

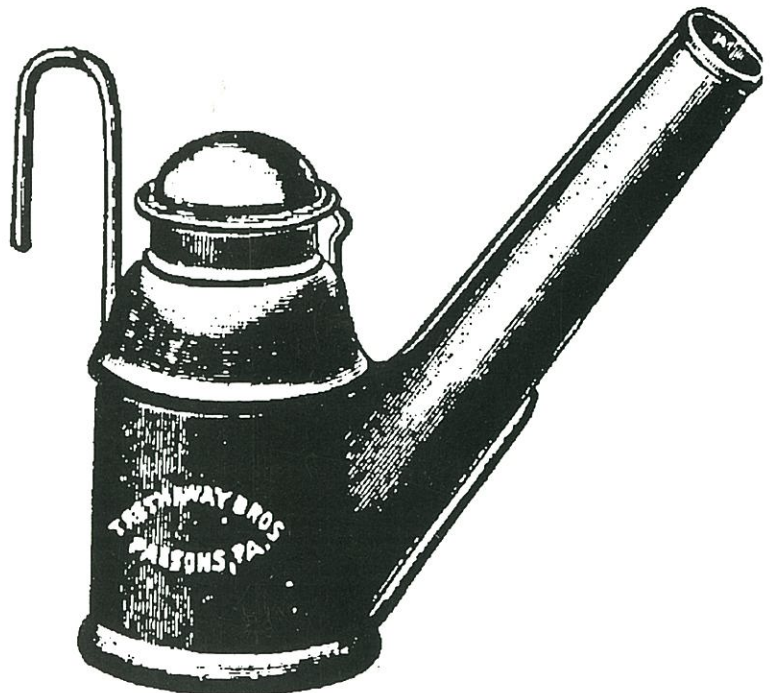
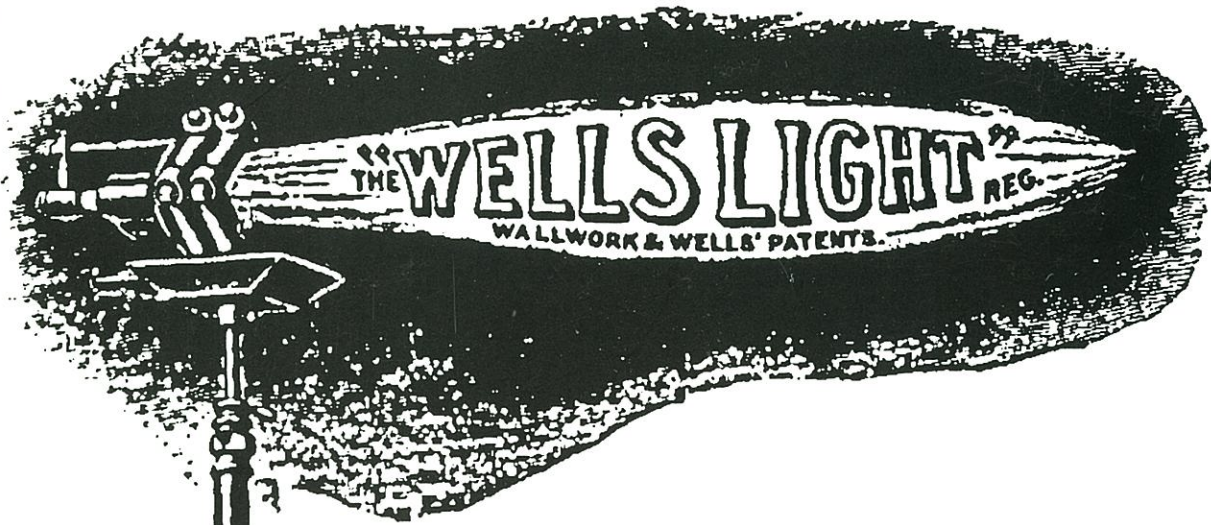
EUREKA!

THE JOURNAL OF MINING COLLECTIBLES

Issue 27



July 1998



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General Information

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EUREKA!

The Journal of Mining Collectibles

EUREKA!



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

Table of Contents

Shipwrecked Ingotsr	2-3
Bittenbender Catalog	4-7
Old photo	8
Rescue Helmet	9
Chas. D. Gordon	10-11
Oshkosh Carbide Lamps	12-13
Mule Power	14-15
Mine Signs	16-21
Unusual Common Named Oil Wicks.	22-23
Mining Costumes.	24-27
Hardsocg Co.	28-32
Bray Burners	33
Folding Stick	34
Bits	35-40
Advertisements	40-42

Front Cover: Photo by Steve Loftin



Letters

Calico

Issue 26's article on Calico by Bob Schroth took me back to 1956 when I was a small boy. We lived in southern California and visited Calico Ghost Town at its very beginning as a tourist attraction. I had to get out the old photos and postcards and look at them again.

Looking at articles about old mines being explored leaves me envious. When I was an underground coal miner my unit broke through into an old mine that had been closed since the 1920's. They had robbed about a mile of coal they didn't own and our company had no idea of it. It was dangerous because of the methane and blackdamp built up. After we ventilated, we looked through the hole. At the end of the tracks was an old coal car with a shovel leaning against it. Who knows what else was there? If only we could have gone in, but it was too dangerous. If only....!

John Foster
Okawville, Illinois

Blasters Handbooks

The information regarding the ISEE Blasters Handbook, 17th Edition was incorrect in your article on "Blasters Handbooks" that was included in your January edition. The correct information is included in the attached flyer. We would appreciate it if you would include this in your July edition [see page 41]. Please contact us if you need any other information.

Janis Davis
Publications Manager
Society of Explosives Engineers
(216) 349-4004

Corrections

We forgot to include the name of the person who wrote the article on Vented Oil Wick Lamps in the last issue. It was none other than Roger Mitchell. His articles have been among our best.

Additionally, we have been misspelling the name of our English correspondent, Mick Corbridge. Apology is given, for we had been spelling his name with two "O's". He was very kind in advising us of our repeated errors (probably thought we had been drinking too many Coors).

Frisco Colorado Scores Again

It happened on June 12-13th. Probably the best attended artifact show yet. Three Eveready lamps, a Justrite No. 77 Stick-lamp, and lots of fun. Our understanding is that the show will be in Colorado again next year, but a larger facility is in the works. Many thanks to Leo Stambaug and Bob Guthrie for putting it all together.

Call for Terms

The "Collector's Glossary" is due for a second updated edition. If you know of any technical mining terms, slang, or vernacular that collectors of mining paraphernalia should know, please send them to Bob Schroth or Dave Thorpe.

Shipwrecked Ingots Return to Original Mould

by Steve Smith

As more shipwrecks and their treasures continue to be salvaged, the collection of mining artifacts finds new grounds: the sea floor.

At 4 AM on 20th July 1885, the steamship "Cheerful" collided with HMS Hecla, a Royal Navy frigate. This happened 18 miles NNW of the Cornish port of St Ives in the Celtic sea. Cheerful was en-route from London to Liverpool with a cargo that included refined tin ingots that had been collected at Plymouth and Falmouth. The ingots had come from four local smelting houses - Treloweth, Carvedras & Trethellan in Cornwall and Tamar in Devon. Cheerful sank in four minutes, carrying her cargo 35 fathoms down to the sea bed. Thirteen drowned.

One hundred and ten years later, a friend of mine who is a local mining entrepreneur acquired the salvage rights to Cheerful. In 1995 he mounted a salvage operation at great expense to recover the tin cargo. This consisted of both 28 and 56lb ingots, as well as tin straws. At thirty five fathoms the divers apparently had only fifteen minutes on the sea bed for one dive each day, so it was quite an expensive business!

Ingots were recovered in various states from barely recognizable to looking like they were made yesterday. The poorer ones were re-melted and cast into small ingots bearing the marks of the smelting works the tin had come from, whilst the good ones found their way to collectors and museums. I have one from Carvedras, bearing the symbol of the lamb and flag, a Christian symbol of purity intended to symbolize the purity of the tin.

Whilst all this was happening in 1995, I took a trip, as I often do, to a local salvage seller. His stock consists mostly of old farm equipment and bits recovered from demolished houses that are re-usable. Lurking in a corner was what I recognized to be an ingot mould with a five pounds price tag on it. Although I knew what it was, at that stage it could have been a mould for any metal from anywhere. Picking it up, I strolled over to the proprietor who uttered words to the effect of "Oh yes! That's a handy little pig-feeder".

I returned home with the item and not yet realizing its true significance filled it with tap water and left it in the garden for the dog to drink from.

Three months later, a friend who has a deep interest in Devon mining paid a visit. As we walked around the garden he seized on the water-filled ingot mould. When I'd bought my Carvedras ingot, he'd bought one of the Tamar Smelting Works ones. I'd never seen a Tamar one as far fewer of these were recovered, but my friend was (almost!) prepared to bet money that my ingot mould was the same shape as the Tamar ingot back home in his lounge.

We put this to the test a couple of months later. We're both members of the Plymouth Mineral & Mining Club (he started it back in 1970) and both attended the 1996 Annual Dinner at the

Plume of Feathers pub at Princetown, a couple of hundred yards from Dartmoor prison. In the car park, I produced my mould and he dug deep in the boot of his car for his ingot. We dropped the 28lb ingot into the mould and it sort of fitted. However, turning it end-for-end allowed it to drop in convincingly with such a snug fit that we had a job getting it out again. It's probably my



over-active imagination, but I would almost say that mine is the very mould that this ingot was cast in all those years ago. Needless to say, the mould has now been promoted from its garden position into somewhere more secure!

I'd be interested to know whether news of the recovered tin cargo reached collectors in the US. I'd be very surprised if it hasn't!

(left) A Tamar Works tin ingot fits snugly in an original mold.

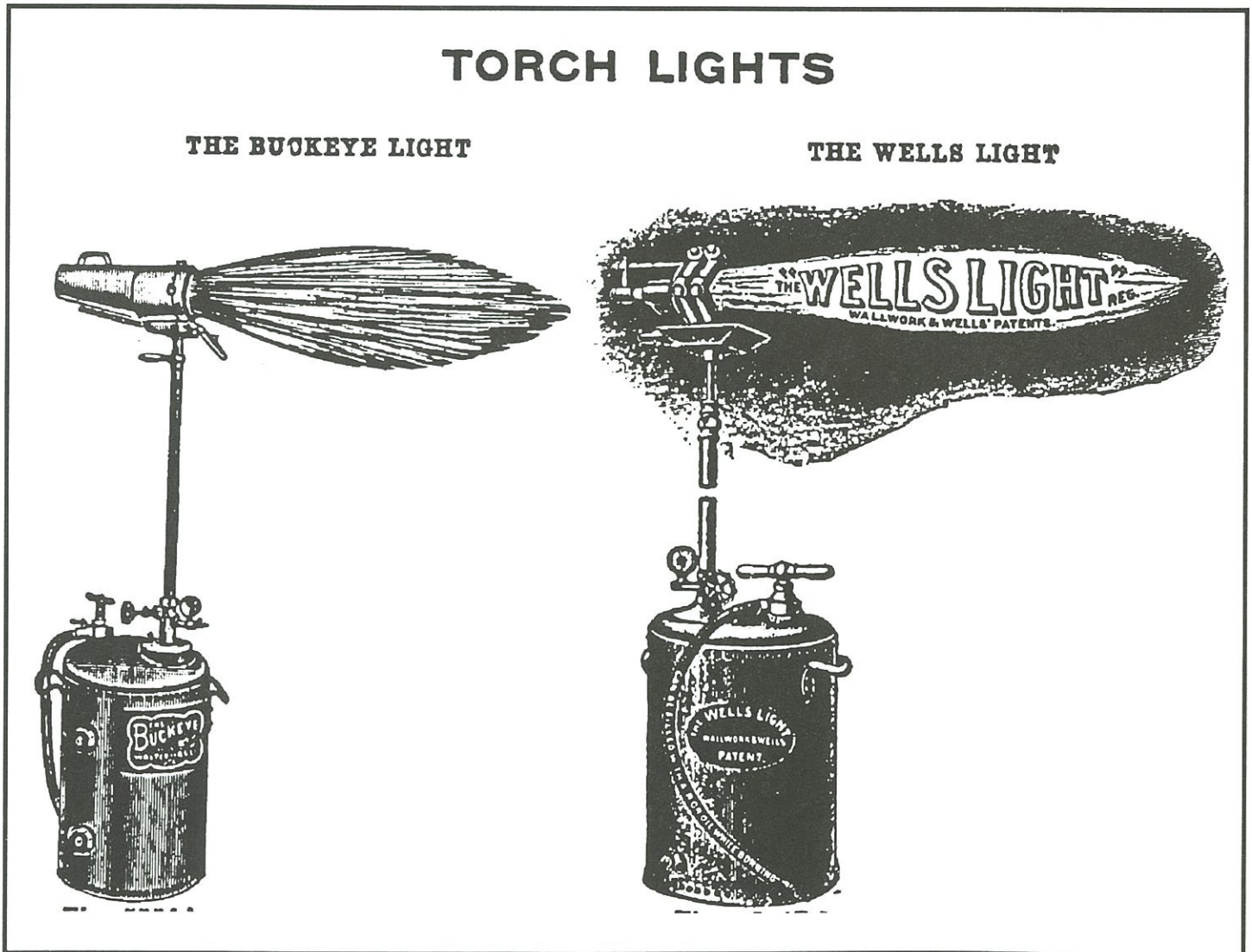
The Bittenbender Co. Catalog

by Tom Stranko and Dave Thorpe

A 1912 catalog from Scranton, PA...what a year! Miners' oil wick lamps were in full swing, and carbides were gaining popularity, and this catalog gives a glimpse into what this distributor offered the anthracite miners of Scranton.

Torch lights for the mines? Maybe not terribly popular, but they were advertised for mine use as well as other industrial applications. They burned oil, and by the looks of things, the flame shot out like a jet engine. Notice the Wells Light, of A.C. Wells fame, made in England. This model, unlike the Wells cast iron "unbreakable" lamps is riveted sheet metal. The advertisement logo would indicate this lamp was made by Wells along with Wallwork whose businesses were known to have mingled.¹

Several English distributors sold U.S. made mine lamps, and it is interesting to see literature showing American imports from abroad.



