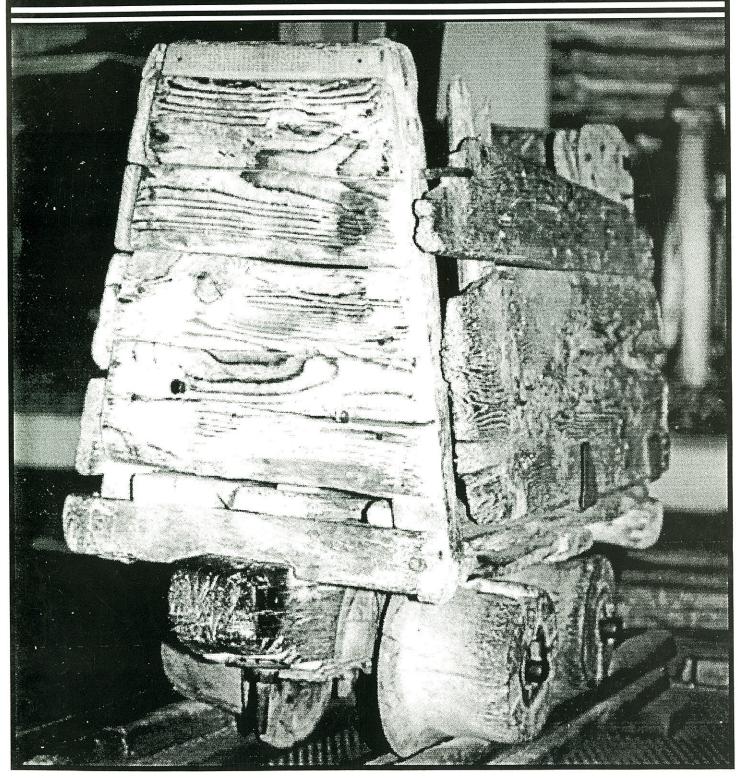
EUREKA!

Issue 17



January 1995



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The Journal of Mining Collectibles

EUREKA!



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

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Cover: An all-wood mine car, or "tub", from the German Mining Museum. (Photo by Manfred Stutzer).



NEWS



SHOWS

The news this month is all about upcoming lamp shows. It seems that a number of these events have become permanent annual occasions, and a chance for collectors to get together, no matter where they hail from.

First a notice for the "Second Annual Mining Collectors Dinner and Auction" in conjunction with the Tucson '96 Annual Gem and Mineral Show.

This event is being hosted by Jane and Roger Becksted and Don Dalton, on Saturday, February 3rd 1996, beginning at 5:00pm. The location this year is the El Parador Mexican Restaurant, 2744 E. Broadway, Tucson, AZ.

There is a modest fee for the buffet dinner and auction, for more information contact: Jane Becksted (520) 792-0645
Don Dalton (520) 297-3001

Please phone in your registration soon!

The Tucson Show has become a mecca for lamp collectors looking to break out of the winter doldrums. As usual, several collec-

tors set up at the show, and have provided information on open houses and special sales events in advertisements at the back of this issue.

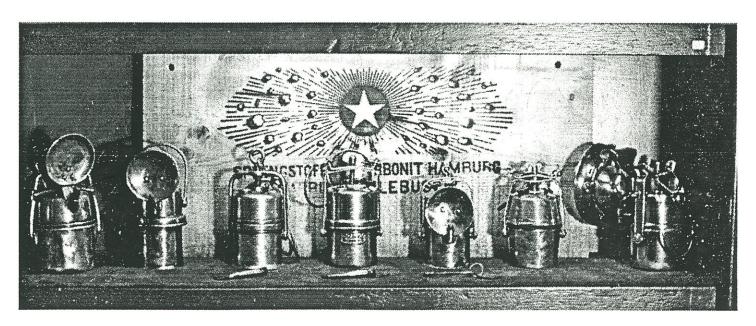
The latest word we have on the very popular Lead, South Dakota / Homestake show is that it is planned for the first weekend in June.

This may present a challenge for the international collector, since we also have an announcement for the **4th International Mining Lamp Show** at Wilnsdorf, Germany, the weekend of June 1st, 1996. Heinz Zander and Henner Schardt are again hosting this show, the most important annual get-together for European lamp and mining artifact collectors. Highlights of the show include the annual publication of <u>Grubenlampen-Info</u>, a beautiful publication full of photographs of rare carbide, oil, and safety lamps.

For information, contact Verlag Zander - Schardt, Auf dem Hof 1, 57520 Emmerzhausen, Germany, phone 02743 / 2709 Last but not least, the Annual Eastern Mining Lamp Collectors Reunion will be held in North Central Pennsylvania the weekend of June 29-30, to coincide with the second Kutztown Extravaganza show of the summer. Further details on location, hotel, etc. will follow in the April issue of Eureka!

COLLECTORS RESPOND

In our October issue we ran a historical account of the Monongah, West Virginia mine disaster. We received several positive responses, and one which made us stop and think. At least one subscriber reminds us that while such information may be valuable to our readers, there will be some who are reminded, perhaps painfully, of friends and family members who were personally affected by a mining disaster. Let this be so. We too easily forget that the mining trade, with all of its wonderful and intricate tools, was and is the most hazardous industry, and that many have died in the course of winning the ore from the ground. Eureka! remembers and salutes the miner, and we hope to follow with more historical accounts of mining and its dangers.



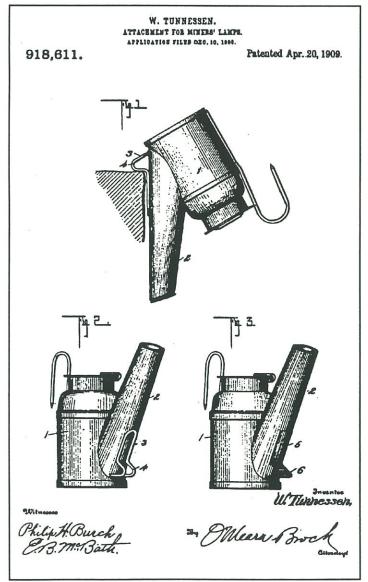
German cap lamps from the collection of Heinz Zander.

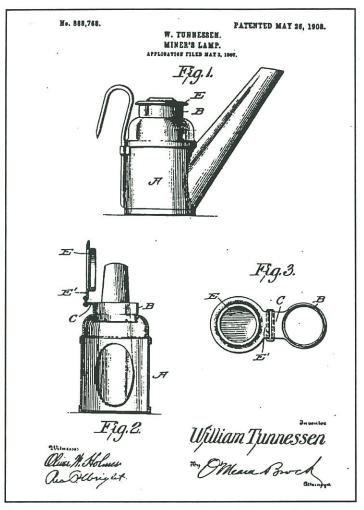
The C. George - Tunnesson - Crown Trademark Connection

Dave Johnson

Christopher George of Hazleton, Pennsylvania was a manufacturer of mine lamps as early as 1884, according to the Hazleton City Directory which listed him as a lampmaker. The 1897 City Directory continued to list George as a manufacturer of mine lamps. The 1902 Hazleton City Directory lists Christopher George as a tinsmith.

In 1908 George sold his firm and the use of his name to William Tunnessen, of Hazleton. Tunnessen had two lamp patents dated May 26, 1908 and April 20, 1909. He





Above: Tunnessen patent for miner's oil wick lamp. Left: Tunnessen patent for attachment to oil wick lamp.

also owned the CROWN trademark. Little information is available on William Tunnessen. He appears in the Hazleton City Directory 1909.

Apparently, Tunnessen's firm was a family enterprise. The 1909 City Directory lists the Tunnessen Mining Lamp Co. with William Tunnessen as Manager at the corner of McKinley and 7th Street. Joseph Tunnessen is listed as a tinsmith and boarder at 557 Peace Street along with his wife Eliza. Henry Tunnessen is also listed as a tinsmith and boarder at 557 Peace Street. I was unable to

determine the relationship between William, Henry and Joseph Tunnessen.

Apparently, as the use of oil wicks decreased Tunnessen abandoned the mine lamp business and began producing auto parts. The 1925 Hazleton City Directory lists William Tunnessen as a manufacturer of auto parts.

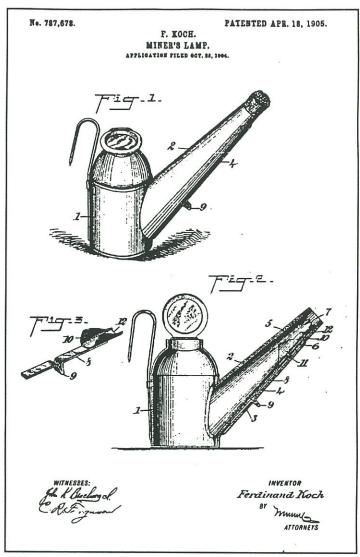
There are presently only two known examples of an oil wick marked with Tunnessen's name - one a mule lamp and the other a face lamp in my collection. The stamping on this face lamp references the Koch Patent and the



Tin face lamp marked: Mfd. By W. TUNNESSEN, with stamping J.

small oblong tab soldered over the wire hook to provide additional strength to the solder that runs the length of the hook down the back of the font. The major feature of the Koch Patent is the wick raiser mechanism much like that featured in the J. R. Watts Perfection Patent of July 5, 1892 (See EUREKA #13). Judging by the extreme rarity of marked Tunnessen lamps it is unlikely that he was a prolific producer prior to the introduction of his CROWN Trademark in 1908.

Prior to 1908 C. GEORGE lamps were marked with the C. GEORGE stamped on the font with just the name and Hazleton PA alone or enclosed in a box. Beginning in 1908 the C. GEORGE lamps first were stamped with PATENT APPLIED FOR or PAT. APPLIED FOR. This was followed by a stamping with PAT. MAY 26,08,



Koch patent for miner's oil wick lamp.

OTHER PAT. PENDING. The last, and most common, stamping is PAT. MAY 26, 08 & APRIL†20,†09 on the lid with "CROWN" REGISTERED TRADEMARK on the bottom of the font.

The 1908 patent was for the separately applied collar cap and hinge seen CROWN oil wicks. This style cap (turned down edge and indented ring) is seen on early CROWN lamps. This lamp is different in design than the original C. GEORGE lamps.

