, Pa., customer. The lamp was made by Dry Lite (embossed around the top) and did not have with it the original can that held the carbide fuel. A separate nickel-plated can, made by Imperial Co., sold by itself for $1,550 to a bidder from Arizona. In the same auction, a rare railroad globe, fading from green at the top to clear at the bottom, brought $400.

On the following Tuesday, which is the day for weekly auctions at Blue Bell Hall, a fancy pedestal base for an oak table, with lion's paw feet and other fine carving, sold for $800. A 30-inch German doll dressed in original clothing was rapped off at $850.

This family-owned business is fully bonded and licensed and holds licenses for selling firearms and for upholstery sterilization. They also conduct auctions elsewhere, according to the needs of clients. Blue Bell Hall offers ample parking, comfortable seating, good food and clean rest rooms.

For information about upcoming sales, contact Blue Bell Hall & Auction at R.D. 3, Stoystown, PA 15563.



THE CARBIDE lamp on the left, made by Dry Lite but with replaced fuel container, sold for $2,650 recently at a weekly Stoystown, Pa., auction conducted by Blue Bell Hall & Auction Service. The nickel-plated fuel can on the right was bid in at $1,550.

Photo by Shawn Ware

SOME RECENT REPRODUCTIONS

by **Wendell E. Wilson**
Tucson, Arizona

Back in *MAC* #15 I wrote a brief note in the "Notes from the Editor" section about "Modern-made lamps" being offered in the attractive catalog of Rupert Höll's company, *Mineralienecke Clausthal* (Postfach 1108, D-3392 Clausthal-Zellerfeld, Germany). These items are made for sale to the professional mining community, as presentation pieces, office decor and so on.

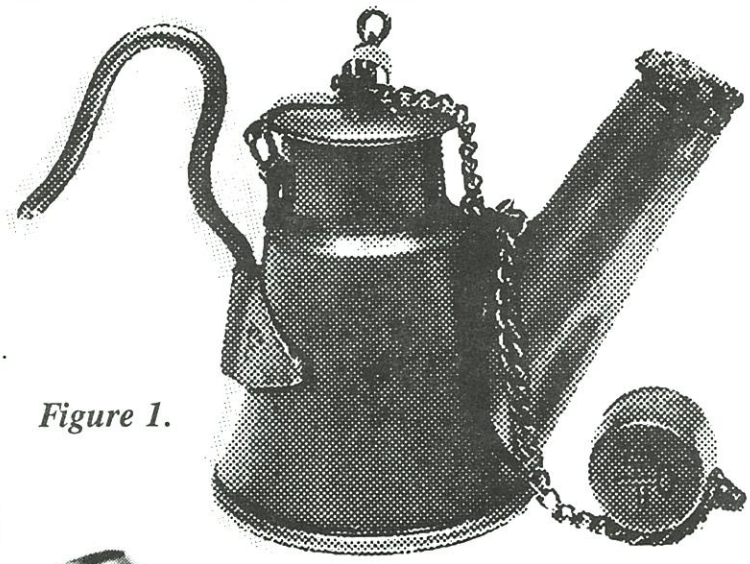


Figure 1.

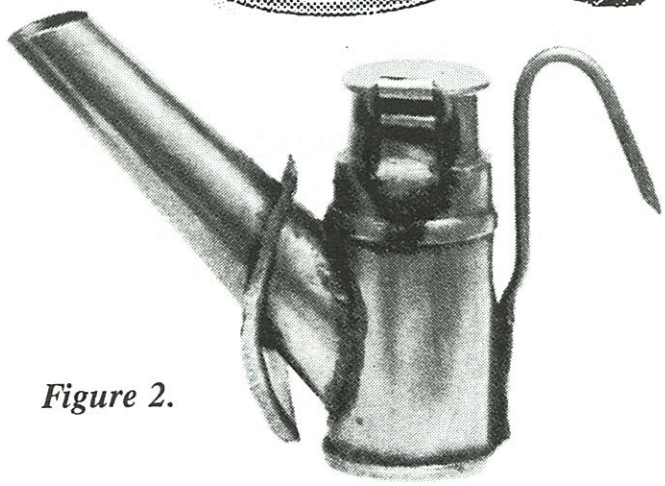


Figure 2.

Unfortunately (?) for the collector, many of the lamps and lamp reproductions in the catalog are so beautifully made that even experts have a hard time telling them from their real old-time counterparts. A recent article in another publication pictured two oil-wick lamps that are dead ringers for items in the Höll catalog, but are described in the text as authentically old (the writer apparently having been unaware that such reproductions are being made). Had I not seen the *Mineralienecke Clausthal* catalog, I'm sure I would have been fooled myself. Consequently it seems prudent to show our readers pictures of a few more items from the catalog, as a forewarning against buying or trading for some of these repros as if they were antiques.

Figure 1, top left, shows a beautifully crafted reproduction of a 3 $^{1}/_{2}$ inch English oil-wick lamp with a spout cap and chain (note the crossed hammers on the spout cap). This kind was originally used in the Northumberland mines around 1890. The repro, which is all in "patinaed" (artificially tarnished) brass, sell for about $16.

Figure 2, bottom left, shows a reproduction of what the catalog calls a "Colorado" oil-wick cap lamp of the milk can shape, said originally to date to around 1880. I'd say it more closely resembles a shielded Trethaway of the 1900-1930 period. It is all "patinaed" brass, measures 4 inches tall and weighs about 5.3 ounces. Price: about $16. (These two lamps are the models recently mis-reported as being antique.)

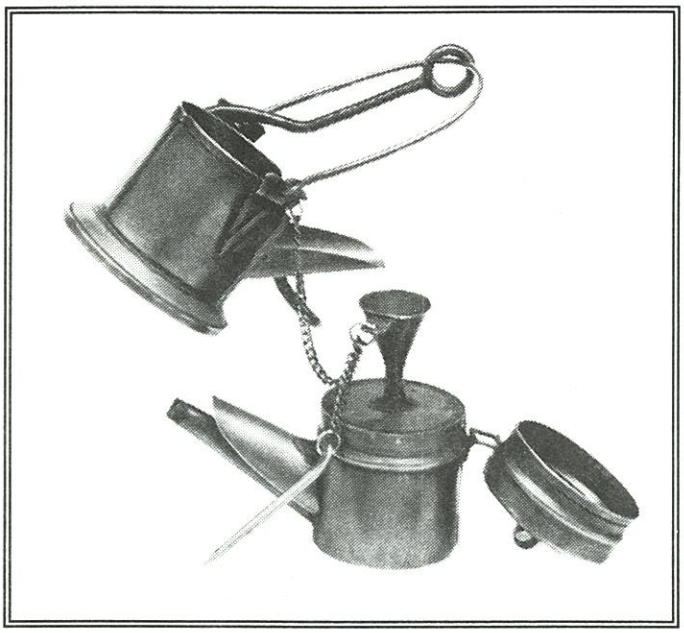
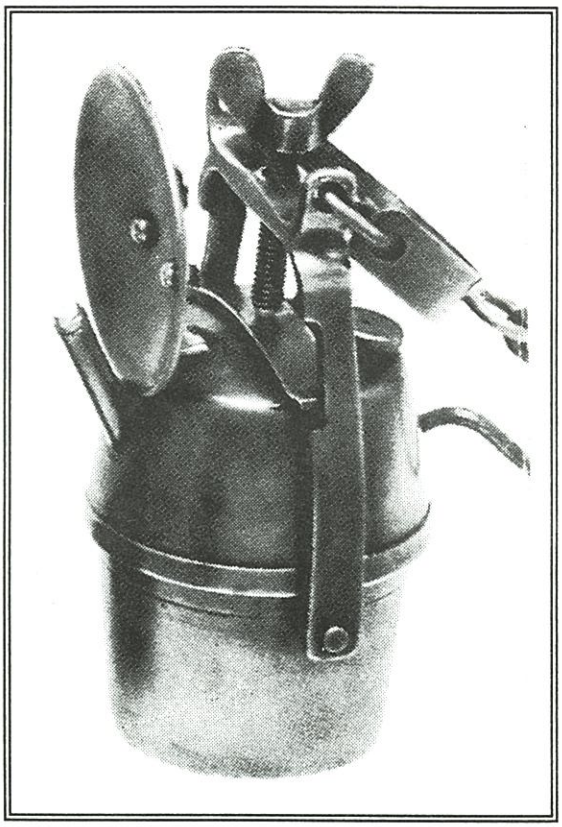


Figure 3 above shows a reproduction of a rare Mansfeld (Germany) "double shell" oil lamp, all in "patinaed" brass, after a model made around 1900. It measures 3 $^1/_2$ inches tall and weighs 5.6 ounces. Price: about $20.



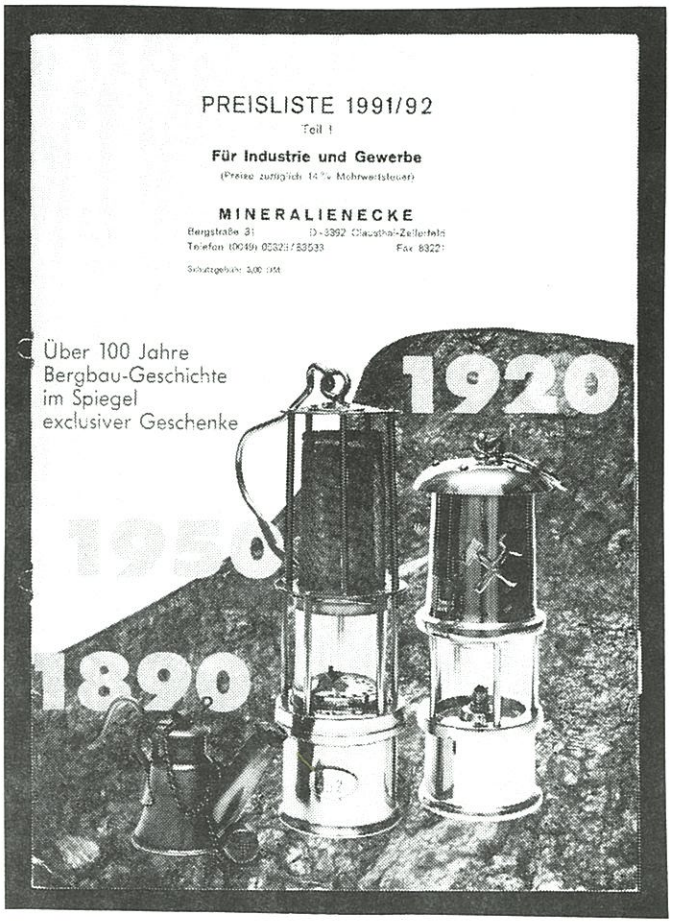
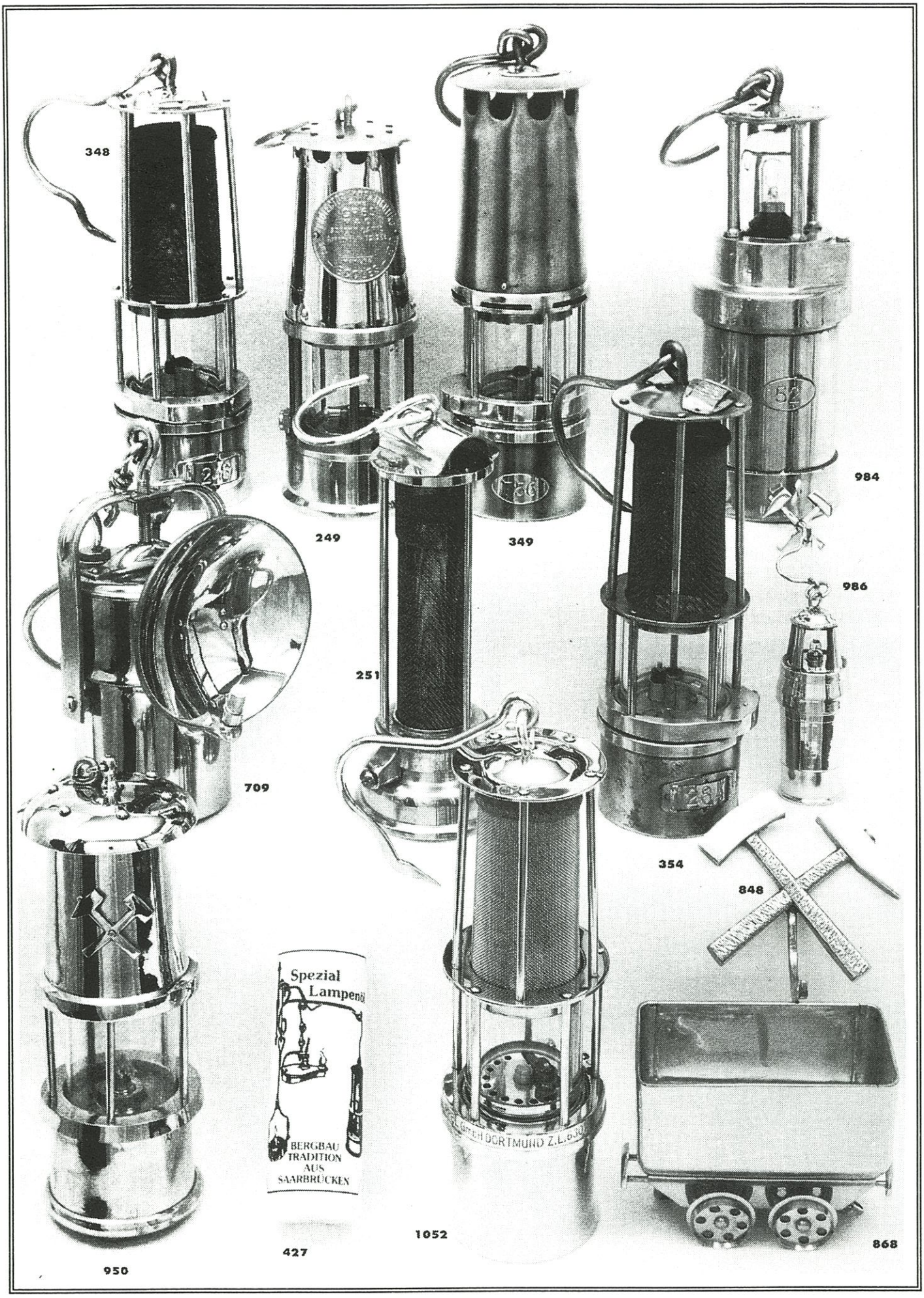


Figure 4 above shows a reproduction of a small 4-hour carbide "barrel" lamp of the kind originally made around 1910 by the firm of Friemann & Wolf in Zwickau, Saxony. It is all artificially tarnished brass, and very faithful to the original, but lacks a maker's plate. Without hook it measures 6 $^1/_4$ inches tall and weighs 17 $^1/_2$ ounces. Price: about $35.

Figure 5, at left, shows the front cover of the catalog of Rupert Höll's company, *Mineralienecke Clausthal*.

Figure 6, on the next page, shows a full-page catalog illustration depicting nine beautiful safety lamps and one 8-hour carbide, all newly made. The Davy lamp (#251) is particularly nice, and precisely duplicates some models made in Pennsylvania by the Hughes Brothers and by the American Safety Lamp and Mine Supply Company. Similar Davys were made in England by Thomas & Williams.

Caveat emptor! ("Buyer beware")


348
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BERGBAU TRADITION AUS SAARBRÜCKEN
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427
950

THE KING POWDER COMPANY

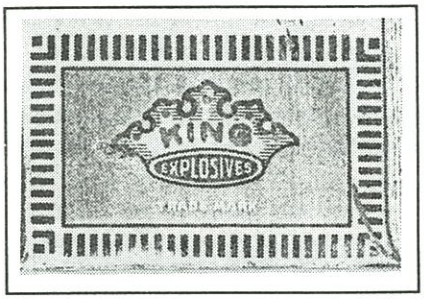
by **Mark Bohannan**
Oro Grande, California

In 1877, Joseph Warren King, his nephew Ahimaaz King, and other members of the family organized King's Great Western Powder Company. The company was incorporated in Ohio in 1878. In 1889, the company's name was changed to The King Powder Company.[1]

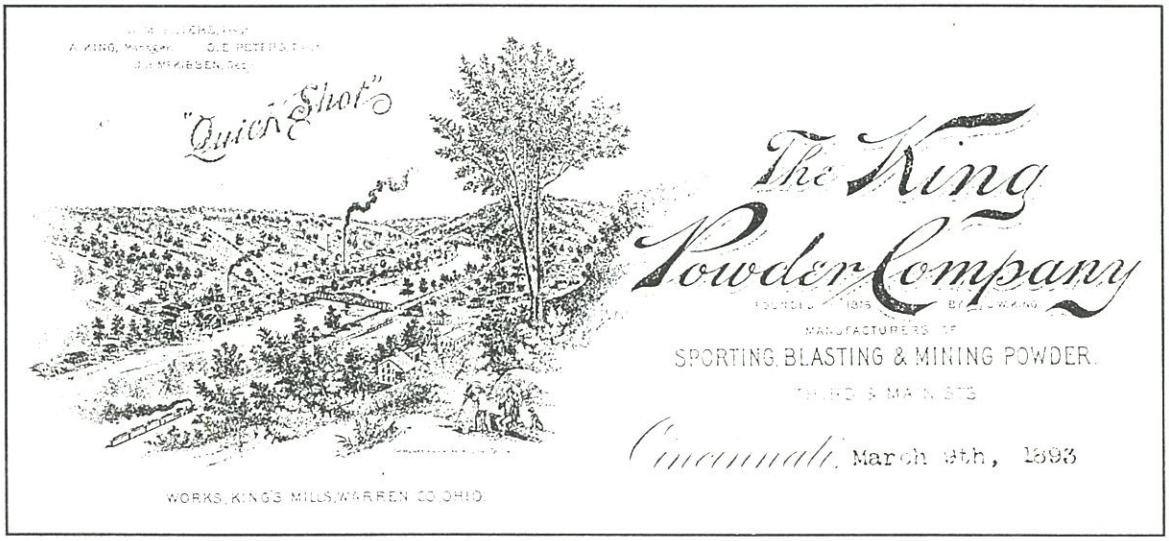
The King Powder Company went out of business in 1954.

Blasting items for the King Powder Company are scarce. There are only two styles of blasting cap tins known from the company at this time. The round tin shown to the right is one of the most desirable cap tins sought after by collectors today because of its attractive contrasting colors.

A round No. 6 King Powder Company cap tin with red and white lettering on a yellow background. (Ron Killingsworth collection)



A square No. 6 King Powder Company cap tin. All of the examples of this tin known at this time are missing the lids. (Jane Girard collection)



An 1893 letterhead from the King Powder Company. (Author's collection)

1. Arthur P. Van Gelder and Hugo Schlatter, History of the Explosives Industry in America, (New York: Columbia University Press, 1927), pp. 275-281.