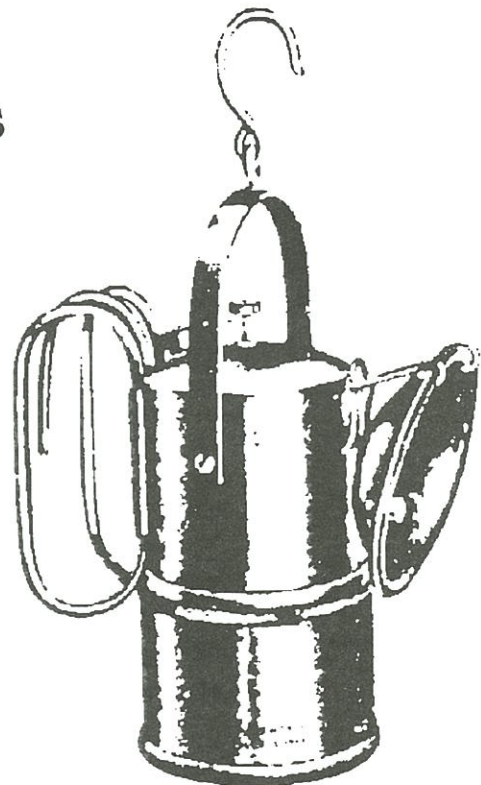
1912-issue Scranto Lamps



No. 1

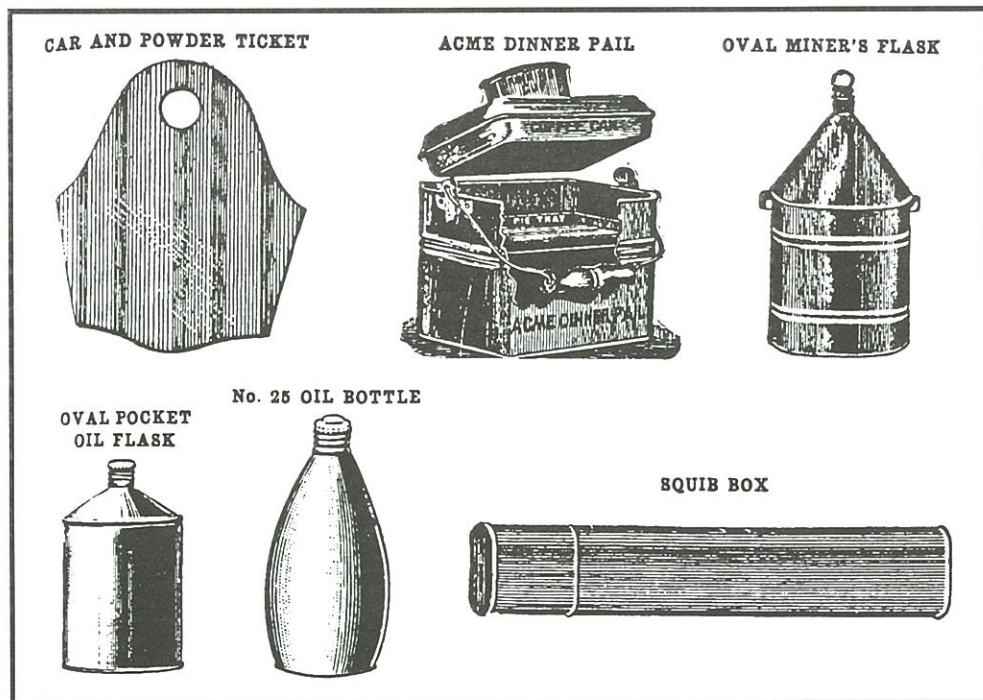


No. 2



No. 2 with bail

The “loop-in-hook” configuration for reflector attachment (a wire loop penetrating the tank) identifies this as a DesMarais classification Type III Scranto lamp. These lamps bear only the 1911 patent date, while later styles showed two dates including the 1914 patent. The 1912 issue of this catalog is consistent with other advertisements from Sept. 1912 to Feb. 1914 showing the same style lamps, and is consistent with previous assertions that the lamp was manufactured between 1912-13. (See EUREKA!, Issue 9, Jan 1994, p. 14-22).



CAR AND POWDER TICKET

ACME DINNER PAIL

OVAL MINER'S FLASK

OVAL POCKET OIL FLASK

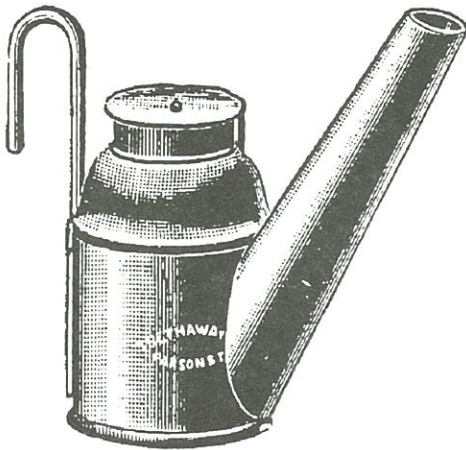
No. 25 OIL BOTTLE

SQUIB BOX

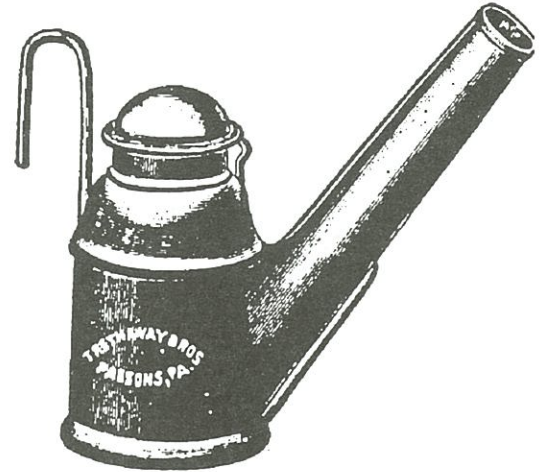
A smattering of the ‘lesser’ collectibles is seen in this cross-section. Acme was a popular name in Scranton and in mining. Perhaps a few Acme dinner pails will turn up to display beside the Acme carbide and oil wick lamps.

MINERS' AND DRIVERS' LAMPS

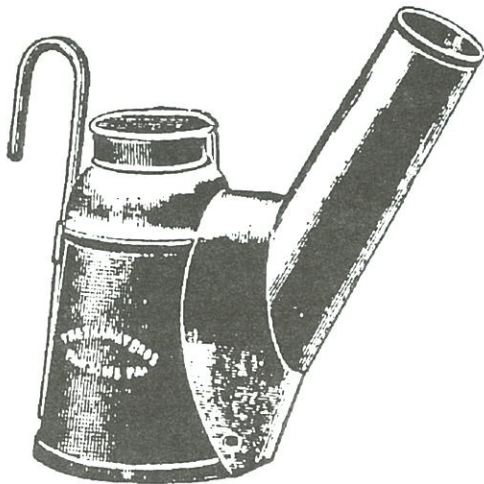
COMMON MINER'S



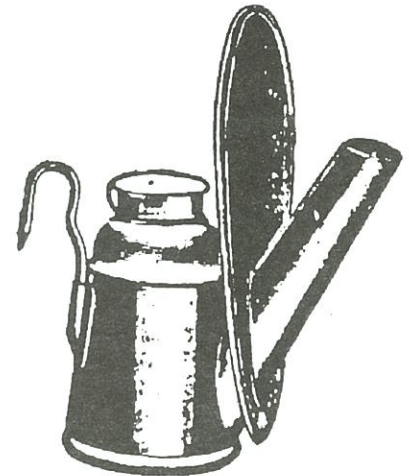
ACME MINER'S



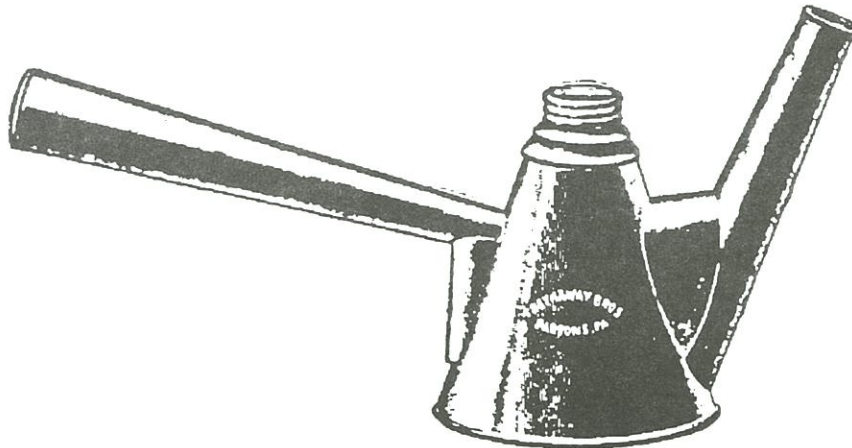
DRIVER'S



DRIVER'S REFLECTOR



BOSS LAMPS

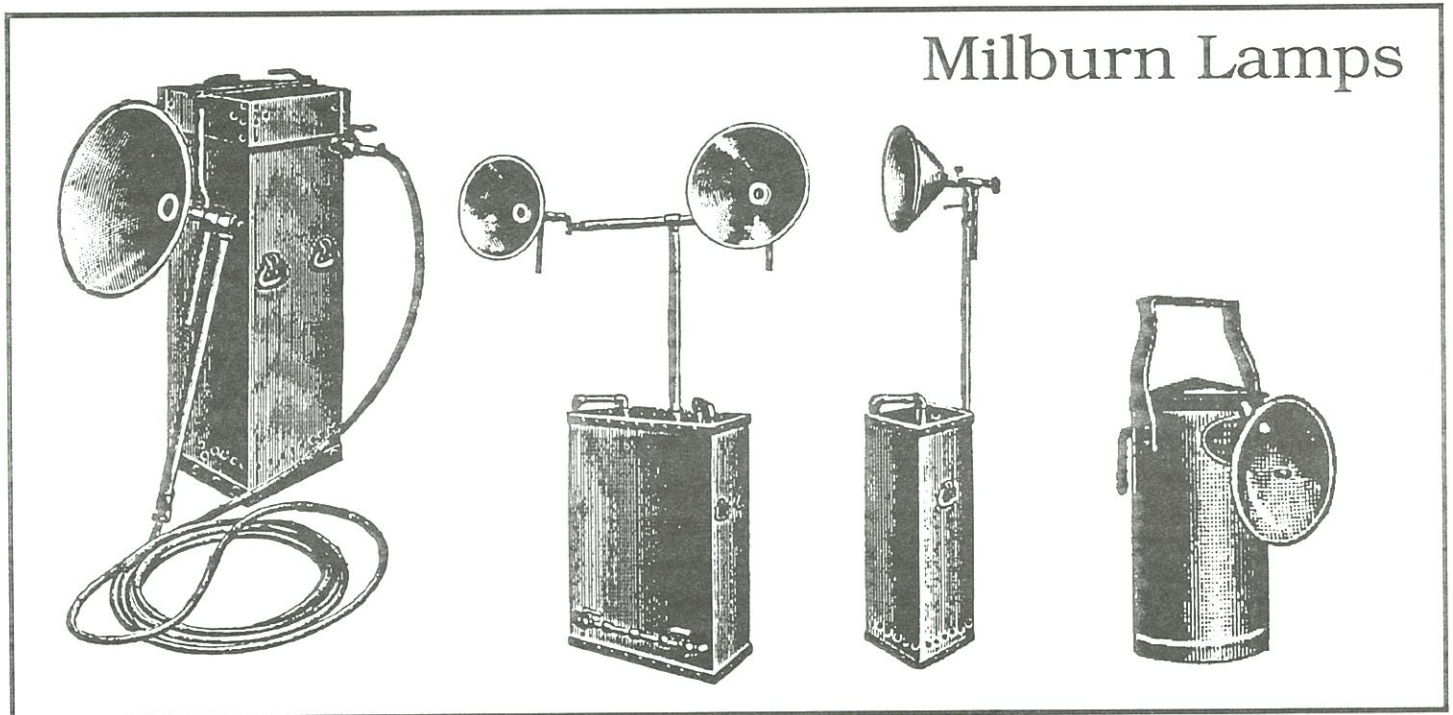


Trethaway Oil Wick Lamps

The show-stopper here is the oil wick in the upper right corner. Just being called an Acme in the catalog is interesting as one of this variety has been reported. There is no seam between the spout and the body of the lamp, rather it is formed from one piece and folded together like a clam-shell. This is not just a trick of illustration, the written description in the catalog describes it as "body and spout in one piece". Some other (rare) brands were constructed similarly², but this would be the first uni-body Trethaway. The solder seam appears to run along the top of the spout, while the bottom edge of the spout looks crimped as a reinforcement, or boot-kick. The lamp shown in the upper left corner was named "Common"...the Acme would qualify as rare.

Check out the Driver's lamp: is door is missing, or is this just an illusion of the illustration? Could this lamp have been intentionally made without a door?

Finally, meet the "Boss"... that is, the large hand-held oil lamp at the bottom of the page. It was advertised with either tin or copper handles.



Milburn was famous for its area lamps, The variety shown above range from 3,000 to 12,000 candlepower. The lamp at far right is a simple, but extraordinarily rare carbide hand lamp. It is actually fairly large: 6 X 12 inches. Its empty weight was 6 ½ pounds and it carried 1 ½ pounds of carbide. It looks like it bears the Milburn badge just behind the eight inch reflector. It was known as the "No. 1".

References

1. The Unbreakable Cast Iron Lamps of A.C. Wells, Eureka!, Issue 14, April 1995. Stutzer and Appleton.
2. The Edward K. Rollins Miners' Lamps, Eureka!, Issue 13, January 1995, Guthrie and Hileman. Also see: E.F. Long Oil Wick Lamp, Eureka!, Issue 2, April 1992, Hyatt.

Miners

by John Foster

I found this old photo postcard recently here in southern Illinois. I was looking at the carbide lamp and the top appeared round, but the base was wrong for an Eveready or Snell. On enlarging the copy it appears to be an early Justrite similar to the one I featured in Eureka! #12, page 36. Sitting on the miner's cap at a slight angle gives it the round look. A new style of lamp found would have been exciting. What's it look like to you?