The 1909 patent features the flat smooth cap and wire "spout guard" boot kick found on most CROWN lamps. While the patent shows the commonly seen vertical font, there are two varieties of slope-sided font lamps produced under the CROWN Trademark. The 1909 patent

Directory of Lamp Stampings

C.GEORGE HAZLETON, PA. A B D E REGISTERED TRADE ROWN" 37. OFFICE DEMARK G I H

J



Above: Crown copper screw-lid face lamp with stamping I.



Left: shielded driver's lamp with stamping G and I. Right: shielded tin driver's lamp w/ brass collar, stamping G and I.

Below: CROWN brass "surveyor's lamp", stamping I.

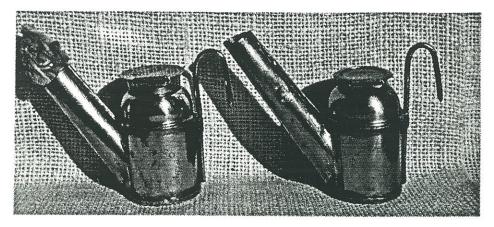
shows the commonly seen wire spout guard as well as a solid sleet guard that I have yet to see on a lamp.

Also produced under the CROWN label were a variety of what are commonly known as "surveyors" lamps. These were produced in tin, brass and copper, as well as in bi-metal combinations.

The Tunnessen CROWN label lamps were produced in a large variety of models and metal combinations, second only to Trethaway Bros. in number. Tunnessen produced CROWN label lamps for private labels such as Cambria-Central Supply Co., Cruso -H.S.B. & Co., F. Beiter, General Supply Co., M. & O., Punxsutawney Hardware Co., Logan-Gregg Hardware Co. and Tracy Wells Co.



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Left: brass face lamp with stamping D on cap and font.

Right: brass face lamp with stamping B and D.



Left: brass face lamp with stamping B.

Right: tri-metal face lamp with stamping G and I.





C. George driver's lamp (left) and two face lamps, all with stamping B. C. George miniature in center.

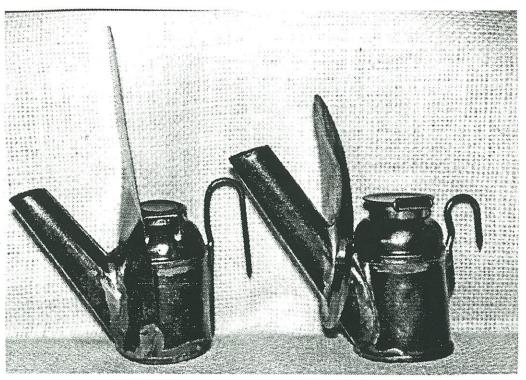




Left: tin face lamp w/ stamping A.. Center: tin face lamp with stamping B and E. Right: C. George Driver's lamp w/ one piece collar/shoulder, stamping B. Similar to lamp in center with separately applied collar.

Left: shielded tin driver's lamp with stamping B.

Right: shielded tin driver's lamp with brass collar and stamping G and H.



Left: copper and brass face lamp w/stamping B, G, and I.

Right: tin face lamp with brass collar and stamping G and I.



Left: tri-metal face lamp with stamping G and I.

Tri-metal face lamp with stamping G and I.





Left: tin driver's lamp with brass dome lid and collar, stamping G and I.

Right: tin driver's lamp with brass collar and stamping G and I.



Left: tri-metal face lamp, stamping C.

Right: tin face lamp with brass collar and stamping F.



Left: tin face lamp with stamping A.

Right: tin driver's lamp with brass collar and stamping G and I.



Left: tri-metal driver's lamp with stamping G and I.

Right: tin driver's lamp with brass collar and stamping G and I.

Left: tin driver's lamp with stamping B and E.

Right: Tri-metal driver's lamp with stamping G and I.



Left: CROWN mule lamp with stamping G.

Right: Unmarked face lamp.



Left: tin face lamp with brass collar and cap and stamping B, G, and I.

Right: copper and brass face lamp with stamping G and I.



The German Mining Museum

Manfred Stutzer

The German Mining Museum, Deutsches Bergbau-Museum, is one of the best mining museums I have seen. If any of the readers of Eureka! are planning a trip to Germany, don't miss a visit to this museum. You will need at least one full day to see everything.

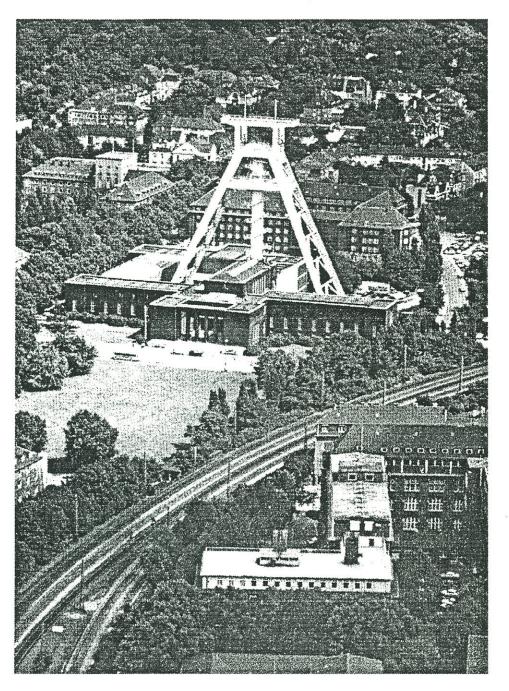
The address is:

Deutsches Bergbau-Museum Am Bergbaumuseum 28 44791 Bochum/Westfalia

Open hours:

Tuesdays - Fridays 8:30 -17:30 Saturdays and Sundays 10:00 - 16:00

The Museum was established in 1930. Its exhibition area of more than 10,000 square meters shows the historical development of all branches of mining. 15 to 20 meters underneath the museum complex you can see a complete model coal mine. You can also take a lift to the platform of a winding gear 60 meters above the museum. This 650 ton heavy headgear is original and was built in 1944. After the closure of the coal mine "Germania" in Dortmund in 1973, it came to the German Mining Museum.



The displays include:

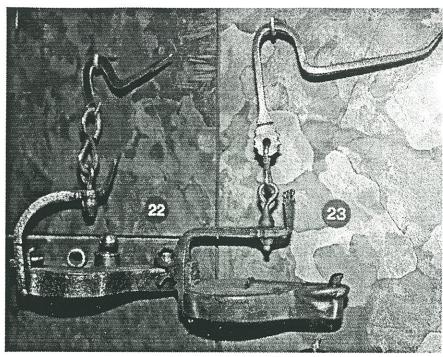
- -The Raw Materials of mineral deposits and mining
- -Shaft Winding
- -Coal winning
- -Shotfiring
- -Mining Tools
- -Drilling and Blasting
- -Drainage and Mine Ventilation

- -Mining in Fine Arts
- -Precious Stones
- -Winning in pre-historic times
- -Winning in the Middle Ages
- -Deep Drilling
- -Mine Surveying
- -Coal Winning Machines
- -Miners' lamps

For me, the section of miners' lamps is of special interest.



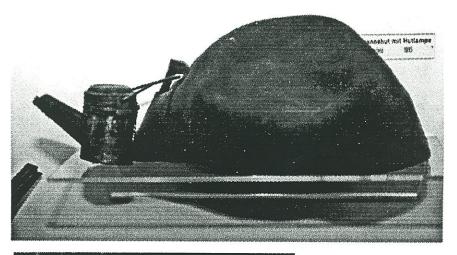
Carbide frog lamp, so-called Pfannenschmidt-Frog, 1906.



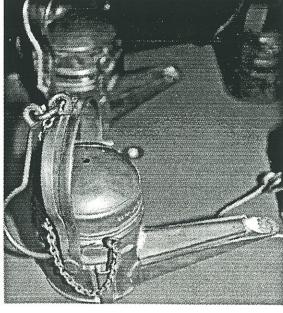
Two closed large iron frog lamps, Harz mountains, 1880.



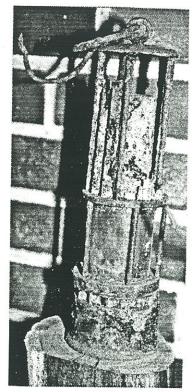
Oil lamp with two spouts, Samson mine, Harz mountains, 1880.

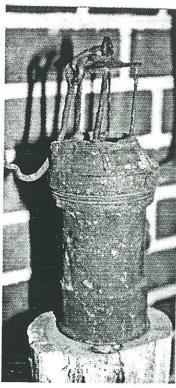


Above: Oil wick cap lamp with leather cap, copper ore mining, Mansfeld, 1895.

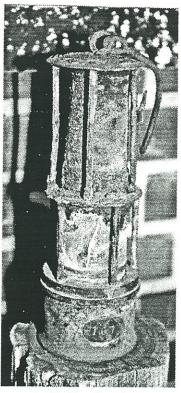


Left: Oil wick hand lamp, brass, Silesia, 1890.





The Frieman & Wolf safety lamp (left) and an electric hand lamp (right) were found after a firedamp explosion which occured 1934 on Nelson Colliery, Osek Bohemia. Only 2 miners of 140 survived. It is believed that a smoking miner caused this explosion.



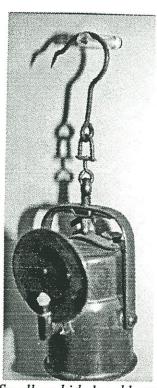
This Friemann & Wolf safety lamp was found after a disaster that happened in 1908 in Radbod Colliery, Hamm, Ruhr area. In the night between August 11 and 12, a coaldust explosion killed 350 of the 400 miners working.



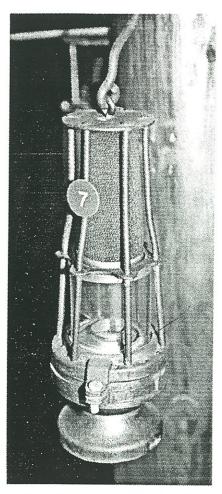
Carbide hand lamp by Seipel, 1920.



