E U R E K A!

THE JOURNAL OF MINING COLLECTIBLES

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First Hansen with Spade Mount Discovered!

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General Information

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E U R E K A !

A PUBLICATION DEDICATED TO THE COLLECTING, PRESERVATION, AND HISTORICAL RESEARCH OF EARLY MINE LIGHTING AND COLLECTIBLES

NEWS

June Western Show in Park City, Utah!

Tony Moon will be hosting the Rocky Mountain/Black Hills Mining Artifact Collectors' Convention in Park City Utah on June 15 & 16. It will be held at The Inn at Prospectors Square. Reservations for rooms must be made before May 1st directly at the Inn at (435) 649-8233. Be sure to mention you are with the Mining Artifact Collectors for the special rate of $71.00 per night.

A separate registration must be mailed to Tony Moon to attend the event. You will find the form on the following pages.

Calico Adventure a Big Hit Again

Organized by Ted Bobrink and John Ransom, a group of more than thirty people gathered in this California ghost town as a jumping off point for underground explorations. This third annual trip was the most organized yet, being based out of an official campground in the town. See the write-up in this issue for more details.

Matt Elchuck

We were saddened to learn of the passing of a familiar face in the collecting community. Matt Elchuck was best known among collectors for his superb reproductions of Justrite and Grier reproduction canteen/base carriers. Each was stamped with his name. He also gained some notoriety for having obtained at auction two unfired Maumee Duplex carbide lamps. He attended his last show this Fall in Johnstown, PA.

Rocky Mountain/Black Hills
Mining Artifact Collectors' Convention
Park City, Utah June 15 &16, 2001

Friday, June 15, 2001

4pm-??? Check-in at the Lodge at Prospectors Square
5pm-7pm Glück-Auf No-host Reception/Bar
7pm-??? Dinner on your own
Trades, Sales, Reunions, Room/Pub crawl or Whatever...

Saturday, June 16, 2001

???-9am Breakfast on your own
9am-10am Set up for Mining Collectibles Show
10am-4pm Mining Show and Sales
5pm-6pm Glück-Auf No-host Bar
6pm-8pm Buffet Dinner at Convention Center
8pm-10pm Auction of Mining related treasures

Sunday, June 17, 2001

AM/PM Open house at Ruth and Tony Moon's

Payment must accompany reservations.
Please make checks payable to and send to Tony Moon.

Lodge: The inn at Prospectors Square consists of condominium units in the heart of Park City at 2200 Sidewinder Dr. Park City is nestled in teh Wasatch Range of the Rocky Mountains. We have reserved 43 rooms starting at $71 per night. Please make your reservations (before May 1st) directly with the Inn at (435) 649-7100 or toll free (800) 453-3812 ext. 3. Be sure to mention you are with the Mining Artifct Colletors Show for their special rate. The rates are good 3 days before and after the show. Lodge has no dining room; they will cater the dinner. Rooms hae kitchenettes. Restaurant across street and several in area.

Transportation: There is a shuttle from the Salt Lake City airport to Park Ciy. The "All Resort Express" (800) 457-9457 or (435) 649-3999. Rental cars are also availabel at the airport. Distance is 35 miles east of Salt Lake Cit on I-80 turning south on 224. For the Inn, turn est at the light on Kearns Blvd. Turn right on Sidewinder Dr. and follow it around, past the Marriot and across the street from the Grubstake Restaurant.

Registration Form for Rocky Mtn./Black Hills

Please return before May 1st to reserve a space.

Names of all Guests:_____

Telephone:_____ E-Mail:_____

Address:_____

_____

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Kennecott's Bingham Canyon Mine, the largest man-made excavation in the world, has a visitor's center open to the public that overlooks the open pit. Well worth a visit and approximately 30 miles south-west of downtown Salt Lake City. The Pioneer Museum, west of the capitol building in downtown Salt Lake, has a few mining artifacts as does the Park City Museum.

Table Reservation for Show Table_____@ $20.00 per Table = $_____

Box Lunch for June 17, 2000 Will be available - must reserve early June 17th

Buffet Dinner and Auction _____@ $25.00 per Person = $_____

TOTAL ENCLOSED $_____

Lehigh Valley Coal Advertising Oil Wick Lamp

Dave Johnson

Advertising pieces from coal companies are a common collectible, generally appearing as letterheads, pens, pencils, letter openers, blotters, lighters, ashtrays, paperweights, pocket mirrors, pocket knives and matchbooks. A very unusual advertising piece is this oilwick cap lamp stamped with embossed letters COMPLIMENTS OF LEHIGH VALLEY COAL SALES CO. This unfired lamp was manufactured by Trethaway Bros. of Parsons, PA and features the O'Keefe Patent (July 21, 1896, Pat. No. 564,450) brace between the font and spout. This is only the second oilwick I have seen with embossed stamping and only the second different oilwick used for advertising a coal company, the first being my all copper Consolidation Coal Co. lamp dated April 28, 1897.

Lehigh Valley Coal Sales was the sales branch of the Lehigh Valley Coal Co. The Lehigh Valley Coal Company, with main offices in Wilkes-Barre, was divided into Ten Divisions, nine of which were anthracite coal producers. There was the Wyoming Division with the Warrior Run, Franklin and Mineral Springs Collieries, the Lackawanna Division with the Heidelberg, William A , Seneca and Broadwell Collieries, the Luzerne Division with the Maltby, Westmoreland, Exeter, and Stevens Collieries, the Delano Division with the Park and Buck Moutain Collieries and Springdale Washery, the Locust Mountain Division with the Centralia and Sayre Collieries, the Girard Division with the Packer No. 4 and No. 5 Collieries, the Lehigh Divison with the Spring Mountain, Beaver Meadow, Derringer and Oneida Collieries, the Hazleton Division with the Hazleton, Drifton and Eckley Collieries, the Pottsville Division with the Blackwood Colliery and a single Division at Snowshoe which produced bituminous coal from the No. 22, 25, and 26 Mines on the Kittanning Seam. The Lehigh Valley Coal Co. was a major anthracite coal producer with thousands of employees involved in the production process. All production was shipped from the mines via the Lehigh Valley Railroad.

9th German Miners Day in Herne, Germany

(from the st till the 3rd of September 2000)

by Werner Horning

The motto of the meeting runs as follows: Roots, Changing, Innovations. Nearly 5,000 miners and mining engineers in their traditional mining costumes went to the festival. Even miners from 8 European countries joined the party. The German miners and metallurgist Day take place every four years and is organized by the "Bund Deutscher Bergmanns-, Hutten- und Knappenvereine" (league of German Miners and Metallurgist) and the " Landesverband Nordrhein-Wesffalen" (confederation of the county of North Rhine Westphalia).

The author: Werner Horning (at right).

The festival started at Friday the 1st of September with excursions and different sightseeing trips in the region. It went of at Saturday the 2nd of September with several official receptions during the day, and the opening of the festival at 7 p.m. in the great festival tent. Than there have been different performances with miners brass bands and dancing groups and so on. At 11 p.m. the great miners tattoo was celebrated by torch-light, which was very impressive. The day ended with marvelous fireworks.

At Sunday the 3rd of September the different groups met in the festival tent for an oecumenical religious service at 11 o'clock. Banner bearers with nearly hundred of banners marched into the tent and draw up in three lines in front of the rostrum. Afler that the miners had a common lunch with their relatives.

French miners.

At 1 p.m. gathering and draw up for the great miners parade. At 2 o'clock start of the miners parade. It was for sure the greatest parade with miners in their traditional costumes ever held. Nearly 5,000 miners marched through the streets of Herne (Wanne-Eickel) attended by miners brass bands. Hundred of thousands of people joined the parade beside the streets and hanging at the windows.

The parade ended at the parade-ground and the Prime Minister of North-Rhine-Westphalia took the salute. Than he hold a speech in the festival tent in front of all the miners and their relatives. The three days festival ended at 6 p.m.

Beside all this activities there have been a great exhibition "Changing of the structure of the Ruhr Region". It shows the history of the region and the changing to an innovative region with a lot of new companies and new activities beside the mining industry. Several museums of the region gave a contribution to the show.
Also it was a public festival.

Polish miners.

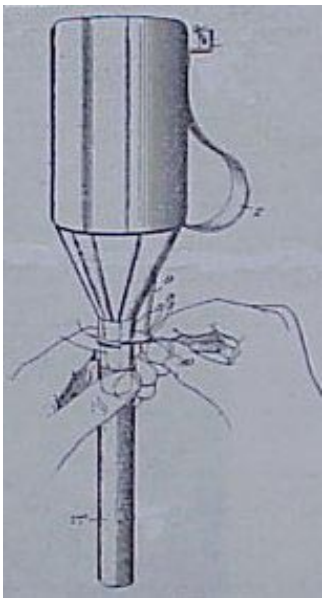
Colbalt-blue Work-

Oecumenical Religious Service.

Werner Horning, once again is spotted,
marching dead-center.

Patented Powder Can

by Dave Johnson



Every once and awhile you get a pleasant surprise when a purchase arrives in the mail. That is what happened when this powder can arrived and I removed the cap to find that this New Old Stock piece had a very prominently stamped patent date that the seller had missed and thus failed to put in his ad.

This all tinned steel powder can (with the exception of the slide spring, which is brass flat stock) measures 10 1/2" to the top of the cap and is 5" in diameter. Beneath the cap stamped on the spout is PAT. Jan. 10, 1905. On January 11, 1904 Sherman Rohree, of Selea, Pennsylvania, filed a patent application for a powder can and on January 10, 1905 he was granted patent 779,670. The patent reads: Claim - 1. A powder can having a nozzle and a spring actuated slide engaging a slit in said nozzle forming a closure for the latter, a handle upon said can and bracket near the bottom of said can, placed in alignment with the handle and having a perforation whereby the can may be suspended. Claim - 2. A powder can having a tapering nozzle provided with a corrugation and with a slit in alignment with said corrugation, a slide engaging said slit and corrugation, and having an extended perforated end, and a spring attached to the side of the can, extending through the perforation in the slide and bent to form a handle.

This is yet another in the vast number of new mining items that keep appearing each year, new finds are what help make the mining artifact collecting hobby interesting, there is always something new.

(left) Detail showing patent date and spring device.

J.A. Williams Oil Wick Lamp

by Dave Johnson

While I have known of the existence of the J.A. Williams oilwick lamp for many years from another single example, it was only recently that I was able to add this very rare oilwick to my collection. I have been unable to find any information concerning a J.A. Williams in Pittsburgh anytime between 1880 and 1915. The lamp is stamped J.A. WILLIAMS & CO. PITTSBURGH, PA. in large letters and above this is PAT. APD. FOR in smaller letters. In all my patent research I have not come across any oilwick lamp patents for J.A. Williams even though the lamp says a patent was applied for.