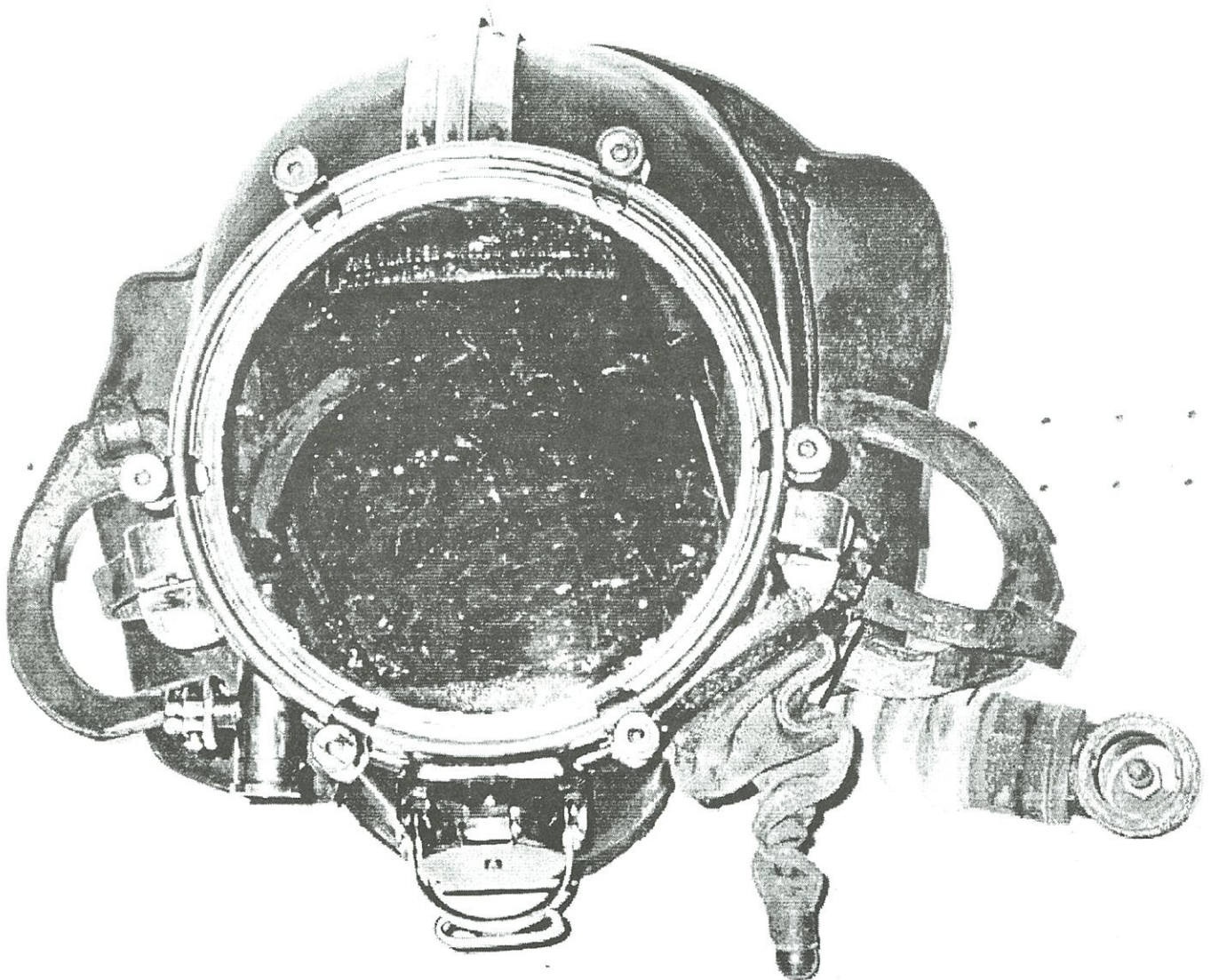
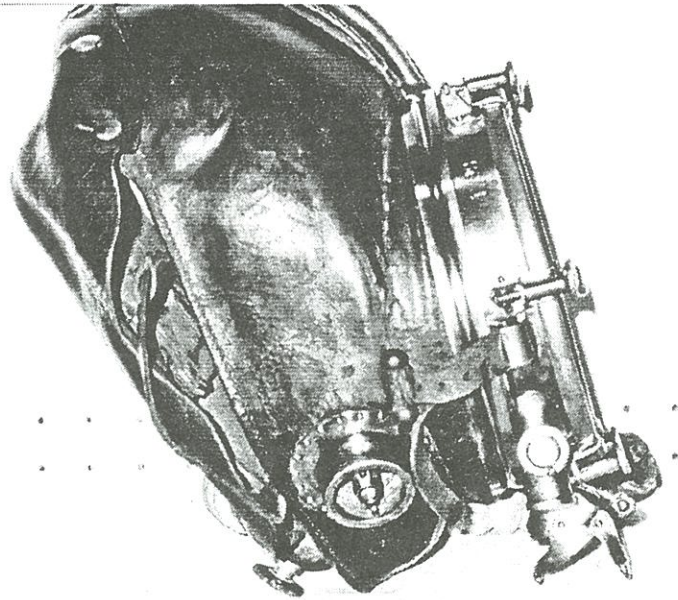


Mine Rescue Unit

by Dave Johnson

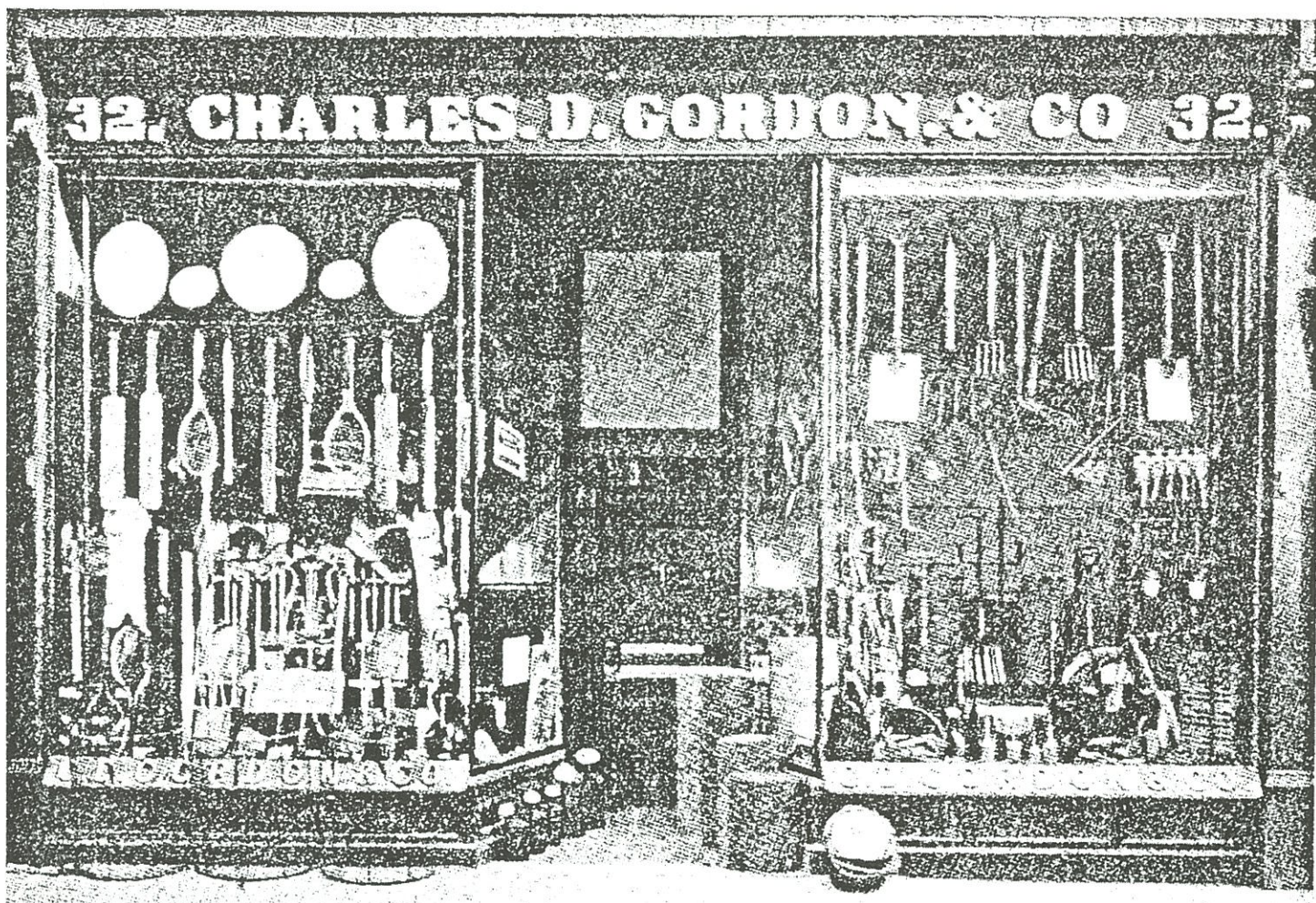
This early leather mine rescue helmet with nickel-plated brass fittings is marked: DRAEGER MODELL 1910/11 on the ring around the face plate. Stamped inside is THE DRAEGER OXYGEN APPARATUS CO. PITTSBURGH PA, 422 FIRST AVE. MADE IN GERMANY.

The face plate is isinglass (mica), as was used in old wood and coal stoves, and is in remarkably good condition. The Draeger Co. is today a manufacturer of medical apparatus.



More on:
Charles D. Gordon & Co.

by Mark Smith



Store-front as seen in early 1900's

I can confirm that the Davy type gauze lamp illustrated in issue 25 of Eureka is British in origin.

It comes from Whitehaven in Cumbria. This coastal town was once the centre of the Cumberland Coalfield. Although this coalfield was one of the earliest in Britain to be commercially developed on a large scale (c.1660's) it was one of the first to enter major decline. The coalfield's last colliery, Haig Pit (named after Earl Douglas Haig, the famous First World War British General), struggled on until as late as 1985.

Charles Dickinson Gordon (i.e. Chas. D. Gordon) was once proprietor of a family run business located at 32 King Street, Whitehaven. The Gordon's business was established in 1799 and by 1846 the proprietors are named as John and Charles Gordon. The family's activities are variously listed as iron mongers, brass founders, tin plate manufacturers, nail merchants

and interestingly enough ships' chandlers. The firm continued to trade in the name of Charles D. Gordon up until 1910, presumably well after Charles' death. There still exists a photograph, taken in the early 1900's, of the family's premises in King Street. In addition I know of one of their trade adverts which dates to 1893.

The lamp is a rarity and is probably the first recorded for this obscure provincial manufacturer. How the lamp found its way to the US is a mystery. If it wasn't part of a cross Atlantic lamp trade or antique deal it is just possible that the lamp left the UK with its original owner back in the late 1800's. This is very possible as many Cumberland miners emigrated to the States around the turn of the century.

Please e-mail if you want any additional information and I'll see what I can find out for you.

C. D. GORDON,
IRON & STEEL MERCHANT,
 Brassfounder, Coppersmith,
 General Builder,
 AND
FURNISHING IRONMONGER.

MARBLE AND ENAMELLED
CHIMNEY-PIECES,
 IRON AND BRASS
BEDSTEADS,
 CUT, STEEL, & WROUGHT NAILS.

32, KING STREET,
Whitehaven.

Established 1799.

Telephone 21.

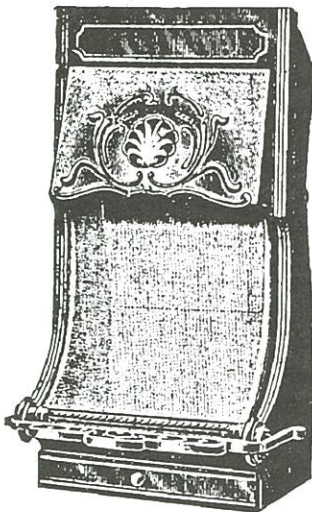
Chas. D. Gordon & Co.

Wholesale and Retail Ironmongers,

Iron and Steel Merchants,

Tin and Copper Smiths,

32 King Street, Whitehaven.



Agents for
Russell's
 Patent
 Peveril
 Grates
 and
 Cumberland
 Ranges.

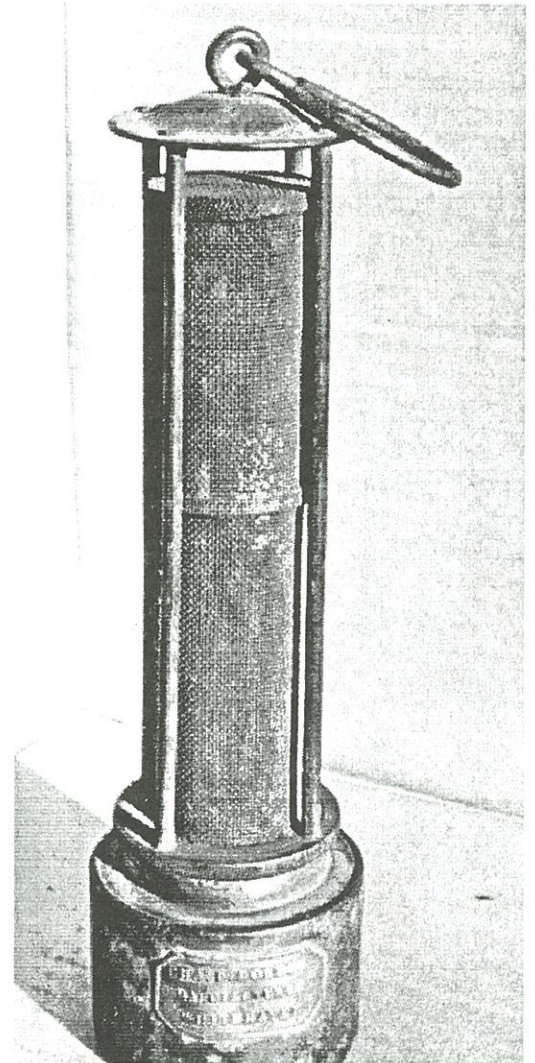
SPORTS OUTFITTERS.

Tennis, Cricket, Golf, and all out-door Games.

Splendid Selection New Season's Goods from best Makers.

Inspection Invited.

Special Terms to Clubs.



Oshkosh

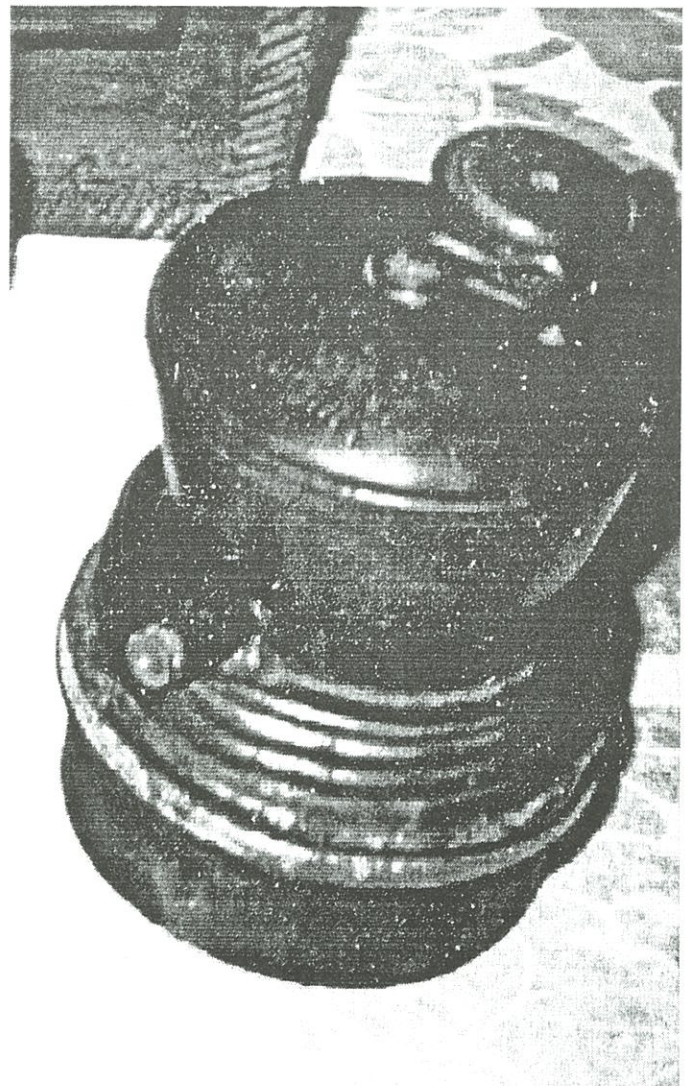
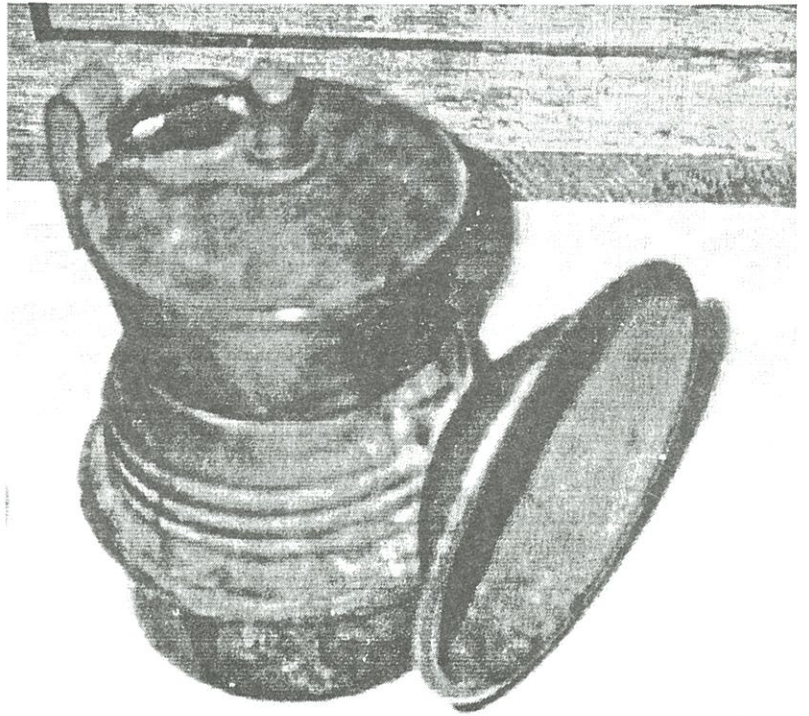
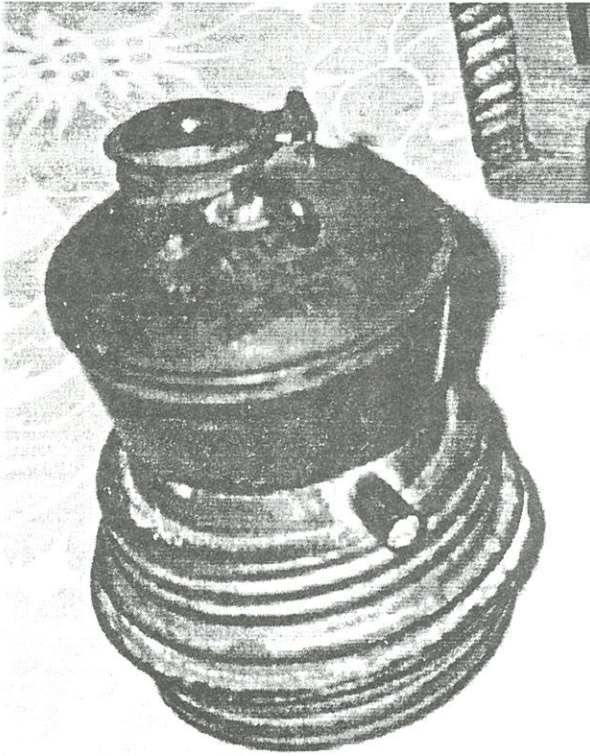
The Editors