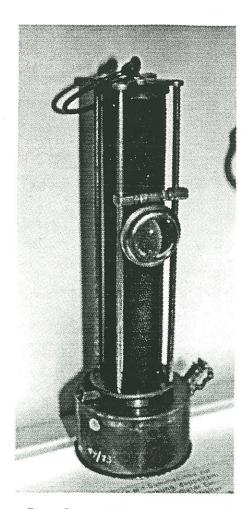
Carbide hand lamp by Gewerkschaft Carl, Bochum, 1900.



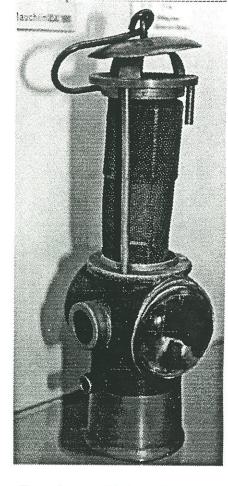
Small carbide hand lamp by Seipel, 1923.



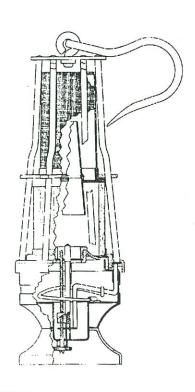
Oil safety lamp with Muesler chimney, by Cossett-Dubrulle, Lille, France, 1901.

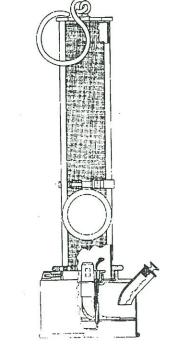


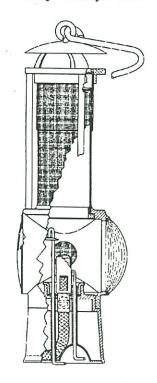
Davy lamp with two gauzes and lens, by Newman, England, 1817.



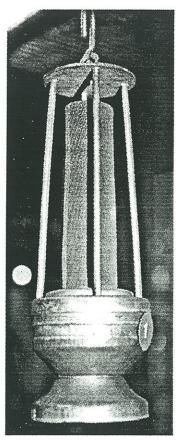
Davy lamp with lens, inventor: mining engineer Mauchlin, USA, 1880, used in the coal mines of Pennsylvania.



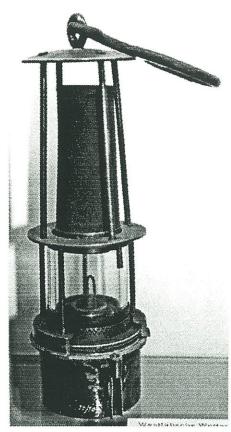




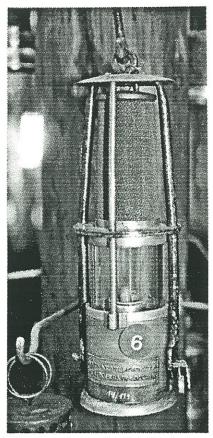
EUREKA! January 1996



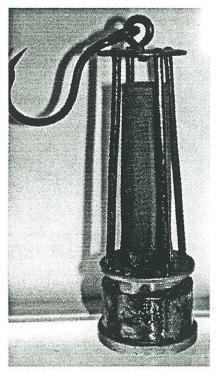
Davy style lamp, made by Cossett-Dubrulle, Lille, France, 1870.



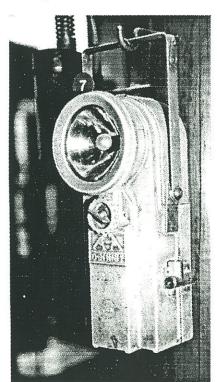
Westfalian oil safety lamp with punched air ring beneath the glass, 1855 - 1880.



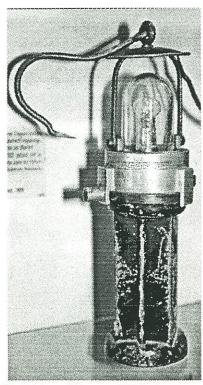
Oil safety lamp, by **Fr. Schmetz**, Herzogenrath, Westfalia, 1868.



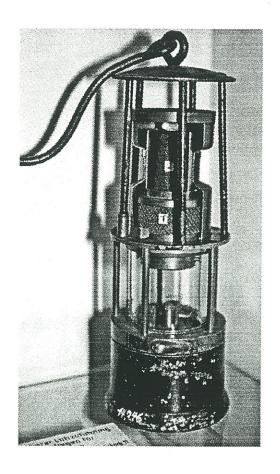
Early oil Davy safety lamp. The top of the gauze is fitted with a punched plate, unknown manufacturer, Belgium(?), 1850.



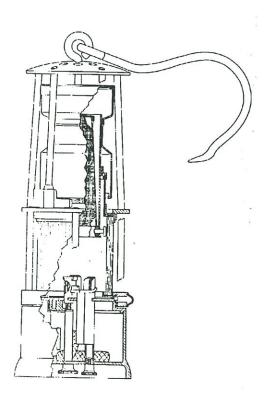
Test lamp, Doninit, 1932.

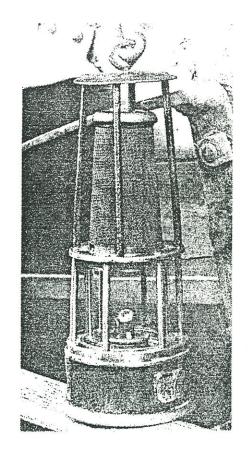


Ni-Cd hand lamp, 1913, inventor: Bohres, Friemann & Wolf.

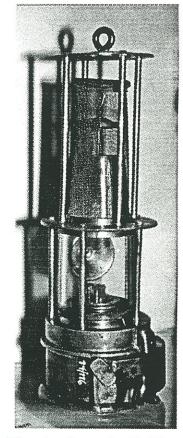


Benzine safety lamp with Mueseler chimney, inventor Dahlmann, 1895, Friemann & Wolf.

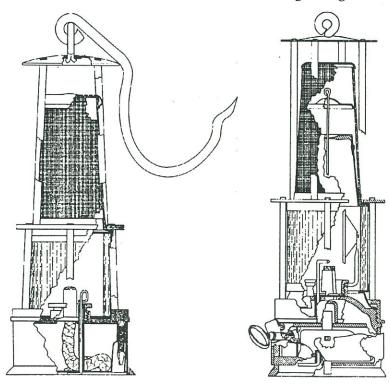


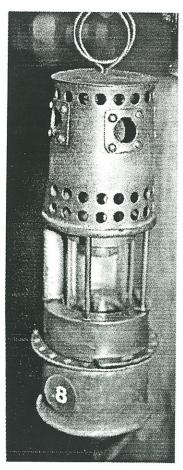


Boty oil safety lamp with punched copper top on gauze, a so-called "Saarbruecker" oil safety lamp used in the coal mines of Saar, Germany.

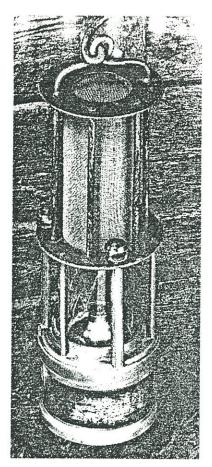


Oil safety lamp, by F. Abs, in Reuland style, 1880, coal mines in Silesia, inside of the lamp is a small reflector and a selfactng extinguisher.

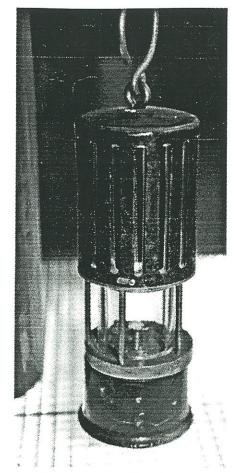




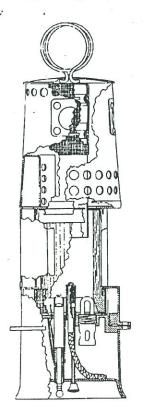
fumat lamp with Mueseler chimney, produced by Fabrique Liegeoise de Lampes de Securite, Liege, Belgium, 1905.

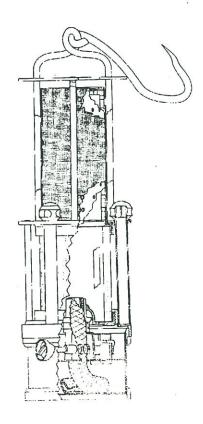


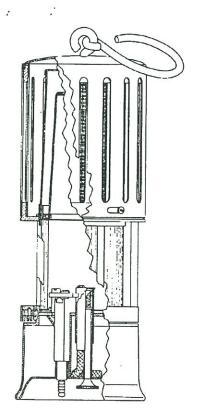
Oil safety lamp, type **Gray**, 1870, unknown manufacturer.



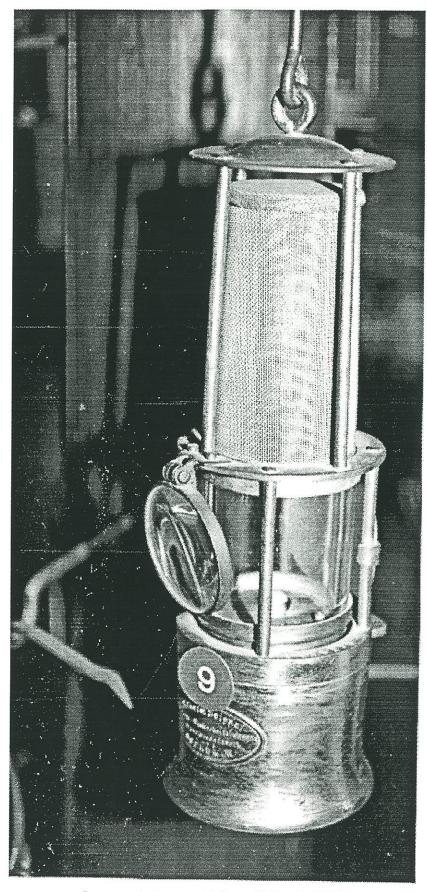
Friemann & Wolf benzine safety lamp with Meyer-Bonnet with adjustable slots, 1902.