The unusual feature found on this lamp is the cap hinge. The wire hinge is attached to the font by having the top edge of the font rolled over the wire half way around the opening (see photos). This same type of hinge is found on several different Trethaway Bros. oilwicks (see photo). Trethaway used the ideas of several other patented lamps in their own production, such as the T.A. Black breather tube patent, the Felix patent, and the O'Keefe spout brace patent.

This Williams lamp measures 2 1/8" tall to the top of the cap. The lamp has a full copper lining - spout and font. It has a concave base similar but distinctly different from the one found on Trethaway Bros. lamps. The piece soldered over the hook to brace it on the font is different than those found on Trethaway Bros. lamps as well. While the lamp has some Trethaway Bros. traits I am certain that this is not a Trethaway Bros. product but rather that Trethaway Bros. copied the hinge for their own use. Until some information on J.A. Williams is uncovered this lamp will remain somewhat of a mystery to collectors.

(above) Detail of hinge on Williams lamp.

Photo legends:

(left)
Williams lamp stamping.

(below left)
Inside the Williams lamp showing copper liner.

(below right)
Trethaway lamp with Williams style hinge.

Hansen Variation

by Dave Thorpe

Hansen cap lamps are usually found with a rather elaborate hook and cross-brace arrangement. The hooks are black painted steel and the wrap-around brace is some type of ferrous plated metal. This is to report the existence of a narrow spade attachment, that appears to be factory made. The nickel-plated reflector and striker shroud is also a variation from the bare brass that is usually found on Hansen lamps.

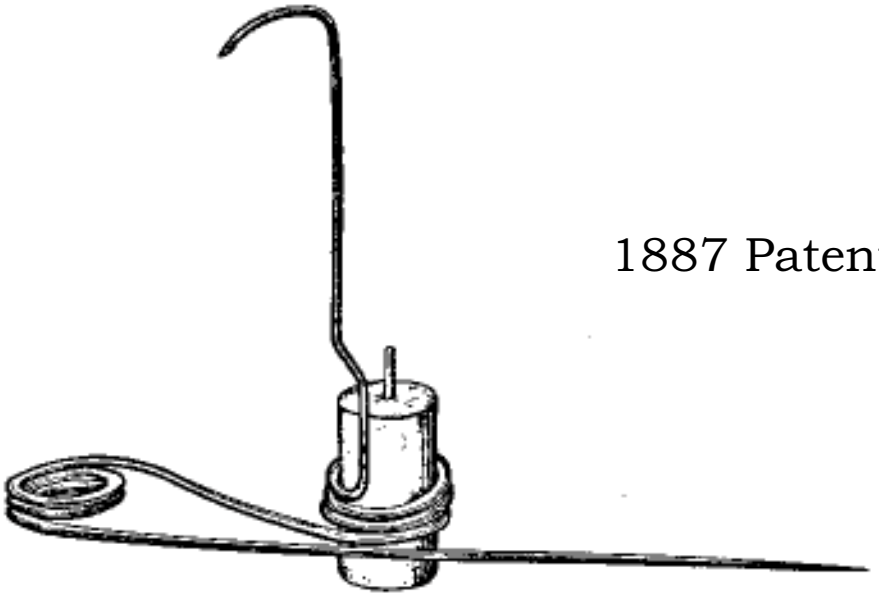
Here are some other photos showing the details of the removed brace. Seen from the inside, the top photo shows professional workmanship of the riveting, and in the lower photo, traces of black paint remain on the steel spade as on the hook equipt models.

David Bice James Candlesticks

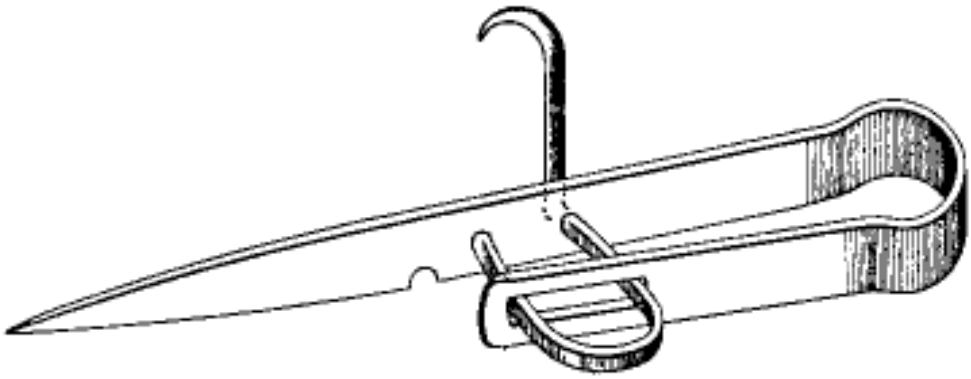
by Leo Stambaugh

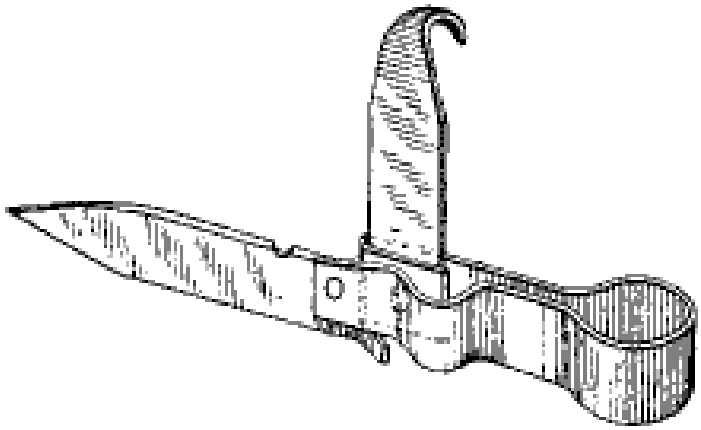
This is an ad for the David Bice James candlesticks that is in a copy of the Mining and Engineering Review of 1903. Not many ads are found for folding mechanical sticks, aside from the Lindahl matchsafe sticks, and the Folding Varney sticks in later years. This ad shows the folding model in three cuts on the top, his 1890 patent. The lower cut is of the earlier 1889 non-folding stick with a variation from the patent thimble. That model calls for a hasp-type thimble. The notch in the bottom stick was for crimping caps, and the patent called for a sharpened knife edge for cutting fuse. The 1890 folding patent also calls for a knife edge and a crimping notch, which doesn't show up in this stick. This ad is 13 years after the patent so he must have sold a fair number of them. Interesting to note that you could buy two patented, folding, fuse cutter,cap crimper nickel plated candlesticks for the same price as one mine safety hook in the same ad. What a change of perspective.

1887 Patent

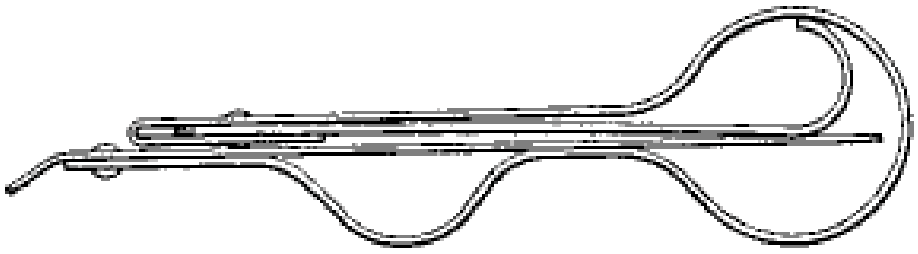


1889 Patent





1890 Patent



Another Miner's Lamp Related Tobacco Item

by Dick Sears

Cigarette silks came with tobacco products in the early part of the 20th century, much likebaseball cards came with bubble gum. This silk came with Richmond Straight Cutcigarettes about 1906-1910. This was during a period when the college connection wasvery in and the mining connection was also used to inspire a macho image. And of course miners were a big tobacco market.

The silk and the information were obtained from Kolata Lewis of Florence, Alabama.

North America's First Metal Miners

by Dave Johnson

Have you ever wondered who the first metal miners in North America were? To get the answer we have to look back several thousand years.
Deposits of 99%+ pure copper are known on the North shore of Lake Superior, Isle Royale and the Keweenaw Peninsula of Michigan. Reports of these copper deposits were heard by the earliest French explorers of the Great Lakes Region, beginning in 1608 with Champlain. He received a foot long specimen of native copper from an Algonquin Indian chief and sent it to King Henry IV. There were no immediate attempts by early explorers to find the source of this copper. However, prior to 1800 there were some attempts to find the source of native copper that was spoken of by Indians of the region. These early attempts all ended in failure.

Left: 4" socketed copper spud for woodworking. Right: Copper crescents, rolled beads, and coiled beads.

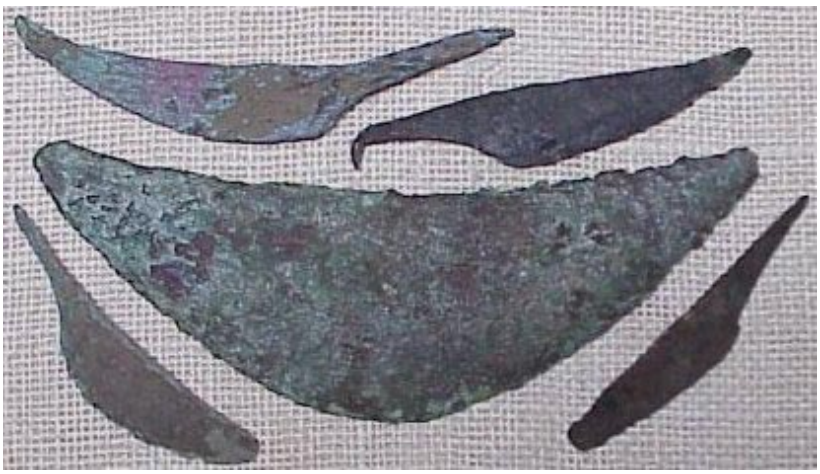
By the mid to late 1840's, when the first modern copper mines were opened in the Keweenaw Peninsula, individuals searching for copper deposits began to find traces of earlier mining efforts. Throughout the Keweenaw Peninsula and Isle Royale pits and trenches dug into the rock were discovered, some as deep as 20 feet and others only a few feet deep. These pits showed evidence of copper having been removed from the surrounding rock, and in some cases copper was found partially worked out of the rock but still in place. In some cases large masses of copper were found in the pits that had been worked free but never removed. In association with these pits were found tons of grooved and ungrooved stone hammers, as well as some copper artifacts (knives, spear points, spuds, etc.).

An interesting point of fact is that these old workings were found on every copper lode discovered on the Keweenaw Peninsula and Isle Royale by modern miners.