Four different Oshkosh cap lamps, all different, all unfired.

The owner of these four lamps wishes to remain anonymous. Really! His phone would be ringing constantly if he were to divulge his name. In the future he promises to tell us more about the four rare Oshkosh lamps he has acquired. As you can see, each is different. One (far left) seems to use an inverted set of tank threads for a base. Some have spade mounts, others have a round hook. Some have a lever feed, others have a twist-ball. Two of them have no water door and only one has a reflector. The best we can determine is that these were prototype experiments at the factory. At least some, and possibly all of the lamps are stamped on top like the "standard" production model seen in a few collections. Now if there was a war, and we had to pit these four lamps against the seven Acme Brothers, who do you think would win? Any answer is correct!

To quote Gregg Clemmer: "The Oshkosh carbide cap lamp was produced between 1912 and 1914 by the Oshkosh Metal Products Company. The cap lamp was fabricated from brass, was 2 1/8 inches in diameter, and stood 2 7/8 inches tall. Reports of an Oshkosh hand lamp are still unverified. Oshkosh Metal Products was presided over by President C. H. Hartley and Vice-president C.C. Nelson. In January of 1912 they bought the Knippenberg Manufacturing Company, a prominent miners' oil lamp and candle holder manufacturer. This acquisition and the addition of a brass foundry paved the way for the first manufacture of the brass carbide lamps by the company. By 1914, however, forced to move operations to 18 Main Street and strapped for working capital, the company ceased business."



Sierra Gold Mine Wants to Return to Mule Power

Submitted by Roger Peterson from a local newspaper.

In the good old days they stood shoulder to shoulder - miner and mule breathing the same dust 10 hours a day.

Now a Northern California mining company wants to bring the beasts back to haul gold ore.

"Willing-to-work hayburner needed for new Sierra County venture," read a recent ad in Downieville's weekly newspaper, the Mountain Messenger. Four steady legs and a certain stubbornness required.

The Original Sixteen to One Mine, the ad stated, does not discriminate because of race, creed, national origin, sex or "size of ears."

"We're looking for a good mule or two," said Michael Miller, president of the mining company.

In the heyday of hard rock mining, mules with names such as Duke, Fannie and Jasper worked all day before retiring to lighted underground stalls.

Never seeing sunlight for decades, they lived long lives, up to 35 years old, due in part to good medical care. Veterinarians were mindful of mules getting hernias from pulling heavy loads and of the development of fungus growth on hooves from constant dampness.

Any miner who hit or kicked a mule was fired on the spot. A miner could be replaced, but a mule was company property.

The Original Sixteen to One plans to use its modern-day mules in the Rainbow mine, an

underground passage that produced a fair amount of gold around 1860-70.

"It has been on our mind because of the interest in the sesquicentennial," Miller said. "We are going back to our roots with this mine."

Recently, a crew found 100 ounces of gold in the area. But the mine's track is old, subject to wear if a locomotive is used rather than a mule.

"We are going in with a lowprofile operation," said Miller, "But the effort will be serious enough to give it a look. The thought to use a mule was a joke, I think, at first. But then we thought: Why not?"

An animal would haul 15 tons a day. Three 1-ton cars each time. The mules would be corralled outside the mine and be welltended, said Miller.

The Original Sixteen to One, about 70 miles northeast of Sacramento in the Sierra County town of Alleghany, employs 46 workers. The mining company hit a good pocket in 1993, removing \$1 million in gold in one work shift. A couple of years later, the mine produced \$2 million in four days.

Miller knows little about mules. But Rick Doyle and tour guides at the Empire Mine State Historic Park in Grass Valley are well versed in mine mule minutiae.

The Empire Mine, which opened in 1850, saw its first mules around the turn of the century, a docent manual states. The animals were needed as the mine shaft got deeper.

The life of a mine mule was not easy, but the work was made less difficult because drifts - horizontal passages off the main shaft were drilled at a slight incline. This allowed water to flow out of the drift. Mules pulled a train of six to nine empty ore cars up the grade. After the 1-ton-capacity cars were filled with rock by miners, the mule was taken and harnessed to the other end of the ore train and it headed downhill sometime at a trot.

The 44 mules that worked the Empire Mine are the favorite subject of visitors, especially schoolchildren. "The more irritating the mules are to the miners in the stories, the more the kids get a kick out of it," said Doyle.

A favorite trick was for a mule to escape from a stall and go on a mad run.

"The miner would chase him in the pitch black," said Doyle. "When the mule saw the miner's light coming, he would move further down the drift for fun."

Doyle said mine mules are ornery and intelligent. One widebodied mule delighted in shifting against the wall to block a miner's path. "She would see the miner's lunch bucket and know there was a carrot, apple or chewing tobacco in there. If the miner bluffed her and scooted by without sharing his lunch, she would bite him right on the tush."

Legend has it that mules counted the number of ore cars locked into place, refusing to haul if there were too many. One mule dumped her load of ore on a quick turn, understanding that a spilled load meant she could nap.

Doyle has tape-recorded oral histories of "mule skimmers," the workers who tended the animals. They groomed the mules, checked for harness sores, led them from place to place and hauled methane-producing manure out of the mine.

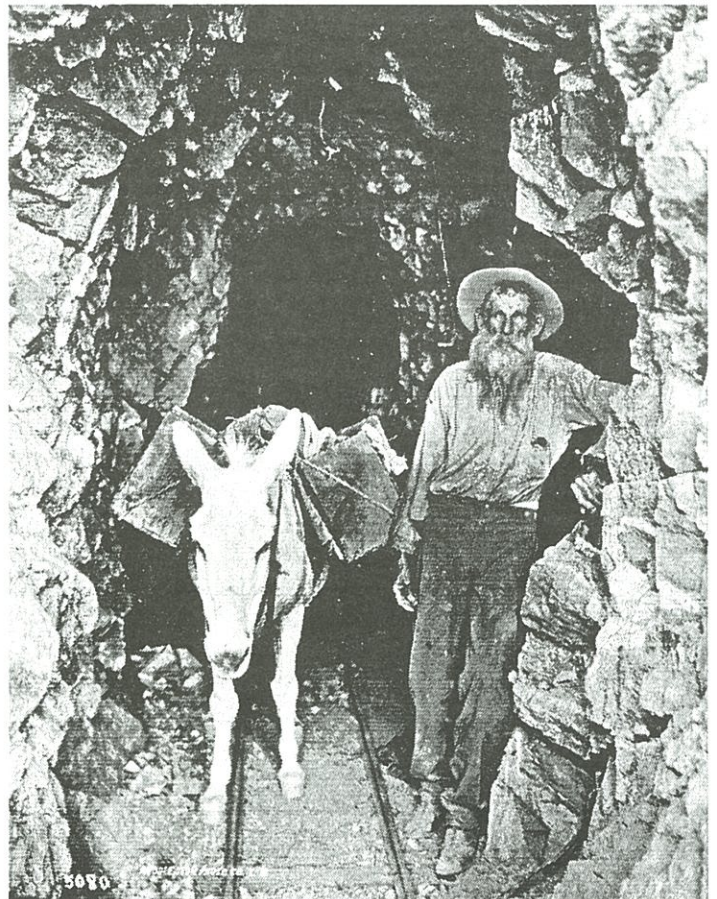
Mules went blind in the absence of light at some mines, but at the Empire; which was outfitted with lights. The need for mules at the mine ended with the close of the Empire in 1956.

Doyle thinks the Original Sixteen to One Mine's desire for mule power is a fine idea. But he wonders if the proper mule and trainer can be found.

"Where do you find a mule-skinner?" Doyle asked. "The mule has to be trained to a harness pull and respond to voice commands."

Sixteen to One's president has similar concerns, but feels that the mine and Allegheny's small mining museum will profit by going retro.

"Cost-wise it will be a wash he said. "Fun-wise it will be really interesting, helping the mining museum up here by showing how it is done in a working mine."



Signs of the Times

by Dave Johnson

An interesting addition to a mining artifact collection are some of the many signs that were used in mines. These signs can be broken into three broad categories:

Safety or warning signs
Signal signs
Information signs

These signs can be cardboard, painted metal, porcelain over steel, painted wood and oilcloth fabric.

Of these materials, the porcelain signs appear to be the most sought after and coveted by collectors, at least this is what their pricing indicates. The porcelain signs are the most enduring since the porcelain is less susceptible to weather above ground or wet underground conditions than are cardboard, painted tin, painted wood or oilcloth signs over long periods of time. Blue and white porcelain generally indicates an earlier time period than the more common white, black, and red variety. Signs made by the Stonehouse company are highly sought after. The company name is often printed in the lower right-hand corner in fine print.

Many porcelain signs are reproduced today, and are done so amazingly well. Oil Company and Coca-Cola signs are the most copied lot, but fakes are turning up in the mining sector. Look for gray porcelain on the back of the sign as an indication of authenticity, though I'm certain that even this could be reproduced.

As can be seen in the photos, most of the signs shown here are in pristine condition. Those signs from the Carey Mine in Ironwood, Michigan and the Quincy Mine in Hancock, Michigan were found in the company warehouses after the mines closed. This is the condition that most collectors prefer, however, reality dictates that not many unused signs survived. Most signs that saw use in the mines above and below ground were either weather damaged or abused, or both. Thirty or more years ago traveling through old mining areas, while rock collecting with my parents, I can recall seeing signs around many old mines in out-of-the-way areas of Arizona, Colorado, Idaho, and Canada. They were all badly weathered, rusted and usually full of bullet holes. These were not very appealing collector's items, although I have seen signs in this poor condition in museums and in private collections.

My preference, like that of most, is for mint or near mint mine signs which limits the availability of pieces. Mint mine signs are about as common as rare mint lamps.

The purpose of this article is merely to point out the variety of mine signs, not to give a history of mine signs or of a specific manufacturer. The signs from my collection are biased toward the Michigan copper and iron mining areas, reflecting the areas I have frequented the most.

- NOTICE TO EMPLOYEES -
ALL LIGHTS IN THIS BUILDING
ARE TO BE KEPT TURNED OFF
WHEN NOT NEEDED FOR WORKING.
- COPPER RANGE CO.-

Blue and white porcelain. From Copper Range Co.,
 Baltic Mine, Baltic, MI.

TELEPHONE CODE

FOREMEN	- 2 LONG
ELECTRICIANS	- 6 LONG
MACHINISTS	- 2-2-2
MUCKING MACH. REP.	- 1-2-1
NUMBER ONE HOIST	- 1 LONG
MAY RAISE HOIST	- 3 LONG
AUXILIARY HOIST	- 4 LONG
IS WINZE HOIST	5 LONG
WHITE RAISE HOIST	- CALL OPERATOR
CHERRY HOIST	- " "
IS WHITE RAISE	- 1-3-1

STATION CALLS ARE THE SAME AS SHAFT
 SIGNALS. FOR EXAMPLE - SHAFT COLLAR - 2-1

IN CASE OF ACCIDENT NOTIFY SUPERVISOR
 AT ONCE.

Blue and white porcelain, from
 Bunker Hill Mine, Kellogg, ID.

MANWAY

Red and white porcelain, from Carey Mine, Ironwood,
 MI.

RAISE CLOSED

Painted tin from Idaho.

TO LADDERWAY

Red and white porcelain, from Montreal Iron mine,
 Montreal, WI.

TO HOISTING SHAFT

Red and white porcelain from Carey Mine, Ironwood,
 MI.

THE PENNSYLVANIA BITUMINOUS CODE

IN ALL SHAFTS AND SLOPES WHERE PERSONS,
 COAL AND OTHER MATERIALS ARE HOISTED BY
 MACHINERY THE FOLLOWING

CODE OF SIGNALS
 SHALL BE USED

1 RAP or WHISTLE	TO HOIST COAL
1 RAP or WHISTLE	TO STOP CAR OR CAGE WHEN IN MOTION
2 RAPS or WHISTLES	TO LOWER CAR OR CAGE
3 RAPS or WHISTLES	TO HOIST PERSONS

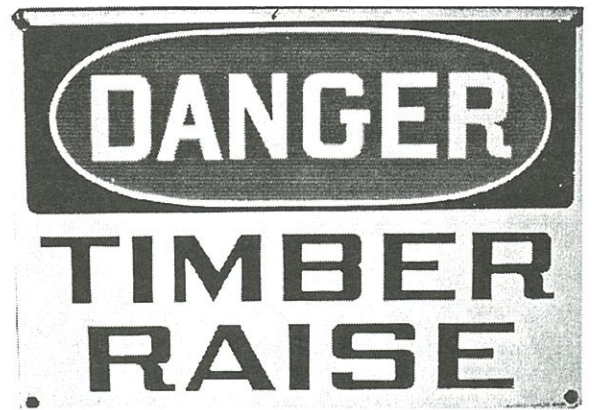
THE ENGINEER SHALL SIGNAL BACK WHEN
 READY, AFTER WHICH THE PERSON SHALL GET
 ON THE CAR OR CAGE, AND THEN ONE RAP OR
 WHISTLE SHALL BE GIVEN TO HOIST.