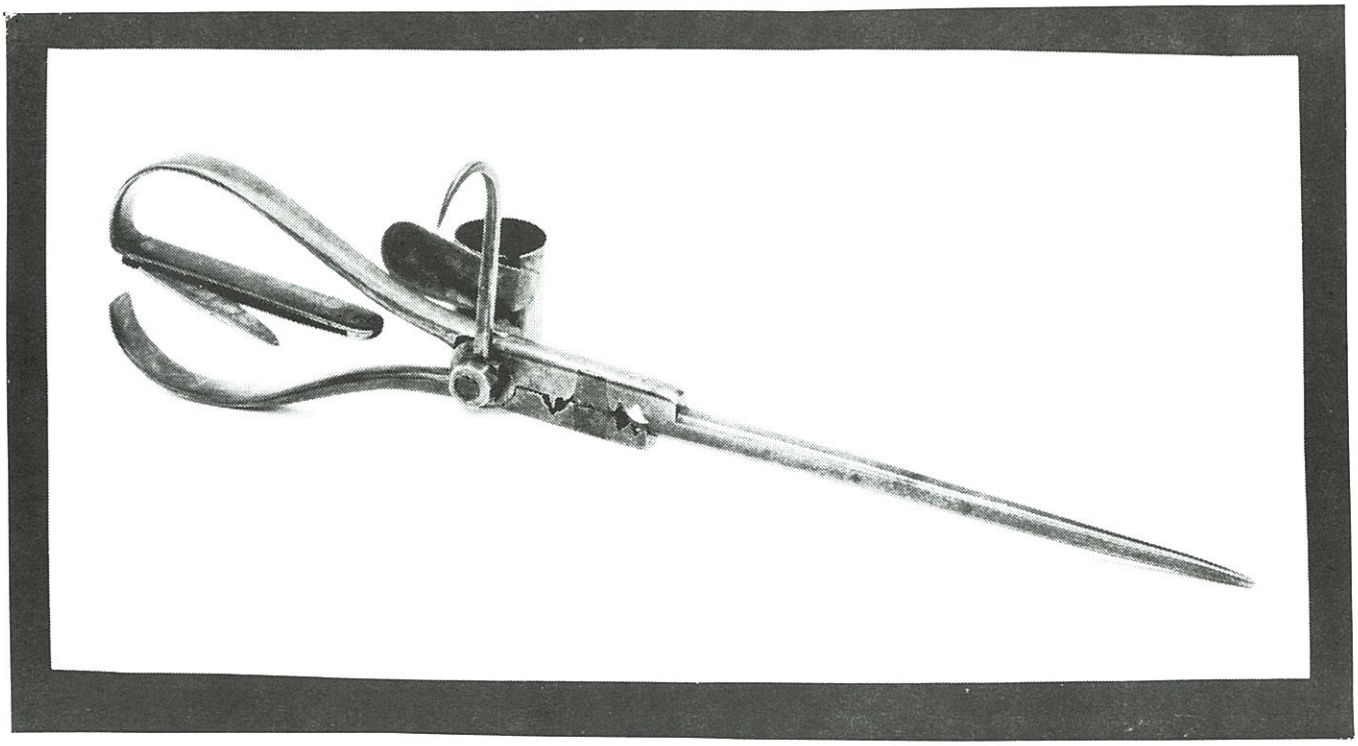
THE J. D. CAMPBELL PATENTED CANDLESTICK "A TOOL FOR MINERS' USE"

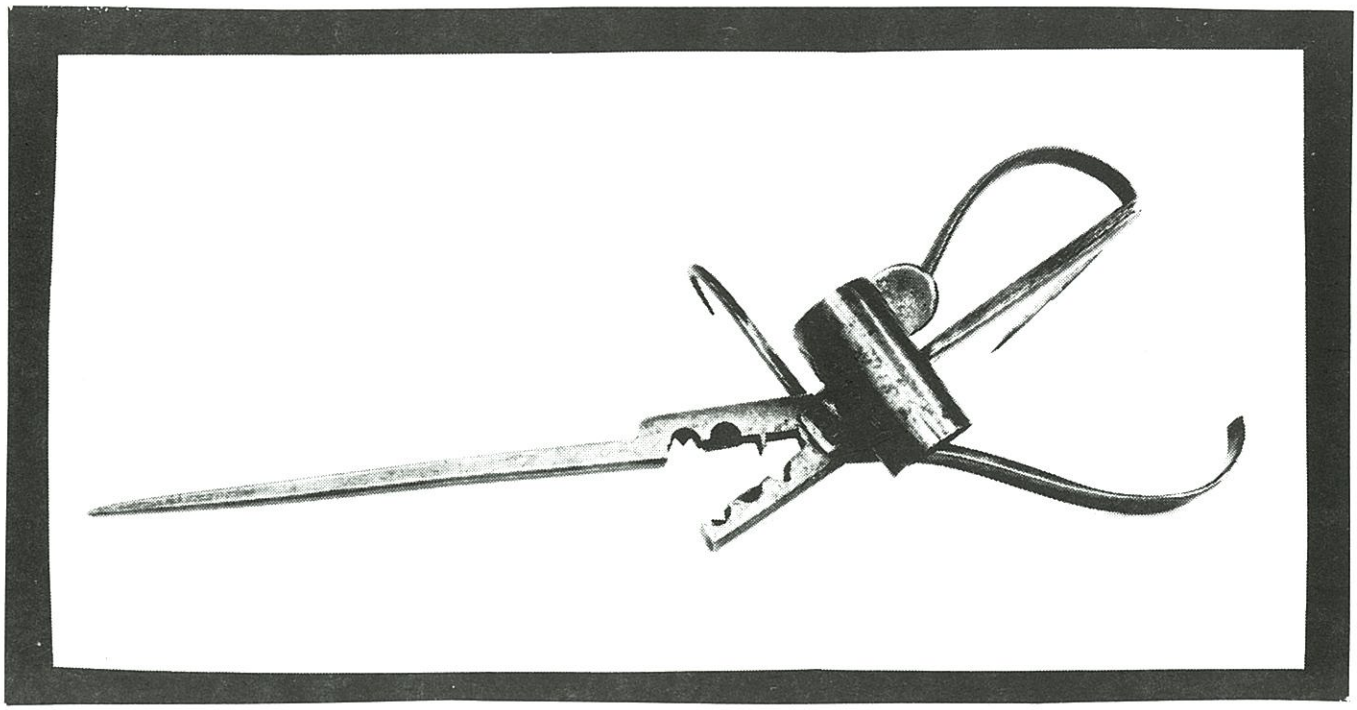
by **Ted Bobrink**
Redlands, California

When John Daniel Campbell of Leesburg, Idaho, filed for a patent on November 24, 1896, he called his new invention "a tool for miners' use." In his description to the patent office, he states his new invention as "an object to provide a tool for miners' use which will embrace a candle-holder, a fuse-cutter, a fuse splitter, a cap crimper, and devices for securing the tool in a beam or suspending the said tool from any convenient support." The patent went on to state that "the cutters are constructed in a manor that they can be readily removed and sharpened and will make a clean cut without danger of changing the shape of the fuse. The handle is provided with a slotted arm in which a knife-blade is pivoted, and is used as a powder-knife for cutting giant powder sticks or for similar purposes."

When I first became aware of the Campbell candlestick, I was doing patent research for my candlestick book with my friend, Phil Casdorph, at the patent depository at the Los Angeles Public Library. I don't remember which one of us found the Campbell patent first, as we were both going through volumes of giant books. However, I do remember how excited we were when we found it, and both of us wondered, "were the Campbells ever produced?"

Shown below is a photograph of one of the two known examples of the patented Campbell candlesticks in the closed position and showing the unique arrangement of the cap crimping, fuse cutting and splitting devices along with the powder knife in a partially opened position. (Author's collection)

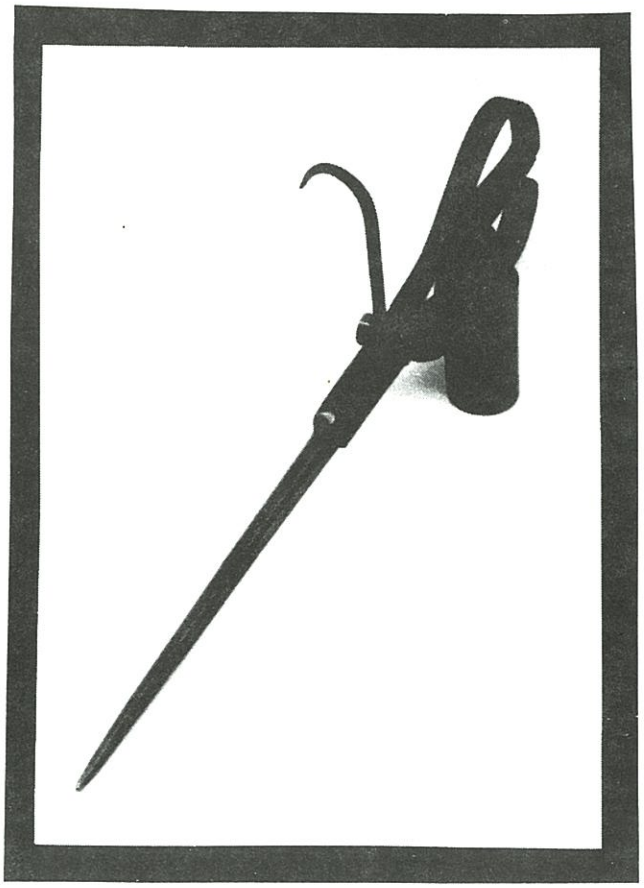




Shown above is the patented Campbell candlestick in the open position emphasizing the unique scissor-like handles.

The answer to that question came when I met David Gresko a few years later at a swap meet in Pasadena. He told me that he had found an unmarked candlestick that worked like a pair of scissors, had a knife blade in the handle and would crimp and cut safety fuse. David was surprised when I informed him that I had found the patent to his candlestick. About ten years later, another Campbell stick turned up in Pennsylvania. To my knowledge, those are the only two examples known at this time. The Campbell stick shown in the photos is 11" long. The other known Campbell stick is constructed in the same manner, but it is a smaller version, about 9" long.

The feature that struck me as the most unusual was the vertical, scissors-like handle. I had seen a number of pistol-grip candlesticks before, but never anything like the Campbell stick. The reason for the vertical handle was to allow the candle to be held in a vertical position while using the fuse cutter, splitter, or cap crimper. You can get a better understanding of this by looking at the dotted lines on the original patent drawings. By lowering the bottom lever, the upper jaws are raised. Then, after a cap and fuse had been inserted, one simply squeezed the handles like a regular pair of cap crimpers.



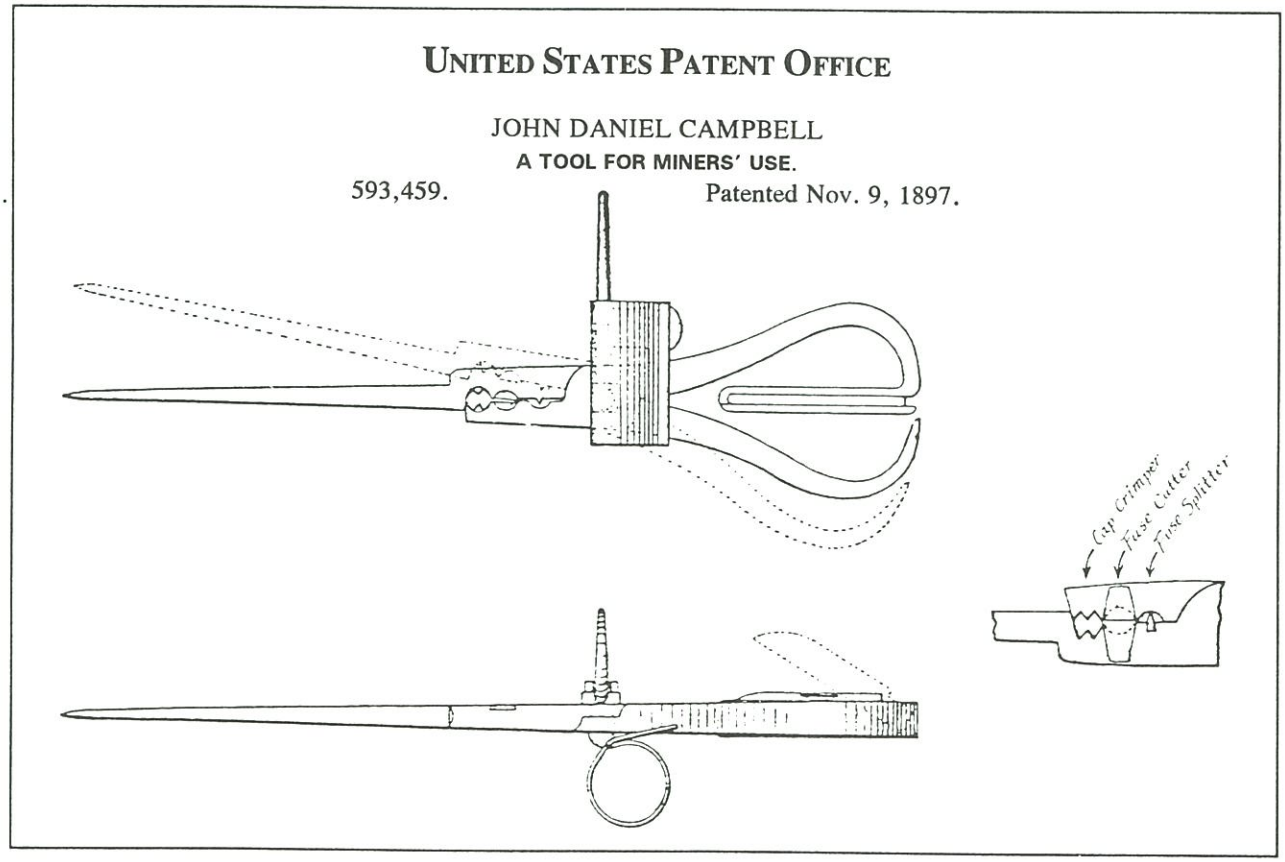
Shown above is a vertical view of the campbell candlestick. Note the interesting thimble attachment.

When you hold the Campbell candlestick in your hand, you can feel the gunsmith quality of its construction. Every part is finely tooled and smooth working. There is no doubt in my mind that the only drawback to the Campbell candlestick was its superb hand-made workmanship that would make them take too long to make in a large quantity.

If you think about how rare most of the mechanical candlesticks are (by "mechanical" I mean a candlestick that folds up, comes apart, or has articulating components), you have to remember that the everyday miner was a very simple person. He didn't have much use for fancy things that cost more and that didn't last long. Every time an inventor like Campbell came along with a new fancy idea for a candlestick, his candlestick would have to compete in the stores with the twenty cent, one-piece, durable Varney. Even Nathan E. Varney found out the hard way with his fantastic folding marvel.

When collecting candlesticks, uniqueness is a major factor in determining desirability. What the "Maumee Duplex" is to carbide cap lamps, and the aluminum "No Melt" is to oil lamps, the "Campbell" is to candlesticks. It certainly has to be rated as one of the most unique miner's candlestick known at this time!

Shown below are the original patent drawings for John Daniel Campbell's candlestick, "A tool for miners' use," granted on November 9, 1897, that Phil Casdorph and I first found at the patent depository at the Los Angeles Public Library. This is one of the few times that a candlestick patent drawing and the actual candlestick are identical.



THE SNELL AND EVER-READY CARBIDE CAP LAMPS

by **Mark Bohannan**
Oro Grande, California

Determining the genealogy of a group of lamps from a particular company, or for lamps of similar appearance but from different companys, is often times a very vague and confusing task. The question of which lamp design or feature preceded another is often difficult--if not impossible--to ascertain. The only information known at a particular time concerning a group of lamps may often be interpreted differently by collectors. Such is the case with the Snell and Ever-Ready carbide cap lamps. Although the Snell lamp patent preceded that of the Ever-Ready, there is a question as to who originally manufactured the spherical water tank.

There is very little information known at this time about the Snell carbide lamp. The patent for the Snell lamp was filed for on October 27, 1910, by Frank Bradoc and William Frost of Athens, Illinois. The patent was granted on March 28, 1911, and was assigned to Arphad Snell of Tice, Illinois. The main features of the patent consisted of "a combined feed water and gas discharging pipe . . . projecting a short distance into said generating chamber, a branch gas conducting pipe connected to said combined water and gas pipe, and projecting through the side of said tank, a deflecting plate arranged in said combined pipe over the inner end of said branch pipe, a valve casing on the upper end of said combined water and gas pipe, a water controlling valve in said casing and a stem connected to said valve and projecting through the side of the tank whereby the valve is operated."

The main unanswered question is did Arphad Snell, when he began to manufacture his Snell lamp, construct the spherical water tank and later, after he went out of business, sell his water tank dies to Charles Hoppe? The Snell patent does indicate a sort of spherical water tank and most notably a side water control valve. Or, more probably, did Arphad Snell contract with the Charles Hoppe Company to manufacture the parts for his Snell lamp and after Snell went out of business, Charles Hoppe used these same dies to begin the manufacture of his own lamps--the Ever-Ready?

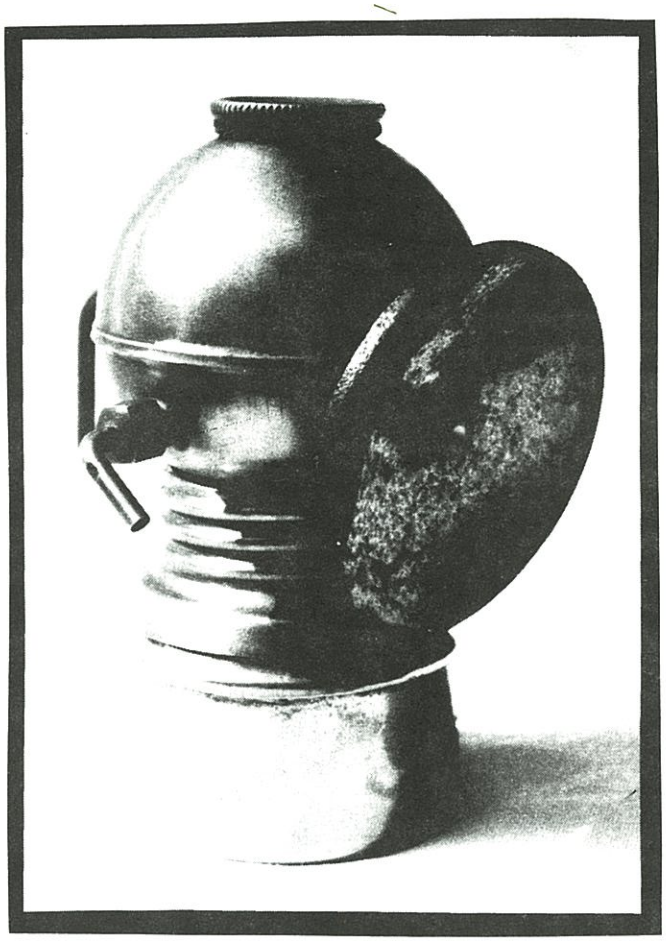


Figure 1. A photograph of the early style Ever-Ready carbide lamp. The water tank of the Snell lamp is identical, the only difference between the two lamps are their carbide containers. (Mark Bohannan collection)

What makes this question so interesting is that all of the Snell lamps known at this time (and there are only 4 complete lamps) have the spherical water tank style shown in Figure 1. The base of the lamp appears very similar to that shown in the patent and is marked:

THE SNELL LAMP
MAR 28, 1911

Although some features of the water valve are not the same as specified in the original patent (such as the gas tube connecting directly with the water tube), these features may have been changed to facilitate the manufacturing of the lamp. Since the marking on the bottom of the lamp contains the patent date, it is safe to assume that these lamps were all manufactured after the granting of Bradoc and Frost's patent in 1911.

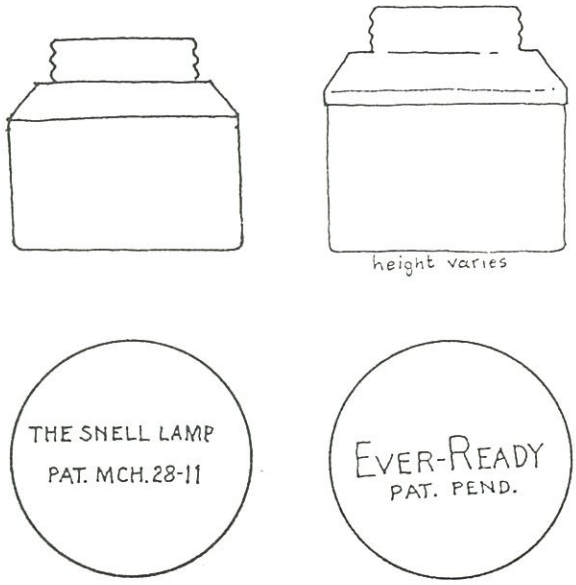
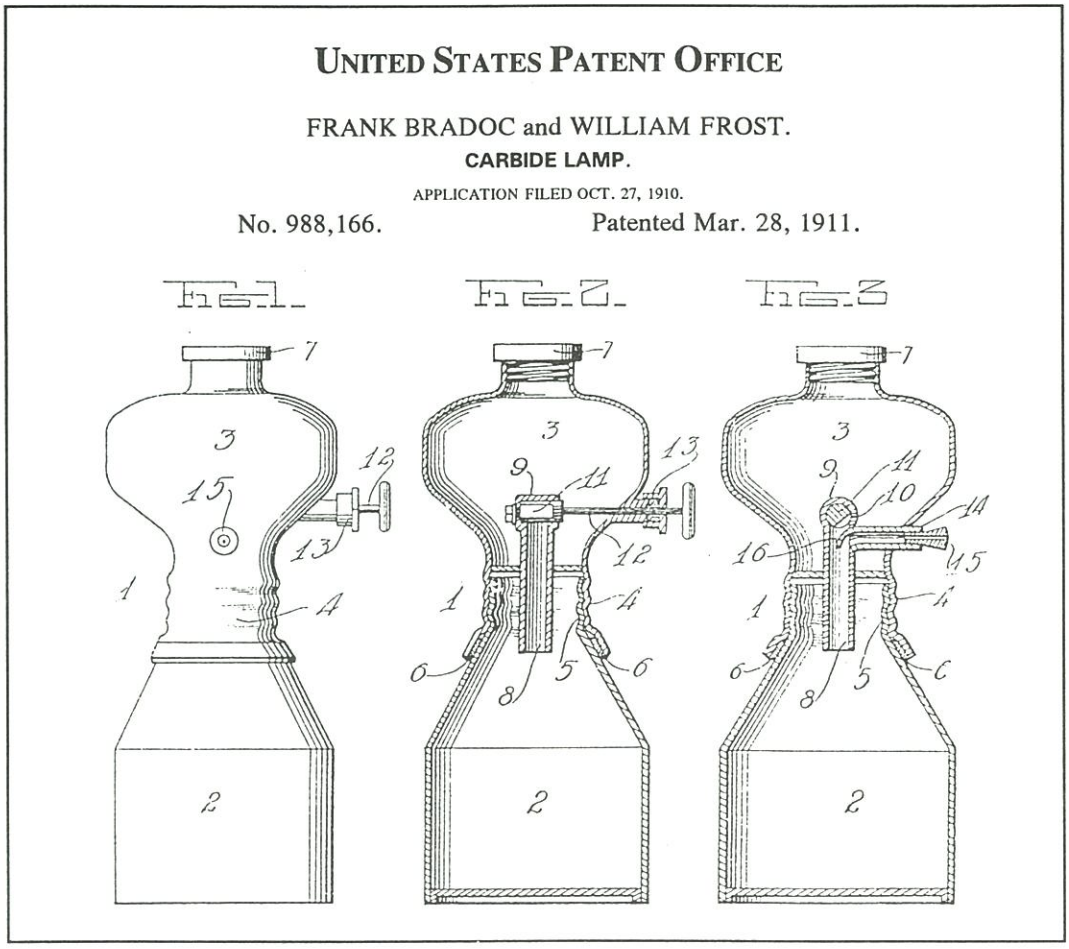


Figure 2. The carbide container and bottom markings for the Snell lamp (left) and Ever-Ready lamps (right). As far as is known at this time, all of the Ever-Ready lamps have the bottom markings as shown above. Both bases are stamped with incused letters. (From *The Nearly Complete Bottom-Guide for Carbide Cap Lamps* by Wendell Wilson)


UNITED STATES PATENT OFFICE

FRANK BRADOC and WILLIAM FROST.