Many theories have been advanced as to who these early copper miners were, some both incredible and ludicrous. These theories run the gamut from Phoenicians to Berbers, Bronze Age Europeans to Vikings, but there is no archeological evidence to support these theories.

Our own Euro-centrist racial bigotry allows many to ignore the obvious, that this copper was first discovered, mined and fashioned into tools, weapons and ornaments by the indigenous Indians of the region. Before admitting that indigenous Indians could have mined native copper and fashioned items for everyday use, some 'scholars' would have us believe that the copper was mined and worked by a "virtually unknown race of people" or Euro-Mediterranean peoples. There is, in fact, unbroken continuity in indigenous peoples, based upon artifact and skeletal evidence, in the Upper Great Lakes Region.

Left: Crescent and tanged knives. *Below: 8" crescent and 4 tanged knives.*



Prehistoric Native Americans began to populate the area we today call Wisconsin at least 11,500 years ago. The end of the last ice age, the Pleistocene Epoch, saw the first human inhabitants arrive in the Western Great Lakes Region. The receding glaciers opened vast new territories for habitation. These post-ice age hunter-gatherer cultures have been named the Archaic Period or Tradition. In the Great Lakes Region the Archaic Tradition spanned from about 6500-1000 BC or 8500-3000 BP (Before Present).

One of the lasting effects of the last glacial period on the Great Lakes Region was the scouring of the rock that holds the copper deposits. This glacial scouring action exposed veins of native copper and broke off pieces of copper transporting them miles or even hundreds of miles to the south. This transported copper, found mostly in glacial gravel, is known as "float copper". It was deposited as the glaciers melted and receded northward. This float copper is found in sizes and weight from that of a pea to several tons. This float copper was readily available to the indigenous Indians during the Archaic Tradition. Experimentation would have demonstrated that this copper was malleable and could be fashioned into useful shapes. It is only a small step from finding the float copper to finding the exposed copper veins.

The first indigenous Indians who actually mined and utilized the copper have been labeled Old Copper Complex or Old Copper Culture by archeologists. There is disagreement among archeologists as to the time period to ascribe to the Old Copper Complex. Dates range from over 7000 years BP to 3000 BP. The greatest disagreement seems to be over the beginning age of the Old Copper Complex. Carbon-14 testing of organic materials found with Old Copper Complex artifacts has established a date of at least 6000 years BP. Copper was still being used through the Woodland Period and actually up to protohistoric times, long after the decline of the Old Copper Complex. The copper artifacts from the Old Copper Complex differ from those of later manufacture.

Copper celts (right), unusual crescent (center left), bracelet (topleft)

Since there is no physical evidence of the Lake Superior copper deposits having been worked by those other than indigenous Indians, what evidence exists to prove that the indigenous Indians were the ones who worked the copper deposits and manufactured the copper artifacts found today?

Conical points (top), fishhooks (center) and harpoons (bottom and middle left and right)

This evidence came in May of 1945 when two fishermen found some artifacts projecting from the bank of the Mississippi River at an old steamboat landing site known as Osceola Landing, in Grant County, Wisconsin. Following this initial discovery, numerous artifacts were removed from the site by local collectors and were subsequently identified as Old Copper Complex artifacts. Old Copper Complex artifacts consist of socketed spuds, crescents, fishhooks and harpoons, gaffhooks and pikes, conical spear points, awls, rat-tailed spear points, knives, socketed spear points, and other pieces of undetermined usage, none of which had previously been found in situ prior to those at the Osceola Site, all previous finds being surface finds or caches.

Of great importance was the discovery, by archeologists, of skeletal remains in association with copper and chipped stone artifacts at the Osceola Site It is estimated that there were approximately 500 burials at this site. The major contribution of the Osceola Site was the demonstration of a cultural complex that included Old Copper Complex artifacts. The Osceola Site tied Old Copper Complex artifacts in with a distinctive chipped stone industry and a burial complex.

It was not until June of 1952 that another Older Copper Complex site was discovered near the Oconto River. Thirteen year old Donald Baldwin was playing in an abandoned gravel pit when he found human bones.. It was found that a great deal of the original burial site had been removed by commercial gravel operations in the 1920's, but 45 burials remained. Seven awls, 4 crescents, 3 clasps, 1 socketed spear point, 1 fish-tail spear point, 1 ovoid spear point, 1 fish hook, 1 coiled copper tube, 1 bracelet, and 1 spatulated artifact. Awls were found to be the most commonly occurring artifact, just as they had been at the Osceola Site.

In 1953 a late Copper Complex site (approximately 3000 BP was discovered on the South shore of Lake Butte des Morts, on the farm of Matt Reigh. Like the Oconto Site, it had been uncovered and partially destroyed by gravel operations. Burials of 43 individuals were uncovered along with copper artifacts identified as Old Copper Complex.

These three sites, with their skeletal remains, chipped-stone and Old Copper Complex artifacts support the unbroken continuity of indigenous peoples in the Upper Great Lakes.

(left) Rat-tailed spearpoints, center point is mostly silver, first point to left has silver tang.

Evidentiary finds at sites in Canada support the Wisconsin site findings. Old Copper Complex artifacts have been found at sites in Ontario, Manitoba, and Quebec, Canada. The Morrison Island-6 site, located on an island in the Ottawa River, was found to contain 18 burials and 276 copper artifacts, including a spud, projectile points, knives, and others. Also of interest was the discovery of worked and unworked copper scraps, indicating copper manufacture on the site. A C-14 date places this site at 4700 years BP, clearly an Old Copper Complex Site.

The Caribou Lake Site contained a cremation pit with skeletal fragments and tooth enamel remains along with copper artifacts. C-14 dating places this site at 3900 BP.

15" copper gaff hook, unusual knife and large spear point.

While Old Copper Complex artifacts have been found from Alberta in the west to Quebec in the east in Canada, and as far west as North Dakota, as far east as New York and as far south as Kentucky in the U.S., the center of the Old Copper Complex is generally agreed to be in Wisconsin. How did Old Copper Complex artifacts come to be scattered so far afield? The answer to this question is trade. The presence of specific types of stone and shell artifacts not indigenous to Wisconsin demonstrate the fact that widespread trading took place.

How did these Archaic Tradition Indians obtain and work the copper that identifies them as Old Copper Complex. As mentioned earlier, the source of the copper was the north shore of Lake Superior, Isle Royale and the Keweenaw Peninsula of Michigan, as well as glacial deposits left by the receding glaciers to the south of the actual copper deposits.

How were these people able to extract the copper from the very hard rock in which most of the copper is found? The answer is found in the use of fire, water and stone. When a copper vein was discovered, fires were built on the rock and kept burning until the rock was quite hot, water was then thrown on the heated rock and the rapid cooling fractured it. This process could be repeated several times before these ancient copper miners began using stone hammers to break the copper free of the rock. Stone hammers were also used to break off pieces of copper small enough to be worked.

(left) Variety of copper knives.

(below) Unusual copper tanged knife and copper rings.

The stone hammers were of two varieties - grooved and ungrooved. The grooved hammers could have handles attached while ungrooved hammers were merely held in one or both hands. Hammerstones have been found weighing from 1 to more than 30 pounds. The vast majority of hammerstones found on Isle Royale are ungrooved, while the majority found on the mainland are grooved.

There have been fabulous claims made as to the time and manpower required to create the ancient copper pits and the amount of copper mined. Starting with Drier and Du Temple in 1961 and Mertz in 1967, through Sodders in 1990 figures of .5 to 1.5 billion pounds have been put forth. Sodders postulates 'it is believed that as many as 10,000 miners, labored some 1,000 plus years, in an estimated 10,000 Copper Range pits". Drier and Du Temple get to their figures with the following suppositions from their 1961 work: Prehistoric Copper Mining in the Lake Superior Region, in which they state" If one assumes that an average pit is 20 feet in diameter and 30 feet deep, then it appears that something like 1000 to 1200 tons of ore were removed per pit. If the ore averaged 5 per cent, or 100 pounds per ton then approximately 100,000 pounds of copper were removed per pit. If 5000 pits existed, as earlier estimates indicated (and all are copper bearing), then 100,000 pounds per pit in 5000 pits means that 500,000,000 pounds of copper were mined in prehistoric times - all of it without anything more than fire, stone hammers and manpower. If the one sampled 15%, and if more than 5000 pits existed, then over 1.5 billion pounds of copper were mined".

Variety of copper spearpoints

Where did all of this supposed copper go? Some scholars would have us believe that the vast majority was taken by Phoenicians, Berbers, Bronze Age Europeans or Vikings in a vast international copper trade. Where is the archeological evidence to support these theories? The truth is, it does not exist.

The estimates made by Drier and Du Temple have been debunked. They erroneously assume that the average pit was 20 feet in diameter and 30 feet deep. Few pits have ever been reported as deep as 30 feet, and many ancient pits barely scratched the surface. Their 5 to 15% copper content is flawed since content can run from zero to 100% (mass copper). The amount of copper in the country rock isn't constant or regular, an expensive fact learned by many early modern mining companies. Their use of 5000 pits can not been shown to be accurate as there has been no organized effort to count the pits, and the figure of 1.5 billion pounds of copper would mean there were 10,000 ancient copper pits averaging 20 feet in diameter and 30 feet deep, there is no supporting evidence for this. All the numbers offered up by Drier and Du Temple are based on conjecture, not fact.

(left) Variety of copper spearpoints, fishtail tang points second and third from left.

So much for flights of fancy, let's now look at how the Old Copper Complex Indians produced their copper tools, weapons and ornaments. The Old Copper Complex did not possess the technology to cast copper, so it had to be eihter cold-hammered, which yields a brittle metal, or annealed (heated and then worked to prevent brittleness). Small stone hammers could be used to form basic shapes and then edges could be sharpened or shaped by being stone ground.