4 RAPS or WHISTLES	TO TURN THE STEAM ON TO PUMPS.
--------------------	--------------------------------

Blue and white porcelain, cage
 signal sign.



Stonehouse sign from Quincy Mine, Hancock, MI. Red, white, and black.



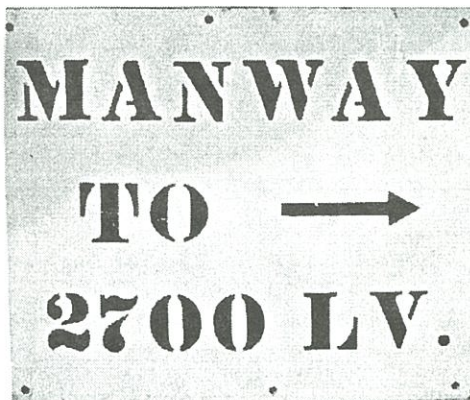
Stonehouse from Quincy Mine, Hancock, MI. Red, white, and black.



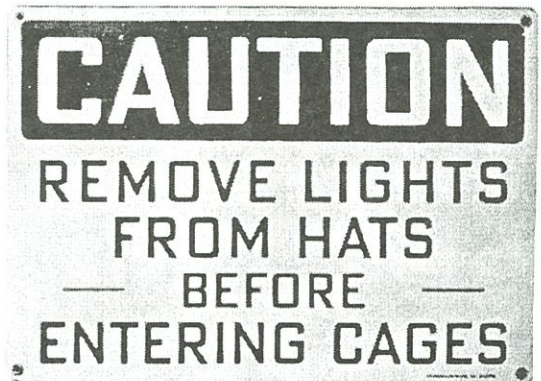
Stonehouse coal sign. Black and yellow.



Stonehouse from Quincy Mine, Hancock, MI. Red, white, and black.



Painted tin from Butte, MT. Black on yellow.



Stonehouse, yellow and black.



Stonehouse cage bell sign. Red and white.



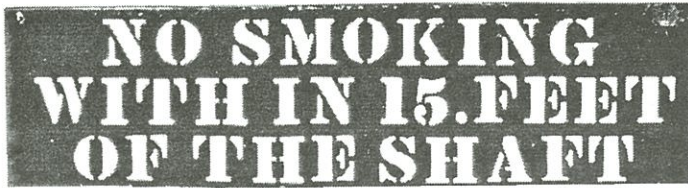
Painted tin cage sign from Butte, MT. This is for a two-level man cage. Black and white.



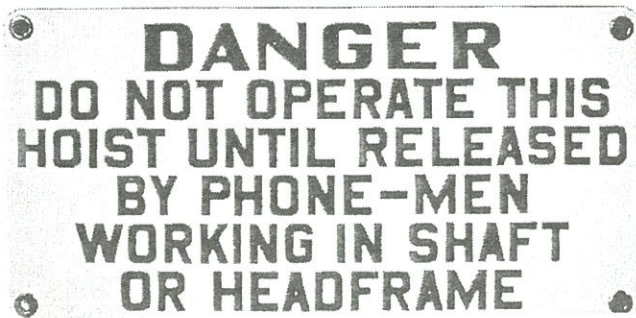
Porcelain coal mine sign. Black and yellow.



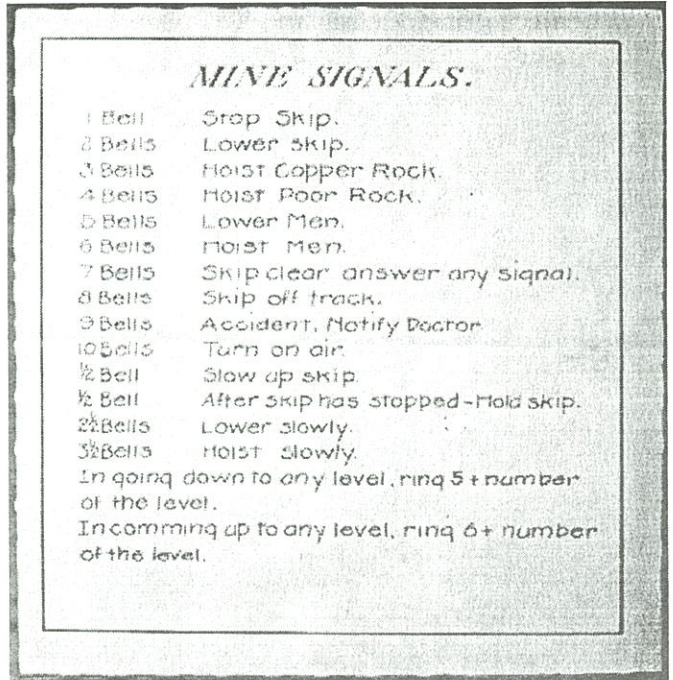
Red and white porcelain from Carey Mine, Ironwood, MI.



Red and white painted tin from Idaho.



Red and white porcelain from Carey Mine, Ironwood, MI.



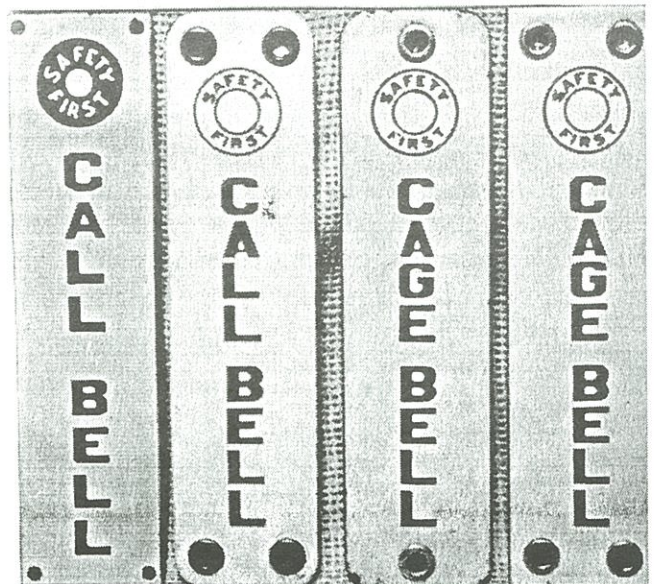
Cardboard, from Tamarack Mine, Calumet, MI.



Red and white porcelain from Carey Mine, Ironwood, MI.



Red and white porcelain from Carey Mine, Ironwood, MI.



Porcelain from Ironwood, MI.

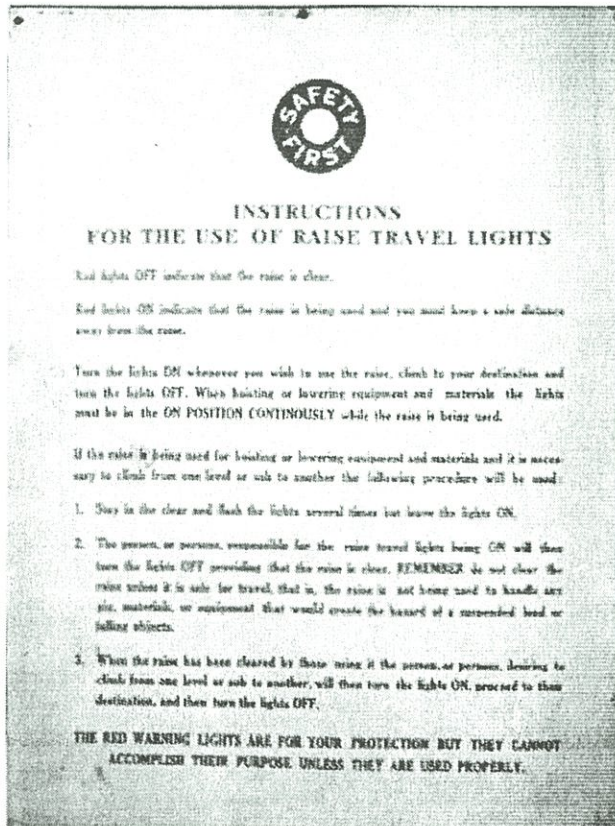


Stonehouse porcelain. Red, white, and black. From Quincy Mine, Hancock, MI.



EMPLOYEES FORBIDDEN TO TRAVEL ON THIS SLOPE

MSA Co. of Pittsburgh, PA. Porcelain: red, white, and black.



Cardboard instruction sign from Carey Mine, Ironwood, MI.



Standard Signs, Inc.(porcelain) Safety sign from Carey Mine, Ironwood, MI.

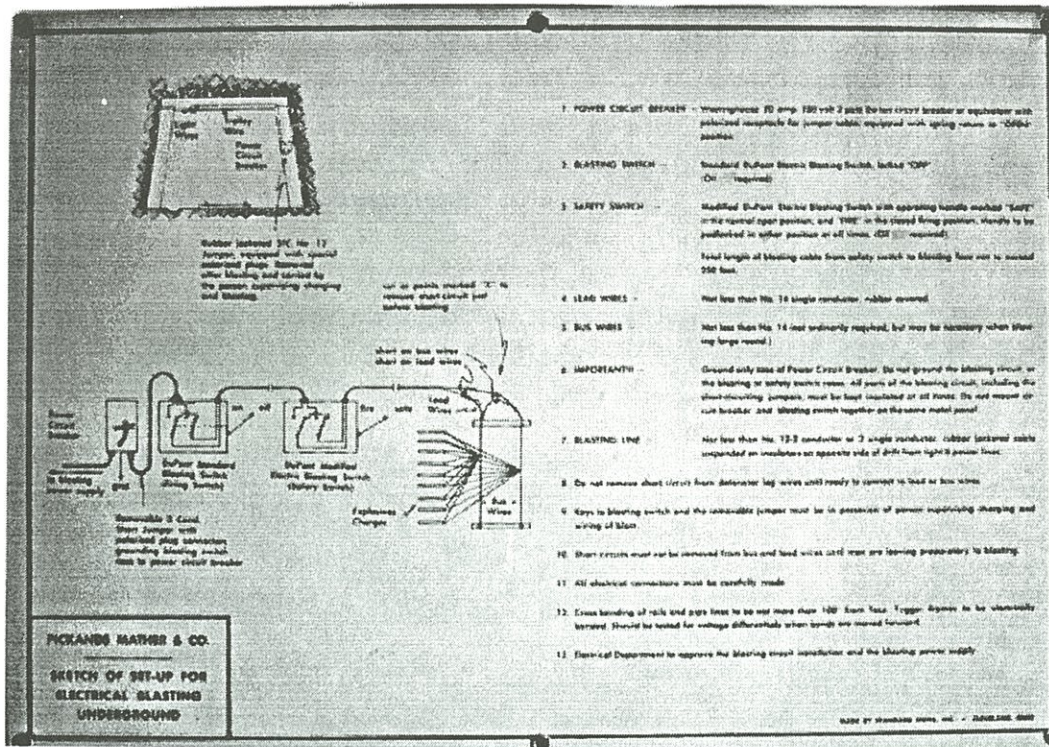


Red and white porcelain, from Carey Mine, Ironwood, MI.



Red and white, from Ironwood, MI.

Standard Signs, Inc.
Porcelain
blasting sign
from Iron-
wood, MI.



NOTICE
EVERY EMPLOYEE MEETING WITH AN
ACCIDENT OR INJURY OF ANY KIND
MUST POSITIVELY REPORT TO HIS
FOREMAN ALL THE FACTS CONCERNING
SAME BEFORE LEAVING THE PREMISES

Green and white porcelain, from Calumet
& Hecla, Calumet, MI.

TELEPHONE SIGNALS

GENEVA ENGINE HOUSE	- 1 LONG BELL
GENEVA POLICE BOOTH	- 2 LONG BELLS
DAVIS MINE SURFACE	- 3 LONG BELLS
GENEVA 30TH PUMP STATION	- 4 LONG BELLS
PURITAN ENGINE HOUSE	- 5 LONG BELLS
DAVIS PUMP STATION	- 6 LONG BELLS

Cardboard
signal sign
from Geneva
Mine, Iron-
wood, MI.

**DISCONNECT
BLASTING
SWITCH**

Red and white, from Ironwood, MI.

Cardboard
signal sign
from Aurora
Mine, Ironwood,
MI.

TELEPHONE SIGNALS

To call any station from another of the same group, simply ring the number of that station given in the list below. To call a station in the other group, push the button on the side of the box, while ringing. Thus: two rings at a station on the mine group will call the Dry, but two rings with the button pressed will call the Office.

OFFICE GROUP

Railroad Station	1 Ring
Office	2 Rings
Manager	3
Captain's House	4
Master Mechanic's House	5

MINE GROUP

Supply House	1 Ring
Captain's Office or Dry	2 Rings
Boiler House	3
Hoisting Engine	4
Pump Station	5

Unusual Oil Wicks with Common Names

by Dave Johnson

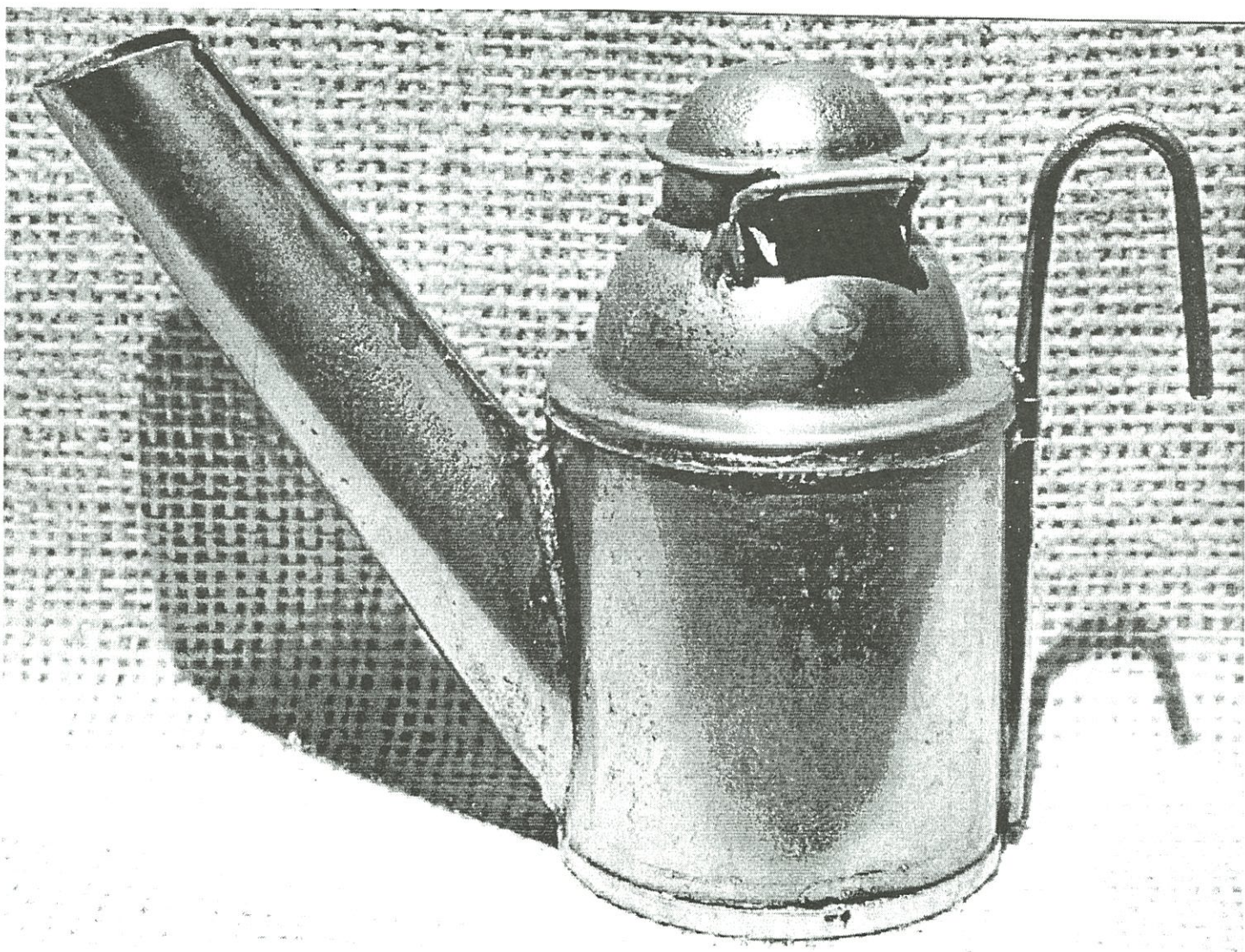
The names of Trethaway Bros. and T. F. Leonard are commonly seen on oilwick lamps, but the two lamps pictured here, manufactured by these two firms, are very uncommon.