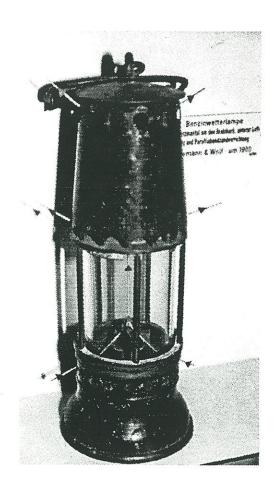




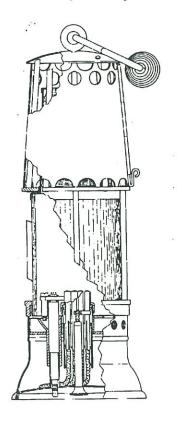
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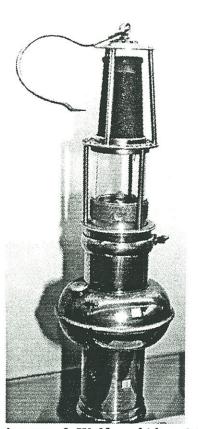


Surveyor's lamp with lens, Seippel, 1910.



Friemann & Wolf, 1900, four wicks.

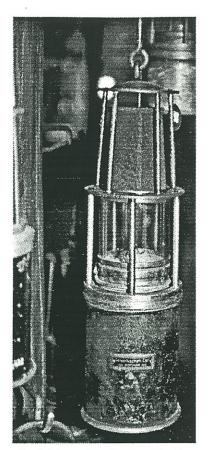




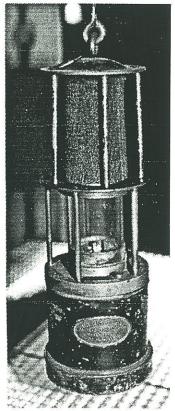
Friemann & Wolf, carbide safety, inventor: Stuchlik, 1904.



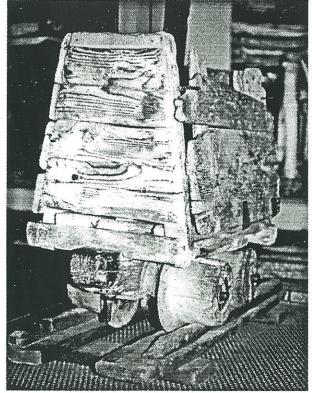
Friemann & Wolf, carbide safety, 1907, inventor: Stuchlik, coal mining in Bavaria.



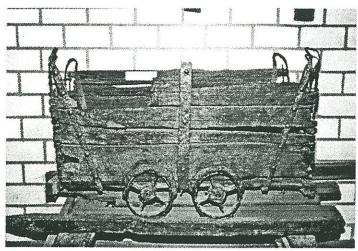
Carbide safety lamp, Carl Koch.



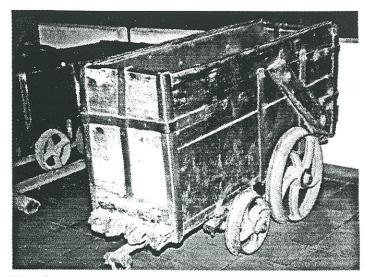
Carbide safety lamp, Seippel, 1910.



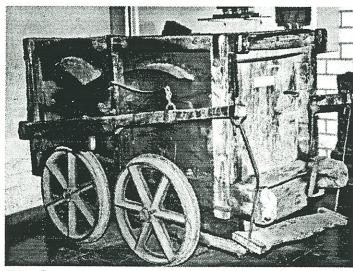
Wooden ore car on wood rails, used until 1930 in a Gold Mine in "Siebenbuergen" (Transylvania).



Wooden car for coal mining. In use until 1866 in Friederica-Colliery, Unna, Ruhr, Germany.



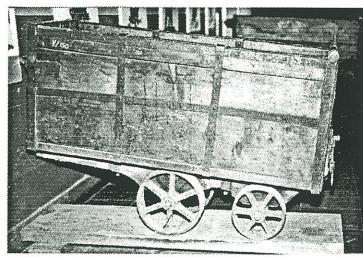
Wooden ore car, ca. 1875, Harz-Mountains, Germany.



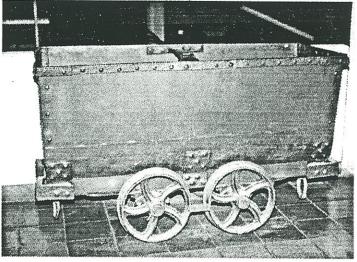
Woodern ore car wit footbrake, used until 1938 in the ore-mines of Steiermark, Austria.



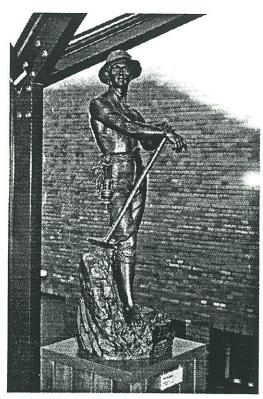
Special wagon for salt transportation, ca. 1900, Unna-Koenigsborn, Germany.



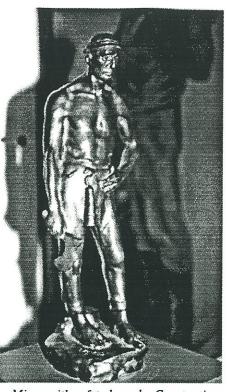
Wooden ore car, Schneeberg, Saxony, ca. 1850.



Iron car used in coal mining, ca. 1920, Germany.



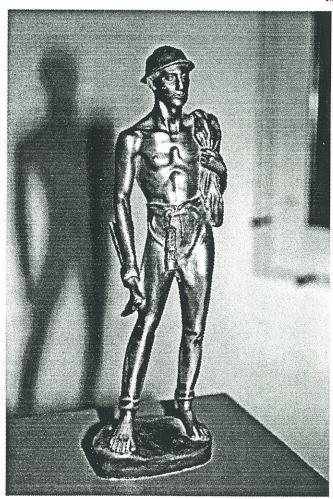
Bronze miner by Christian Levy, ca. 1880.



Miner with safety lamp by Constantin Meunier, 1901.



Woman with safety lamp by Constantin Meunier (1831-1905).



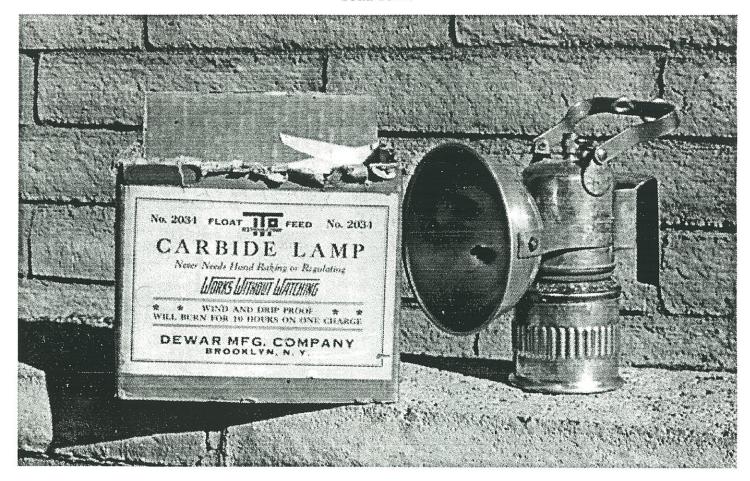
Miner with safety lamp by Friedrich Thuma, ca. 1929.



Siegerland Miner by Friedrich Reusch, end of 19th century, bronze, Germany.

ITP Mine Car Lamps

Todd Town



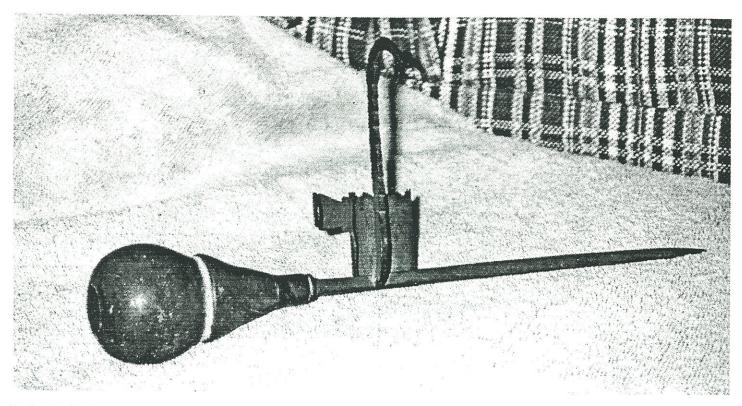
he mine car lamp shown above has occasionally found its way into collections. Some have questioned as to whether the reflector was factory-made or a miner's adaptaion. This unfired example with its box shows it to be a genuine factory model with its own model number. It was not shown in Dave DesMarais' lamp survey. The rear bracket shows it to be a mine car lamp. I found it in Bisbee, Arizona.

The ITP lamp shown at right appears to be a tail lamp, as it has a red glass lens. The two make a nice set, and are typical of mine lamps found in Arizona.



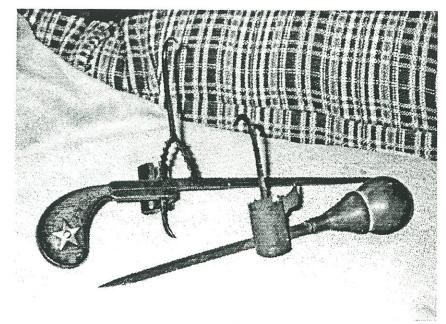
Wood-handled Candlestick

Bob Schroth



I was the lucky one this fall to get a call from a dealer friend of mine about a very unusual miner's candle holder. This dealer collects all type of old lighting and found this stick in a estate sale. No one at the sale knew any history of the stick or of any miners in the family.

The stick at first glance looks a lot like a old screw driver modified into a miners candle stick. when you look more closely you see that it was made as a miners stick right from the start. The hanging hook, is filed to look like a tree, and the tip of the hook is hammered flat and sharp, a lot like the early Betty lamps. The thumb tab is very long and has a lot of nice filing on it also. The best part is the old wood handle. The balance and the feel of the handle makes me wonder why more sticks were not constructed this way. It is a lot easier on your hand when you pound the stick into a timber.