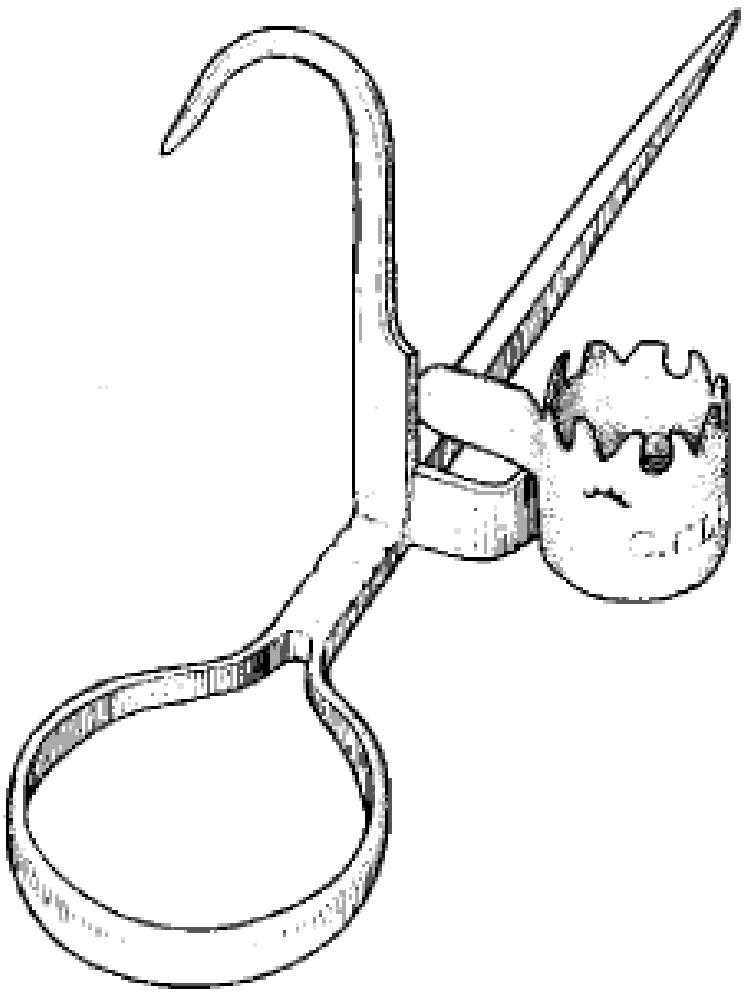
Diorama of Copper Culture Indians mining copper in the Keweenaw Peninsula of Michigan.

If one closely examines a large number of Old Copper Complex artifacts it becomes apparent that two types of copper were utilized and that each required a different method of manufacture. There are artifacts that are made of a chunk of copper beaten and ground to the desired configuration. A second type is made of thin sheet copper folded over and over, and then beaten and ground into the desired configuration, much like the famed Damascus swords. The multiple folds are known to result in a superior cutting edge. Not surprisingly, these folds appear in spear points, atlatl dart points, knives, crescents, celts, awls, spuds and others. I have found artifacts with as many as six distinct folds. We have found hundreds of what are essentially scrap copper pieces associated with manufacturing sites. We also have formed copper "bars" that were most likely used as trade items. Given the primitive means of working the raw copper, the workmanship is excellent on many of these artifacts.

Partially formed point (right) and artifact (below) both showing folds.

C. Cleaves Identified

by Dave Thorpe



His name appears on the thimble of miner's candleholders, but until now, he was unknown to collectors. He was **Charles Samuel Cleaves** and he lived in Weaverville, California from his birth in 1860 to death in 1918. Herb Dick did the original detective work, and we have now interviewed several descendants who remember him. They relate that C. Cleaves owned a blacksmith shop in Weaverville where he made candlesticks, spurs, bits, and bells for freight horses. He would travel to Oregon periodically and trade items (including old watches) for wild horses on the indian reservation, which he returned to Weaverville and broke.

C. Cleaves was born to Jeremiah Cleaves, of Maine, and Margaret Jane Linney, who was born on an Irish immigrant boat in Quebec Harbor. He married M. J. Hobart in 1887, and had a son Charles De Forest Cleaves in 1889. The middle name De Forest was taken from his wife's grandfather De Forest Amos Hobart, who came to California in 1851 from Courtland County, New York. A grandson of C. Cleaves states that he learned blacksmithing in Chicago.

Although the son (Charles De Forest Cleaves) also learned blacksmithing, he did not achieve the skill of his father. Charles D. worked at the La Grange, a hydraulic mine, in Weaverville. He died at age 87, coming out of the mine on his way to the dog house. He was also a well-known "packer", taking hunters and fishermen into the Trinity Alps. A granddaughter Jo Ellen relates that one of his clients was Clark Gable!

Quirin:
The First American Surveyor's Safety Lamp?

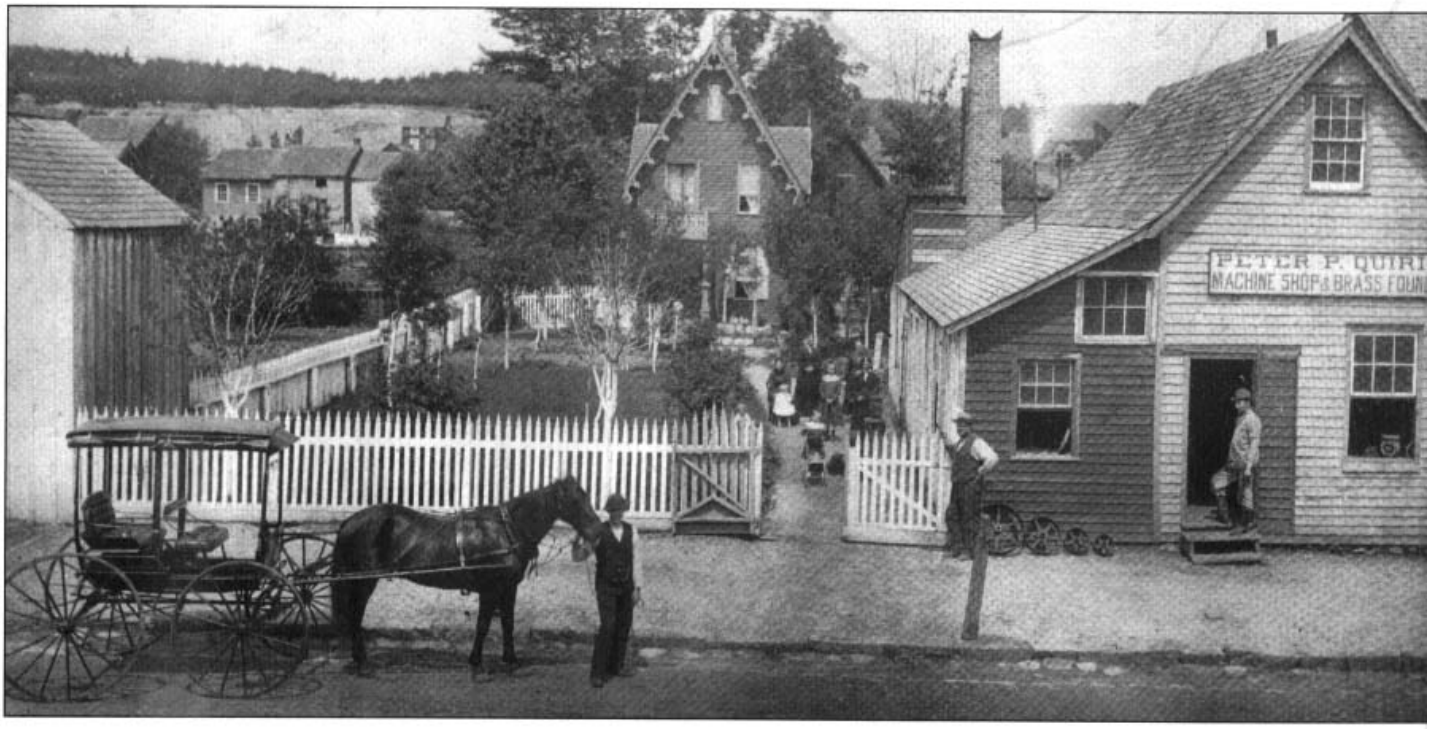
by Neal Ressler

I recently copied this photo of the Quirin foundry and brass works. To my knowlege, only two U.S. companies made surveryor's safety lamps: Everhart and Quirin. The photo belongs to the grandson of Peter Quirin, the owner of the factory whose lamps are stamped with his name. The factory was located in St. Claire, PA. Quirin safetys look remarkably similar to Everhart lamps, both using the three-armed support of the top cover. They are differnt in that the Quirin is smaller, and does not use a separate internal reflector, but rather uses the back wall of the horizontal portion of the lamp to reflect light.

Both Everhart and Quirin would appear to use the 1884 Mauchline patent, which suggests that the Quirin may have been the first surveyor's safety lamp in America:

> "I am aware that a lamp has heretofore been provided with a concave reflector and a lens on opposite sides of the burner..."

I am impressed with the nice yard that Mr. Quirin had beside his shop.



Squalus Lamp
Or a hoax?

by Tom Stranko

This all brass Koehler was purchased by me in 1988 in a shop just over the Mass. border in Maine. It had a note attached proclaiming that "this lamp was removed from the US submarine SQUALUS sunk off the Atlantic coast in 1939. It was raised in mid Sept 1939 from 243 feet of water. The Navy had to see exectly why it sank because it was the first of a new class of sub and if the design was bad, the Navy had to know what was wrong. (seems it was a shipyard error. Someone left a length of small pipe inside another larger pipe and the pipe inside slid and jammed a valve)

Now, I don't usually bite on every claim made on the price tag of an antique but since they only wanted $15. for the lamp and I thought who would know that they would have had one or more safety lamps in the battery compartment? Would someone make this up? The thing had obviously been handled quite a bit. Last summer I picked up the picture of the raised and renamed Squalus (now USS Sailfish)and , anyway , here it is.

George Bevan's Lamp

by Tom Stranko

This safety lamp was stamped all over with the owner's name. Various numbers have been stamped into it, perhaps indicating the various mines it was used at. Mr. Bevan apparently did not want his lamp stolen!

Tombstone Rubbings

by Mark Bohannan

An interesting and unique aspect of mining artifact collecting-and one that my mother introduced me to many, many years ago-is tombstone rubbings.

To make a tombstone rubbing, you will need some unbleached muslin (about three yards will do for a start), a few graphite sticks, a roll of gray tape, and a pair of scissors.

When you find a tombstone that you want to make a rubbing of, cut a piece of muslin at least ten inches larger than the tombstone. Place the muslin on the tombstone and wrap the sides and top around the tombstone and tape the edges of the muslin to the back of the tombstone with gray tape. Try not to stretch the muslin too much as it will cause distortions in the rubbing after it is removed which will make it more difficult to mount later. Once the muslin is secured to the tombstone, take a graphite stick and evenly rub the face of the tombstone with the flat side of the graphite stick. Using the edge of the graphite stick, outline the edges of the tombstone. The graphite will darken the raised flat areas of the tombstone, but will leave all of the indented areas clear.

After you have finished rubbing the tombstone with the graphite stick, you can spray the muslin with an acrylic spray like that used by artists on pastel and charcoal drawings-if you have the time to wait until it dries-or just remove the muslin from the tombstone and spray it later.

To mount your rubbing, cut a piece of plywood to a size that will accommodate the dimensions of the tombstone rubbing with an inch or so extra on each of the sides. Wrap the muslin around the plywood-again avoiding excessive stretching-and staple the edges of the muslin to the back of the plywood. Of course, this is not the only way to mount the muslin, and you may think of another way of mounting your rubbing. This is a good time to spray the rubbing if you have not already done so.