T. F. Leonard lamp.

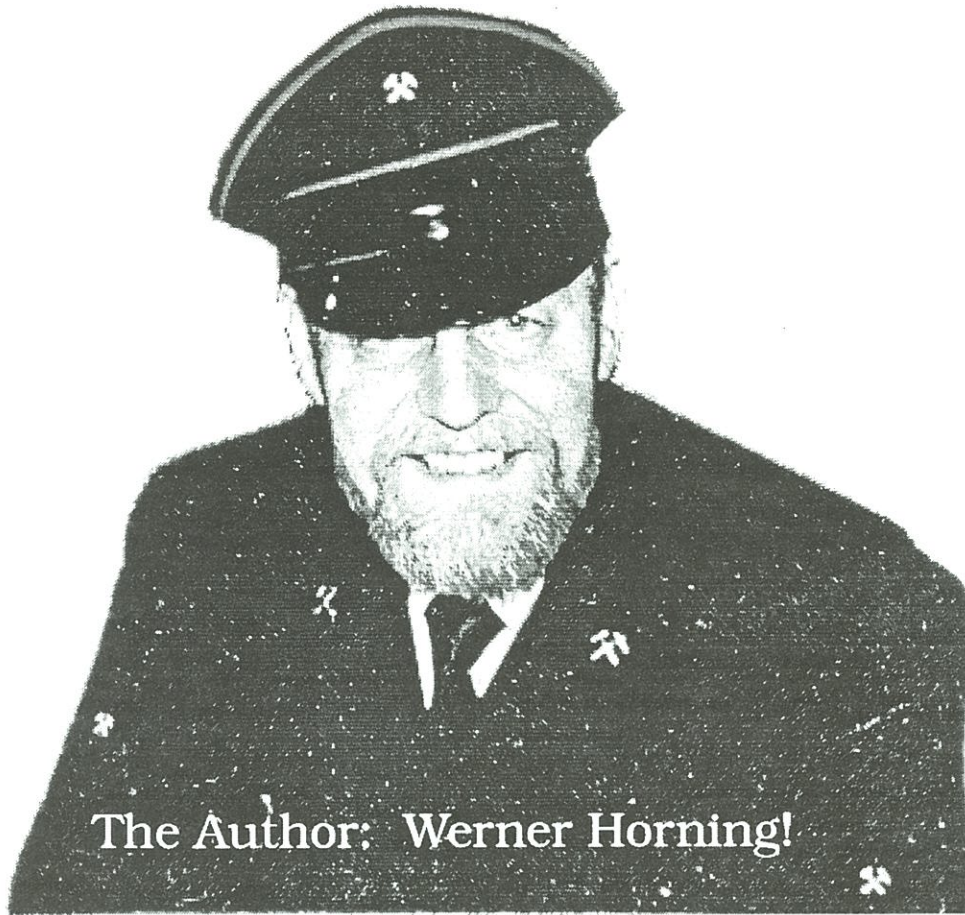
The first of these is an all brass T. F. Leonard with a threaded cap, a spout brace, an unusual boot-kick and, most unusual, a hook that penetrates the font and is soldered on the inside of the lamp. The lamp measures 2 3/4" to the top of the cap, the font is 1 7/8" in diameter and the single spout is 4 1/2" long. This lamp bears no resemblance to any other T. F. Leonard product save for its stamping.

The second lamp, produced by Trethaway Bros. has a shoulder/collar piece unlike any other Trethaway product. I own 53 different Trethaway oilwicks and this is the only one made in this configuration that I have ever seen. The lamp measures 3 1/4" to the top of the cap, the font is 1 7/8" in diameter and the spout is 3 11/16" long. It has a heavy zinc-plated surface over tin.



Trethaway Bros. lamp.

The Evolution of Miners' Dress to Traditional Costumes



The Author: Werner Horning!

It was customary in the Middle Ages through the 1800's in Europe for working people to wear special dress relating to their profession. For miners the 'uniform' was different for each mining region. There were also differences depending on whether the miner was dressed for work, private functions, or festivals.

First of all, the special dress identified the miner. No one was allowed to attack a miner as he was protected by law.

During the 13th Century the miners working dress was registered in Germany and Austria. The earliest was the hooded white "Gugel" dress (Latin: cucullus, cuculla = hood). This was worn for over four hundred years. After 1650 miners began using black dress as many illustration show.



Miner with early "gugel" hood.

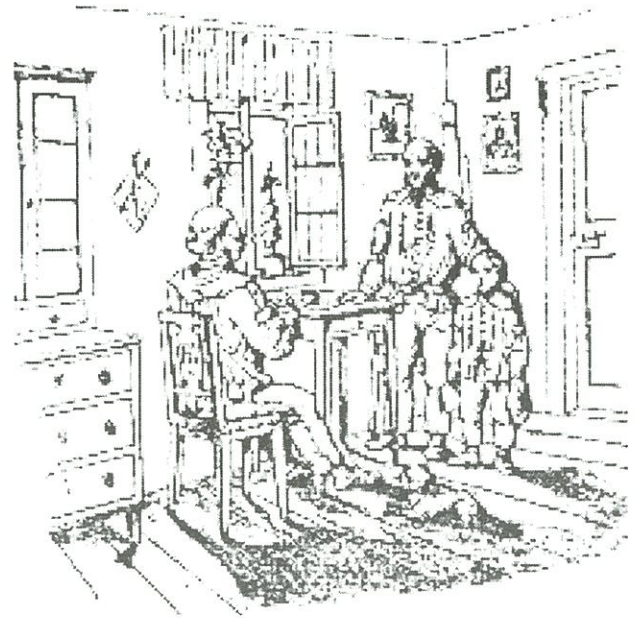
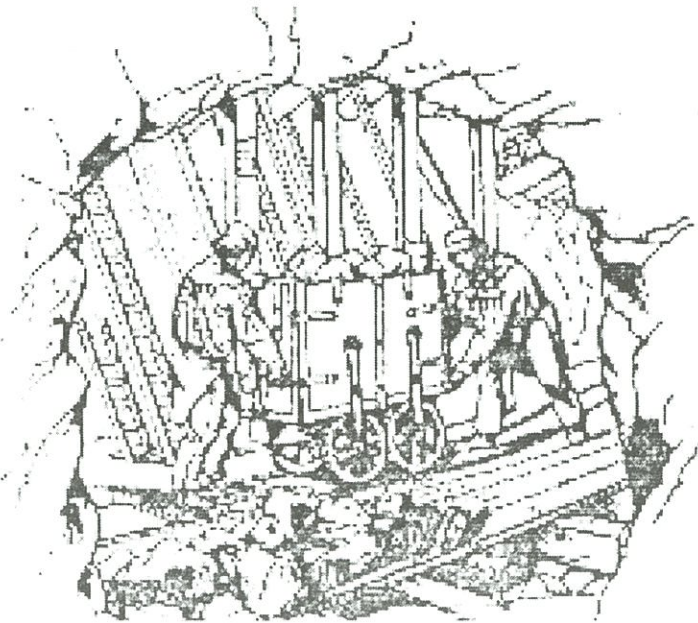


Left: Figurine of miner wearing the white "gugel" work clothes.

During the 17th and the 18th Century the Europeans believed it necessary to distinguish between the particular professions by their robes. By law, the miner was ordered to wear a special dress known as the "Berghabit". Often they were required to wear the dress in private life too. This was thought to instill a sense of pride and self-esteem for the profession otherwise distinguished by hard labor and hazard.

Miners' parades were held in Saxony/Germany under the rule of August the Strong. In 1719, the parade numbered 1,300 miners, in 1733 there were 2,500, and by 1769 more than 3,000. It was from this that the parade uniform arose.

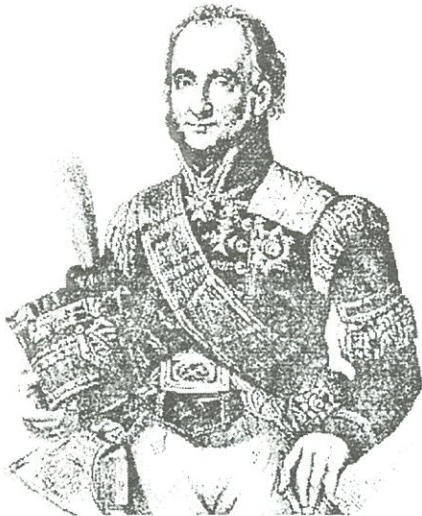
Mine employees became civil servants in different ranks, while the true miners became "belonging to a lord" workers. From this point on, the buttons of the uniform bore the "Schlagel und Eisen" (crossed hammers). A ranking system was developed similar to military hierarchy. By 1844, in the county of Hannover there were 13 different ranks .



Miners in their work dress, worn even at home.

During the industrial revolution the uniform became more and more a traditional costume. But in 1890 with accession to the throne of William II. in Prussia, new orders were given with regard to the miners uniform.

In 1953 a work-group of mine officials recommended a "traditional costume" for miners. These different types for different grades are still in use today.



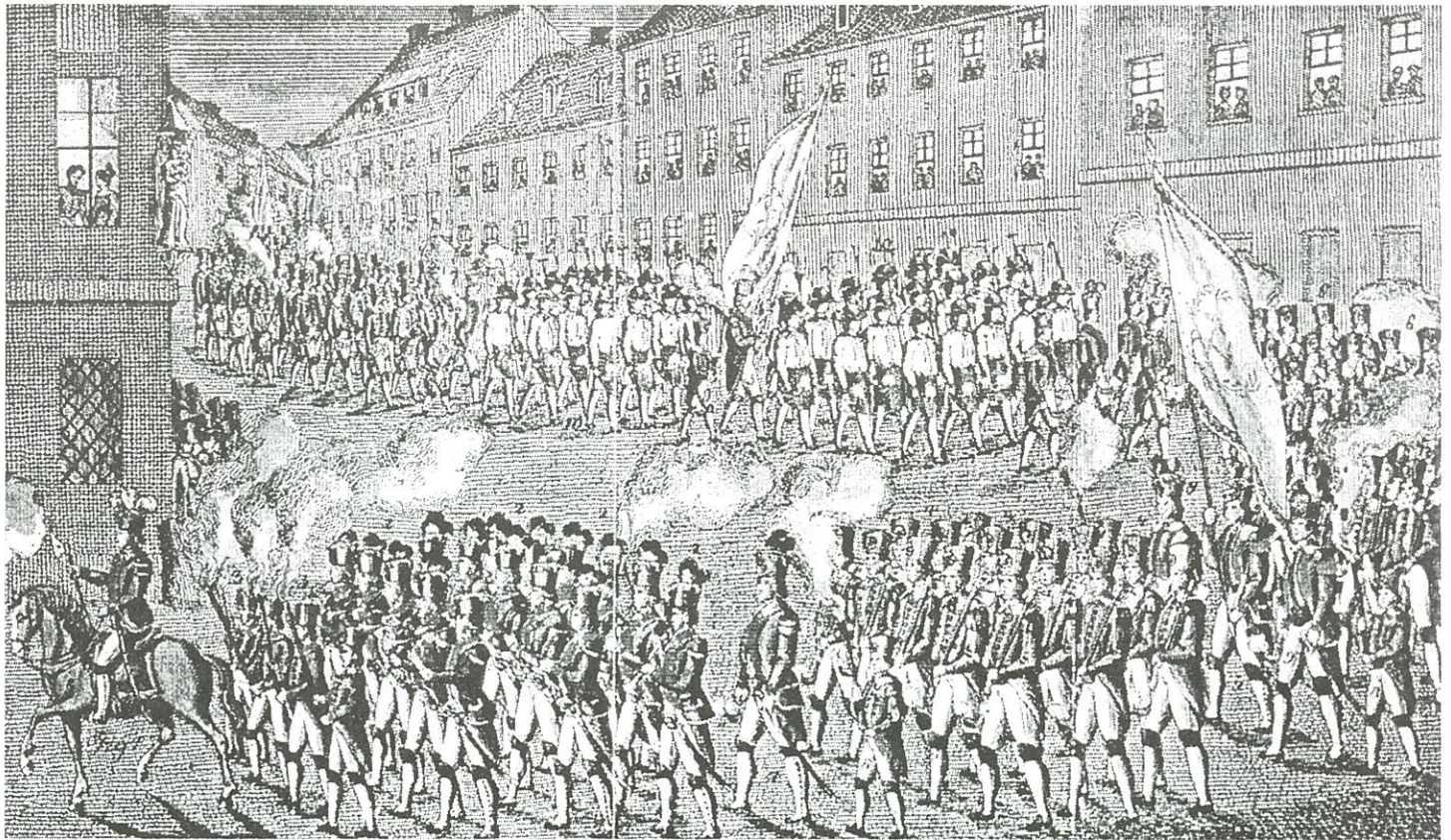
*Siegmund August Wolfgang,
Chief Inspector of mines,
~1800.*

Literature and Figures:

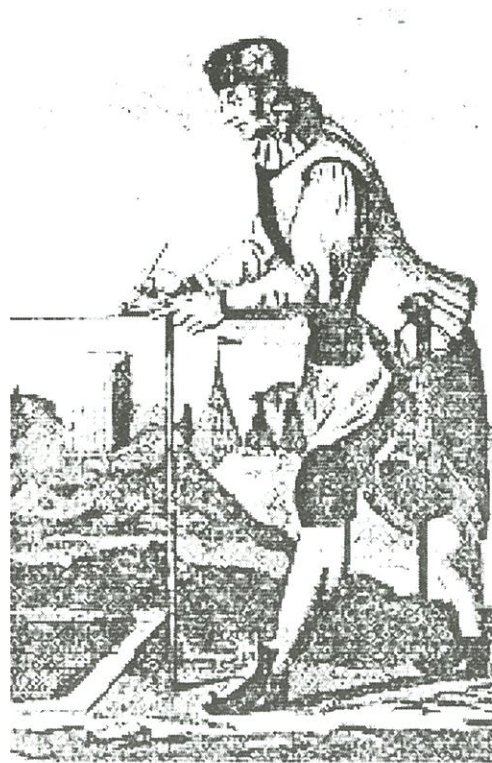
- H. Lommatzsch, Bergbau, 1974
- H. Rohner, 1956
- Deutsches Bergbau-Museum, Bochum
- E. Heuchler, ~ 1850
- Firmenprospekt Henkel, Bielefeld
- C. Beichling, Der belehrende Bergmann, Pima, 1830
- R. Wartusch, O. Wohigemuth, F. Mayer, Gluckauf, 1927
- Bergbau & Kunst in Sachsen, 1645
- Stadt- und Bergbaumuseum Freiberg, 1670
- L. Niemann, Kristall, 1952



*Left to right; Miner with Working Dress, Deputy with Parade Dress, Miner with Parade Dress, Elder Dputy with Parade Dress, Under Manager with Parade Dress, Chief Inpsector with Pa-
rade Dress.*



Miners' Parade ~1830.