CARBIDE LAMP.

APPLICATION FILED OCT. 27, 1910.

No. 988,166. Patented Mar. 28, 1911.

Figure 3. The patent of Frank Bradoc and William Frost for what would become the Snell carbide lamp. Although many features in the known examples are different from those shown in the patent, many features, such as the side water control lever, the short water discharge tube and the shape of the carbide container, remained the same.

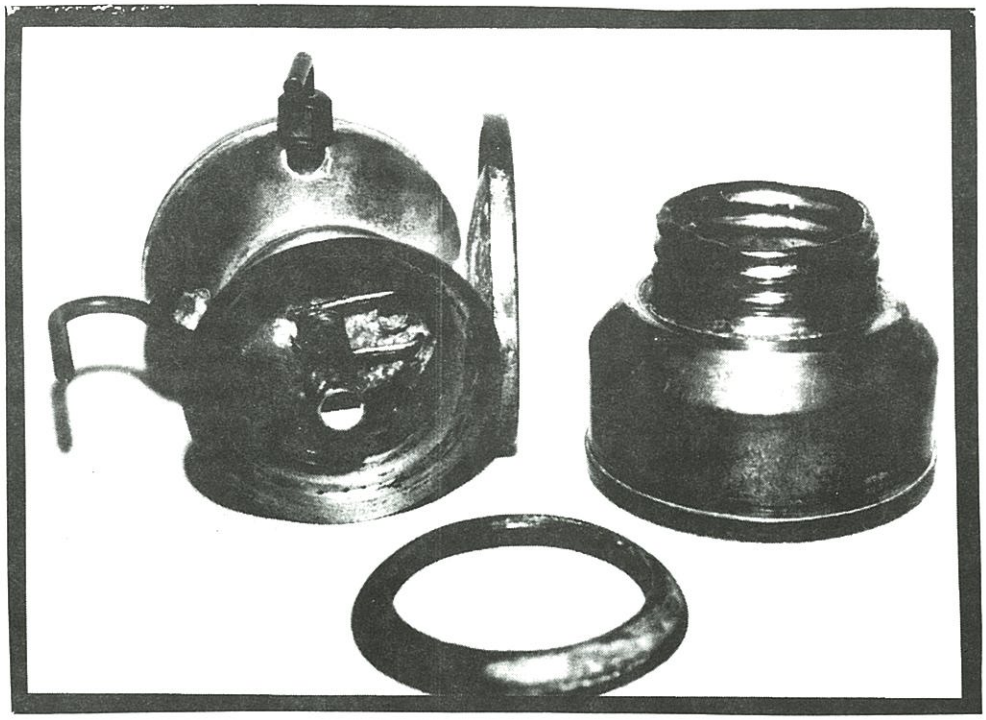


Figure 4. To the left is a photograph of a Snell carbide lamp with the carbide container removed to show the hollow water discharge tube. (Dave DesMarais photo)

Figure 5. Shown below is a 1914 advertisement from an issue of the *Engineering and Mining Journal* for the Ever-Ready carbide lamp.

The Chas. Hoppe Co.,

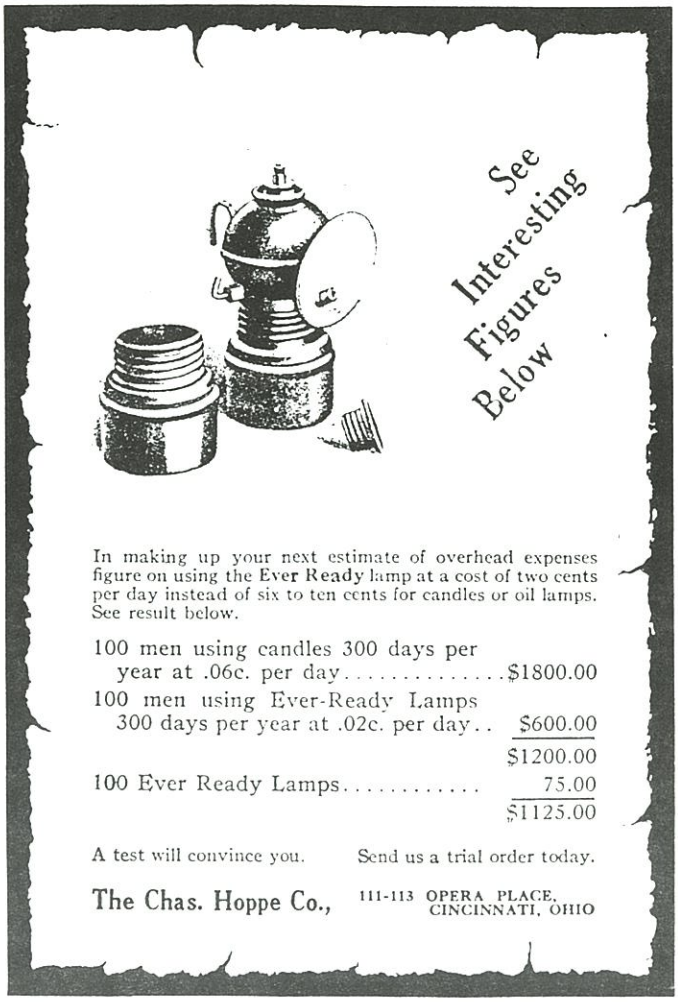
ARTISTIC METAL WORK

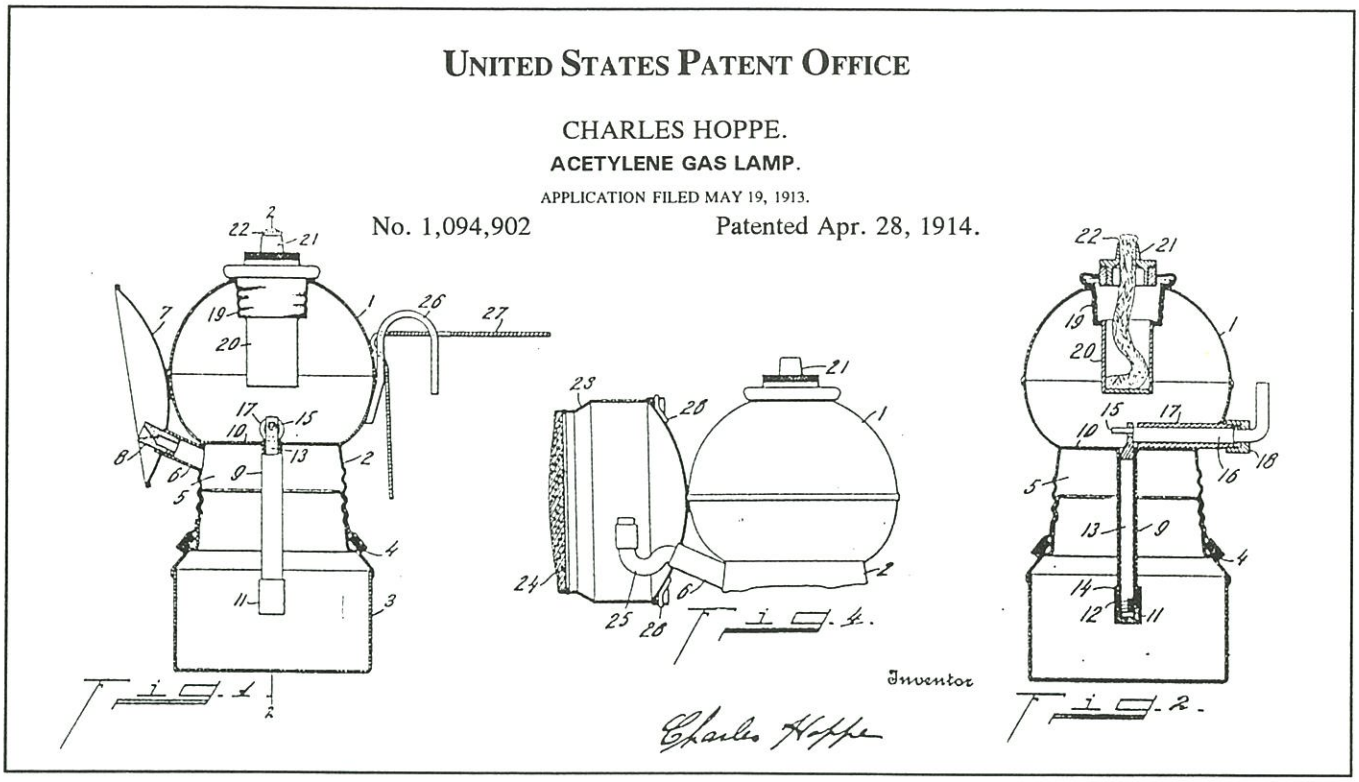
Brass, Aluminum and Bronze Castings. Metal Specialties and Platers.

OFFICE, 121 OPERA PLACE. 'PHONE CANAL 329.

When the first Ever-Ready was manufactured is unknown at this time. The Charles Hoppe Company was established prior to the turn of the century at 632 Main Street in Cincinnati, Ohio. The company was listed in an 1899 Cincinnati City Directory as "manufacturers of metal goods." The location of the company was moved to 121 Opera Place in 1912.[1]

On May 19, 1913, Charles Hoppe filed for a patent for "an improvement in portable acetylene gas lamps and principally to that type of lamp known as miner's lamp." Hoppe's patent dealt mainly with an improved water feed mechanism. This improved water feed was designed to discharge the water "upwardly in a direction with the expanding or swelling carbid [sic], preventing it from being forced into the channel or passage of the tube." The valve (#13 on the patent drawing) was "adapted to be reciprocated, to cleanse the channel and remove such deposit which may interfere with the feed of the water to the carbid [sic], with the valve regulation limited as to the consumption capacity of the lamp." The valve stem (#13) had an eccentric connection with the water control lever





UNITED STATES PATENT OFFICE

CHARLES HOPPE.

ACETYLENE GAS LAMP.

APPLICATION FILED MAY 19, 1913.

No. 1,094,902 Patented Apr. 28, 1914.

Inventor

Charles Hoppe

Figure 6. Charles Hoppe's patent for the Ever-Ready carbide lamp.

(#16). When rotated repeatedly, the valve was moved up and down, thus cleaning the lower discharge end of the valve. Any regulation of water was accomplished by only partially moving the water control lever.

The patent also furnished a description of a small oil lamp designed to be screwed into the top of the water tank. This small oil lamp was to be used in case of an emergency in the mine to furnish a light when the carbide in the lamp had been exhausted. Although advertised, there are no examples of an Ever-Ready carbide lamp with this attachment known to exist at this time.

Another provision in the patent was for a lens that was designed to be attached to the lamp's reflector. As far as known at this time, there is only one example of an Ever-Ready lamp with this lens attachment (see Figure 7).

Figure 7. A photograph of the only known example of an Ever-Ready lamp with the attachable lens. (Bill Spence photo)

Most of the information and advertisements for the Ever-Ready lamp are for the patented style lamp. Yet, there are a few examples of an earlier style Ever-Ready. This earlier style consists of a water tank that is identical to that of the Snell lamp. The only difference between the two lamps are the bases.

These two styles of Ever-Ready lamps are distinctly different in their size and water control mechanisms. In the Snell/early Ever-Ready lamps, the water tube is short and extends just into the carbide base--just as described in Bradoc and Frost's patent. The tube is hollow and is $^1/_4$" in diameter. The water control valve is basically a needle valve, the more the lever is turned, the more water that is discharged into the tube. The spherical water tank is 57 mm in diameter and sits right on top of the screw threads. The gas tube extends horizontally from the side of the water tank. The lamps came with a 2 $^1/_8$" diameter, plain tin reflector soldered to the middle horizontal seam of the water tank and at the lower flange of the threads (see Figure 8).

The later style Ever-Ready, on the other hand, looks identical to the patent drawings. The spherical water tank is a little smaller, 54 mm in diameter and on the top of the water tank there is a very small hole next to the water cap towards the back of the lamp. This hole is a vent hole for when the small oil lamp was inserted into the water filling hole. There is an inserted piece between the spherical top and the screw threads from which the gas burner tube extends angularly through the reflector. The reflector is 2 $^1/_2$" in diameter and is nickel plated. It is soldered to the middle horizontal seam of the water tank and to the angled gas burner tube (see Figure 8).

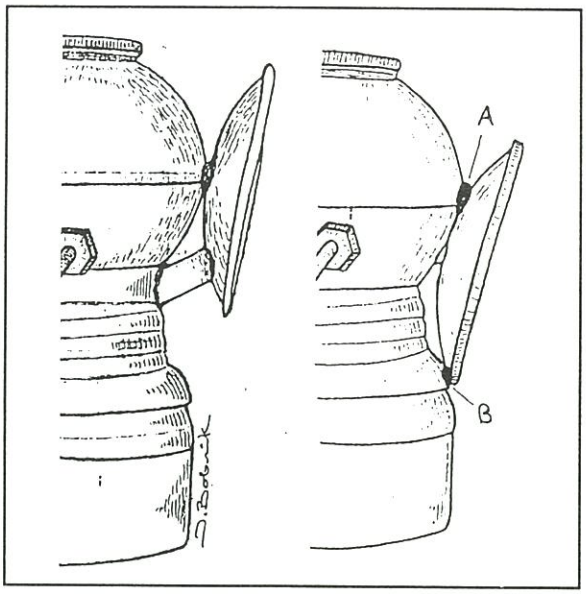


Figure 8. Side drawings of the Snell/early Ever-Ready (left) and the later, patented Ever-Ready (right) showing the position of the gas burner tubes and the spots that the reflectors are soldered to the lamps.

Figure 9. A drawing of the later, patented style Ever-Ready carbide lamp. This lamp is identical to the patent drawings in appearance and construction.

An article in a January 3, 1914 issue of the *Engineering and Mining Journal* states that the Ever-Ready lamps were made of "light spun brass lined with tin, weighs three ounces, is about 4 in. high and 2 $^1/_2$ in. in diameter overall." The article also stated that the lamps sold for $22.50 per dozen with the small oil lamp or $18.00 per dozen without the oil lamp. The lamp was sold with an extra carbide container with lid.

Some of the later, patented Ever-Ready lamps came with a curved, flat brass strap soldered to the back of the lamp which served as a hat brace. There is also an example of a steel Ever-Ready. Although there is now evidence at this time, this lamp was probably originally painted black similar to many of the Hoppe Brite-Lites which were produced later.

In 1915, Charles Hoppe became associated with the Harker Manufacturing Company--also of Cincinnati. While there, he created the Hoppe Brite-Lite (see MAC No. 13, Winter 1992) which utilized the same patent as the Ever-Ready.

1. Gregg S. Clemmer, American Miners' Carbide Lamps, (Tucson, Arizona: Westernlore Press, 1987), p. 75.

THE PATENTED OIL WICK LAMPS OF H.J. RICHARDS

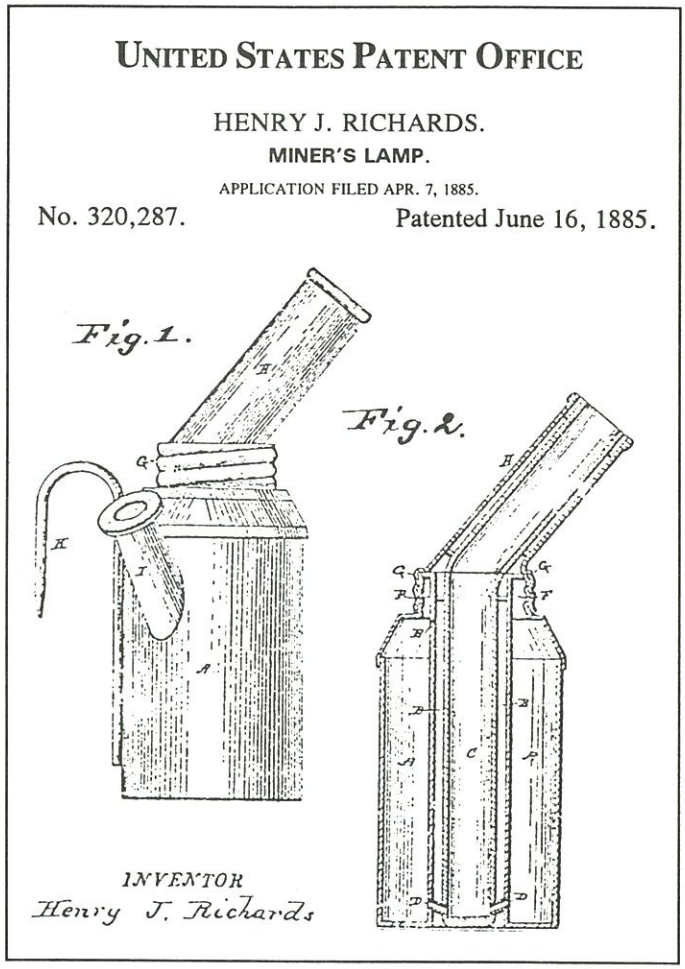
by **Tony Moon**
Sandy, Utah

Three patents for oil wick lamps have been found that were granted to Henry J. Richards of Wilkes-Barre, Pennsylvania. There could well be others as the author's oil wick patent files are far from complete. The three patents that have been found are dated and numbered as follows and the more important patent illustrations are shown in Figures 1, 6, and 7.

Application Date	Patent Date	Patent Number
Apr. 7, 1885	June 16, 1885	320,287
Nov. 23, 1885	Jan. 26, 1886	335,041
Nov. 6, 1889	Apr. 29, 1890	427,013

The earliest patent, No. 320,287 was an attempt to provide a lamp that would burn kerosene of coal oil without heating the miner's forehead. The wick tube was surrounded by an air gap which in turn was surrounded by the oil vessel.

The latest patent, No. 427,013 was another attempt to provide cooling of the lamp body by providing a space around the base of the spout which in one case had a hinged cover and could be filled with water. However, the main feature was the perpendicular or near perpendicular spout which was claimed to improve the oil flow to the wick and prevent oil from oozing out of the top of the spout and running down the outside.



UNITED STATES PATENT OFFICE

HENRY J. RICHARDS.

MINER'S LAMP.

APPLICATION FILED APR. 7, 1885.

No. 320,287. Patented June 16, 1885.

Fig. 1.

Fig. 2.

INVENTOR
Henry J. Richards

Figure 1. The patent drawings for patent No. 320,287.

Figure 2. Front view of H.J. Richards lamps showing the cooling ribs. (Author's collection)

Figure 3. The rear view of the lamps in Figure 4. The lamp markings are in the open areas to the left of the hooks.

Figure 4. The marking on the H.J. Richards oil wick lamps.

The author is not aware of any examples of actual lamps built to these two patents.

However, lamps were manufactured which had some of the features of patent No. 335,041. This patent again provided a means of cooling the lamp body but also had a wick pricker, a stopper or cork for a lid and a removable hood or reflector. Examples of the lamp with the cooling and pricker features have been found and are shown in Figures 2 and 3. These lamps have the marking shown in Figure 4. The main feature of the lamp that is covered in the patent is the provisions for cooling using an annular skirt around the lamp. This skirt extends approximately two-thirds around the lamp in a non-symmetrical manner and has vertical ribs with holes to allow the heat to escape. A holder for a wick pick is also provided at one end of the skirt.

Another lamp using these same two patent features is shown in Figure 5. This lamp is unmarked but was probably made by Trethaway as the base has the distinctive domed depression which is a feature of most Trethaway lamps. The wick pick itself has survived in this example.