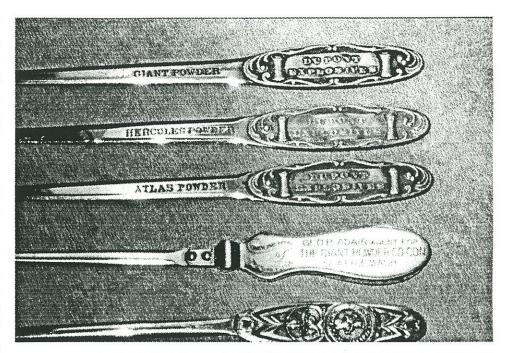
Two wooden-handled candlesticks (Bob Schroth collection and photo.)

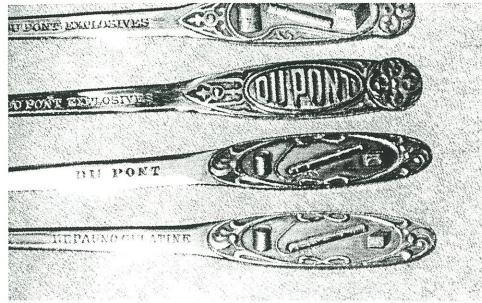
Mining-related Letter Openers

Bob Schroth

While out hunting for mining lamps and other items, I always look in the small dealer cases. Some times I am surprised by what I find. In the past few issues of Eureka I have written about some of the unusual mining and blasting related things that I have found.

One of the most attractive items that I have been collecting, are the powder company advertising letter openers. Many companies gave them out as giveaways. DuPont Powder Co. by far has the most attractive, and unusual styles. Several markings are known, stamped on the blade of DuPont letter openers. I believe most are for the different types of powder they sold. One exception I have found is one marked Memphis 1913. The opener is marked DUPONT on the handle, the blade is marked DuPont on one side and DuPont Explosives on the other. This model has the powder keg and the powder box both marked Dupont. The other styles have Dupont marked on one side of the blade and powders such as Giant, Repauno, Atlas, Hercules stamped on the other. I am sure that there are others. Do any of the readers have other powder types stamped on their letter openers? I have found only one style of Giant Powder Co. opener. I have not yet found a good reason for the Dimpled serration's in the open handle of the opener. I have been told that this was for canceling stamps, but the post office does that. Another reason given was to help seal the letter





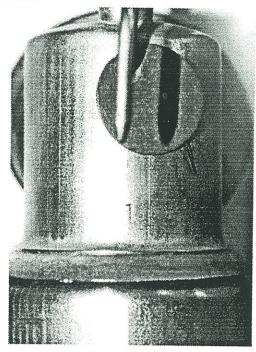
before sending, but that seems unlikely also. This device was important enough to be "Pat. May 17, 95". Anyone know what this was for??

I have found one coal company opener, the logo shows a miner wearing a oil wick lamp on his hat and has a knife blade that folds out of the handle.

Strange Numbers on Pennsylvania Lamps

Dave Thorpe

For as long as the early Victor lamps have been rediscovered by collectors, it has been noted that each has a number stamped into the back of the water tank. The two numbers that have been brought to my attention are"1" and "3". Chuck Young once speculated that they may relate to the degree of tilt on the reflector. Then, not too long ago the "ACME" cap lamp was reported. This is a lamp that is identical to the Victor except for the reflector being centered and straight up and down. Wouldn't you know it: it had the number "2" stamped in the same location beneath the hook in the back of the lamp. Certain structural characteristics suggest that these lamps were made by Hughes Bros. of Scranton, PA.² If not made by Hughes, the style is nonetheless classic eastern Pennsylvania.

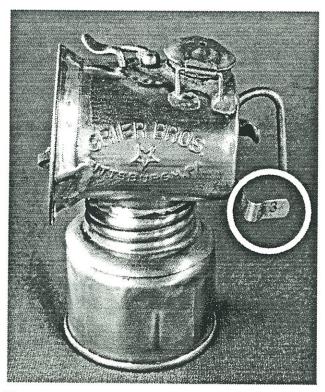


The number "1" is stamped into the back of this early Victor lamp. (looped over the hook is disc with tip-cleaning wire found on Victor and early Baldwin lamps. (Dave Thorpe collection and photo).

I began to notice that various Grier (Pittsburgh, PA) lamps were also stamped, but these numbers were located near the outside ends of the cap braces. I have seen the number "3" on a horizontal Grier and "5" and "2" on a vertical models.



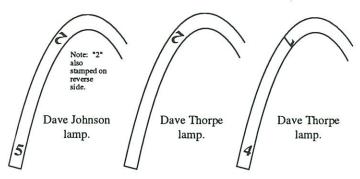
Vertical Grier with the number "5" on cap brace. (Keith Williams collection, Dave Thorpe photo).



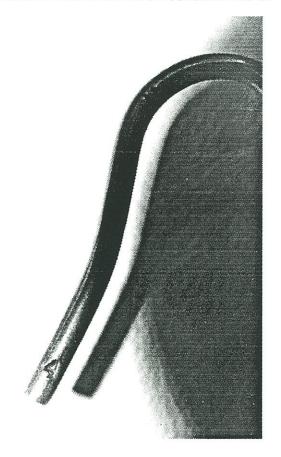
Horizontal Grier with the number "3" on the cap brace. (Dave Thorpe collection and photo).

Mike Puhl has told us that he once removed the hook and solder from the back of a Pathfinder. Lo and behold, there was a single digit number!

I'm not able to examine many Scranton brand lamps with original fittings, but the two I own, as well as one in Dave Johnson's have numbers stamped into the hook itself. Some lamps have one number, others have two or three numbers on their hooks. Bob Schroth owns a Scranton with no numbers. The various stampings are shown below.



Numbers and locations on Scranton hooks.



Closeup photo of a Scranton hook showing stamped number "4". (Dave Thorpe collection and photo)

What all of these lamps have in common? They are all from Pennsylvania manufacturers. I have never seen a number stamped on a non-Pennsylvania lamp with any regularity. As to what these numbers signify, I have not the slightest idea.

References:

- 1. Acme Cap Lamp, *Eureka!*, (1994) Issue 9, p. 27.
- 2. Victor-Acme-Pathfinder, *Eureka!*, (1994) Issue 12, pp. 29-35, David J. Des Marais.





Scranton (top) and Victor (bottom) lamps (Dave Thorpe collection and 35mm photo)

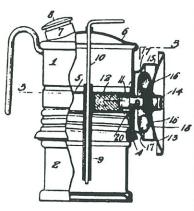
The Bell Reflector

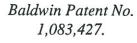
(and its relatives)

Dave Thorpe

I'f you've collected cap lamps for a few years, chances are you have come across this set-screw reflector that is shaped like a bell. Although I have never seen an advertisement for it, its appearance on several unfired lamps establishes it as a Shanklin (Guys Dropper) product.

Various collectors have described it as a blaster's reflector, supposedly designed to keep the flame from blowing out during and explosive shock. This lore is in part due to the four small holes its face which outwardly resemble the appearance of a patented perforated reflector system specifically intended for that purpose.







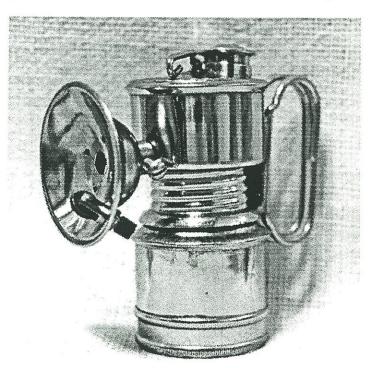
A ZAR lamp with perforated reflector.

The patent illustration shows a lamp resembling Baldwin's ZAR lamp. Most ZARs have holes in the reflector, but in this patent, they are used as channels to an elastic air bag hidden behind the reflector. When a blast occurred, the shock wave would compress the bag, and force air into the burner tube behind the flame giving it the extra surge needed to overcome the blast which otherwise

would have driven the flame back into the burner, extinguishing it. No examples of this patented device have yet surfaced. Unfortunately, the Shanklin reflector is not equipped with an air bag. Its perforations are all that is shared with the Baldwin patent While collectors may describe this as a "blaster's reflector", its function must serve another purpose. In all likelihood, the bell reflector was designed to keep the flame protected and burning during windy conditions.

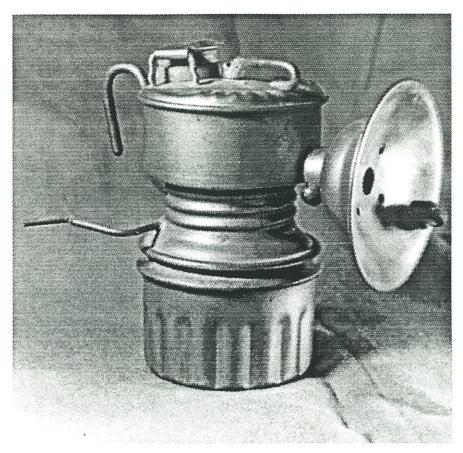
An enclosed reflector makes sense, but why the perforations? An understanding of the Venturi effect provides a possible answer. When air is blown through a chamber that is larger than the stream of gas, the air pressure is reduced within the chamber. An application of this principle is found in the ordinary carburator, where the reduction of pressure is used to "suck" a stream of gasoline into the flow of rushing air.

The problem with an encosed reflector is that the lowered pressure within it would distort the stream of acetylene



Guys Dropper superintendent's lamp with bell reflector (Dave Johnson collection and photo).

and disrupt the flame. Solution: perforate the reflector so that outside air can be drawn in to equalize the pressure. The holes are small enough to keep the wind out, but large enough to keep the pressure normal.



Guys Dropper cap lamp with bell reflector (Dave Thorpe collection and photo).

Examples of the Shanklin bell reflector are shown here. The unfired cap lamp shown above is of interest in that it deviates from the general rule that Shanklin set-screw lamps seem never to be equipped with cap braces. I have queried others regarding their cap lamps with bell reflectors and found that they too have cap braces. Perhaps the extra swinging weight of this relatively heavy reflector warranted some extra support.