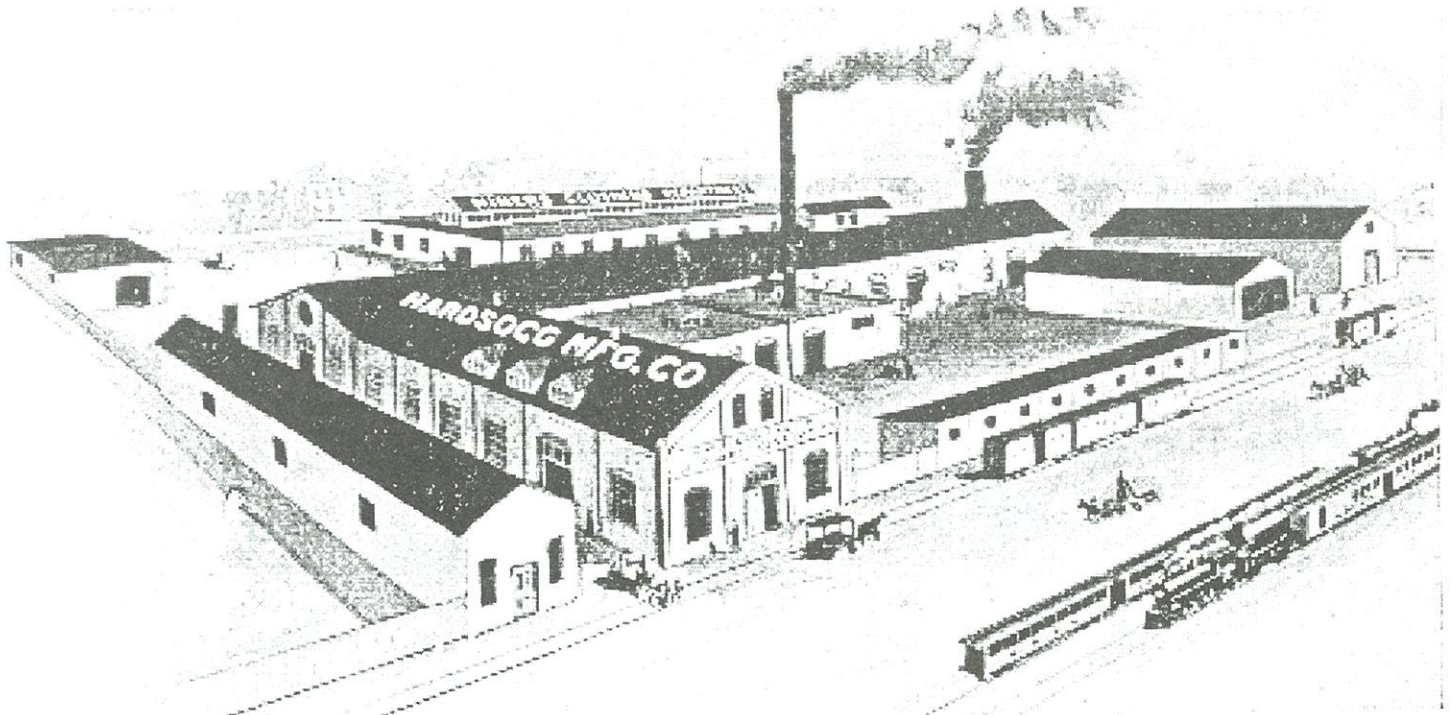
Left to right: Mine Inspector ~1719, Mine Surveyor, Miner.

Hardsocg

Miners Tools And Supplies

by Dave Thorpe

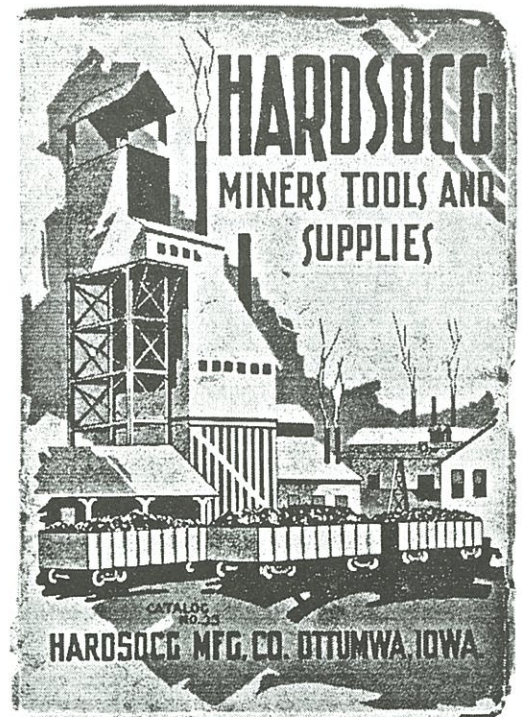
Information for the following article was obtained entirely from the 1922 Hardsocg catalog.



The Hardsocg manufacturing plant at Ottumwa, Iowa.

If you mention the Hardsocg name to a collector in our field, most think of oil wick lamps stamped with the Hardsocg name. Some are stamped with Ottumwa, Iowa and others with Pittsburgh, PA. Hardsocg had businesses in many US cities, but by the time of their 1922 catalog, the only locations mentioned, other than Ottumwa, were Evansville, Indiana and Pittsburg, *Kansas!* A detailed history of Hardsocg Mfg. Co. can be found in Dave Johnson's article in the first issue of EUREKA! (January, 1992).

Hardsocg Mfg. Co. was a major supplier of mining tools, with particular emphasis on coal mining. It was founded and owned by Martin Hardsocg. Born in Germany, Martin was brought to America in 1858 at six years of age. His father had been a farmer and had always preferred working for himself. In America, he was a well-digger, charging by the foot. Watching and helping his father dig, Martin thought it would be helpful to know ahead of time if there was water below. His first invention was a ground auger to test for water. His inherited instinct for self-employment along with an inventive mind laid the foundation for a successful industrial empire.



A 1922 Hardsocg catalog.



*Left:
Pittsburg,
Kansas branch.*



*Right:
Evansville,
Indiana branch.*

His family settled in Agency, Iowa where Martin learned the blacksmith trade, as an apprentice making \$50.00 a year and board. He then set out on his own to “paddle his own canoe”. He hiked twenty miles to Happy Hollow, Iowa where he had heard that blacksmith George Thornton was in need of a helper. Thornton was a big Englishman, but was afraid to shoe his own mules for fear of being kicked. After Martin nailed one on, he was hired immediately. He was paid two dollars a day, but some was held back for the future. When it was time to move on, Martin was given a kit of tools to balance the account and allow him to begin a business of his own.

Martin moved a little farther away and took the Englishman’s daughter along as his bride. It could be said that he wasted little time on social amenities while building his business. They settled near a mine, and there Martin made mining tools and ore cars. After developing a local reputation, the Ottumwa Chamber of Commerce offered him a substantial sum of cash to move to Ottumwa. Long years of struggles followed while he built his plant and developed a full line of miners’ tools and supplies.

Hardsocg wrote: “I always made the best tools I knew how to make, and used the very best materials. I tried to keep ahead of the times too, and made quite a few inventions. Sometimes they couldn’t see my new ideas at all, but I kept at it and finally had the satisfaction of seeing most of them adopted.”

EUREKA! July 1998

He was the first to manufacture the detachable pick. The miners used to pack a load of ten picks on their backs into the mines, no two alike, and these had to be carefully sorted. Hardsocg “talked his head off” to the miners to get his device into common use, but it was difficult, as a standard pick could be bought for fifty cents, and Hardsocg “had to have a dollar and a half” for his. He promoted his tools as worth every cent, for he used nothing but the best materials. He gave away six picks as demos, and finally his detachable pick caught on. The same men who were given free picks came back time after time to buy more.

The introduction of the auger and the detachable pick were considered by some to be the two most important innovations of the time in coal mining, and Hardsocg pioneered the manufacture of both. He deplored the smelly lard oil wick lamps, though he sold thousands, and promoted carbide and electric lamps when they came to market. He contracted with Justrite, Auto-Lite (Universal), Guy’s Dropper (Shanklin), and Grier Bros.

A special line of carbide lamps was stamped with the Hardsocg name. These have become highly collectible items. They were made by Grier Bros. and Justrite, but bear the **Hardsocg Premier** and **Hardsocg Imperial** names. To emphasize the pride he took in marketing his own name, all of these lamps were nickel-plated.

HARDSOCC HANDLE



1st and Best Grade.



2nd Grade. Best Seller.

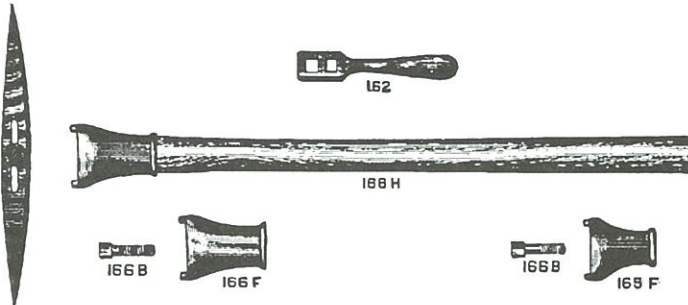


3rd Grade. An Excellent Handle.

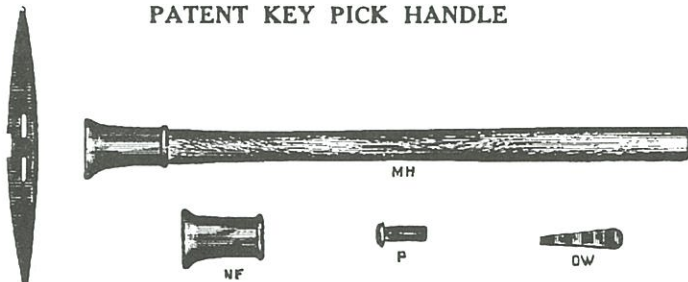
Names such as Imperial, Victor, Black Diamond, and Premier were applied to his picks and augers as well.

Though the main manufacturing plant was in Ottumwa, Hardsocg had major branches in Pittsburg, Kansas, Pittsburg, PA, and Evansville, Indiana,

HARDSOCC PATENT BLACK DIAMOND HANDLE



PATENT KEY PICK HANDLE



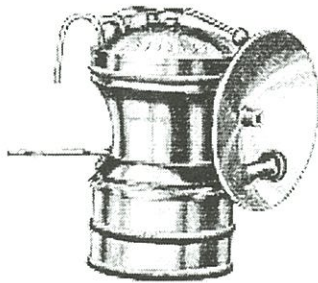
After amassing a fortune by age 55, he tried to lead a more leisurely life, but found that "retirement was killing" him. He returned to work, feeling happier and healthier. He remained worked in the Ottumwa plant until well into his seventies.

His lifestyle can be viewed as a recipe for success: a desire for self-employment coupled with an inventive mind; learning the basic skills needed and applying them rapidly; settling for nothing but the best in his products and doggedly promoting them.



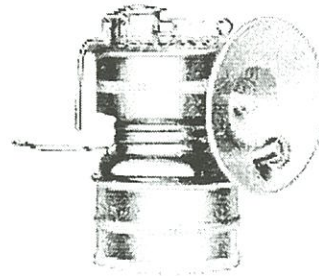
Martin Hardsocg

MINERS' CARBIDE LAMPS



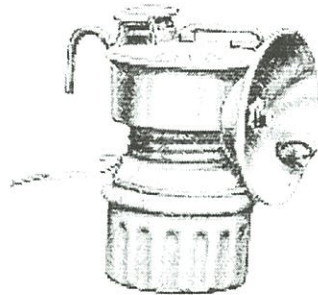
Auto-Lite

No. 102X, Brass. No. 302X, Nickel.
2 1/2 inch silver nickeled reflector with
self lighter.



Arrow

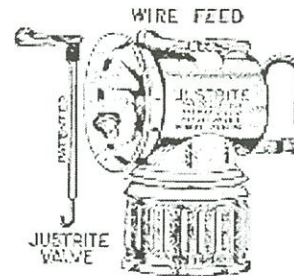
No. 10, Brass, No. 30, Nickel.
2 3/8 inch wind-proof reflector with self
lighter.



Guy's Dropper

No. 5 Lamp, Bright Brass Finish. 2 1/2
inch Brass Self-lighter Reflector. Round
or hexagon bottom.

No. 28 Lamp, Bright Brass Finish. 2 1/2
inch deep Brass Reflector, which protects
the burner tip from dripping water.
Round or hexagon bottom.



Justrite

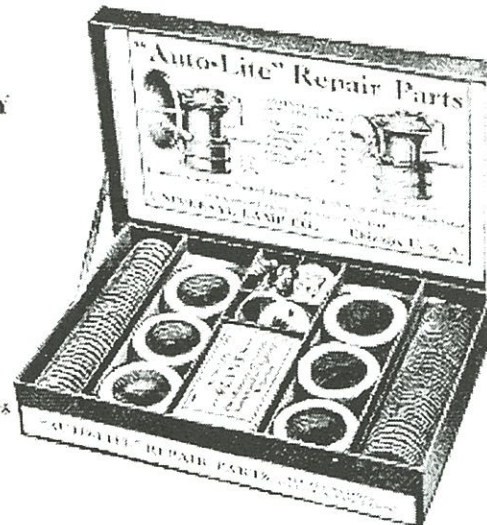
No. 407, Polished Brass.

NO. 24 THE AUTO-LITE SUPPLY BOX

PACKED IN A HANDY SHELF-BOX

What the box contains:

- 6 dozen felts
- 6 dozen flat rubber gaskets
- 3 dozen lava tips
- 2 dozen flints
- 5 complete lighters
- 6 brass felt holders



Fifty-six

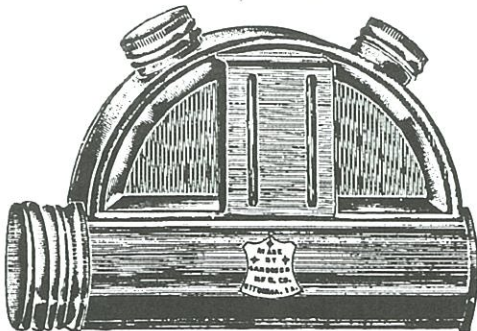
A page from the 1922 Hardsocg catalog.