Figure 5. An unmarked drivers lamp using the H.J. Richards patented features. (Author's collection)

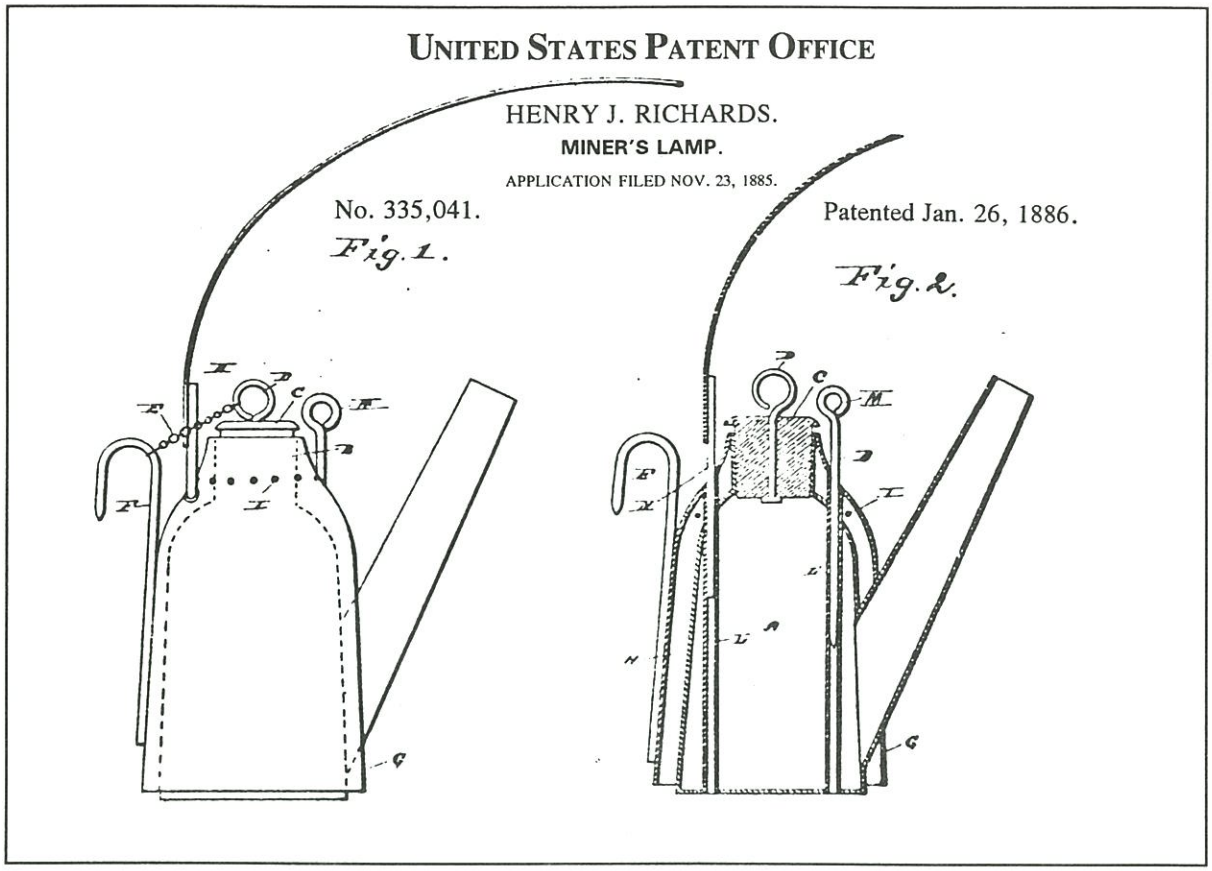
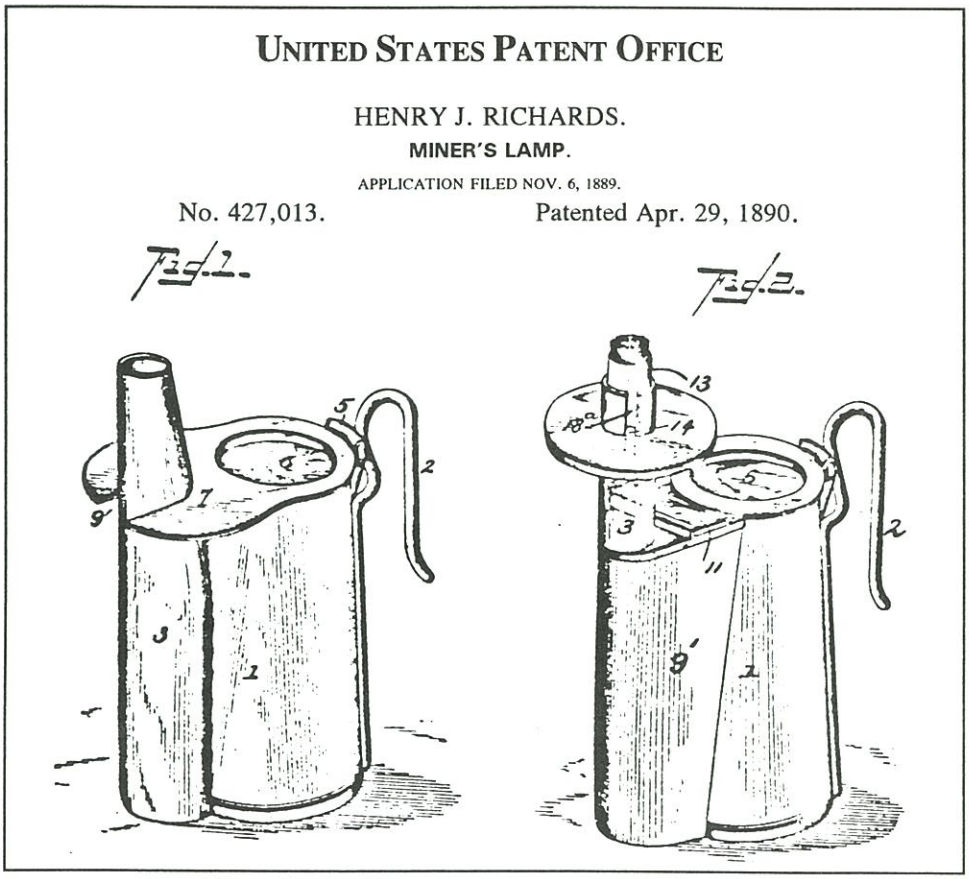


Figure 6. The patent drawings for patent No. 335,041.

Figure 7. The patent drawings for patent No. 427,013.

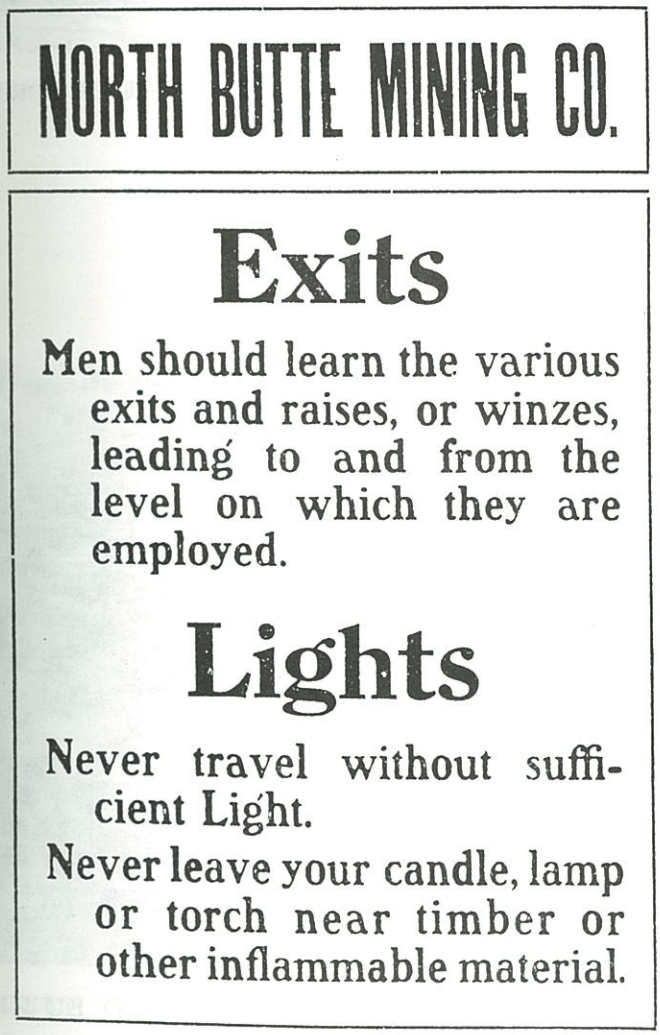


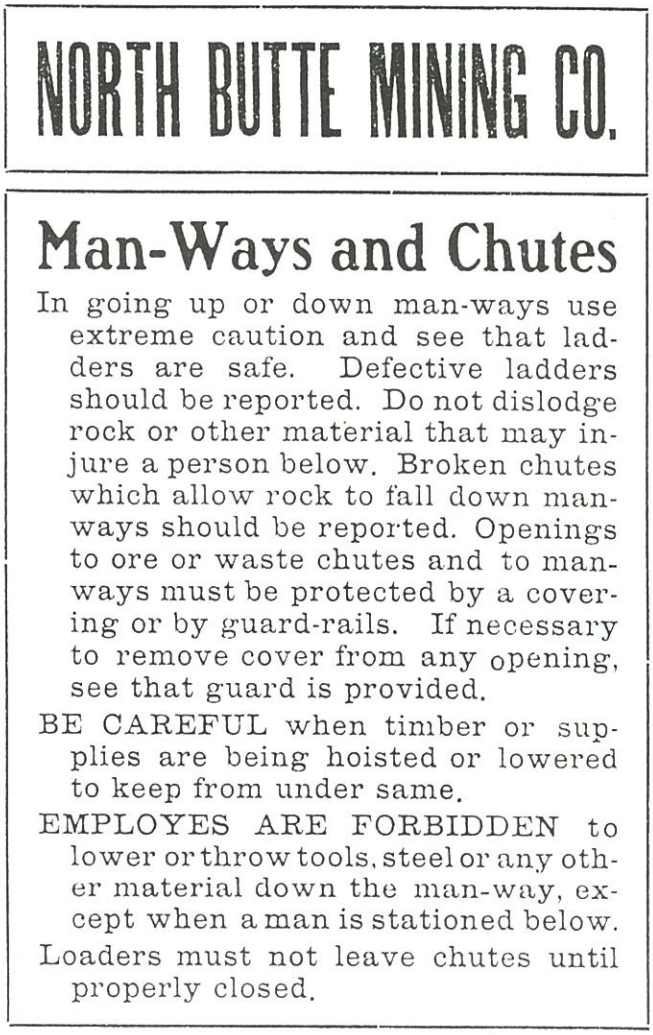
THE NORTH BUTTE MINING COMPANY

by **Joe L. Slouber**
Butte, Montana

The North Butte Mining Company was a short lived operation, lasting only for nineteen years, until being taken over by the Anaconda Company. It was started in 1905 by several prominent investors, including John Ryan who was a president of the Anaconda Company, and Patrick Largey, an important Butte businessman. The North Butte Mining Company owned several valuable mines including the Speculator and the Granite Mountain. The company was a major employer in Butte, having over 1600 men working for it at one time.

The North Butte Mining Company is better known for the disasters that happened at one of its mines. On October 15, 1915, at the Granite Mountain mine, twelve cases of explosives waited to be lowered. Fifteen shift bosses were standing around also waiting to go down, when the dynamite exploded. There were several theories, but the most accepted one was that one of the other men had just picked up several tins of blasting caps and one of these had accidentally been dropped and set off the explosion.





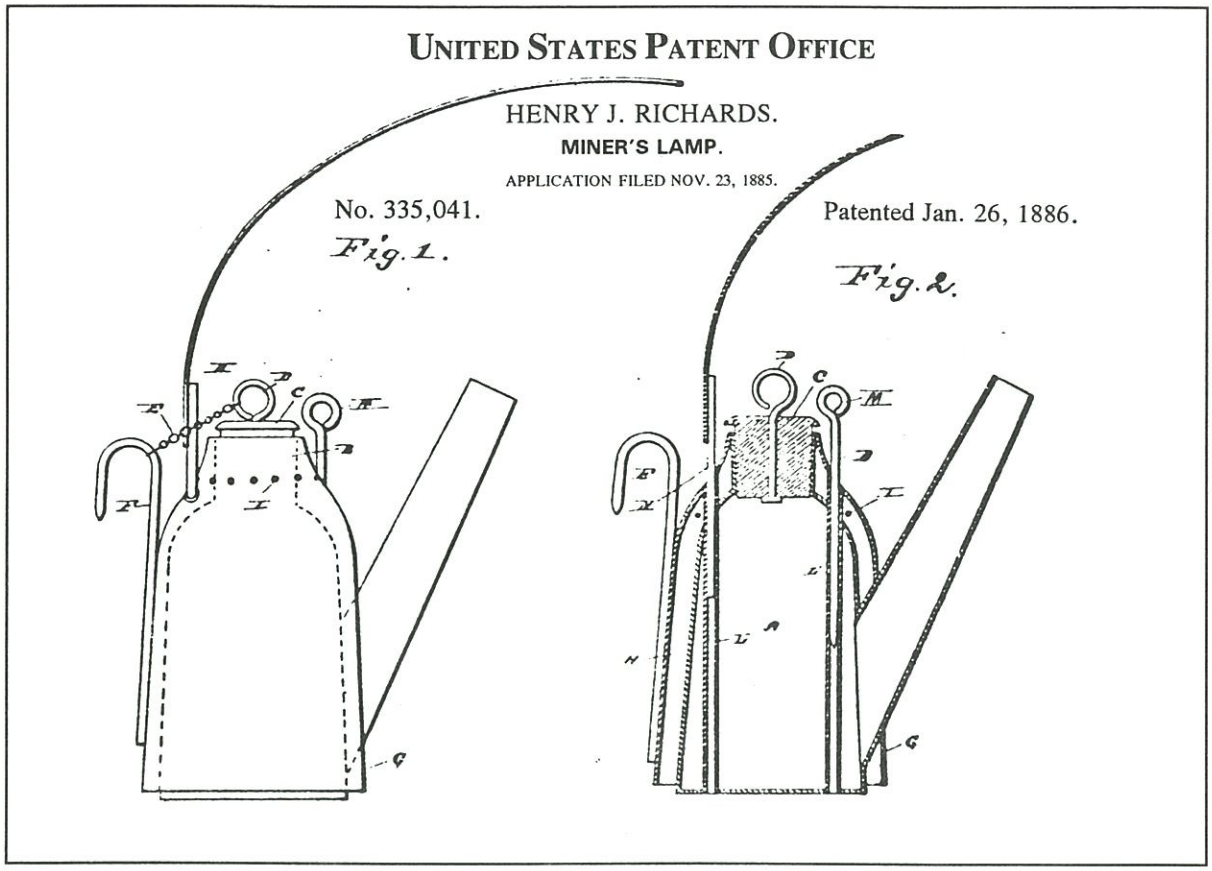
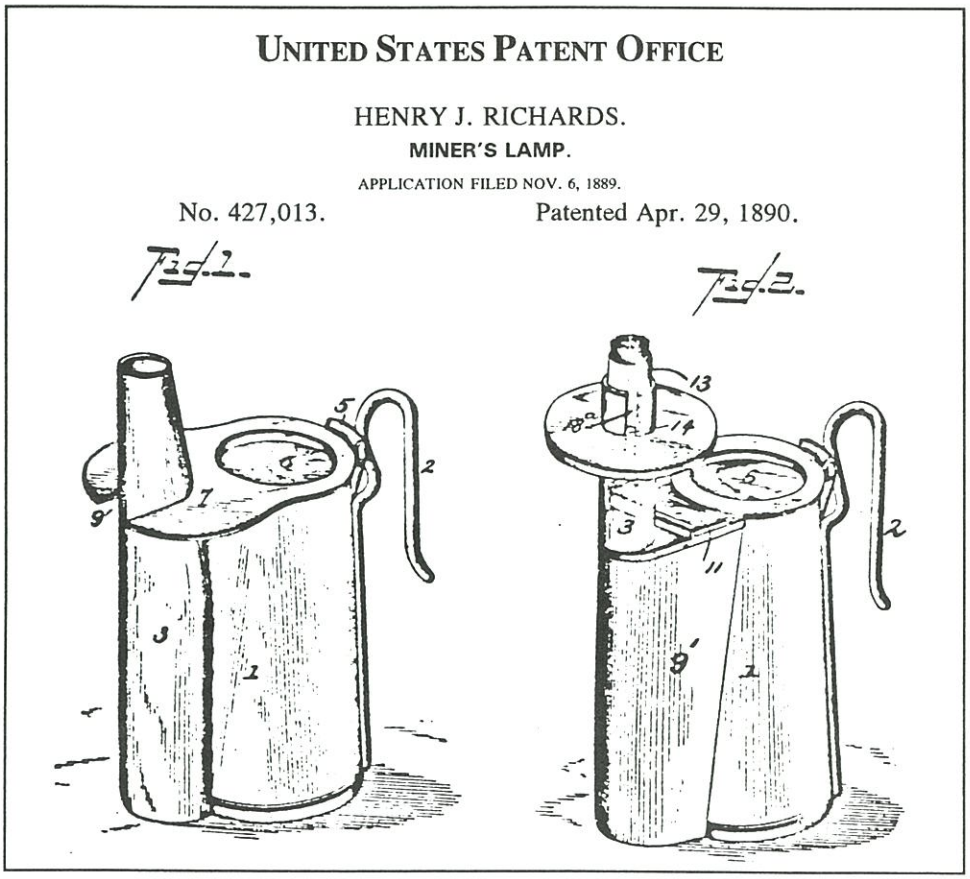


Figure 6. The patent drawings for patent No. 335,041.

Figure 7. The patent drawings for patent No. 427,013.



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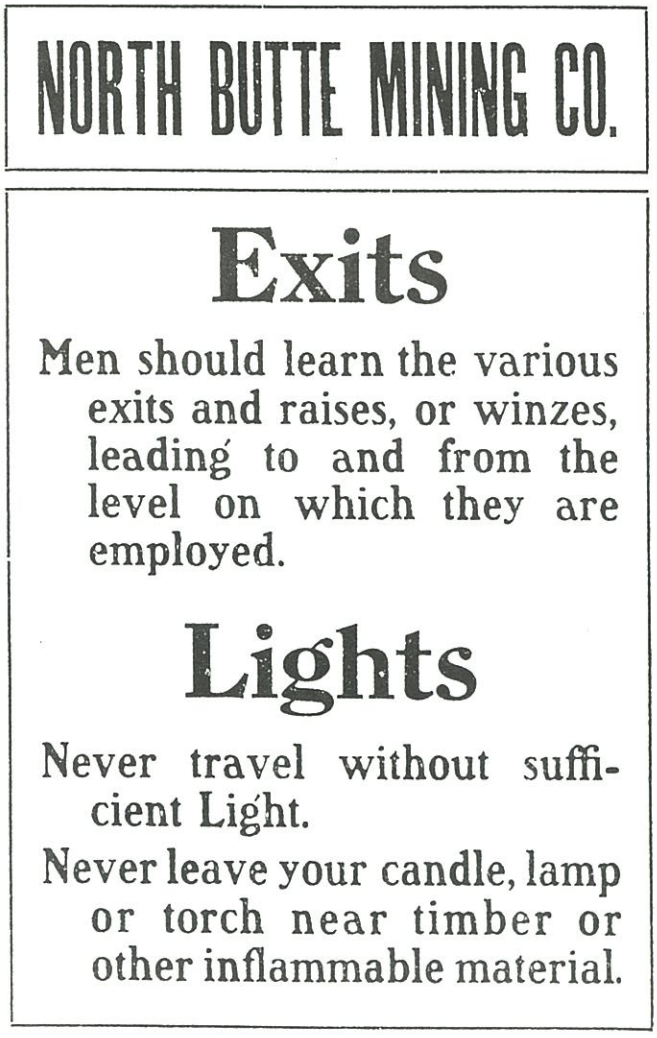
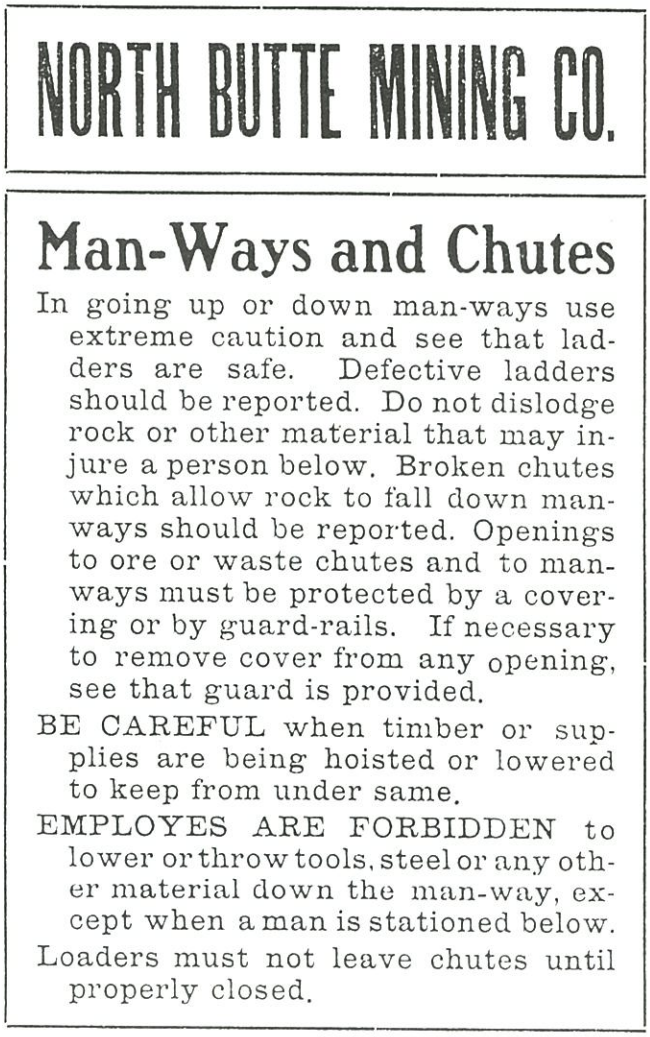
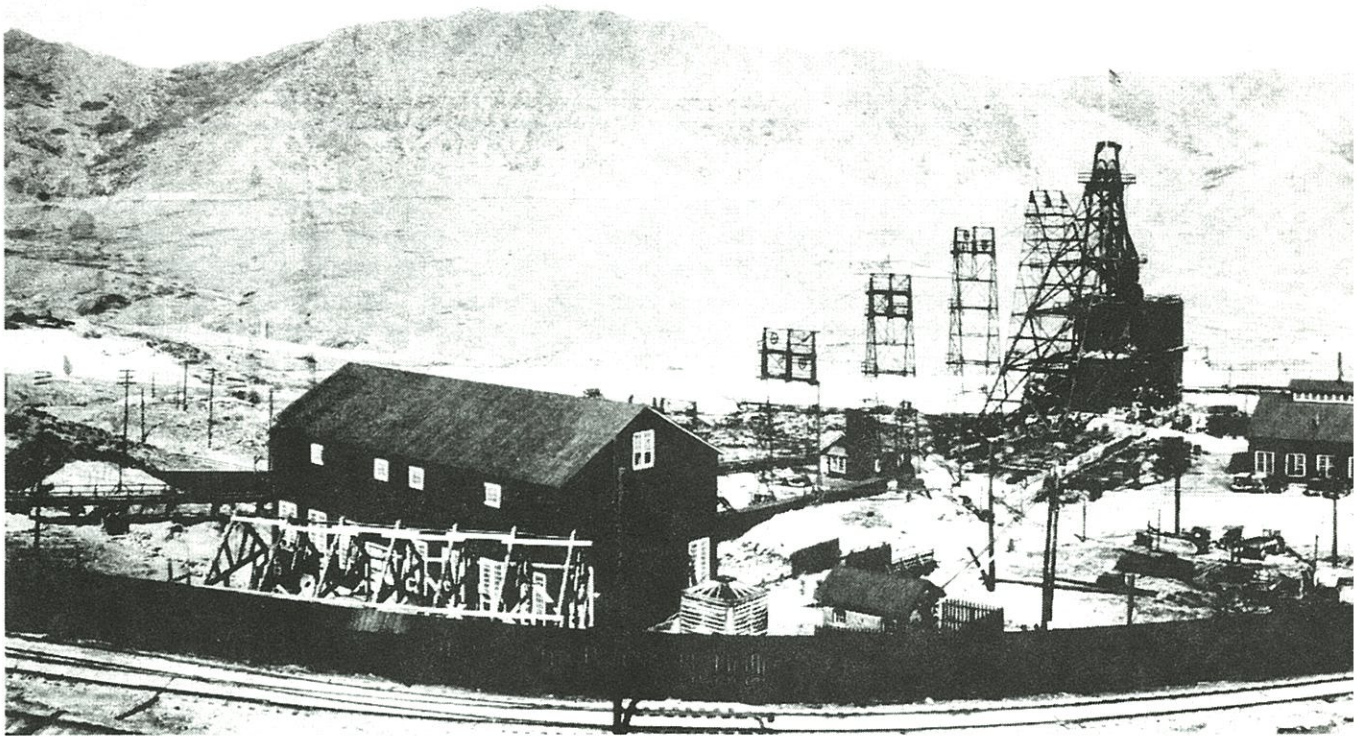