I know of only three reflectors with holes in their reflectors. The ZAR and the Shanklin bell have been mentioned. The third is seen on Baldwin lamps with the deep-dish reflector. While most of the deep dish models did *not* have perforations, later examples did. There must have been an advantage to having these holes in a single surface reflector. To understand what that may have been, consider that the deep-dish reflectors were primarily designed to protect against windy conditions. Imagine a strong air current blowing across the face of such a reflector. By the Venturi effect again, the air pressure within the

concavity would have been lowered, not by the acetylene stream, but by the wind 'current itself. This reduction in pressure would draw the wind into the bowl creating turbulent conditions and an erratic flame. A perforated reflector, however would equalize the pressure and keep the wind out.

A final question comes to mind as we return to the ZAR lamp with its perforations in a flat-faced reflector: why? Perhaps this lamp was originally designed for the elastic air-bag, just as shown in the patent illustration. Baldwin may have been overly ambitious in his hopes for a device that never saw production. But the dies had been formed and the external lamp produced just the same. Perhaps the air-bag itself was intended as an accessory. We may never know. But as I sit sometimes and look at lamps on the shelf and their peculiarities, I cannot help but wonder.



Baldwin cap lamp with perforated deep dish reflector (Dave Thorpe collection and photo.)

The Friemann & Wolf Warning Lamp

Werner Horning

and constructed a universal in spection lamp for all enterprises with danger from gas or bad air. The safety lamp is fueled by benzine, and ignited with a pull rod attachment and a small dry-cell battery. Also included is a battery cap lamp attachment. At the point of attachment, this connection includes a photo-cell. The electric cap lamp includes a transistor and relays as well as accumulators.

When the safety lamp is lit, the electric cap lamp responds. The light from the flame safety lamp switches a contact in the accumulator, and the cap lamp is lit.

The safety lamp responds to bad air or a lack of oxygen by flickering, reducing the light that is generated, and this effect is also transmitted to the cap lamp, warning the miner of danger.

The electric cap lamp may even go out, warning the miner to leave the zone of poor oxygen immediately. By pressing a button at the accumulator of the cap lamp, the miner has light again to leave the place safely.

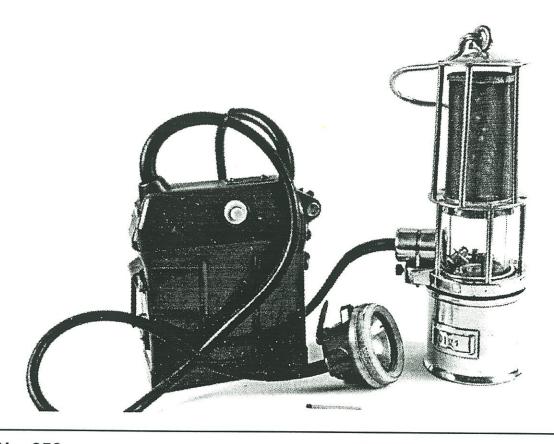
In normal air, the flame safety lamp can be ignited again and the com-



bined inspection lamp is ready for gas testing.

In case of the presence of methane, (CH₄) the safety lamp works like a

normal safety lamp. The height of the fire-damp cap shows the percentage of methane.



No. 359

Class of Lamp: Composite Safety Lamp Type 20601/Benzine Safety Lamp No. 20502 combined with modified Accumulator Cap Lamp Type 1410

Place and Country of Origin: Suisburg/Westfalia, Germany

Manufacturer: Friemann & Woolf

Material: Safety Lamp: All Brass

Accumulator-Lamp: Plastic

Dimensions of Safety Lamp:

Height: 292 mm Diameter: 87 mm Length of Hook: 130 mm

Dimensions of Accumulator Cap Lamp:

Length: 135 mm Width: 55 mm Height: 170 mm

Year of Production: ca. 1955

Features of Construction of the Safety Lamp: Upper air inlet. filament ignition which is fed by a dry-cell battery, and works by pulling rod. double gauzes. Magnetic locking anchor. **Specialty:** Device to press a photo-cell against it, which is connected with the accumulator of the cap lamp.

Features of Construction of the Accumulator Cap Lamp: Magnetic. double cell silver zinc-accumulator 3V, 6A. Switch at the cap lamp. Two filament bulb.

Specialty: A transistor and two relays are housed in the middle part of the accumulator box. In case of poor oxygen causing a small flame, the photocell sends a signal to the cap lamp and it begins to flicker and it will be extinguished soon. It is a warning of danger. By pressing the push button at the accumulator, the cap lamp lights again.

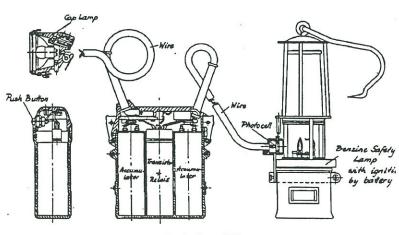
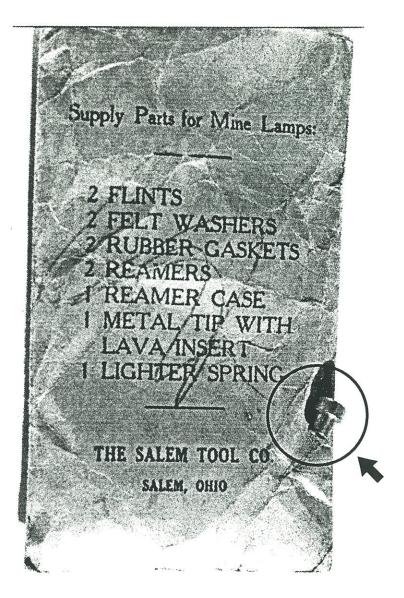


Fig. 1: FW Warning Lamp 20601 Friemann & Wolf GmbH, Duisburg, Germany



Another Carbide Lamp Mystery

Mike Puhl has a positive talent for finding odd bits and parts for carbide lamps that no one has ever seen before. His latest find is the spare parts envelope and burner tip shown here. Now, a number of companies, such as the Chase Co. of Connecticut, are known to have manufactured spare parts for various name brand lamps.

This may be another example of that sort, perhaps a sideline for the Salem Tool Co. But that burner tip is of a unique design, and the editors agree we have never seen anything exactly like it. Paleontologists would take a piece of bone or a tooth no bigger than this, and try to reconstruct an entire new dinosaur from it.

Anyone care to speculate on the existance of a Salem Tool Co. carbide lamp?

Imperial Collector's Notes

Readers may remember that in a previous issue, I noted a distinct design difference between the X-Ray and Imperial carbide cap lamps. I have received at least one confirmation, from Jim Ewing, that his Imperial cap lamp does indeed have the word "PATENTED" stamped closer to the edge of the lamp top than a comparable X-Ray lamp. Jim's lamp has another unusual feature, a set-screw reflector with no reflector brace. We hope to feature these lamps in a future article.

Copper and Brass Oil Wick

The only other one like it is Dave Johnson's. He doesn't know anything about it. It's very well made and was used at some point because it has fuel residue in it. The hook rotates 90 degrees to expose a spike. The top has a vent similar to an M & O oil wick. Anone know anything about it? U.S. or European? (J.R. Mitchell)

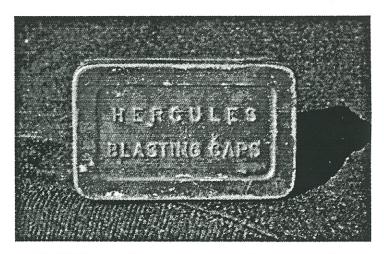
Ribbon

The ribbon reads: "Miners Lamp Brotherhood of America:. No one I've spoken to knows anything about it. Maybe some one else will. None of the printing on the ribbon is readable. (JRM)





Early Hercules



Todd Town submits this photo of the very early (first?) Hercules cap tin which he purchased in Scottsdale, Arizona.

Water Light

I know this is not a mining lamp but I came across this lamp a few years ago in a picture that was given to me by a tin collector. I had talked with an elderly lady this summer in Montana that had originally owned it and had found it in Butte, Montana in an old mine supply building some years ago. She had sold it to a party in Seattle, Washington, and after some years, I have finally been able to acquire it for my collection. Does anyone know if this lamp was listed in any of the mine supply books? Since this lamp originally came from an old mine supply stock, was it used in emergency cases in the mine? And what I would like to know is what the inside parts look like so if anyone has one that has been opened, I would like to know what the parts look like.

Dimensions are: 9 3/4" tall by 5" wide. 3lb.

The wording on the can says:

THE WATER LIGHT FIREMAN'S SEARCH LIGHT THE MARINE TORCH COM-PANY

ALWAYS KEEP OUTSIDE CAN FULL OF COOL WATER ADD FRESH WATER EVERY 15 MINUTES



DO NOT TAMPER WITH TOP OR BOTTOM WHITE SEAL UNTIL READY TO USE.

DIRECTIONS HOW TO USE

1st PULL OFF WHITE SEAL TOP AND BOTTOM, BIVE ONE STADY PULL
2nd FILL THE OUTSIDE CAN HALF FULL OF WATER
3rd PLACE THE CYLINDER INSIDE OF CAN AN DFASTEN HOOK TO HOLD LIGHT FIRM
4st POUR SOME WATER ON TOP OF BURNER

P.S. Also on the bottom it has a pull ring as it shows one on the top an don the back there is a ring that is for hanging. This lamp does not have a date on it. But it was patented so if someone knows the date it was made I would like to know. Thank you. Scott Brady, HCO 1 Box27, Pinehurst, Idaho 83850 (208) 682-2580.

Book Reviews

HISTORY OF THE COAL-MINING INDUSTRY OF OHIO

Author: Douglas L. Crowell Published 1995 by Ohio Dept. of Natural Resources, Division of Geological Survey

In this 203 page work we see the history of coal mining in Ohio from 1800 through 1993. What is particularly appealing about this book are the 220 photographs, the quality of which are excellent, dealing with all aspects of coal mining in Ohio. Among other subjects are covered mine lighting, mine animals, tools and techniques, child miners, coal transportation, tipples, underground and surface mining, wages and unions, catastrophes and disasters.

There are more than 20 pages of tables and charts dealing with coal production, as well as 3 pages of old advertisements.