Tombstone inscription reads: WM HENRY BENNETTS - A Native of ENGLAND.- DIED - In attempting to rescue the lives of his fellow miners in the alta drift. - June 2, 1882 - AGED - 29 yrs & 3 mo's (Virginia City, Nevada cemetery)

After the rubbing has been mounted, it can then be matted and framed, hung on a wall as is, or stored for future use. Rubbings can be done on wooden headstones also.

Collecting tombstone rubbings can be as specific or as diversified as you wish. You can collect rubbings or important people (i.e. mine owners, inventors, etc.), professional people (i.e. doctors, mine superintendents, blacksmiths, etc.), or just nice or unusual looking tombstones. I now mainly collect tombstone rubbings of mine accident victims. It may seem a little morbid, but many of them are very interesting to read, although the are very hard to find.

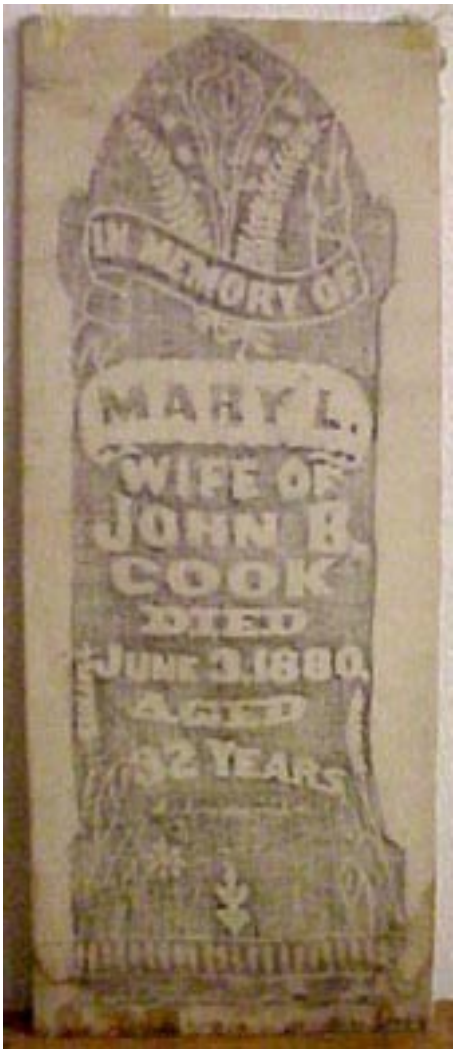
THURLOW A.
HASKELL,
Born in
Lowell, Mass.
May 17, 1832;
Died in
Gold Hill, Nev.
Feb. 17, 1891.
Rest
(Gold Hill cemetery 14" W by 18" H.)

IN MEMORY OF
Dr. JABEZ ROBINSON
BORN
July 9, 1813
DIED
June 22, 1866
(Virginia City, Montana cemetery)

RICHARD BREY
who lost his life by the
bursting of the fly wheel
(Gold Hill, Nevada cemetery.
This is all that could be found
of this headstone.)

IN MEMORY OF
UNKNOWN
DIED
JUNE, 13 1895
(Wadsworth, Nevada
cemetery)

HUCK STINSON
HANGED
JAN 8, 1864
(Bannack, Montana
cemetery)



IN MEMORY OF
MARY L.
WIFE OF
JOHN B.
COOK
DIED
JUNE 3, 1880,
AGED
32 YEARS
(Virginia City, Montana
cemetery)

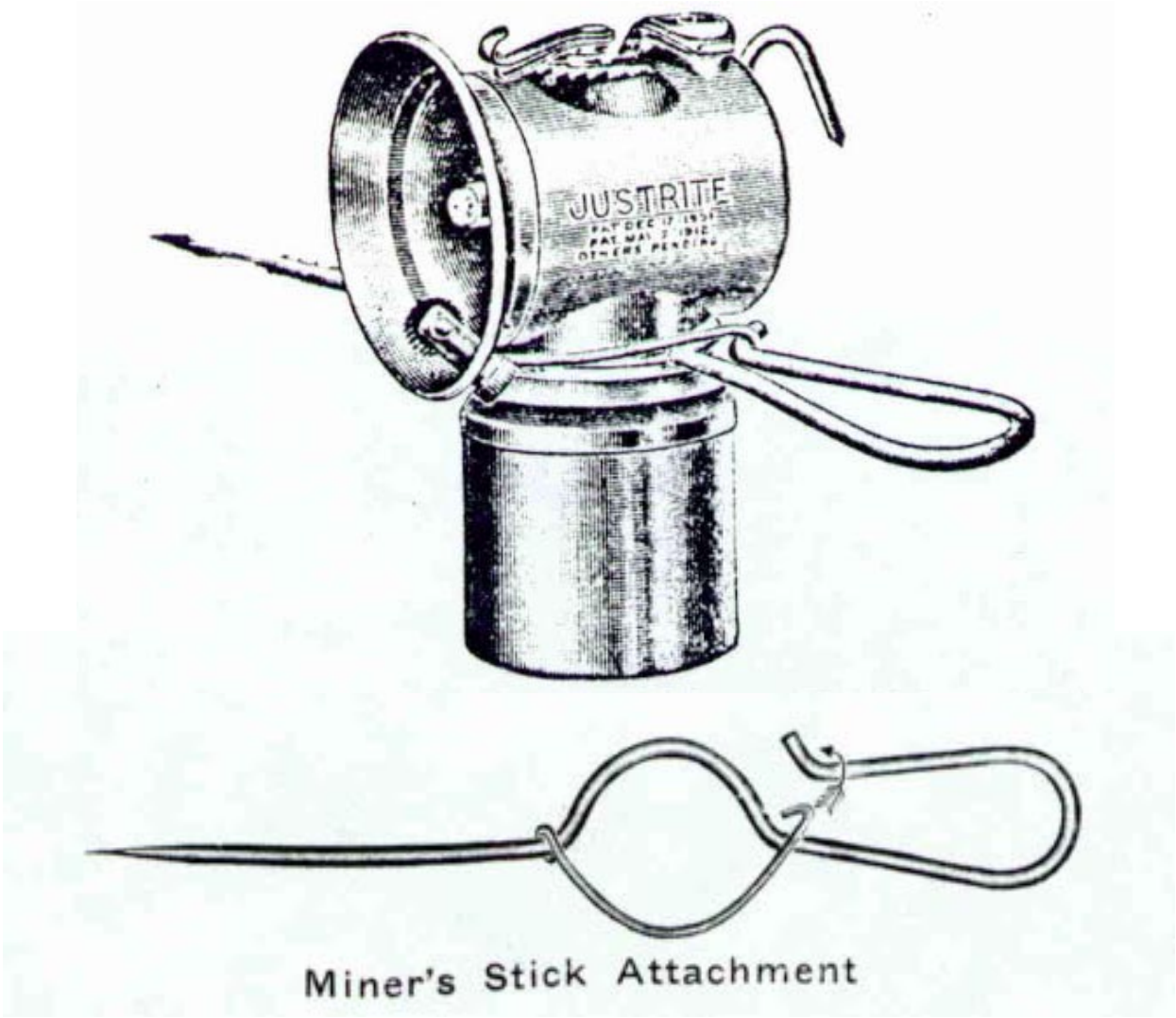
Manufactured Carbide Lamp Candlesticks

by Mark Bohannan

To help facilitate the miners' transition from candlesticks to carbide lamps, some lamp manufacturers made and sold carbide lamp candlesticks. The most prolific manufacturer of lamp sticks was Justrite. Although the Shanklin Manufacturing Company and the John Simmons Company also manufactured candlestick for their lamps.

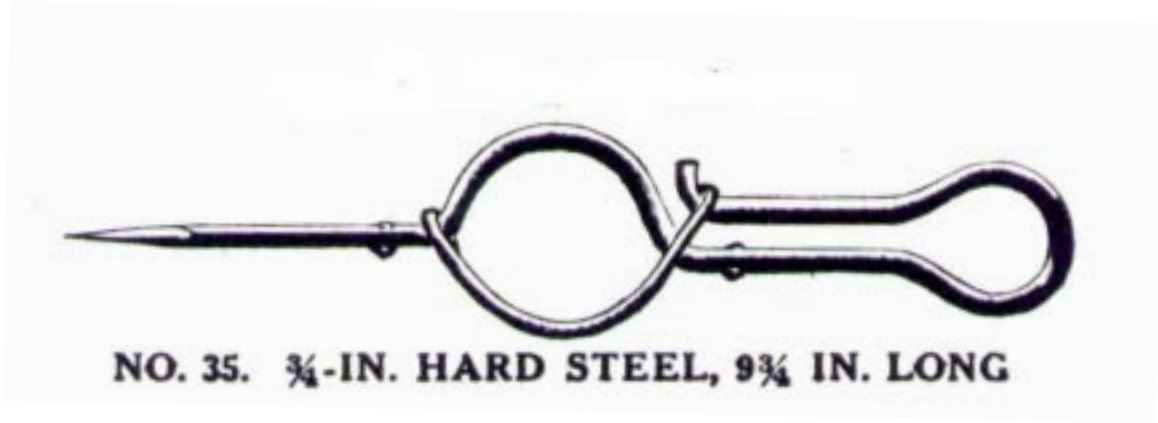
One question which is often asked is: What candlestick goes with which lamp or lamps. After going through as many catalogs as possible, I have put together a listing of carbide lamp candlesticks with the lamps that they were designed it fit on.

Justrite No. 30



The Justrite No. 30 candlestick is made of 1/4 inch steel wire, copper plated, and 9 1/2 inches long. They were manufactured to fit on the No. 91 half-shift lamp. This lamp is of polished brass and is 4 inches tall with a smooth base, oval water door and steel hat hook.

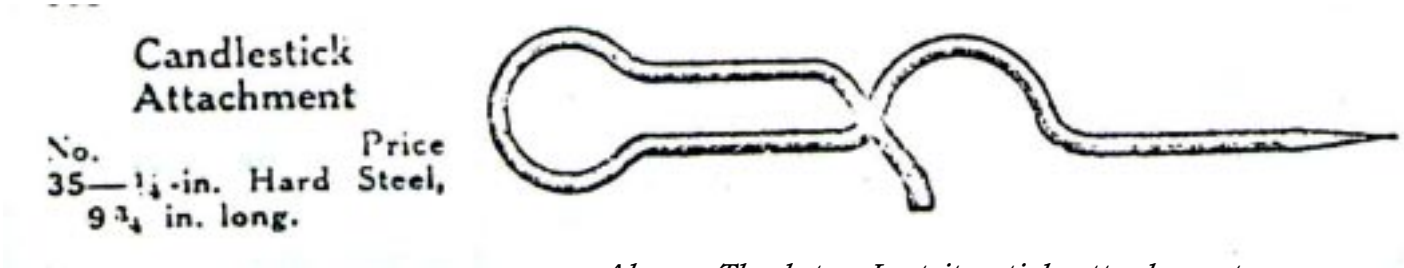
The first Justrite No. 35 candlestick is made of 1/4 inch hard steel and is 9 3/4 inches long. This candlestick was manufactured to fit the No. 101, No. 103, No. 202 and No. 204 half-shift lamps. The No. 101 and 103 half-shift lamps are of polished brass, 4 1/2 inches tall with the beaded base, oval water door and steel hook. The only difference between the two lamps is that the No.101 is made of 26 gauge brass and the No. 103 is made of 22 gauge brass. This candlestick could also be used on the No. 202 and 204 half-shift lamps. These lamps are also of polished brass, 4 1/2 inches tall with the beaded base, oval water door, but have the folding handles. Again, the only difference between the No. 202 and 204 is that the No. 202 is of 26 gauge brass, while the No. 204 is made of 22 gauge brass.