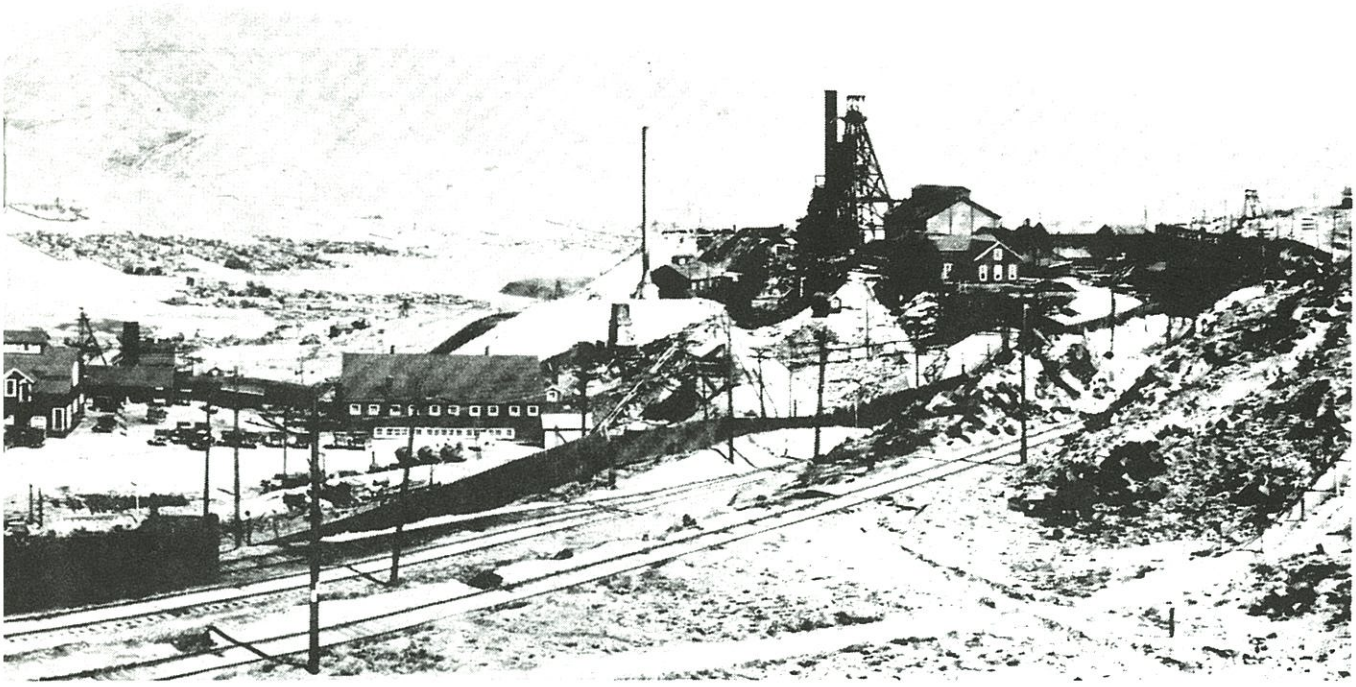




GRANITE MOUNTAIN AND SPECULATOR SURFA

MAIN RANGE SURFACE PLANT LOOKING WEST TOWARD BUTTE HILL

A photograph from a 1929 Annua



E PLANTS OF NORTH BUTTE MINING COMPANY

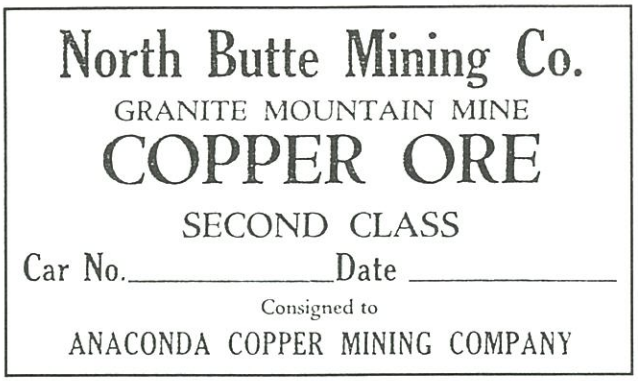
AND GRANITE MOUNTAIN GROUP OF NORTH BUTTE MINING COMPANY

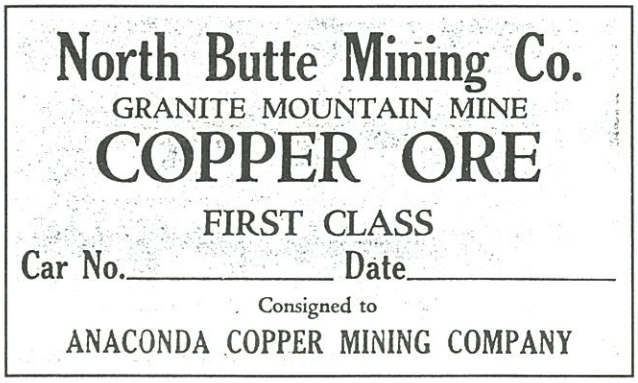
On June 8, 1917, again at the Granite Mountain mine, workers had been lowering a heavy cable down one of the air shafts. It got hung up and instead of trying to raise it back up, a man was sent down to try to free it. The cable was only held by one tie, and the man cut it for some reason, dropping the cable down the shaft. An assistant foreman inspected the insulated cable, and getting too close, set the cable on fire with his carbide lamp. In moments the entire 3,000 feet of timbered shaft was burning, while smoke and gas crept back through the tunnels. Most of the mines in Butte were connected, so most of the miners were able to escape. After the rescue crews were able to get down, they found 166 dead miners.

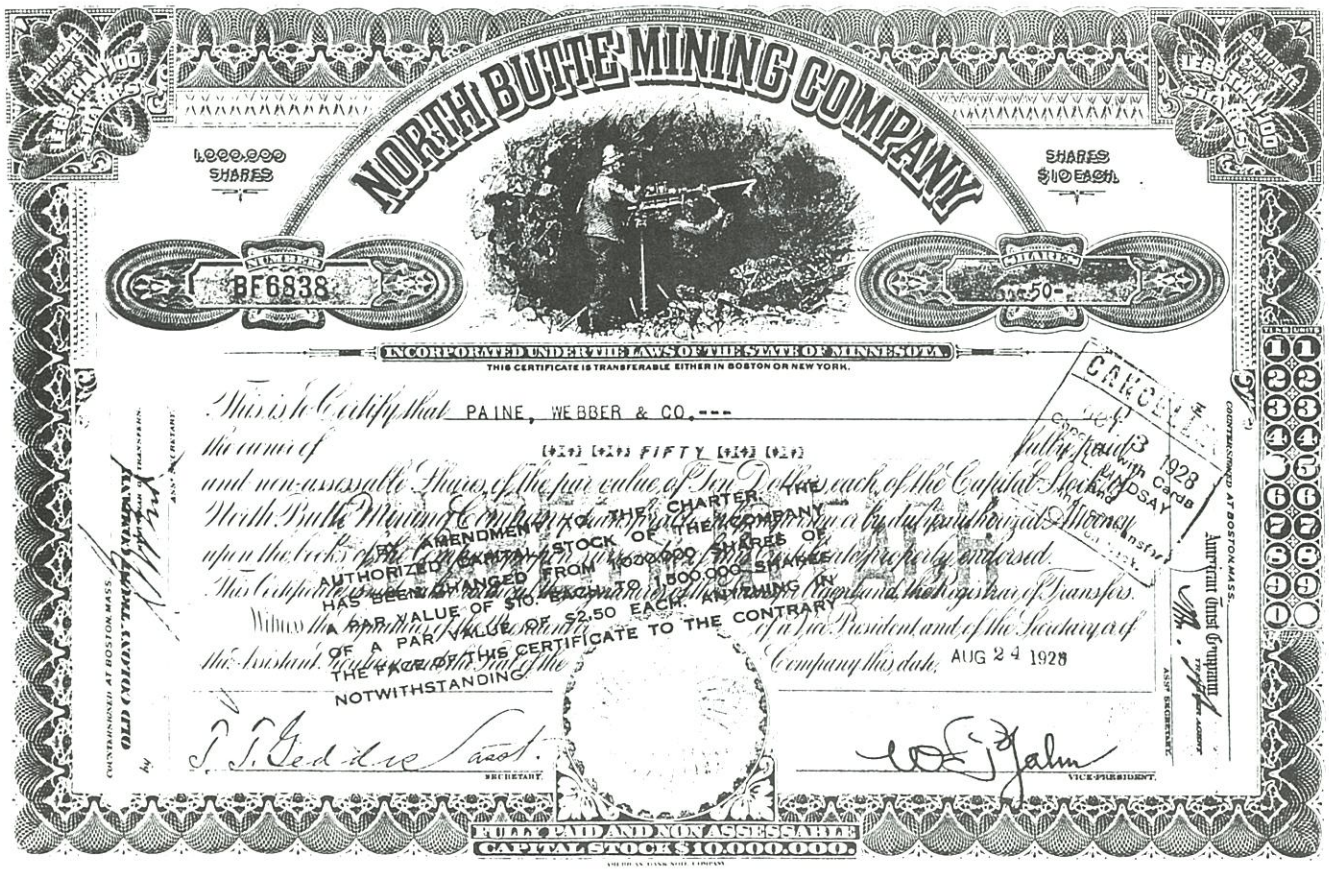
In 1923, the North Butte Mining Company was bought by the Anaconda Company, closing out its short history.

The Anaconda Copper Company continued to operate the North Butte Mining Company mines for many years.

Most all of the artifacts related to the North Butte Mining Company are paper items such as stock certificates, checks, post cards, and small cardboard signs that were placed throughout the mines. The stock certificates from the North Butte Mining Company--although very attractive--are the most commonly found mining stocks around.







THE LUNKENHEIMER OIL WICK LAMP

by **Tony Moon**
Sandy, Utah

Lunkenheimer of Cincinnati, Ohio, has been well known for the manufacture of brass valves, oilers and other fittings for over 100 years and is still in business today. A typical advertisement from the turn of the century is shown in Figure 2.

One example of an oil wick lamp made by Lunkenheimer has been found and is shown in Figure 1. The lamp is very well made, mostly in brass but the base and hook are copper. The screw lid is cast and has a small vent tube similar to those found on certain Trethaway lamps. The lid marking shown in Figure 3 indicates that this is a No. 2 lamp. Who has an example of the No. 1?

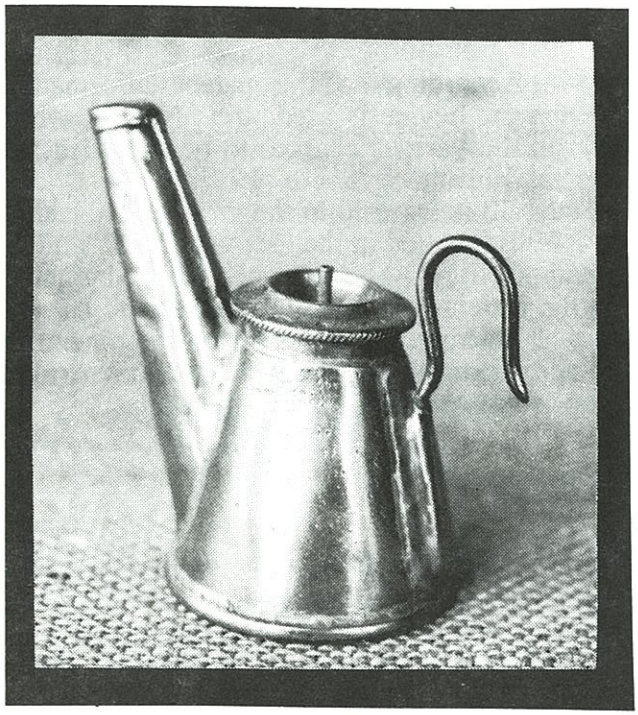


Figure 1. A brass and copper No. 2 Lunkenheimer face lamp. (Author's collection)

Figure 2. A Lunkenheimer advertisement from a 6th edition (1900) of *The Coal and Metal Miners Pocketbook.*

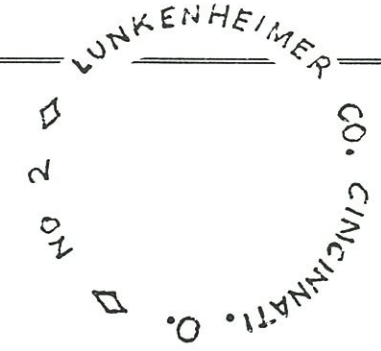


Figure 3. The lid marking of the Lunkenheimer lamp.

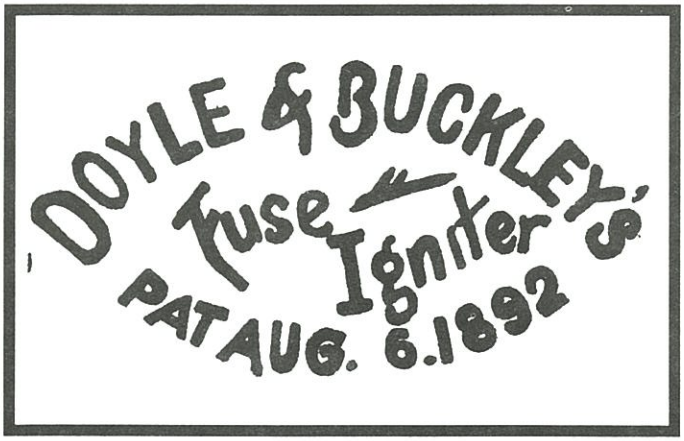
THE DOYLE & BUCKLEYS FUSE IGNITER

by **Ted Bobrink**
Redlands, California

In a previous issue of the MAC (Number 16, Fall 1992), Wendell Wilson wrote an interesting article about the Hagenmeyer fuse lock or fuse igniter patented on October 9, 1866. If you recall, that fuse igniter ignited only one fuse at a time and was intended to be used in a manner so as to allow a miner to light a fuse from a safe distance.

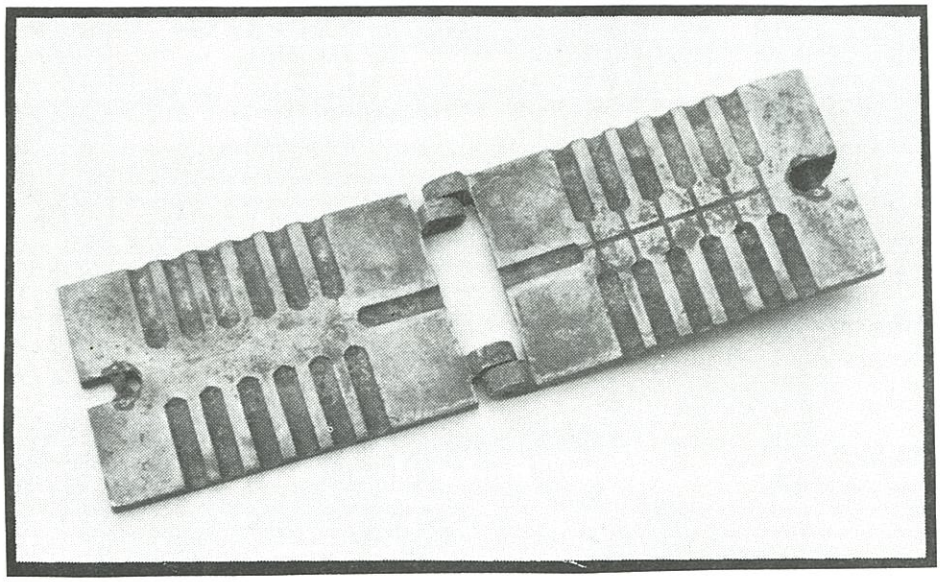
Twenty-six years later, on August 16, 1892, two fellows by the names of William J.C. Doyle and Timothy Buckley, both of Aspen, Colorado, patented "a simple device by means of which any number of fuses may be safely held and simultaneously fired, so that there will be no chance of a miss-fire, . . . which is very simple and cheap and which may be used either in wet or dry blasting."

The only known example of a Doyle & Buckley Fuse Igniter at this time is made of solid brass. As you can see by comparing the example in the photo to the patent drawing, Doyle and Buckley made a few changes in the finished product. The hinge design was improved and they added two more groves to accommodate twelve fuses instead of the ten shown in the patent drawing. The lock or fastening device (#13) was also changed, but it is missing on the only known example. I would assume that it was some sort of latch that was tightened by a bolt or wing nut.



Shown above is a rubbing of the incused lettering on the front of Doyle & Buckley's Fuse Igniter.

According to the patent information, "When the device is used, the fuses 17, which lead to the various charges to be exploded, are fastened in the grooves 14 14^a, the (black) powder 18 is inserted in the grooves 16, a short fuse 19 is inserted in the grooves 15 15^a, and the members 10 and 11 are firmly fastened together by the fastening 13. If the device is to be used for wet blasting, the edges of the body members 10 and 11 may be first smeared with cartridge-soap, so as to effect a water-tight joint."



A photograph of the solid brass Doyle & Buckley's Fuse Igniter in the open position showing the placement of the grooves for the fuses on the sides, the igniting fuse at one end and the small black powder grooves leading to each fuse. The fuse igniter, in the closed position, is 4 $^1/_4$ inches long, 2 $^1/_2$ inches wide and $^7/_8$ of an inch thick.

Obviously the Doyle & Buckley Fuse Igniter would have been very time consuming to use. Just imagine a powderman at the face of a drift with twelve fuses hanging in front of him and trying to align each one into the grooves of the igniter, not to mention the time it would have taken to mix up the black powder paste that had to be applied into the small grooves.

If you look close, there are two things in the stamping on the brass igniter example that you may have noticed that are different from what is on the patent. The word igniter that is stamped into the brass example is spelled with an "er" whereas in the patent it was spelled with an "or." Also, the date of Aug 6 1892 that is stamped into the brass example does not match the date of Aug. 16, 1892, that is on the patent. I'm sure this was either a simple mistake attributed to the die maker or more probably the 1 in 16 had gotten broken off of the casting since there appears to be a space where a 1 would fit.

Above is a photograph of Doyle & Buckley's Fuse Igniter in the closed position.

Shown below are the original patent drawings for Doyle & Buckley's Fuse Igniter.