This is not the usual dull and dry government publication, but rather a comprehensive history of coal mining. The text humanizes the miners and their families, giving facts and details relevant to everyday life of the miner. I thoroughly enjoyed this book and recommend it to all students of mining history. Thanks to Roger Mitchell for telling me about this new publication. (D.B. Johnson)

Every once in a while, a state puts out a book that is a must have. This book is one of them. The author does an excellent job of putting over 100 years of coal mining in Ohio into a book which is over 200 pages long and soft bound. It covers every aspect of mining from drag lines to animals, transportation to structures. And yes, there's plenty of lamps. The photos are all old and clear. Even without the text, the pictures alone are worth the price. You'll find yourself reading more than the captions though. There's lots of good information here. The author did his homework and research. It's not definitive book about Ohio's coal mining history but a brief overview. As with any book, to tell the whole story would take several volumes. The author does a nice job of consolidating Ohio's coal mining history into an excellent book suitable for any coffee table. You'll find yourself picking this book up more than once. At under twenty dollars, it's money well spent. It's available at the following address: Division of Geological Survey, 4383 Fountain Square Drive, Columbus, Ohio 43224-1362, (614) 265-6676. (JRM)

This book is available for just \$12, plus \$3 postage by calling (614) 265-6576 or by writing:

Division of Geological Survey Ohio Dept. of Natural Resources 4383 Fountain Square Dr. Columbus, OH 43224

MINING TOWN: The Photographic Record of T. N. Barnard and Nellie Stockbridge (from the Coeur d'Alenes)

Authors: Patricia Hart and Ivar Nelson Published by University of Washington Press

Through the camera lens of pioneer photographers Thomas N. Barnard and his assistant Nellie Stockbridge, who later took over his studio, we see the mining towns of Wallace, Gem, Wardner, Burke and Kellogg starting in 1887. Featured are 110 photos of the mines, towns and

people of the Coeur d'Alene region of Idaho taken by these photographic pioneers.

Documented in photos is the Coeur d'Alenes beginning as a gold mining region and its development as a silver and lead mining region. The authors describe the development of the region's mines and towns, the labor disputes, the politics of the region and local businesses.

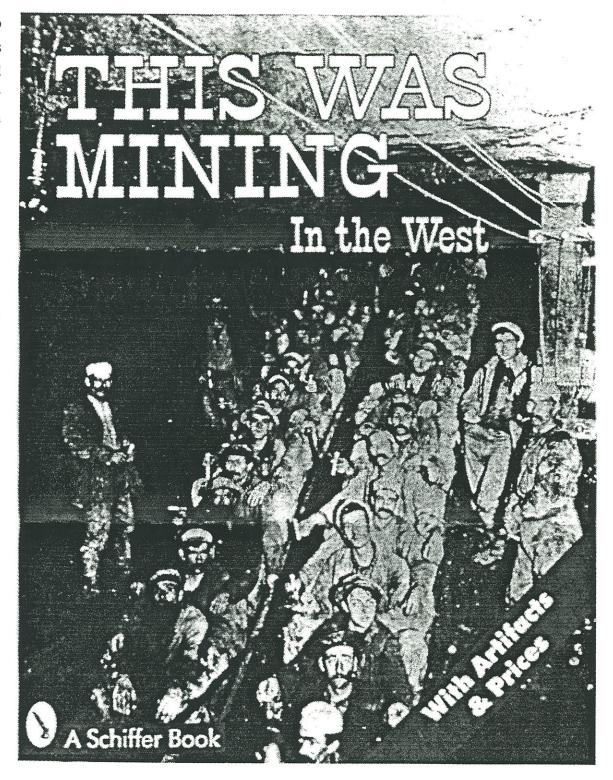
I recommend this book to anyone interested in mining history, especially the Coeur d'Alene area. The magnificent photos alone are worth the price of the book. (DBJ)

Book Review

Bob Schroth

On my last trip up to Errol Christmans Mining show and sale, I was lucky enough to meet the author of a very interesting book written by David W. Pearson. The book is called This Was Mining In The West. Published by Schiffer Publishing Ltd. 77 Lower Valley Road, Atglen, PA 19310.

The book covers mining camps mostly in the states of California, and Nevada, with light coverage of the other western states. The book is printed on a high grade paper and has over 165 pages and a small price guide on mining artifacts. The best part of this book other than the history text, are the photos taken from the Ron Bommarito



collection. They are reproduced in large and excellent quality, most have never been published before. This book is well worth

the price, about \$25.00. I bought the book after just a quick look. If you have a interest in western mining and mining camps, I think you'll love this book.

Interesting Trademark

On May 2, 1902, Thomas Crowley of Lambertsville, New Jersey received a registered trademark for TUN-NEL Brand rubber boots and shoes. This trademark features a pick, shovel and soft miner's cap with an oil wick lamp. (DBJ)

Telephone Code Sign

This 11" x 18" white on blue porcelain sign was used in the Bunker Hill Mine, located at Kellogg, in Idaho's Coeur d'Alene District. Originally discovered in 1885 by Noah Kellogg, the Bunker Hill Mine, owned by the Bunker Hill and Sullivan Mining Co. was to become the most successful mine in the Coeur d'Alenes. (DBJ)

FOREMEN	- 2 LONG
ELECTRICIANS	- 6 LONG
	- 2-2-2
MACHINISTS	
MUCKING MACH. REP.	-1-2-1
NUMBER ONE HOIST	- I LONG
MAY RAISE HOIST	- 3 LONG
AUXILIARY HOIST	- 4 LONG
19 WINZE HOIST	5 LONG
WHITE RAISE HOIST	- CALL OPERATOR
CHERRY HOIST	_ 11 11
19 WHITE RAISE	-1-3-1
STATION CALLS ARE TI SIGNALS-FOR EXAMPLE	

38,218. BUBBER BOOTS AND SHOES. THOMAS CROWLEY, Lambertville, N. J. Filed Jan. 13, 1902.



The word "TUNNEL" and the pictorial representation of a miner's cap, lamp, and tools. Used since December 23, 1901.

United Mine Workers Of America Belt Buckle

This small brass UMWA belt buckle measures just 1 1/4" x 1 1/2". The April 1, 1898 date commemorates the date of the first instance of an eight hour day being won for UMWA members, under the UMWA's fourth National President Michael Ratchford. (DBJ)



German Miner's Coin

This aluminum alloy 25 Pfenning coin is dated 1920, during the Weimar Republic following World War I. The obverse features a helmeted miner with a pick and Gluck Auf. The reverse states STADT WATTENSCHEID, 25 PFENNING, 1920. This is one of 3 different 1920 German coins featuring a miner that I have received from a German collector in trades. (DBJ)



French Mining Ashtrays

Unlike most mining related ashtrays these two brass French pieces are not advertising anything. Both are stamped FRANCE in one of the cigarette grooves in the lower right hand corner and both are stamped 1945 on the back. These brass mining motif ashtrays may have been produced at the end of World War II by the burgeoning cottage industries that found uses for the scrap metal left by the war, especially brass shell casings. (DBJ)



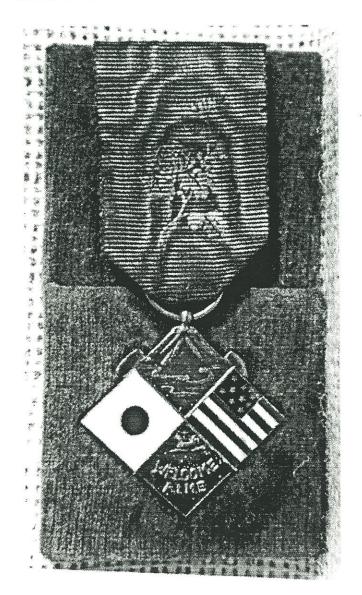


Advertising Paper Clip

This brass spring-loaded paper clip was used as advertising by the F.P. Weaver Coal Co. of Buffalo. What makes it attractive as a mining collectible is the figure of a miner with a pick and smoking oil wick lamp on his hat. (DBJ)

AIME Medal

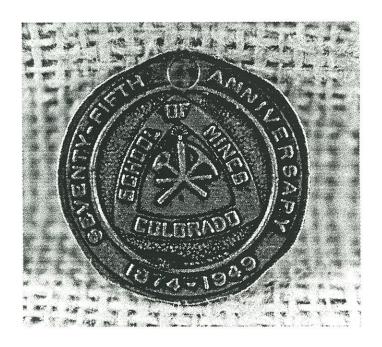
This sterling silver and enamel medal features a crossed pick and gad with American and Japanese flags. There is a picture of Japan's Mt. Fuji above the WELCOME AIME. The back of the medal says CHIKUHO COAL MINING ASSOCIATION, NOVEMBER 1911. The medal hangs from a blue pin-back ribbon with a gold flower. (DBJ)





75th Anniversary

This brass medal commemorates the 1949 75th Anniversary of the Colorado School of Mines in Golden. (DBJ)



37



TRADES & SALES



RATES

All classified ads up to 75 words are free to subscribers. For subscribers, quarter-page ads are \$25, half-page \$50, and full-page ads \$95. The fee for non-subscribers is \$15 for ads up to 75 words. For larger ads, add \$25 to fee for subscribers. Fee includes custom computer layout.

Higher prices wil not be published. Contact seller for prices if not listed.

No reproductions of any type will be knowingly advertised unless so stated.

No member of the staff will act upon an advertisement in EUREKA! prior to its mailing.

CONDITIONS

Ads must be submitted for each issue in which they will appear. Send all ads to Jim Van Fleet prior to Dec 10, Mar 10, Jun 10, and Sep 10 for publication in the following issue. Ads are accepted on a space available, first-come first-served basis. We reserve the right to refuse any ad. Eureka! assumes no responsibility or liability for the contents of ads; however, every effort will be made to assure a high standard of honesty in advertising.

If any advertiser is contacted about an item in their ad prior to the publication being mailed, they are asked to report the incident to the Managing Editor. Remember that it is to the advertiser's benefit to wait until Eureka! is in the hands of all subscribers before disposing of a trade or sale item. Please keep in mind that a trade or sale conducted through the mail is not complete until both parties are satisfied!