No. 101 and 103 "Half-shift" lamp

No. 202 and 204 "Half-shift" lamp

The later Justrite No. 35 candlestick is made of 1/4 inch hard steel, 9 3/4 inches long. This candlestick was manufactured to fit on the No. 103 and No. 204 half-shift lamps. These lamps are also 4 1/2 inches tall and are of polished brass. They have the ribbed base, oval water door and steel hook (No. 103) or folding handles (No. 204).



Above: The later Justrite stick attachment.

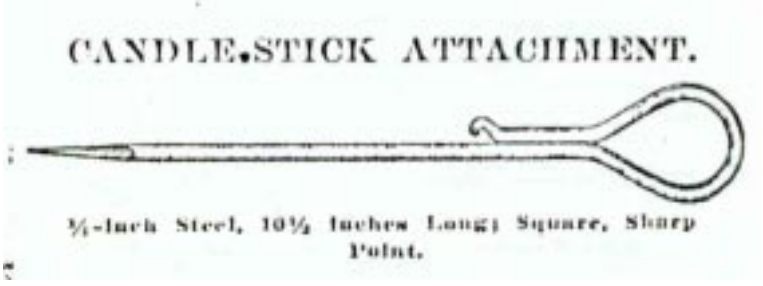
No. 94. CANDLE-STICK. ¼-IN. STEEL
11 IN. LONG

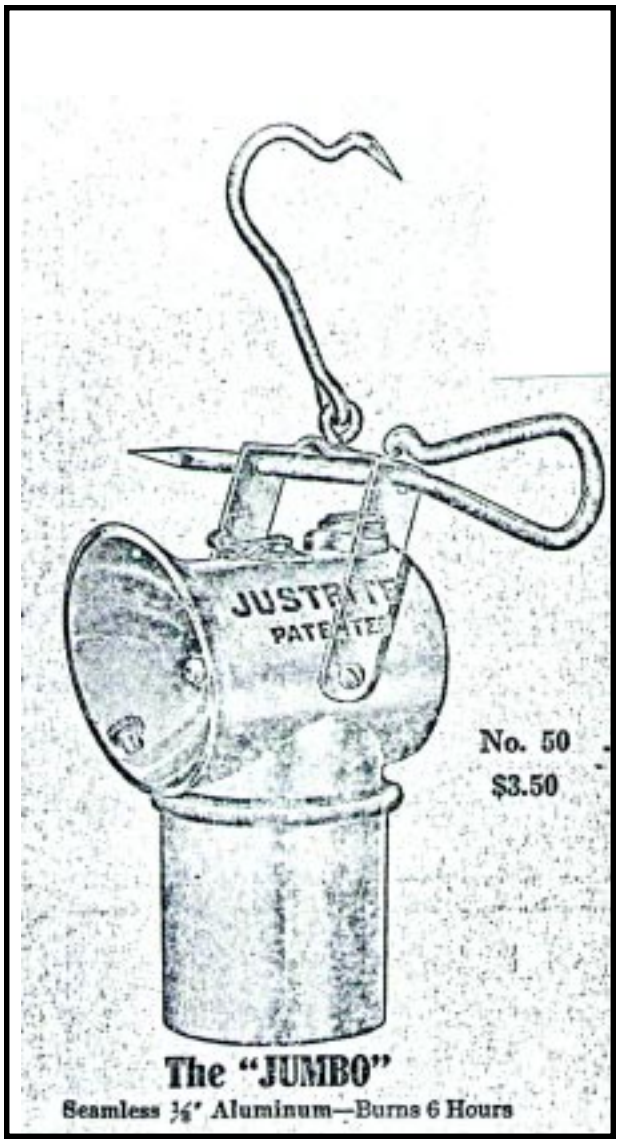
"ANACONDA SPECIAL"

The Justrite No. 94 candlestick looks the same as the early No. 35 candlestick, except that the No. 94 is 11 inches long and was made larger to fit the No. 93 Anaconda Special carbide lamp.

"THE JUMBO"

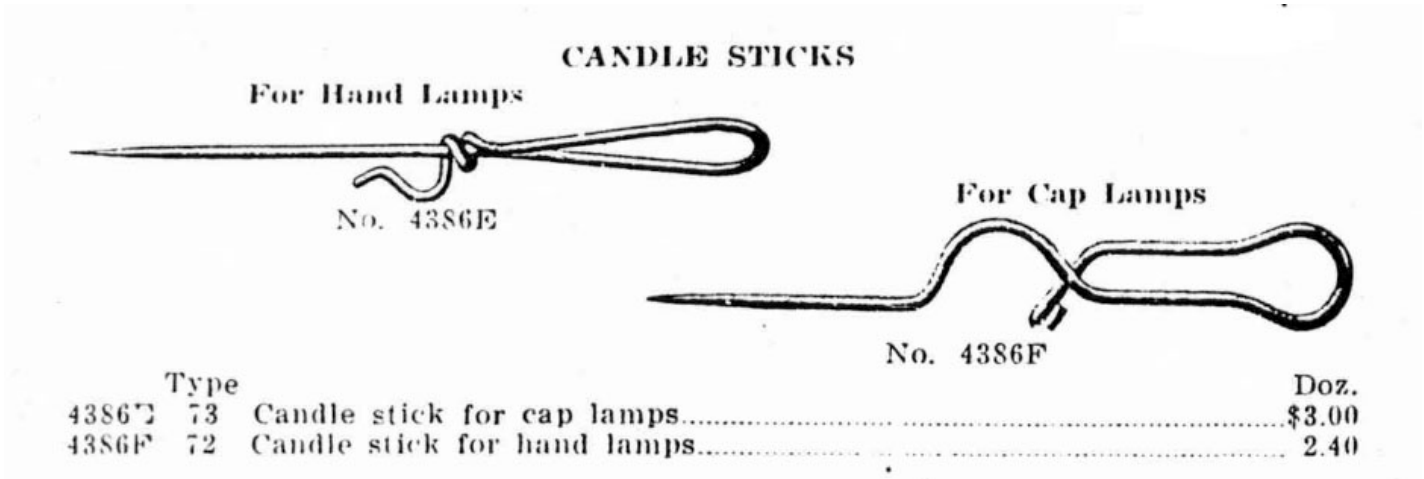
The Justrite No. 55 candlestick is made of 1/4 inch square steel, 10 1/2 inches long and was manufactured to fit the "Jumbo" carbide lamp.





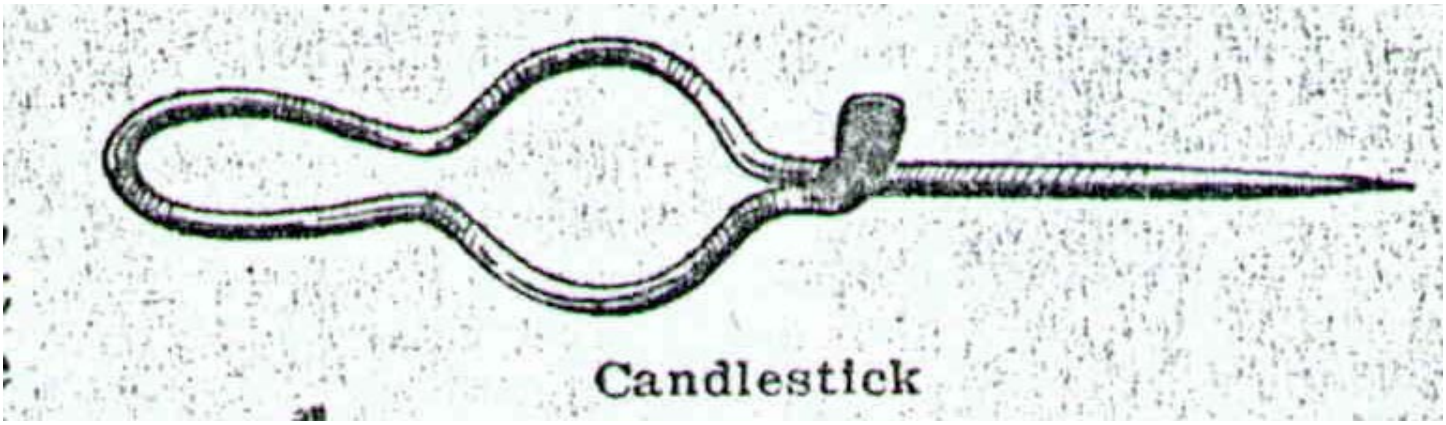
Baldwin

Carbide lamp candlesticks were manufactured by the John Simmons Company to fit onto the Baldwin carbide lamps. The No.73 candlestick was designed to fit the Baldwin pinchwaist cap lamps. The candlestick is made of 1/4 inch steel, 10 inches long and painted black (or Japanned). The No. 72 candlestick is made of 1/4 inch steel, 10 inches long and was made to fit the Baldwin hand lamps.