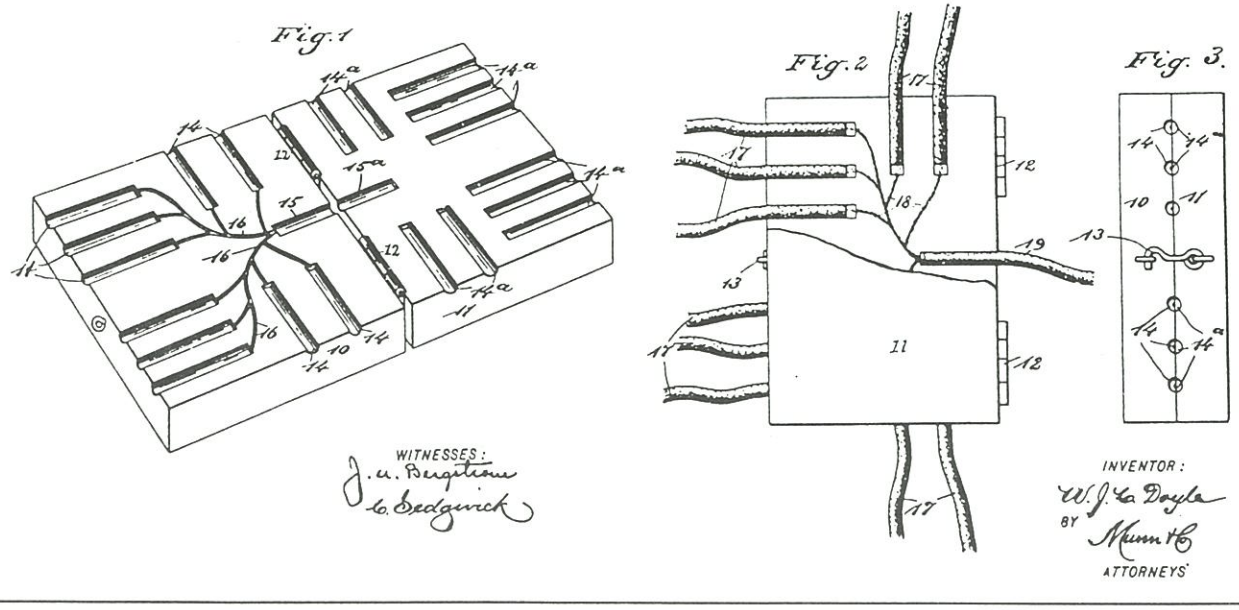
UNITED STATES PATENT OFFICE

WILLIAM J. C. DOYLE.
ASSIGNOR OF ONE-HALF TO TIMOTHY BUCKLEY.

FUSE-IGNITOR.

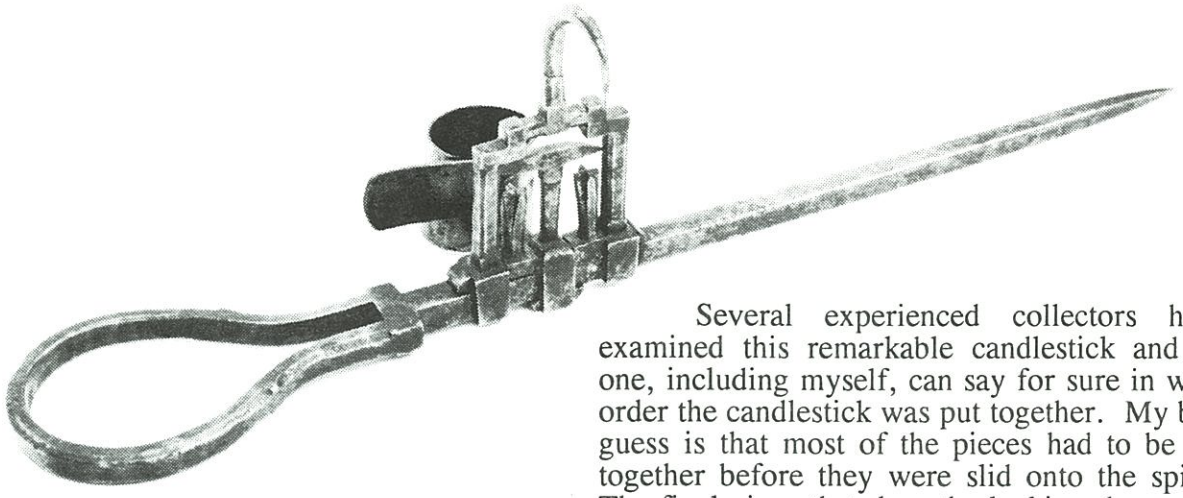
APPLICATION FILED DEC. 29, 1891.

No. 481,012. Patented Aug. 16, 1892.



A Fancy Tools Candlestick From Nevada

by **Ted Bobrink**
Redlands, California

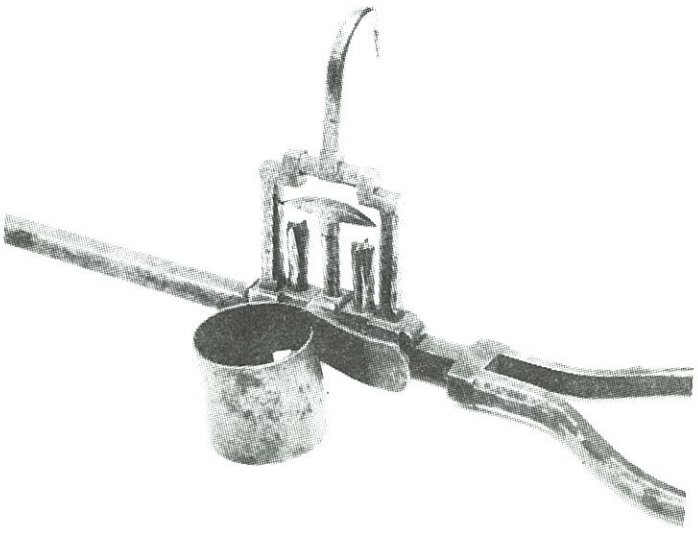


The workmanship exhibited by blacksmith candlesticks range from crude to exquisite. No other type of miner's lighting device reaches such a high level of art as the fancy candlestick. Each of the best examples is a one-of-a-kind art work.

Candlesticks that are ornamented with miniature miners' tools are referred to as "fancy tools models." If the workmanship is done well, and it almost always is, then these types of candlesticks are the most sought after examples of them all. Most collections today consist primarily of examples of the simpler blacksmith candlesticks. Anyone should feel proud to own even a single example of the fancier versions.

Fred Holabird of Reno, Nevada, came up with this superb candlestick from an estate sale in Gardnerville, Nevada. This fine example of a fancy tools model includes a miner's pick and two early star drills inside an elaborate hook formation. The manor in which the hook, thimble, and tools are applied is unprecedented. It appears that the main column that includes the hook is one separate piece--as is the thimble, pick and star drills. Along with the one-piece handle and spike, all five pieces are joined together like a puzzle.

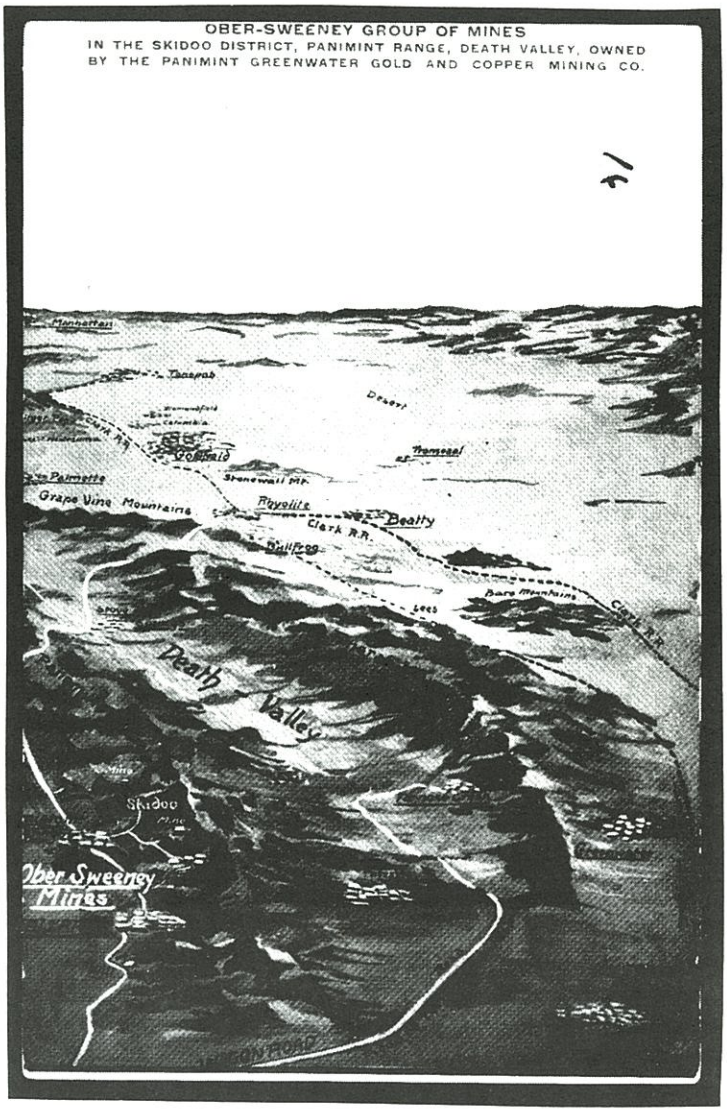
Several experienced collectors have examined this remarkable candlestick and no one, including myself, can say for sure in what order the candlestick was put together. My best guess is that most of the pieces had to be put together before they were slid onto the spike. The final piece that does the locking, however, will forever remain a mystery.



The spike and thimble are quite plain, whereas the one-piece split handle is double beveled at 45° angles--as are the columns and beam supporting the hook. The fact that the spike and thimble were left plain centers more attention to the remarkable detail that went into making the hook and miniature tools. All in all, it is a fascinating candlestick, combining precision craftsmanship with an elegant design. What more could one ask for?

SKIDOO: A DEATH VALLEY GHOST TOWN

by **Bob Schroth**
Twin Peaks, California



A prospectus post card for Skidoo. (Ted Bobrink collection)

It was a very cold and windy February in 1977, the first time I visited Skidoo. This mining camp was not really that significant in its mineral production, but the history of the miners and their curious ways made it a place that I wanted to visit. No one is sure how the town got its name, and there are several versions of the story. One is that the town was named after the twenty-three mile pipe line that was laid all the way from Telescope Peak. The popular slang expression of the day was "23 skidoo!" Skidoo meant to scram or vamoose, to go away or leave.

Skidoo is located 5600 feet up in the Panamint Mountains in Death Valley National Monument, California. In January, 1906, on route to the new strike at Harrisburg, "One Eye" Thompson and Harry Ramsey got lost in a fog bank and somehow discovered a rich gold ledge. This was subsequently purchased by Bob Montgomery, a Nevada mining tycoon, for $600,000. News of this new discovery sparked a mild stampede and resulted in the founding of the boom camp of Skidoo. The town, at its peak, had over 500 people, a bank, real estate offices, two stores, a newspaper--The News--five saloons, two barber shops, assay office, restaurants, pool hall, etc. Water was sold to the inhabitants for ten cents a gallon, and mesquite wood sold for fifty-five dollars a cord. The output of the Skidoo mill averaged about $15,000 a month until 1916, when it was closed due to some legal problems.

Skidoo's most famous incident was the lynching of a drunken saloon keeper named Joe "Hooch" Simpson. The headline in Skidoo's newspaper read: "MURDER IN CAMP. Murderer lynched with general approval. Joe Simpson shoots Jim Arnold and is hanged by citizens."

That hanging on the night of April 3, 1908, made Skidoo the most advertised mining camp in the West. Twenty-four hours after Simpson had been interred on Boot Hill, a Los Angeles Herald reporter arrived in town. He had come all the way from Lone Pine in a livery rig to get the story of the hanging. The folks of Skidoo were right proud of such notice and set out to show their appreciation. They disinterred poor Simpson's corpse and hanged him a second time just so the reporter could take a picture.

There's not much left of old Skidoo today. When the ore ran out, so did the need to stay. The twenty-three miles of pipe was dismantled and hauled off for scrap during World War I. Anything useful was hauled away to other camps.

Remember, if it were not for underground mine explorers, you would not have mining artifacts!

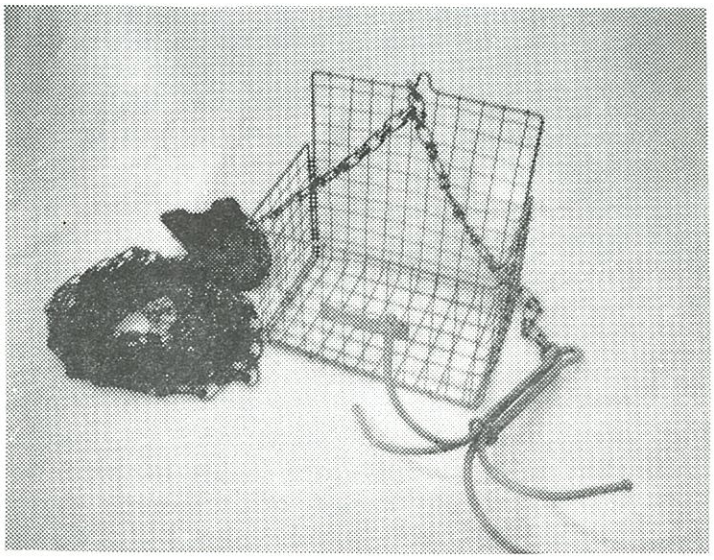
I recently returned to Skidoo and was saddened by the sorry shape the old stamp mill was in. This was the only standing building left. Also, all of the mines in the area have been covered by a steel net to keep explorers out. This has been done in just the last few years by the Park Service. I don't blame the Park Service because they are liable for anyone getting hurt--usually always those without the proper equipment and inexperienced in mine exploration. Most all of the mines in the National Park system are now getting closed, netted or gated. Most of these mines have had heavy traffic anyway, so there is not much in the way of mining artifacts left to find.

I still enjoy the adventure of going out and finding these old camps and seeing where and how the miners of old lived. All of these camps had some unique history and tales in their short lives, and these old towns and camps are vanishing very fast. I hope to video tape what is left of all the ghost towns and mines that I explore in the future so I will have some visual record of what is left. Many mines, like their towns, have their own unique history. In video taping these mines, I hope to record the mining techniques--such as timbering, drilling and hauling methods--the tools and equipment used, and their inner, underground beauty.

UNION SANITARY CLOTHES HANGERS

by **Jim Steinberg**
Pasadena, California

If you have ever seen a photograph of a miners' changing room, you may have noticed a forest of clothing suspended from the ceiling high above. These are the miners' clothes hangers in use.



The hanger that is shown in the photo--and advertised on the front cover--measures 8 $^1/_2$ inches tall at the back with a small loop at the top where the hanger is suspended from a chain. The front and sides of the hanger measure 5 $^1/_2$ inches high (the depth of the basket), 8 inches from side to side, and is 5 $^1/_4$ inches from front to rear.

The basket has a 19 $^1/_2$ foot chain. Attached to one end of the chain is a four-pronged hook made of $^1/_4$ inch rod with $^3/_8$ inch round knobs on the end of each prong. The hook assembly is held together by a steel ring towards the base of the hooks. The top of the basket is attached to a link in the chain about a foot above the hooks.

At left is a photograph of the Union Sanitary Clothes Hanger from the James H. Shannon Manufacturing Company that is illustrated in the ad on the front cover of this issue of the MAC. (Author's collection)

The construction of the basket is interesting. It is essentially two framed sections of $^3/_4$ inch mesh folded and connected together. First, a $^1/_8$ inch wire was formed into an 8 inch by 13 $^1/_8$ inch long rectangle covered with $^3/_4$ inch mesh of $^1/_{16}$ inch diameter wire soldered to the frame. This piece is folded once at a 90^0 angle to form the bottom and back of the basket. A second rectangle of similar design measuring 5 $^1/_2$ inches by 13 $^1/_4$ inches was folded to form the front and two sides of the basket. These two sections of the basket were then joined together using eight steel wire loops.

On the front of the basket the manufacturer soldered a tinned metal tag that is 3 inches long by $^3/_4$ of an inch wide and is stamped as follows:

UNION SANITARY CLOTHES HANGER
J H CHANNON CORPORATION
MFRS CHICAGO

The miners' clothes hanger illustrated in the accompanying advertisement differs slightly from the hanger shown in the photo in that the top of the advertisement hanger is rounded.

When in use, the pulleys at the ceiling facilitate the raising and lowering of the miners' clothes hanger. Smaller objects could be placed inside the basket while clothing could hang from the hooks to dry in free moving air.

There were probably many reasons for using these types of clothes hangers, among them were the low cost of installation and repair, the amount of floor space saved, but most notably was that the miners' wet and dirty work clothes probably dried quicker and better than when kept in the ordinary closet type lockers.

Shown below is an ad for the Union Sanitary Clothes Hangers from a 1928 Keystone Mining Supply Catalog.

Equipment for UNION Mines and Quarries

Booklet "High and Dry" Sent Free on Request

Consequently, the James H. Channon Original "Union" Sanitary Clothes Hanger is rapidly displacing the stuffy, ill-ventilated, germ-breeding steel locker.

Its practical advantages are self-evident: The stout, rust-proof basket, deep and capacious, holds the workman's lunch and valuables in safety. The ample, rust-proof four-prong hook spreads his damp clothing to the fresh, warm, drying air. The sturdy sherardized chain (tested to 1,000 pounds) hoists all to the ceiling, where the air-currents are warmest. The strong padlock secures the outfit from molestation.

The illustration shows a standard Hanger unit, which includes thirty feet of chain, the length that meets average requirements (for 15-foot ceiling).

The saving, as against steel-locker installation, is about three-quarters in first cost; and about two-thirds in floor-space required. The Hanger effects a further large saving in repair-cost; for when a workman forgets his key and pries the steel locker open with a pick, the repair-cost is greater than the cost of an entire "Union" Hanger unit. Fire-risk from spontaneous combustion is eliminated, and from pipes left in clothing greatly diminished.

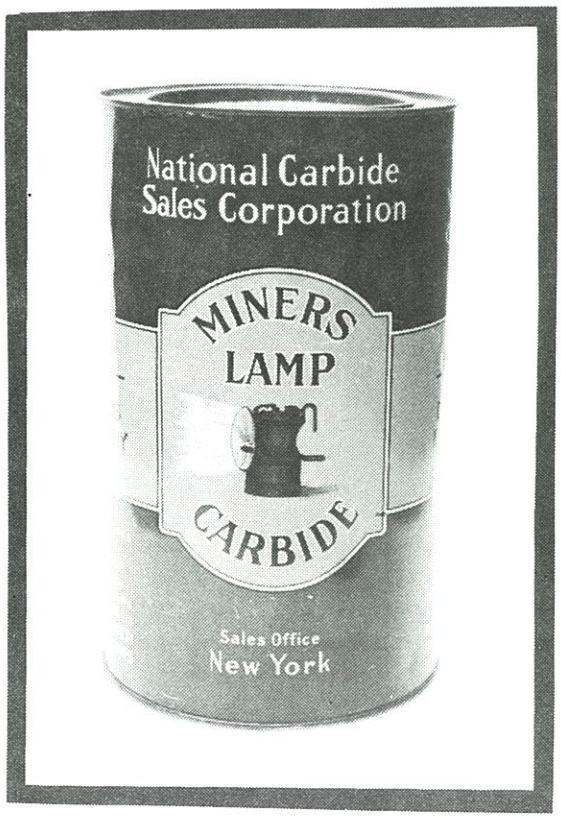
Whether or not your State or Province has legislation making Hanger or Locker provision for workmen compulsory, self-interest will suggest that you investigate this, by far the best and cheapest high-grade Wash-Room Equipment.

Correspondence is invited—from Mine Operators, Industrial Engineers, and Architects. Model Wash-Room Layout will be sent on request.

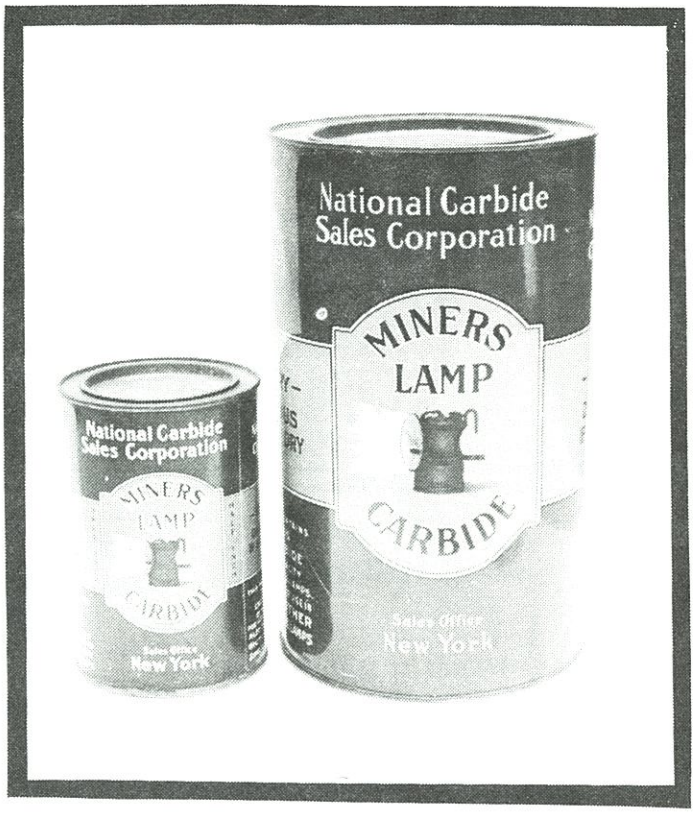
EARLY "MINERS LAMP" AND "SUN-LITE" NATIONAL CARBIDE CANS

by **Ted Bobrink**
Redlands, California

Anyone collecting mining artifacts will usually pick up a little mining-related advertising items now and then. I can't think of anything more attractive than the early "Miners Lamp Carbide" cans from the National Carbide Corporation. These brightly colored round and square cans were produced in two sizes, two pounds and ten pounds. I have seen two different styles of cans that came with a picture of a carbide lamp on the front and back. The style shown in the photo is dark maroon and orange and shows a "Wolf" carbide cap lamp. The other style (not shown) is dark maroon and yellow and shows an "Arrow" carbide cap lamp.