Wanted: Telescope and tripod. Mining items for trade. Ken Rupp (814) 944-9307, 6 to 9 PM EST only.

Books for Sale: King Coal: A Pictorial Heritage of West Virginia Coal Mining by Cohen \$11.95, Video: The Streets Were Paved with Gold: The Klondike Gold Rush 1896-1899 \$29.95, Fire in the Hole: The Untold Story of Hardrock Miners by Dolph \$30.00, Gold Rush Gateway - Skagway and Dyea, Alaska by Cohen \$10.50, Gold Mining in the Upper Peninsula of Michigan by Fountain \$14.95. Postpaid in the USA Send \$1.00 for complete book catalog. Robert Fox 1235 N. Westfield Street, Oshkosh, Wisconsin 54901.

For Sale: Mining Books, Mineralogy Books, Mining History Books. Send large SASE with 55 cents postage for list. Russell Filer, 13057 California St., Yucaipa CA 92399.

Books for Sale: Technical and historical books on coal and metal mining, AIME Transactions volumes, explosives and carbide company letterhead, etc. For listing please send SASE (32 cents postage) to Dale Richards, 7582 Quarry Rd, Alburtis, PA 18011.

Ore Cars: for sale or trade. One Atlas rocker dump, 24 gauge, in good working condition, one C.S. Card, type Z end dump, 18 gauge, in good working condition. Bob Werner, 835 East 2800 South, Price, Utah 84501, (801) 637-6588.

Blasting Cap Tins for Sale/Trade: Graham Living, POB 292, Millsboro, DE 19966, (302) 934-8273 - 7PM to 10PM EST. e-mail: Graham7117@aol.com.

Wanted: Atlas, DuPont, Hercules blaster's handbooks. Ronald A. Champeau, 100 Indian Run Rd., Bellingham, Mass 02019 (508) 883-8026.

For Sale: Over 240 lamps and related items, Pocahontas, Gee-Bee, Hansen flask, 3 compartment Hardsocg Flask, Presentation safety lamp, miniature oil wicks, candleholders, etc. Call or write for complete list. Mike Puhl, 6527 E. 90th St., Tulsa, OK 74133, (918) 493-1169.

Wanted to Buy: Carbide cap lamps. Cast iron lamps by W.E. Wells. Have a number of rare cap lamps for trade. Call collect if you have items for sale: Dave Thorpe (602) 548-1959.

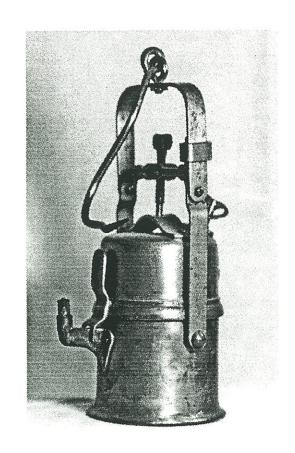


Wanted: Elkhorn base. Robert Samay, 712 Alta Vista Dr., Pacifica, CA 94044.

Wanted: Bottom for Guys Dropper Square Lite cap lamp. Sun Ray cap lamp lens, bottom an dwater door. Lens for a Simmons Pioneer cap lamp. Push on lens for a Baldwin "pinch-waist" supervisor lamp. Scott Brady, Hcol Box 27, Pinehurst, Idaho 83850. (208) 682-2508.

For Sale: MINER'S QUEST --- Supplier of Mining Antiques & Collectibles and Mining Historical Data. MQ will print a minimum of 6 catalogs in 1996 (subscription \$10). Write or call: Miner's Quest, West 3015 Weile, Spokane, WA 99208. (509) 327-2897.

Wanted: Reflector for this German carbide (right). It's a Wilhelm Seippel - Bochum carbide and the reflector mount is 7/8" wide. New, used or repro is acceptable. Also wanted: Wolf 8 hr. carbide hand lamp, Dupont hand blaster, aluminum cap crimpers an dscatter tags. Roger Mitchell, 547 Fairview Ave., Media, PA 19063-4901.



TUCSON '96 2nd Annual Mining Collectors Dinner & Auction

during the

<u>Annual Tucson Gem & Mineral Experience</u>

When:

Saturday

3 February 1996, 5:00 pm

Where:

El Parador Mexican Restaurant

2744 E. Broadway Tucson, Arizona

What:

Buffet Dinner & Auction

Cost:

\$15.00 per person, by 27 Jan 96 \$17.00 per person, after 27 Jan 96

For More Information Contact:

Jane Becksted (520) 792-0645 Don Dalton (520) 297-3001

WANTED TO BUY MINING MEMORABILIA



MINERS LIGHTS, FLASKS, SAFETY LAMPS, CAP TINS, MINE RELATED ITEMS -NO TOOLS-

CALL: 814-944-9307 AFTER 5PM ALTOONA, PA

Sale or Trade:

Carbides: Force Feed, ITP inspectors cap lamp, Baldwin, Buddy

Oil: Liberty, Leonard, Chirry, Brass Trethaway, Grier Bros, Hussen BB, Aluminum, Hunt & Connel (Pat. Apld. For)

Misc.: Dupont 10 cap blaster, Hazletin box, Leader hip, Cork powder, Scranto botom, Gold and Silver Medal tins, Galvanometer, wolf cannister hand lamp, Arrow reflector and botom, much more!

Trade Only:

Queen compass (tripod and wood box), K&E staff compass with wood box, U.B.C. Everheart Brass Works (intermediate size), U.B.C. John Mills (intermediate size), E.E. Inc. sight level in leather case.

Wanted:

"The Buddy" base, Springfield lamp, Maumee Duplex, N.P. Buddy, Marked Squib boxes, good carbide lamps, Sure Lite, early Guys Dropper. Every weekend I search the Pennsylvania flea markets for mining antiques! Here are a few items for sale.

Nelson Ressler

151 State St., Ephrata, PA 17522 (717) 733-7721

- 1. Oilwick carved from anthracite coal-complete and in excellent condition
- 2.Brass Trethaway Bros., Parsons, PA oilwick-very good condition 3.Tin Crown oilwick with brass domed lid w/ patent dates around
- perimeter-v, good cond.
- 4.T.F. Leonard slope-sided oilwick, tin with brass collar-good condition
- 5.T.F. Leonard slope-sided driver oilwick, tin w/ brass collar, oval shield
- on spout-unfired
- 6. Sheet Metal S. & Mach. Co. oilwick, tin-very good condition
- 7.Baldwin carbide cap lamp-very good+ condition
- 8.Unmarked fireboss davy lamp with hourglass bottom, missing lower gause-ow
- v.good
- 9.Steel Koehler, tall, key lock, mint, unfired in orig. box w/ instruction sheet and fuel door removal tool
- 10. 48"x12" UMWA 1906 Indianapolis convention photograph, framed & in nice

condition

- 11. Hercules No. 6, Keep Dry, 100 count-excellent cond.
- 12.M.C. Mfg. Co. No. 6, New York, square, 100 count-excellent cond.
- 13. Fort Pitt, 100, No. 6-good condition
- 14. Canadian Explosives, No. 6, Round-very good condition
- 15.DuPont No. 6, 25 caps, style "B"-good condition
- 16. Trojan, No. 6, 100 count-excellent condition
- 17. Trojan, No. 7, 25 caps-excellent condition
- 18.Hercules No. 6, round, var. 1 (dark brown &white)-good condition
- 19.Hercules No. 6, round, var. 3 (yellow & black)-very good to excellent

condition

- 20.Hercules No. 6, 25 caps, round, var. 1 (dark brown & white)-good condition
- 21. Atlas Chemical Industries, No. 6, 100 count-excellent condition 22. M.C. Mfg. Co. No. 5, N.J., 100 count-good condition
- 23.Brass Anaconda paperweight; "Anaconda Brass Works" & "From Mine to

Consumer" cast into base. Vertical, 3-d arrowhead mounted on top of base-very good

condition

24. Copper cup with "Montana School of Mines, Butte Montana" and a building embossed on side-excellent condition

Mining-Collect

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dthorpe@primenet.com

Sale-Trade: 1937 Mine and Smelter Supply Co. catalog. Len Gaska, 725 Hermes Circle, Lafayette, CO 80026 (303) 604-2875.

For Sale or Trade: Oil Wick Lamps, Updated list. Still not enough room todisplay all my favorites. Grier Bros (4), Beall Bros. (2), Geo. Anton (4), Anton Liberty, Chirry, Trethaway (3), Dunlap, American Mining Tool, What Cheer, Husson (2), Hunt & Connell, and others. Candlesticks, L.A. Sayer and Son, Blacksmith (2), Ramstead and Johnson folder. Bob Guthrie, PO Box 3725, Dillon, CO 80435, (970) 468-0405. SASE appreciated.

UPCOMING EVENTS!!!

Great Western Fossil Show Feb. 1-10, 1996 Tucson, Arizona

Brad and Linda Ross'

FOX HILLS FOSSILS

Room 141 Quality Inn, Tucson, AZ

OPEN FOR FOSSILS SALES: Thursday Feb. 2, 1995 at 10 AM

FOR MINING ARTIFACTS SALES: Friday Feb. 3, 1995 at 10:00 AM

(Hard to believe, but we should have even more artifacts than last year! - Where will we put them all?)

ANNUAL

BLACK HILLS

MINING COLLECTORS
CONVENTION

Lead, SD - June 1-3 at the Golden Hills Resort FRIENDS GATHER FOR FUN, FOOD, TOURS, and an AUCTION.

> For more information contact:: Keith Schillinger (605 584-2430) Al Winters (307 683-2403) Chuck Tesch (605 584-2382) Brad Ross (307 686-7070)

See Friends, Buy-Sell-Trade, Underground-Surface- Museum Tours, Auction and Banquet. Call now for information and to Register early. DON'T MISS THE EVENT OF THE YEAR!!!!

Williams Minerals

Keith and Brenda Williams

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Dutch Hollow Road
Rio, West Virginia 26755
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Mining Antiques and Artifacts



Visit Our Booth During the Tucson Gem & Mineral Show

Tucson Convention Center - February 8-11, 1996

We Buy Entire Collections or Single Items

CASH PAYMENTS