Shanklin

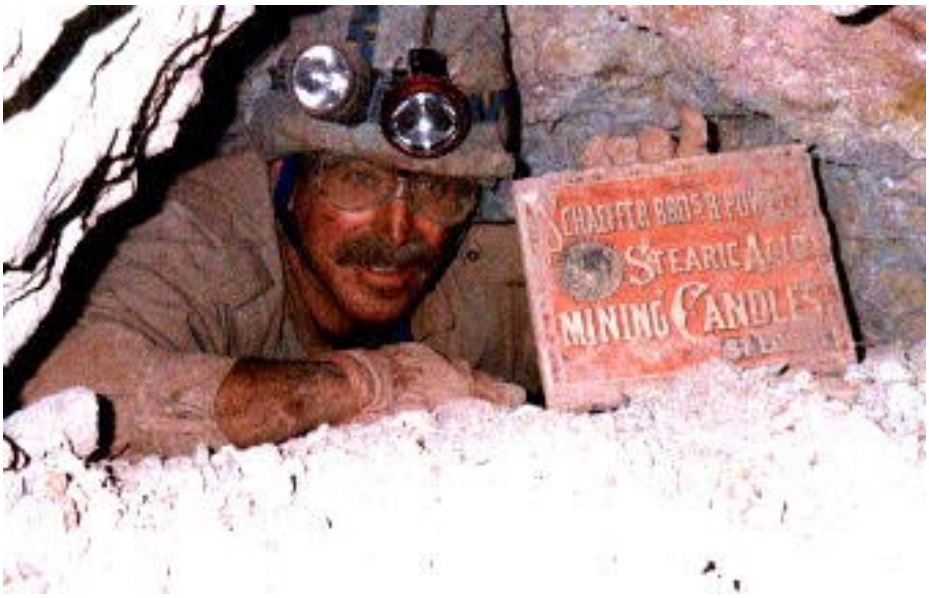
The Shanklin Manufacturing Company also made carbide lamp candlesticks. The No. 4 candlestick is made of 1/4 inch steel and is 9 1/2 inches long with a 2 inch circular opening. This candlestick was made to slip onto the bottom of the lamps. The No. 4 candlestick was designed to fit their cap lamps and 4-hour lamps. The lamps that the candlestick fits are the early Shanklin-or Guy Dropper lamps. The Shanklin Manufacturing Company's No. 6 candlestick is made of 1/4 inch steel and 10 1/4 inches long with a 2 1/2 inch circular opening. The No. 6 candlestick looks like the No. 4 candlestick, except that the No. 6 candlestick fits the company's half-shift lamps.



There are also a number of other carbide lamp candlesticks around, but these were independently made-probably by local blacksmiths) and were not generally manufactured and have not been included here.

Found at the Silver King

by Ted Bobrink



While we are talking about the up and coming underground Calico Adventure I thought you might like to see a few things we have found while exploring the Silver King Mine. Some of you will being going into the Silver King on Sunday and will be dropping down to the 7th level. That 7th level produced one of my favorite Calico artifacts and it's a very rare Schaeffer Bros. & Powell candle box. We have found four of these all together and to my knowledge they are the only ones known and unique to Calico. The photo left is Jim Steinberg coming out of a back filled drift that he and I dug into and found the whole box disassembled. The pictures below show the box end after it was cleaned up and a close up of the cool mining scene illustrated on the left side. Candle box's with the word mining are rare and ones with mining scenes are extremely rare. Even the sides of the box say Mining Candles in bold large letters and to top it off the back end of the box was boldly stamped "ORO GRAND MININ

Johnstown Show 10/02

by Steve Lindberg

The auction.

Host of the show: Steve Lindberg.

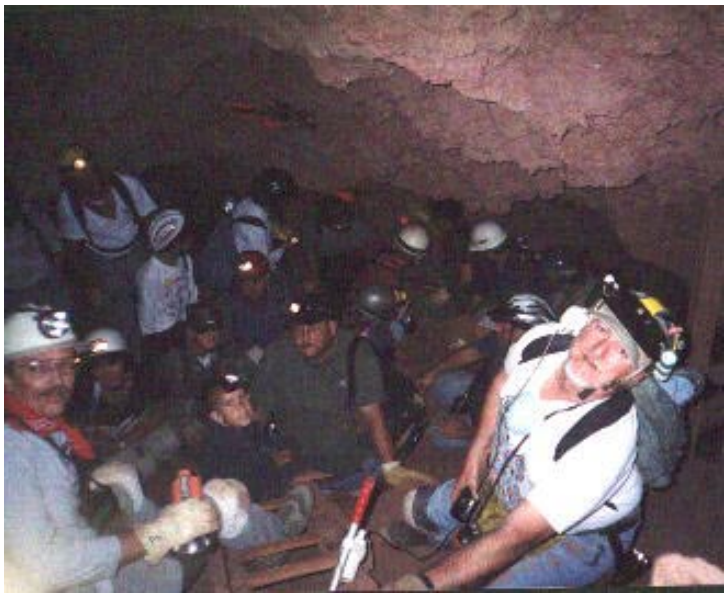
The late Matt Elchuck and wife.

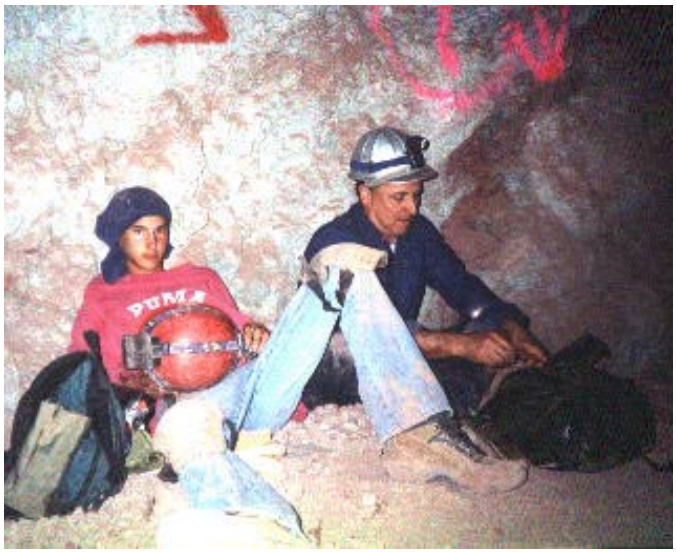
'The boys': (left to right) Dave Des Marais, Neal Ressler, Nelson Ressler, Keith Cunningham (?).

Calico III

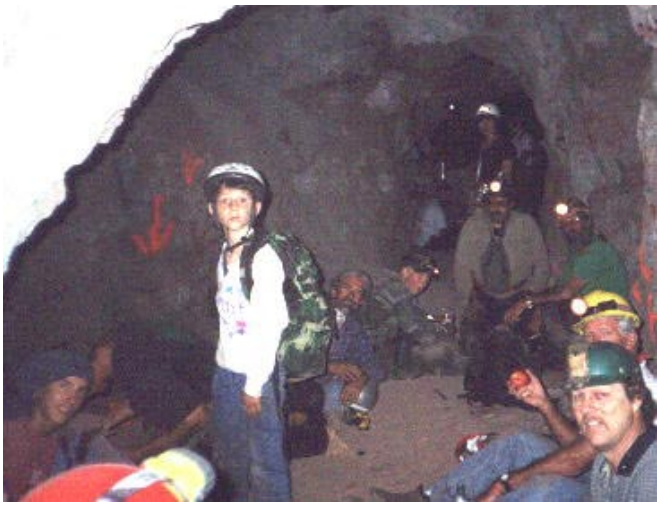
by Ted Bobrink

The 3rd Annual Mining Collect Underground Adventure was the biggest and best ever. It all started Saturday morning with 33 people gathering for breakfast at the Jenny Rose Cafe. Doc Thorpe kept it a mining collectors event right from the get go by bringing in an Apache Powder Box full of goodies for sale and trade. In a very short time I saw a mint Lindahl Take Down Match Safe Candlestick trade hands along with a very nice Hanson Carbide Cap Lamp and Brass Screw top Patented Oil Wick. We all jumped into our cars and headed to Calico Ghost Town to set up camp. Hard Rock John Ransom had 9 huge free camp sites waiting for us and we had no trouble getting about 18 vehicles in there with plenty of room for tents. There was a nice large camp fire ring set up with two days worth of wood stacked up from everyone. At 10:30 a.m. we all gathered together for the days agenda. I gave everyone a little history about the mining town and pointed out the names of the different mines up on the mountain. We then pilled into 6 vehicles and drove about a half mile from camp to a site at the base of King Mountain. We hiked up Wall Street Canyon about a 1/4 mile to the# lower entrance of the Red Cloud Mine and gathered around for the group photo you will see in the first photo people entered tunnel in single file and spread out into two groups. John Ransom leading the front group and me leading the rear. We stopped and explained all of the different mining things we came across such as flat strap rail, ore chutes, drifts, crosscuts, stopes and shafts. We gathered in a small stope in front of a ladder and took our second photo you see in the photo below. Only about half of the people are in the photo. We climbed up the short ladder to a higher level to show everyone a cool looking vertical wintz, and then we cut everyone loose on their own for 30 minutes to explore the numerous cave like work-ings.

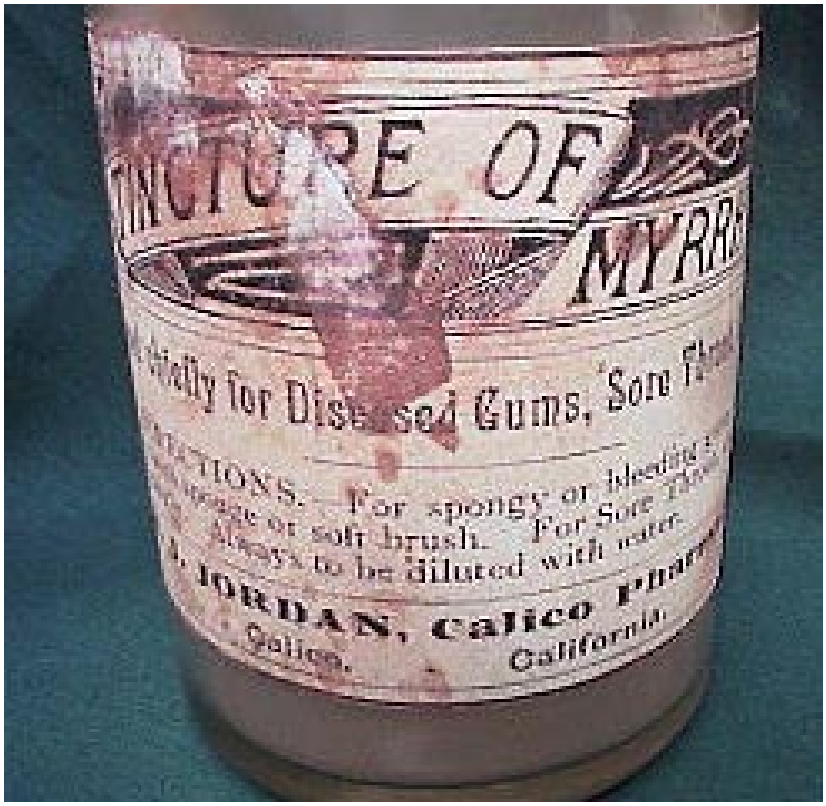




The ore bodies in Calico were found in irregular masses and it is like exploring a massive cave with curving drifts and crosscuts leading to small and large glory hole stopes in every direction. We had two mineral collectors in the group and they were having a heyday collecting all of the different minerals with their hand picks. We all gathered together again for the climb up an 80' ladder. The ladder was on about a 55 degree angle and everyone had a fun time climbing it. My son David and John Ransom were at the very top helping people climb over a short ledge. We had been underground about an hour and a half and it was a little after noon, so we all picked out a spot on the floor and had lunch. You will see that in jpg#3 and as many people you see in the photo, there were half again as many behind me. This level had the most workings to explore and we cut the group loose again on their own to go in any direction they wanted for as long as they wanted. Some took off to the right and some to the left while Jim Steinberg, John Ransom and myself stayed put for a needed rest. It was at this time that the biggest Calico find of the year was found just 25 feet away from where we had all been sitting for lunch.