A photograph of a ten pound can of Miners Lamp Carbide from the National Carbide Corporation.



Shown above is a photograph showing the size difference between the two pound and ten pound National Carbide cans.

Of all of the Miners Lamp Carbide cans that I have seen, the smaller two pound cans are by far the most common. They are usually 5 $^1/_2$" high and are very easily displayed in a case. The ten pound cans are 10" high. Although they are rarer, for display purposes they are less desirable. There are also a number of minor color and design variations, in fact too many for me to mention here.

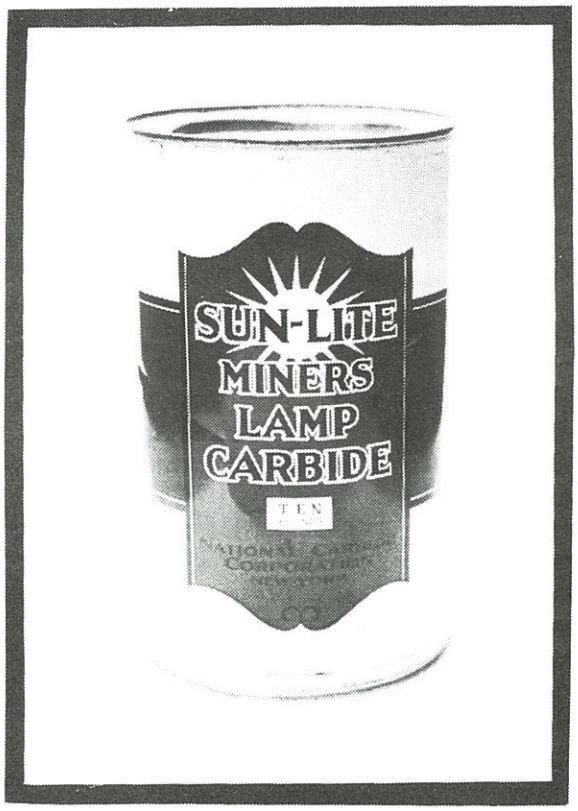
While exploring an old mine one day, I came across a square, two pound Miners Lamp Carbide can. The can was yellow and brown and had an Arrow carbide cap lamp pictured on the front, but unfortunately, the can had been run over so many times that I didn't even bother to bring it out.

The "Sun-Lite Miners Lamp Carbide" was another brand name made by the National Carbide Corporation. I believe that both brands were sold during the same period of time. However, I find that the Sun-Lite cans are the rarest. The attractive ten pound can shown in the photo is bright yellow, brown and white. Errol Christman of Cedar Ridge, California, has a square, ten pound Sun-Lite can that is red with black lettering. All of the Sun-Lite cans that I have seen have been the ten pound size. According to an ad, however, it was also sold in the two pound size.

The Sun-Lite Carbide pocket calendar is yellow and orange-brown and is dated 1939. On the back cover it says:

MINERS LAMP CARBIDE
Packed for Miners Lamps and other Lamps in 100-pound and 25-pound drums; 10-pound and 2-pound cans.

I found two of these nifty calendars in the Noonday silver mine in Tecopa, California. However, the only National Carbide cans we found in the mine were the later, more common gray and blue type. I will talk about these in another article.



A photograph of a ten pound can of Sun-Lite Miners Lamp Carbide. (Author's collection)

SUN-LITE

SUN-LITE
CARBIDE

UNIFORM IN SIZE

FREE FROM ALL IMPURITIES

RICH IN GAS

GENERATOR SIZE CARBIDE
Packed in 100 lb. Drums in sizes suitable for House-lighting and Industrial Generators.

MINERS LAMP CARBIDE
Packed for Miners Lamps and other Carbide Lamps in 100-pound and 25-pound drums; 10-pound and 2-pound cans.

INTERCITY GROCERY CO.
Phone 580
PERU, ILL.

SUN-LITE
CARBIDE

NATIONAL CARBIDE CORPORATION
Lincoln Building
New York, N. Y.

IMA HOKES COLLECTION: THE MAUMEE MULTIPLEX LAMPS

by **Wendell E. Wilson**
Tucson, Arizona

Around the first of each April we like to feature a lamp from the collection of Mrs. Ima Hokes (see MAC Number 16, p. 26-27!). As mentioned in the earlier article, I visited her and photographed many oddities and rarities, not to say some items previously considered mythological, and have enough data now for quite a few installments.

This time we shall report on the Maumee multiplex lamps, including some background data passed on to me personally by Ima.

Every collector worth his carbide knows about the rare and famous Maumee Duplex lamp. Several examples are known in collections around the country. These lamps, each consisting of two separate carbide chambers, water valves, and burner tips, were made by the Maumee Manufacturing Company of Pittsburgh from 1914 to 1915. Frank W. Law patented the design on May 12, 1914.

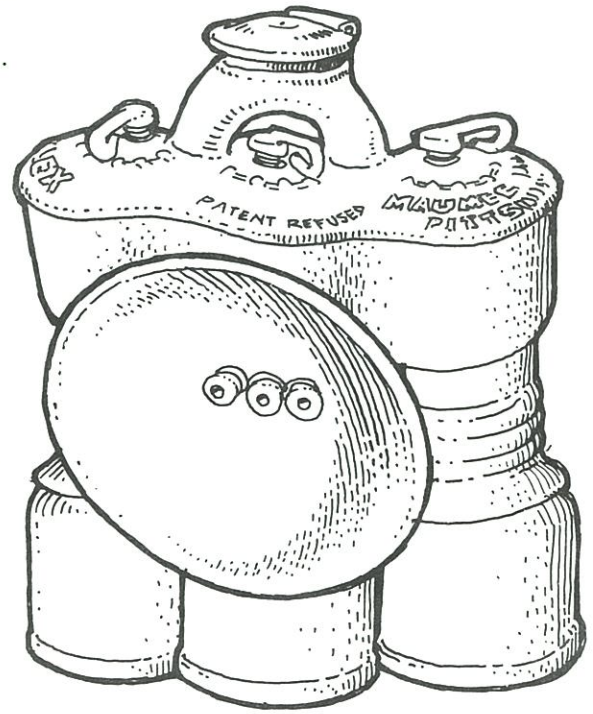


Figure 1. Maumee Triplex (all brass).

A photograph of the infamous Ima Hokes.

What has remained generally unknown is that Frank Law continued with a series of additional innovative designs along the same line. In 1916 he submitted a patent for the three-burner "Maumee Triplex" and, although the patent was refused, he made a few examples including the Ima Hokes specimen.

Frank liked the Triplex so much that he next developed the Maumee Quadriplex (4 burners), then the Quintiplex (5 burners), and the Hexiplex (6 burners). Ultimately he created one of the most remarkable miners' lamps ever developed: the Maumee Multiplex, consisting of a continuous ring of 12 burners around the miner's helmet, shining brilliantly in all directions to illuminate an entire stope or working face area. The beauty of this idea was that no other miners in the immediate area would need to wear hardhat lights at all!

Sadly, the Multiplex lamp did not catch on, perhaps because it weighed about ten pounds when fully charged, and took thirty minutes to refill, every hour and a half. Of course, it would run for 18 hours without a refill if the burners were used only one at a time, but apparently that advantage was not enough to overcome the weight problem. (And anyway, not many miners wanted to work 18-hour shifts.)

At least, this is what Ima tells me. The illustrations shown here are based on examples in her collection.

There is a *rumor* of another unusual Maumee lamp, the Polyplex, but I don't have any idea what it looked like. If any readers know I hope they will share the information with us.

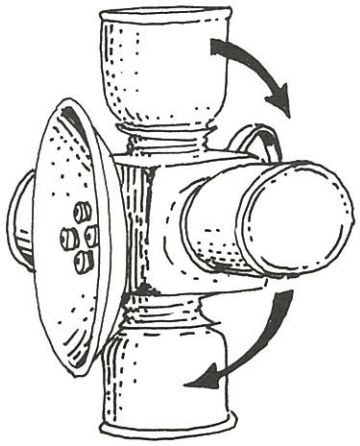


Figure 2. Maumee Quadriplex (all brass). Note that the lamp must be rotated 90° before lighting each successive burner, so that gravity-feed will operate.

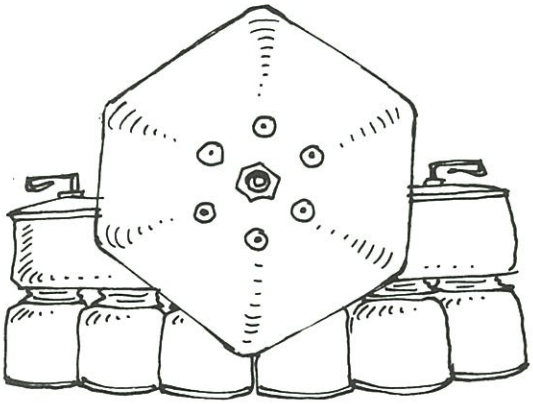


Figure 3. Maumee Hexiplex (japanned steel).

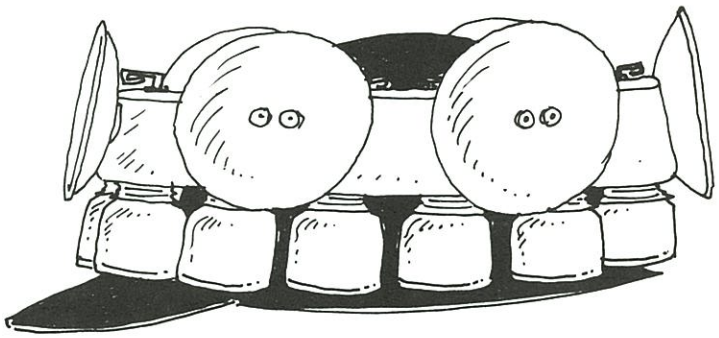


Figure 4. Maumee Multiplex (japanned steel).

A photograph supposedly of (from left to right) Irving "Swifty" Hokes, Security Hokes, Jim "Diamond" Hokes, Charles Patterson and Psalter Hokes during one of the rare times that they were all working together.

"From Mine To Consumer" The Anaconda Copper Company

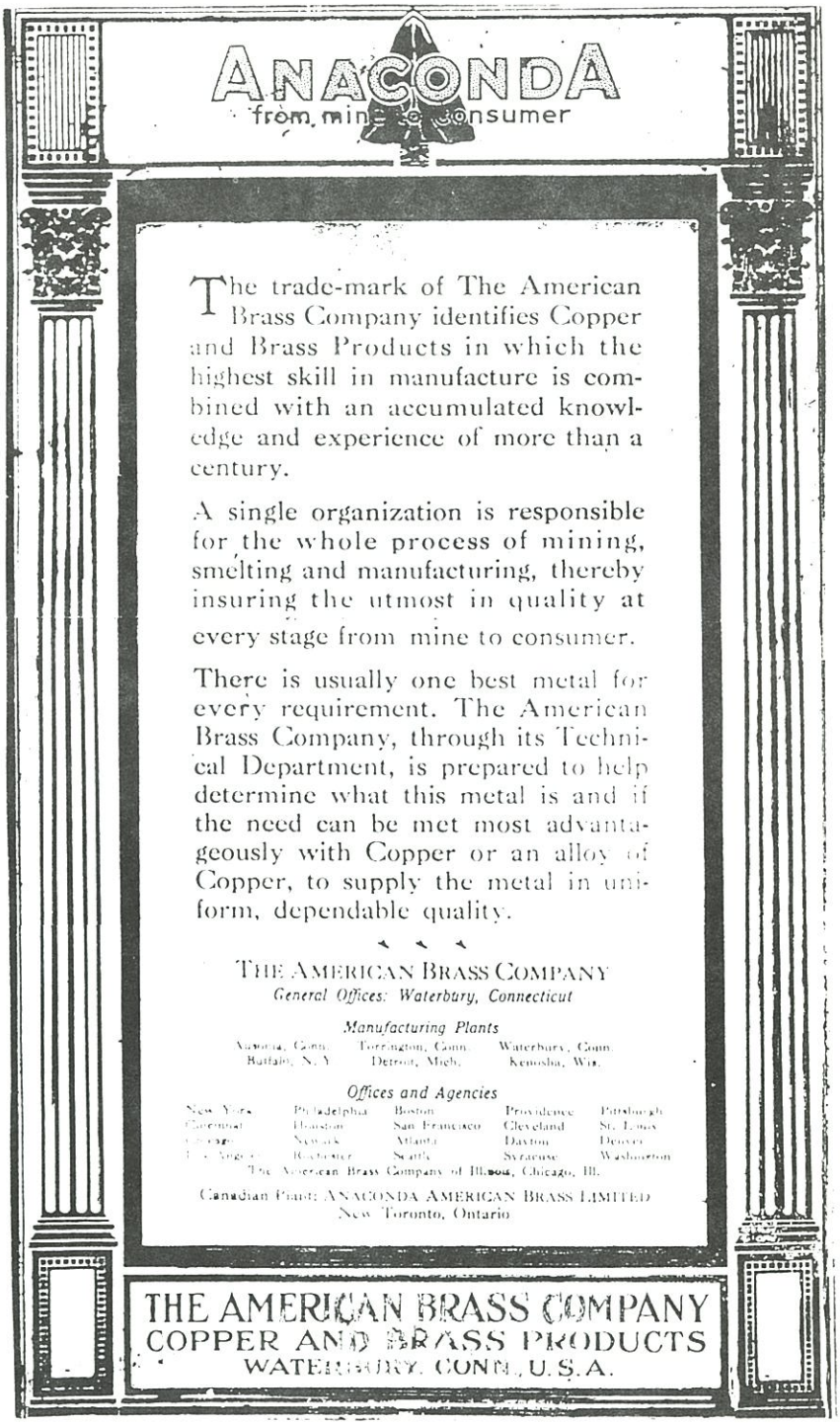
by **John Neilsen**
Lake Elsinore, California

On a crisp October morning in 1875, a former solder in the Union Army staked out a claim on a hill overlooking what is today the city of Butte, Montana. This solder turned prospector was Michael Hickey, and below him sprawled the crude streets of a mining camp bent on finding gold, silver, and eventually copper. While fighting in the Civil War, Hickey read an editorial by Horace Greeley in the New York Tribune which said: "Grant will encircle Lee's forces and crush them like a giant Anaconda." The word "anaconda" had caught Hickey's fancy, which led him to name his new claim the Anaconda.

This was the beginning of what would become the Anaconda Copper Company. They not only would operate mines in at least half a dozen states in the U. S. and three foreign countries, but would also operate concentrators, smelters, refineries, fabricators, and a host of other operations.

In the early 1920s, the Anaconda Copper Company was looking to expand into the copper fabrication business. They were very impressed with the output capacity of the American Brass Company of Waterbury, Connecticut, which was at that time the largest fabricator of non-ferrous metals in the world. The Anaconda Copper Company was convinced that a merger of the two companies would be highly advantageous to both parties and the public because it would eliminate many of the intermediatory costs as well as creating other related economies.

In 1922, the Anaconda Copper Company bought the American Brass Company for the sum of $45,000,000 and the slogan "From Mine To Consumer" was begun. The sale and merger of the Anaconda Copper Company and the American Brass Company was one of the largest up to that time in American industrial history.[1]



A 14 x 22 brass sign from The American Brass Company which was bought out by the Anaconda Copper Company in 1922. (Author's collection)

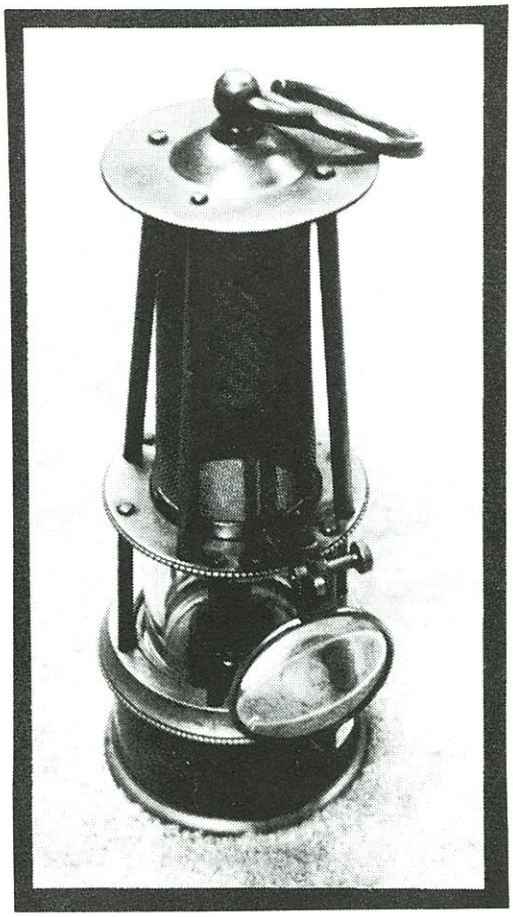
1. Isaac F. Marcosson, Anaconda, (Kingsport, Tennessee: Kingsport Press Inc., 1957).

SAFETY LAMPS FOR READING SURVEYING INSTRUMENTS

by **Tony Moon**
Sandy, Utah

One of the difficulties of surveying underground that has not been addressed in previous MAC articles is how the surveyors read the graduations on the transit or compass.

Any lamp used for this purpose must be COMPLETELY non-magnetic (no iron wick picks, gauzes, or parts within the relighter mechanisms). Any lamp--safety, oil wick or even candle--that meets this criteria can be used but the shape of a safety lamp prevents its flame from being brought close to the transit verniers or compass graduations. The earliest attempt to improve on this was to add a movable lens (or lenses) to the side of the lamp close to the flame. Two lamps of this type are shown in Figures 1 and 2.



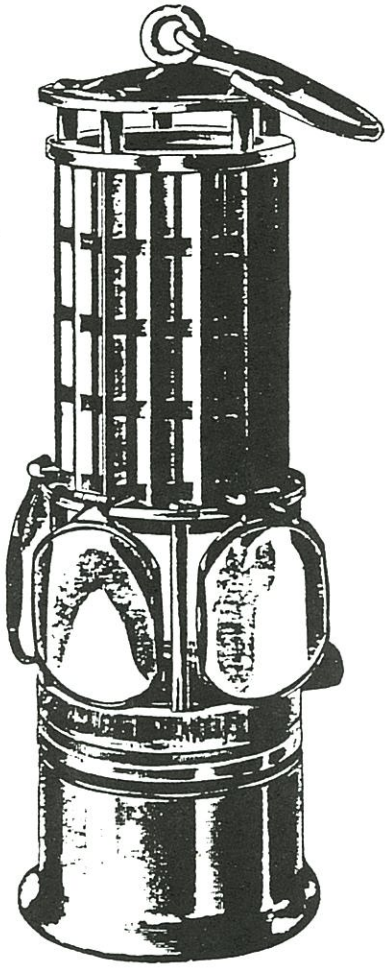


Figure 1. A Wolf surveying safety lamp from a 1914 Wolf Safety Lamp Company of America catalog. The catalog states that "All these lamps are made in brass and aluminum only, free from iron. When ordering, this however should be specially mentioned." The lamp was also available with one, two, or three movable lenses.

Figure 2. Unbonneted surveying safety lamp with movable lens. (Lester Bernstein collection)

The most ingenious device, however, is shown in Figure 3. In the mid-1890's, Professor Brathuhn of the Clausthal School of Mines suggested the addition of a curved glass rod fastened to two of the bars protecting the safety lamp's glass.[1] A small plate with a tube in the center opposite the flame was fastened to the bars and a bored cork was placed into the tube. The curved glass rod was then placed in the cork leaving the free end of the glass rod movable. The light from the flame passed down the glass rod which was held above the instrument and could be adjusted to obtain the readings. A similar device is available today at most gun shows for inspecting the bores of gun barrels!

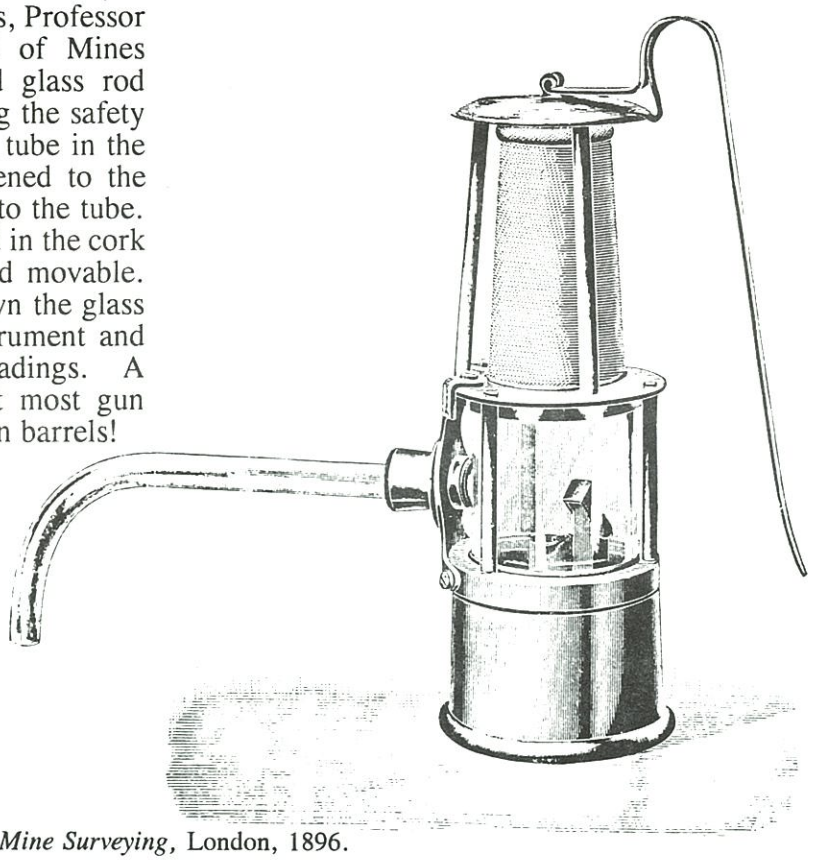
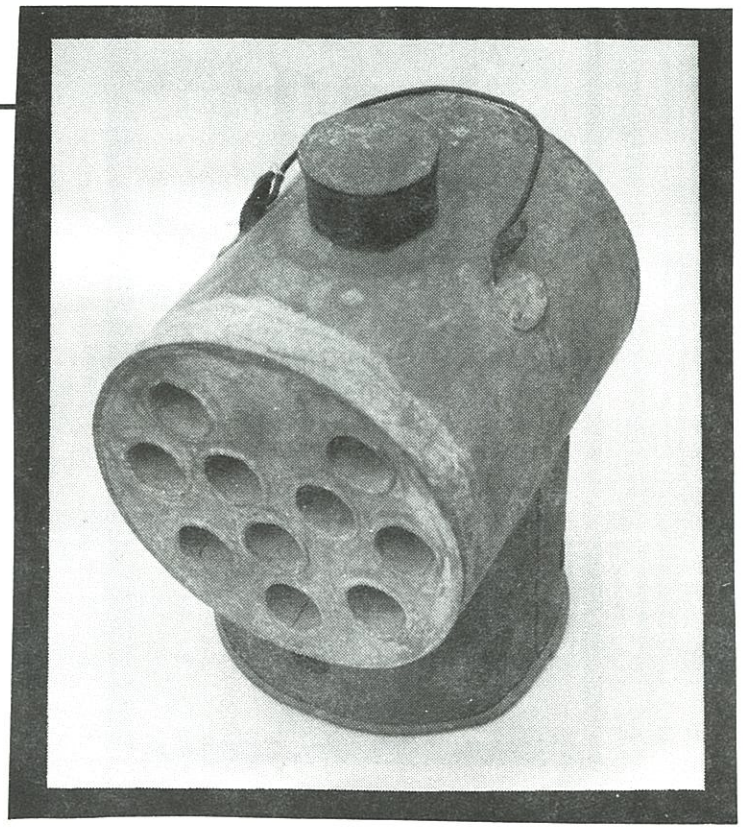


Figure 3. A surveying safety lamp manufactured by Friemann & Wolf of Germany showing the addition of a curved glass rod fastened to two of the bars protecting the safety lamp.

1. Brough, Bennett A., *A Treatise on Mine Surveying,* London, 1896.

Collector's Talk

Another Powder Thawer



Bob Hooks of Pasadena, sent in this photograph of an unusually shaped dynamite thawer that he picked up recently at a nearby swap meet. This particular powder thawer was reportedly used in Creede, Colorado. The thawer is constructed out of galvanized tin and could hold ten sticks of dynamite. The thawer stands 13 $^1/_2$" high and the warm water container is 8 $^1/_4$" in diameter by 9 $^1/_2$" long. After the top cap is removed, warm water is poured in and usually one to three short candles are placed under the water container (note the air holes around the base of the thawer). For more information about powder thawers, see MAC Number 2, Winter 1989, pages 22-23.

Mine Rescue Button

A friend of mine who knew I collected miners' candlesticks recently sent me this great, bright red and white button from the "U.S. BUREAU OF MINES - MINES RESCUE CORPS." The button commemorates the first national mine safety demonstration held in Pittsburgh, Pennsylvania in October of 1911.

What I find to be most unusual is that a miners' candlestick is among the miners' tools illustrated on the button, along with a safety lamp, double jack and mucking shovel. The fact that miners' candlesticks were used exclusively in hard rock mines and never in coal mines makes me wonder if the persons responsible for the design of this button were hard rock mining men because oil lamps were the norm in the great coal mines of the East.

A New Blasting Cap Tin

It seems that the new fad in mining artifact collecting today is in blasting cap tins. I suppose the main reason for this is that you don't have to spend a whole pay check to buy one, even from another collector.

For all you cap tin collectors out there, here is another one you can add to the list. It's a 100 count round Silver Medal from the "M.C. M'F'G. W'K'S." The other round Silver Medal cap tins that are known are stamped "M.C. M'F'G. CO." The company name was changed to "Works" after the buy-out by DuPont in 1907. These early, attractive black and silver cap tins are somewhat easy to find in the rectangular shape, but extremely rare in round.

An Oil Wick With Cooling Holes?

An unusual oil wick lamp recently turned up in California with 10 holes drilled (or punched) in the base of the outer spout of a sunshine lamp (double spout). The lamp is shown above and is face lamp size ($2\ ^1/_4$ inches high to the lid; $2\ ^7/_8$ inches to the spout) and was made by Hardsocg of Ottumwa, Iowa. Lester Berstein has an identical lamp, plus the larger driver's size. Careful examination reveals that the holes must have been drilled of punched prior to the lamp being assembled. What is the purpose of the holes? Cooling? Does anyone have an old advertisement that would help?

Trades & Sales

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

Advertising Deadlines
Winter Issue—Dec. 15
Spring Issue—Mar. 15
Summer Issue—June 15
Fall Issue—Sept. 15

FOR TRADE OR SALE: Mining stock certificates. Free descriptive lists of old mining stock certificates issued periodically. Each certificate described, giving brief history of company, location, and vignettes. *Russell Filer, 13057 California St., Yucaipa, CA 92399. (909) 797-1650.*

FOR SALE: Mining stocks, deeds, checks, and misc. documents. Send $1 for next mail bid sale catalogue. *Douglas McDonald, Box 350093, Grantsdale, MT 59835.*

WANTED: Anything relating to the Upper-Mississippi Valley Lead/Zinc District: artifacts, mineral specimens, books, maps, documents and (especially) photos. Book on history of this district now in preparation. Would appreciate the opportunity to photograph or photocopy any items "not for sale." *Mark & Lynn Langenfeld, 2020 Harley Dr., Madison, WI 53711. (608) 274-8242.*

NOTICE: The Hammerblow Mining Museum has antique . . . Mining Equipment, Tools, Railroad Equipment, Ranching/Farming Equipment, Tractors, Trucks, Road Building Equipment . . . *Tucson, AZ. Call (602) 882-7073.*

FOR TRADE: Big Boy hand lamp, Baldwin cap lamp with flat hook. Trade for cap lamps. *(505) 538-9788.*

FOR SALE: Rare French book about miner's lamps *Des Lumieres dans La Nuit* by Michel C. Dupont. $80 + postage for each book. *Hans-Joachim Glapa, Bussardweg 12, PF 1320, 4352 Herten. Tel. 02366/38672*

FOR SALE: Large mine air compressor on heavy cast iron wagon made by the Chicago Pneumatic Tool Company. 6 cyl. engine, 4 cyl. compressor. All original with original gauges and tags. . . . $1200. *Call Jerry, 909-794-3047.*

NOTICE: Please send name and address for list of American mining and western books due out soon. Also interested in buying and trading. Send to *Mining the West, P.O. Box 1035, Georgetown, CO 80444*

FOR TRADE: Western mining stocks for more of the same. Especially want items related to OR, WA, ID, B.C. and Alaska. Have good selection of paper and mining hardware to swap. What do you want? *Dale McNee, P.O. Box 926, Pendleton, OR 97801 (503-276-1384)*

FOR TRADE OR SALE: A large selection of uncommon to rare blasting cap tins. Will trade good tins for tins that I don't have or need to up-grade. Also looking for blasting cap crimpers and Blasters' Handbooks. Want list is available. Contact: *John Kynor, 8905 James NE, Albuquerque, NM 87111*

WANTED: Blasting cap crimpers. Have blasting cap tins and dynamite boxes for trade. *Tom Stockwell, Rt 1, Box 13, Owatonna, MN 55060 (507-451-2254)*

FOR TRADE OR SALE: Lamps and other misc. mining items. Send SASE for list of what I have. *Tony Moon, 2763 E. Willow Wick Dr., Sandy, UT 84093 (801-943-2091)*

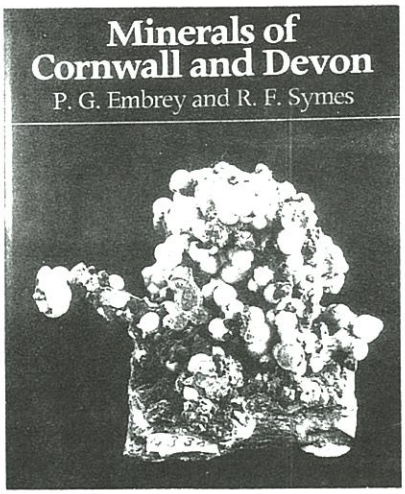
FOR TRADE: Always an assortment of carbide lamps, cap tins, candlesticks, photographs and other mining artifacts on hand to trade. I like to trade, what do you have and what do you want? Contact: *Errol Christman (916-273-3268)*

FOR SALE: I'm a dealer in mining artifacts and always have a wide variety of neat stuff. Send me your want list. *Leo Stambaugh, 614 Rose St. Box 779, Georgetown, CO 80444 (303-569-2848)*

FOR SALE OR TRADE: About 20 different carbide lamps. Will trade other mining items for cap lamps. *Dave DesMarais, 1015 Woodland Ave., Menlo Park, CA 94025*

FOR TRADE: Springfield cap lamp, early Auto-Lite, NP Gee-Bee cap lamp top, Simmons Pioneer Supt. lamps--NP and brass. Rare green 40 lbs Schneider candle box, Vigorite and early Giant powder boxes and cap tins. Will trade for carbide cap lamp boxes, parts boxes and repair kits (empty ones o.k.). Also looking for certain carbide pocket cans and flasks. *Mark Bohannan, P.O. Box 127, Oro Grande, CA 92368 (619-246-4418)*

FOR TRADE OR SALE: A very nice Lindahl matchsafe candlestick patented 1905 in Colorado Springs, Colorado, an unfired Dry-Lite bottom with lid, a nice Hansen Force Feed carbide cap lamp, an unfired brass Justrite Victor cap lamp (complete), a nice collection of mining photographs. *Ted Bobrink, 12851 Kendall Way, Redlands, CA 92373 (909-794-5518)*



Minerals of Cornwall and Devon

by P. G. Embrey and R. F. Symes (1987) published jointly by the British Museum (Natural History) and Mineralogical Record Inc.; available from the Mineralogical Record. Hardcover, 154 pages, 9 x 11 inches, $32 postpaid.

This surpasses anything that has been published on the minerals of Cornwall and Devon. That which follows will amply demonstrate the fact that it is a magnificent work. This is not to be wondered at when it is appreciated that both workers were colleagues in the Mineralogical Department of the British Museum (Natural History) where a wonderful collection of choice mineral specimens from Cornwall and Devon is housed. In addition, the authors have a long acquaintance with the mining fields of southwestern England, particularly their geological and mineralogical character, and with the ancient and modern methods employed to exploit their mineral wealth. For a long time they have also assiduously researched the major collectors and mineral dealers whose activities have been largely responsible for the preservation of those beautiful specimens whose photographs, in color, adorn the pages of the work under review, and for that of many other specimens in many museums of the world.

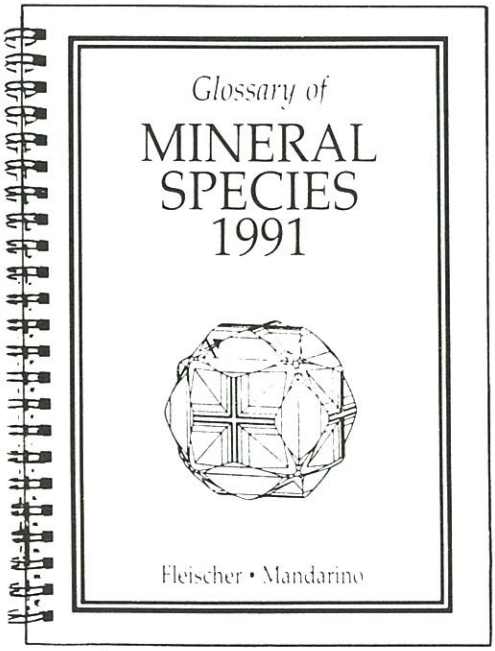
Not surprisingly, *Minerals of Cornwall and Devon* is far from being a collection of excellent photographs of minerals set in a matrix of rather gray, matter-of-fact mineralogical details. Its lively construction is such that the minerals seem to acquire a vital quality. One becomes aware of the nature of their birth, where they were born and who were their mineralogical neighbors. One learns of those who uprooted them and of those who acquired them, and of those who sold them. One is also provided with the means of discovering much more about all these topics and related ones.

Beyond doubt, *Minerals of Cornwall and Devon* is a major addition to the literature that is concerned with mineralogy and related subjects. It is a scholarly work that is both easy and entertaining to read. It can be recommended, without reservation, to all who have an interest in mineralogy and associated fields and not solely to those concerned with southwestern England.

That this publication, an amalgam of much knowledge and beauty, can be acquired at such a modest price, is little short of the miraculous.

Dr. K.F.G. Hosking
Camborne School of Mines

Books for the Collector



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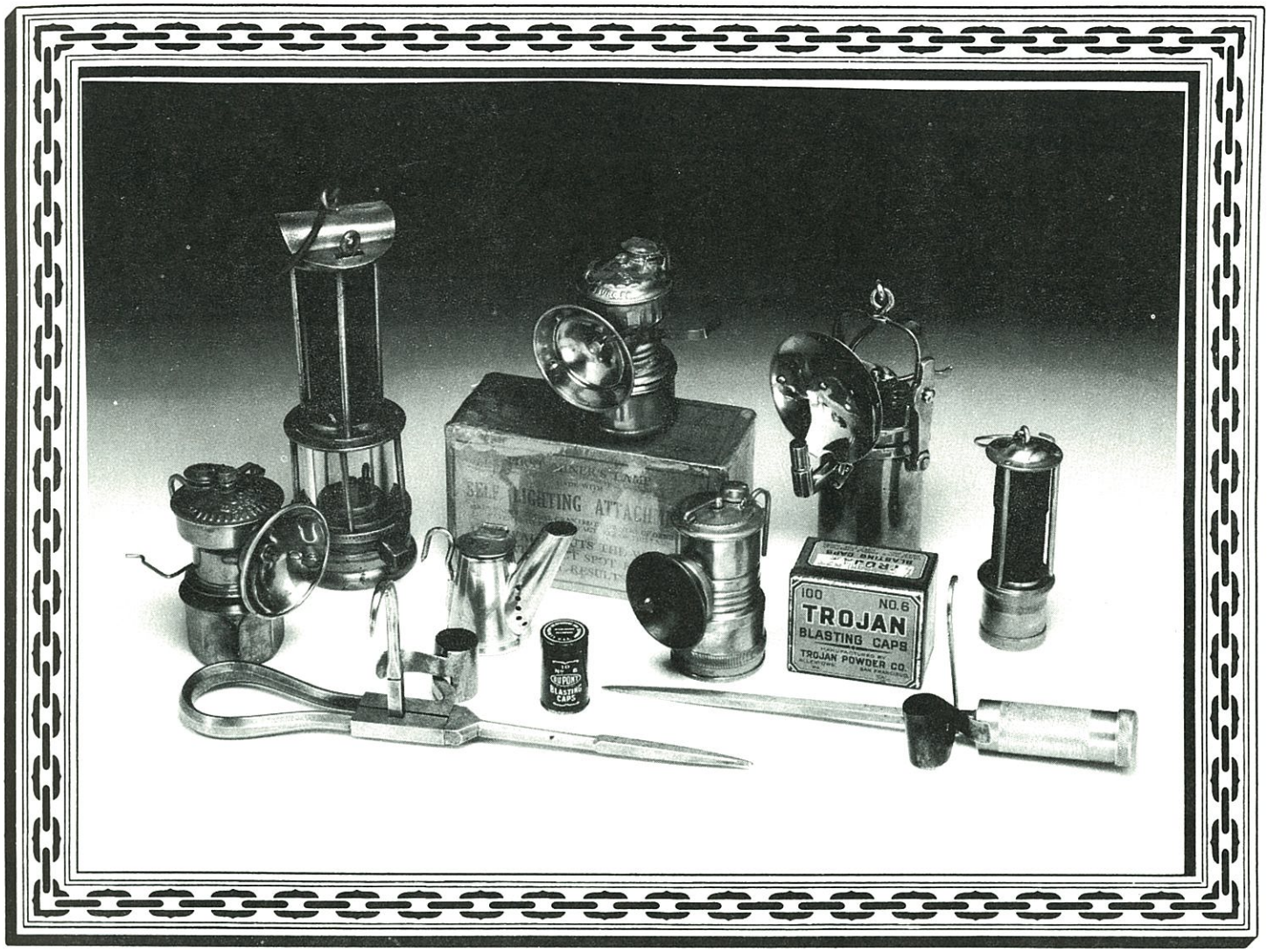

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The Eighth Annual Mining Artifact Collectors' Reunion

The Eighth Annual Mining Artifact Collector' Reunion will be held on Saturday, June 19, 1993, from 9 a.m. to 4 p.m. at the Holiday Inn, 1801 G Street, Ontario, California. The Holiday Inn is conveniently located near the Ontario International Airport. Shuttle busses travel to and from the airport and the Holiday Inn every half hour. Tables for exhibits, trade and sale items are FREE and will be available on a first come, first served basis. A grill for lunch and snacks is conveniently located near to the exhibit area.

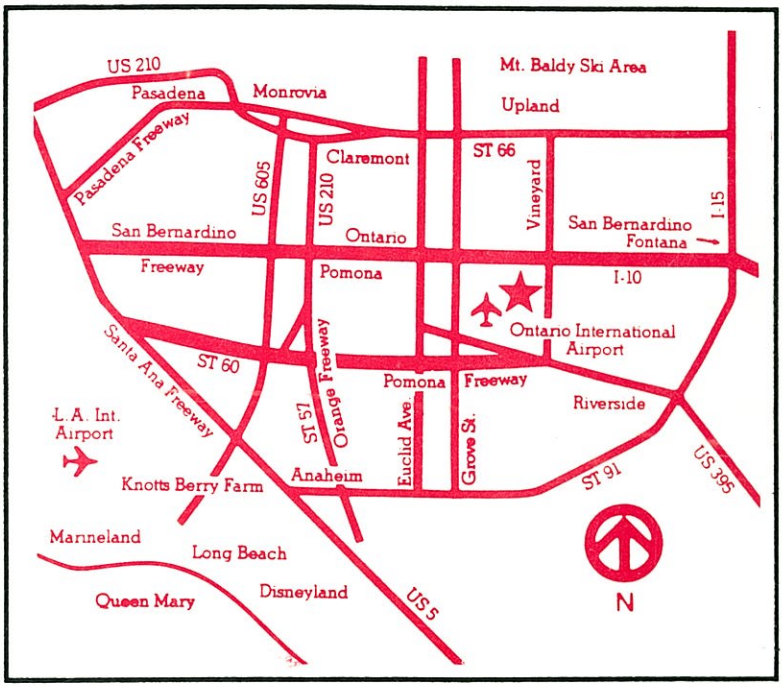
As always, there will be many items for trade and sale. Bring your extra mining artifacts and perhaps you will leave with something new for your collection.

Also at this years reunion:

- A free one year subscription to the Mining Artifact Collector to the person who travels the furthest distance.

- Everyone attending will receive a 8th Annual Mining Artifact Collectors' Reunion button and all first time attendants will also receive last years 6th annual commemorative button.

- A slide show will be given the night before on underground mine exploring.



SEE YOU THERE!

To get the special room rate, you must call **714-986-0334**, Monday thru Friday between 9 a.m. and 4 p.m. **seven days in advance of the reunion**. Ask for Lucy and tell her that you are attending the Mining Artifact Collectors' Reunion.

FOR INFORMATION CONTACT:

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