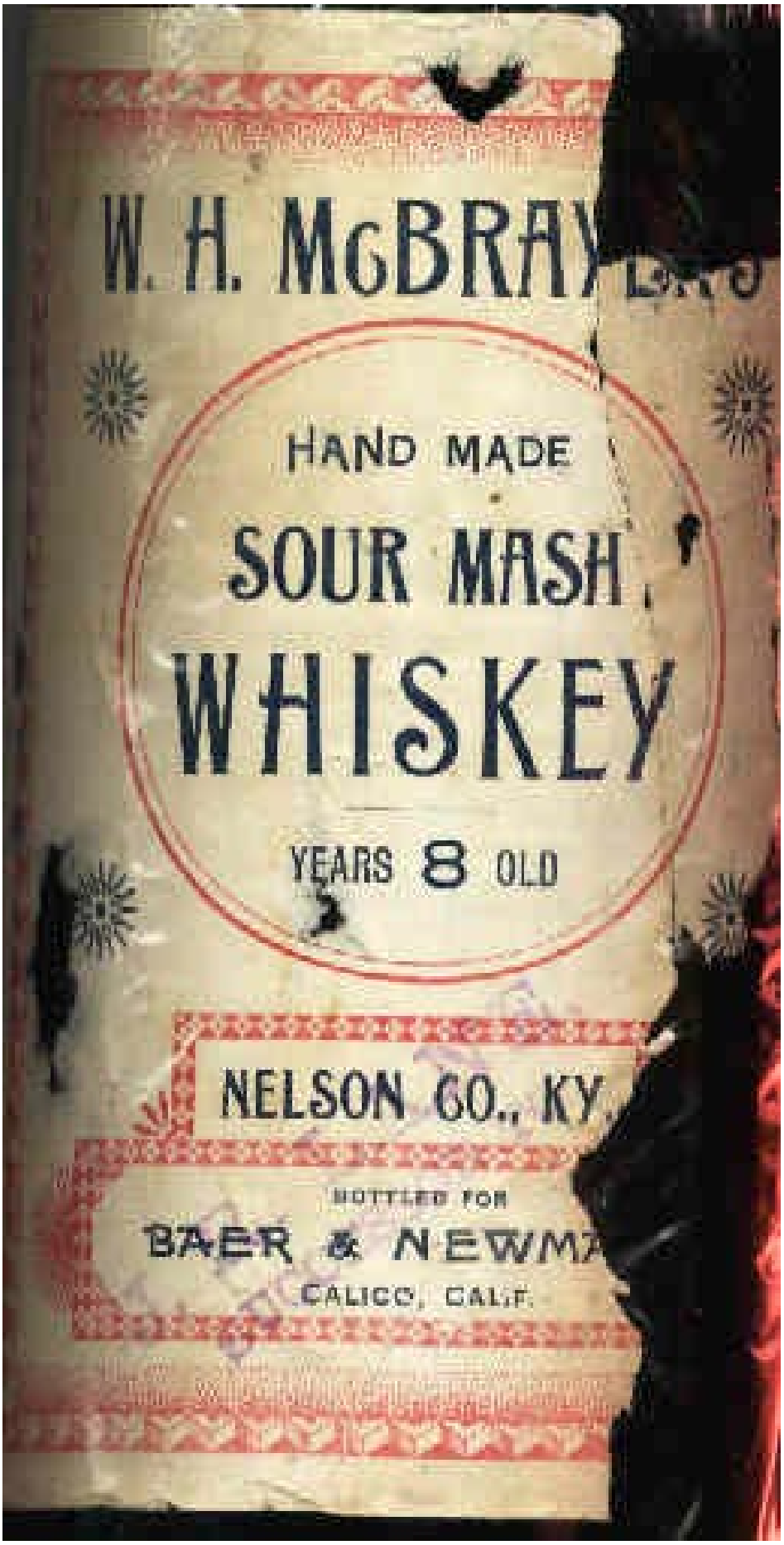


Jim, John and I were sitting down talking about where we wanted to take the group next when John Ransom got up and walked down the drift to a pile of rocks. He started turning over some rocks about the size of basket balls that had been stacked up by some early miners when all of a sudden he looked down a spotted a glass bottle wedged between two rocks as if the miner was hiding it there. At first he thought it was just a plain bottle with a cork in the top because the way it was laying he could not see a label. He slowly pulled the bottle out and when he turned it over it had a beautiful black and white label with bold words that said "Tincture of Myrrh - Used Chiefly For Diseased Gums, Sore Throat, Etc. H.J. Jordan, Calico Pharmacy, Calico, California." The Calico Pharmacy burned to the ground in 1884 and never rebuilt because there was another store called "The Calico Drug Store" owned by Dr. Rhea. To my knowledge this is only the fifth bottle known with a Calico place name and they are all different, and all from just those two localities. This is the largest bottle of the five as it stands a full 7" high and 3 1/2 across. You will see a photo of John Ransom holding the bottle and I will send a digital photo showing the label. After I took the photo of John Holding the bottle he handed it to me and said "You and David are the Calico collectors, it's yours. I said what !!! He said , you heard me, it's yours, now go show it to David. I am truly at a loss for words to tell you how I felt. It isn't every day that a friend hands you something that is priceless that he could sell for a hell of a lot of $$$ just because you are friends.



I immediately walked down to a large timbered area about 500' away where most of the people were poking around in the ore chutes and timber lagging pulling out some neat stuff. I yelled for David and everyone to come over to see what John Ransom had found and when I pulled out that bottle David's eyeballs just about popped out of there sockets. David said "Darn dad that is the find of the year, how are we going to top that?" When I told him that John had given it to us he said "What!! is this an April fools joke?"

That heavily timbered area we were in produced a number of neat items that were lodged behind the lagging to plug the gaps. Jim "High Grader" Malouf found a really cool 1880s large square liquid can that used a cork stopper. It was about 10" and 6"wide high and completely hand soldered with its original shinny tin finish and no dents. Darrell Plumb and Gary Butrick pulled out most of a Goodwin Candle Box side that had lots of cool writing. David found a really nice hand carved wood powder poke with candle wax all over it. John Emray found a nice original Calico hand made wire Miners Candlestick that my son Daniel walked right over while exploring a lower stope. Someone found a little tin box of some kind, but I didn't get to see it. There were lots of parts of 1880s news papers found by different people and I cant name all of the square nails a mine rail spikes that were found. All in all, I think everyone who looked and wanted to find a mine relic from Calico found something to bring home and talk about. After almost five hours underground we all decided it was "Deep Enough" and time to pack up and head out. It took another good half an hour to climb through a maze of drifts, holes and short ladder climbs to get out, and when we did, we all looked like dirt moles. I wanted to get another picture of the unsightly crew, but I was out of film. We jumped into the vehicles and and headed back to camp and the smart ones made a be line for the showers. After waiting for over two hours, me and Jim Malouf drove to another camping area to take our showers and get cleaned up the the Saturday night campfire get together.



Deric English adds:

In the San Bernardino City and County Directory of 1887, H.J. Jordan is listed as a druggist, which seems to suggest that he lingered on for a few years after the Calico Pharmacy burned down. As you mentioned, the other Calico bottles are from Dr. Rhea of Calico. I'm going to try to send an image of a third known bottle from Calico sold by Baer & Newmark, J.R. Lane successors. This bottle is dated somewhat by the business transactions that took place in 1892 when John Robert Lane acquired the old Norton Brothers Building from Oscar Baer and Harris Newmark. Baer and Newmark were assignees of the original owners of this building (Norton Brothers Building) built in 1884, and acquired it when the Norton Brothers went bankrupt. This bottle was bottled for Baer & Newmark, but it has been ink-stamped "J.R. LANE SUCCESSOR TO." It was most likely old stock Lane acquired from Baer & Newmark when he purchased the building and contents. Anyway, it would appear to be early 1890s. I found it partially buried under an ore chute.

TRADES & SALES

Back issues of Eureka for sale: Issues 11-31. Contact Todd Town. ttown@cybertrails.com

Wanted: Blasting cap tins. I buy rare and unusual blasting cap tins. Please email me with a description. Jack Purson purson@earthlink.net

Buying or trading for old photos: Miners posed or working, wearing/carrying lighting - carbides, wicks, sticks, and safety lamps preferable, will consider electric based on photo composition. Other tools of the trade in photos a plus. Modern reproductions considered by content/event. Contact Terry Sharpton Trs96@aol.com

Hansen Force Feed carbide cap lamp: Superb complete condition, $1400, also have Sunray with radial reflector $250, unfired Simmons Pioneer $500, and serveral other good pieces. Dave Thorpe (602) 549-1959

ANNOUNCEMENT: The new book "The Assay Balance - Its Evolution and the Histories of the Companies That Made Them has just been received from the binder.

The 241-page book contains two sections: the first relates to the evolution of the assay balance, including discovery of gold and its cultural influences and topics relating to the development of the balance. The second section contains histories of the companies (especially U. S. Companies) that made assay balances. Both sections contain many photos and drawings, and the second section also contains either complete catalogs from balance companies or pertinent pages from mining supply company catalogs for each company represented. The book is well-indexed and contains a complete bibliography, which should aid in any further research. One can also find a page which will assist in dating balances.

There are soft-bound copies with a protective coating on the cover (Smythe sewn and perfect bound), and hard-back (case bound) copies also with a protective coating. Cost of the soft-bound book is $55 plus $2.50 postage (in U.S.)(In Colorado add sales tax of $1.65) , while the hard-back copy is $75 plus $2.50 postage (in U.S.)(In Colorado add sales tax of $2.25). Books can be ordered by forwarding a check made out in the proper amount to John M. Shannon and mailed to 7319 West Cedar Circle, Lakewood, CO 80226. We will have to give quotes for foreign orders, due to postage differences. Thank you and we will look forward to hearing from you if you have an interest in assay balances. John Shannon (rovers@aol.com) Phone (303) 232-1534

Lenticular Lamps: A new book is available in France about tunnel lamps. The title is " Les Raves ou L'Histoire du Crezieux Stephanois" by Michel Bonnot and Marcel Humbert-Labeaumaz. The price is FF 120 (~$20) + postage costs.The order address is: Minelamp Cidex 924 b, 38460 Leyrieu, France or send Marcel directly for further information an eMail: minelamp@babel.asi.fr

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