The Hardsocg Imperial cap lamp, nickel-plated. Made by Justrite (Dave Thorpe collection).



HARDSOCC PATENT COMPARTMENT
CANTEEN FOR CARBIDE, WATER
AND MATCHES



Left: Premier carbide lamp
made by Grier Bros. (Errol
Christman collection).

Below: Imperial Cap
lamp made by Grier Bros.
(Mike Puhl collection).



Left: The patented three
compartment flask, by
Hardsocg.

Bray Burners

by Mick Corbridge

Living in Leeds I was pleased to come across a original sales catalogue for 'Bray Acetylene Burners'; (list 192, dated July 1945). I obtain mining pattern carbide lamps from many countries of the world, & more often than not they are fitted with a 'Bray' burner showing that they were a very popular burner world-wide. I know that the various type names for the individual jets were registered against copying in in all countries of the world. The jets are classed as 2 main types, i.e. 'Atmospheric Burners', and 'Non-Atmospheric Burners'. The introduction pages explain that with the atmospheric burners air is mixed with the gas before it becomes ignited, so preventing the formation of carbon on the tip and hence having 10 times the life expectancy of a non-atmospheric jet. It does also warn that except for the 'Elta' or the 'Ota', any other burner will carbonise if allowed to burn low; and so unless using either of these jets, the lamp gas tap must be either in the fully on position, or fully off. This formulates to that if intermediate feed control positions are used, then the life expectancy of the jet will be greatly reduced! As reflected by the much cheaper cost for the non-atmospheric jets, which are of lower life expectancy anyway, these do not require the need to run the lamp at full feed flow for maximum life expectancy.

BRAY "BETO" (two-hole)



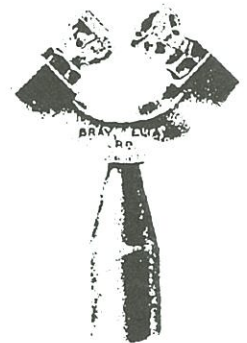
BRAY "CETO" (one hole)



BRAY "RONI"



BRAY "ELTA"



BRAY



"OTA"

BRAY MINER'S CAP LAMP
BURNERS



No. 299
Plug Socket

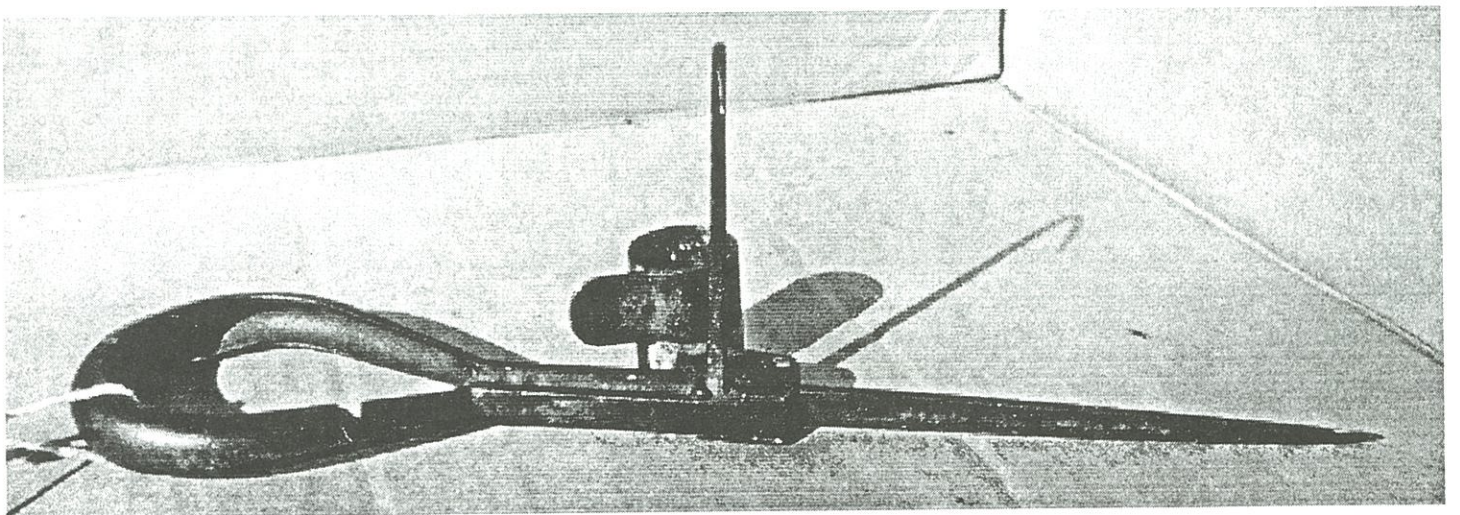
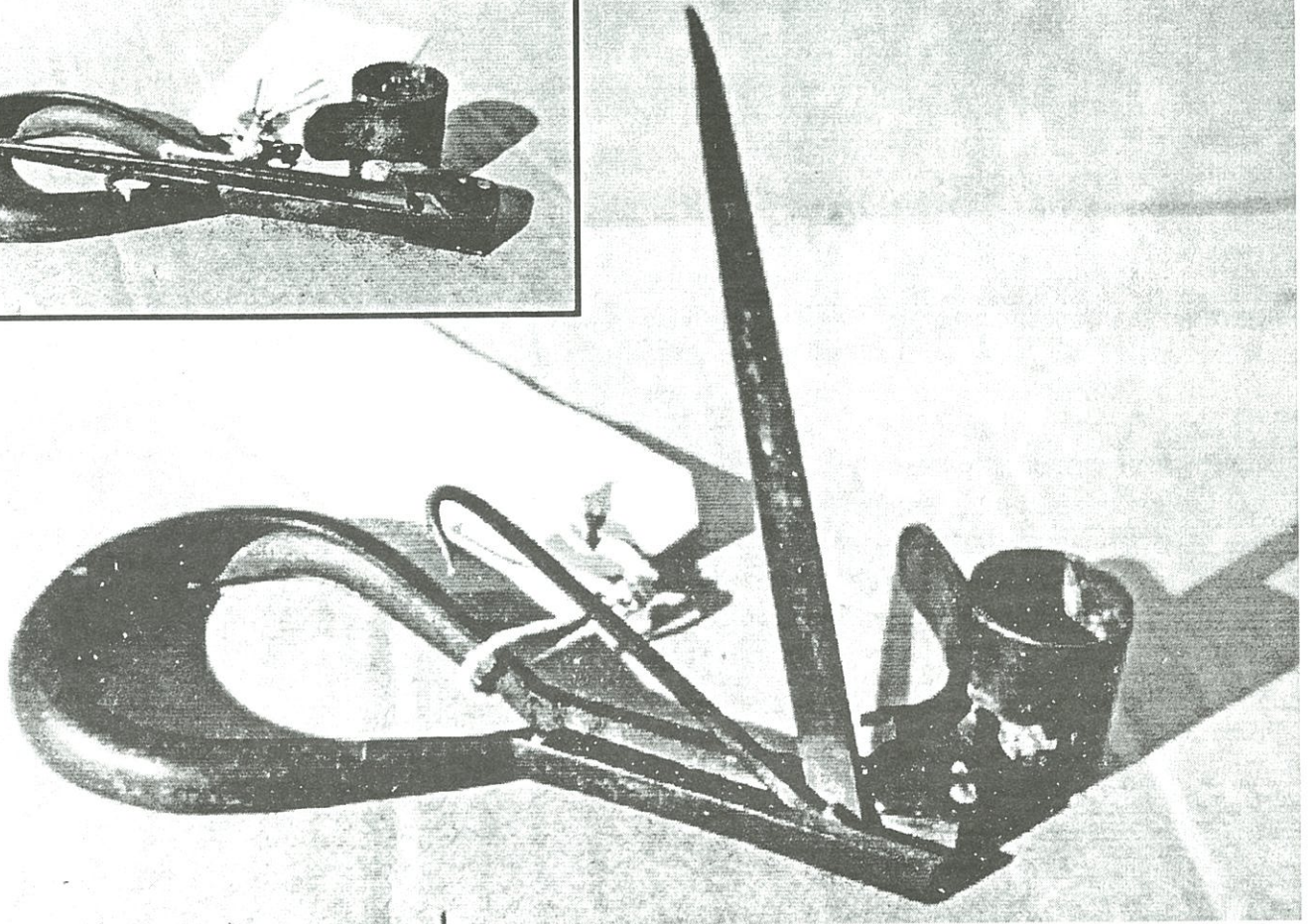
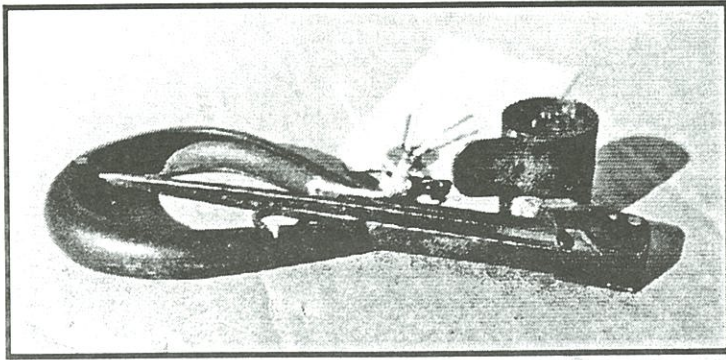


No. 300
Outside Taper Screw

Folding Candlestick

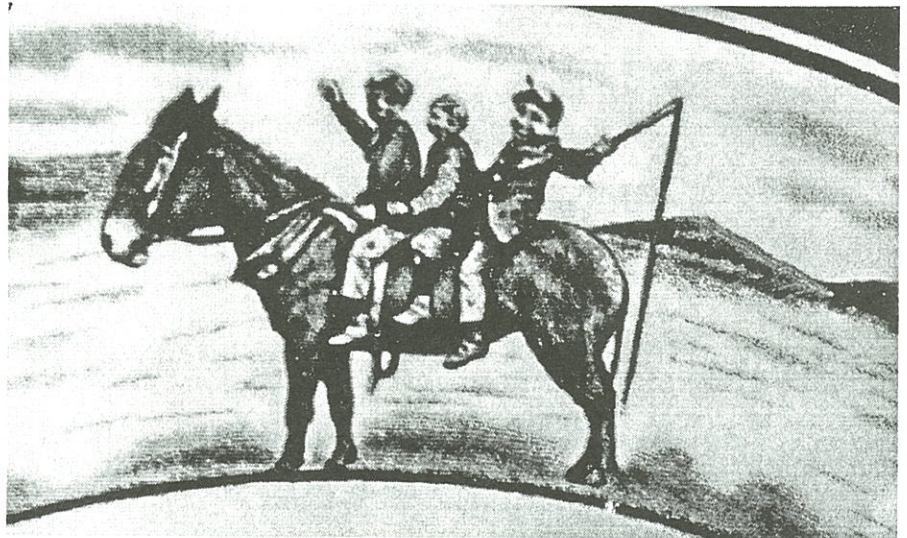
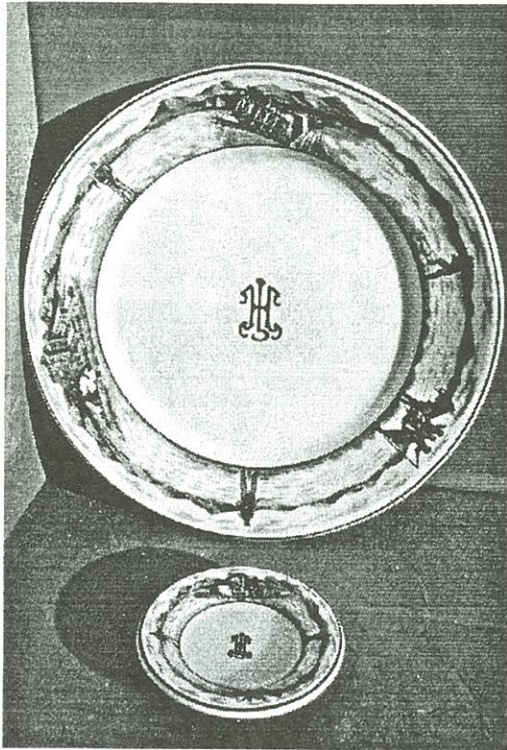
by Tom Stranko

There are no marks on this stick, but it is very well made. The joints are tight. Has anyone seen a stick like this?



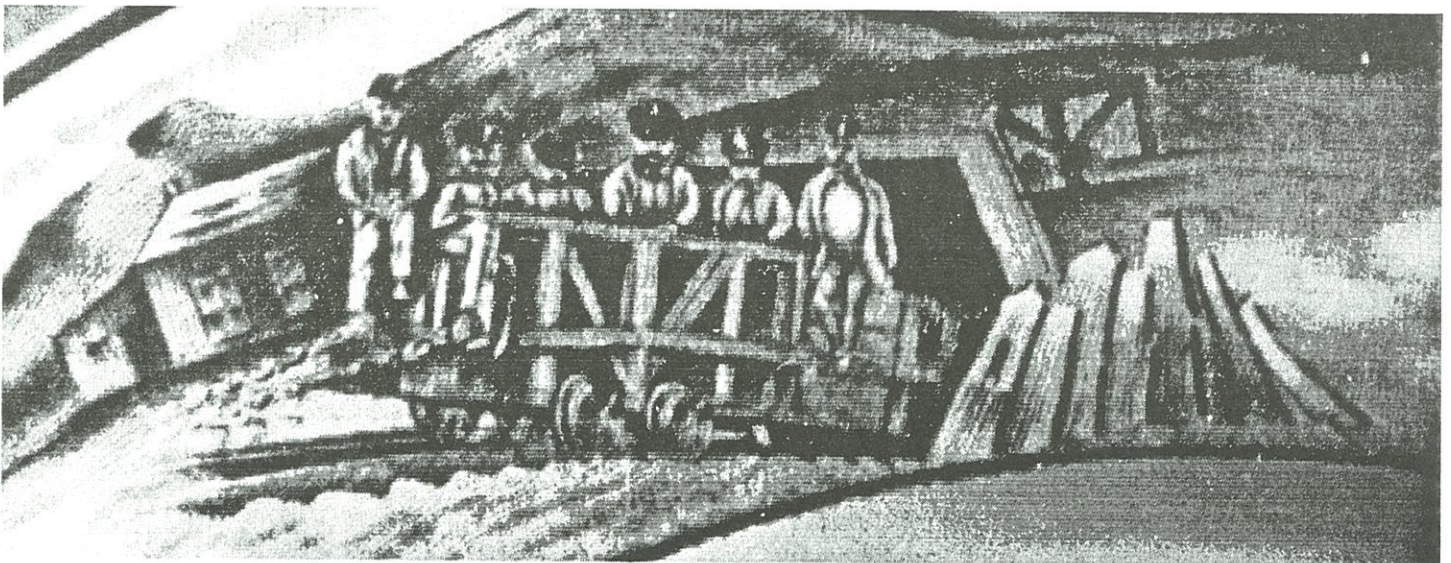
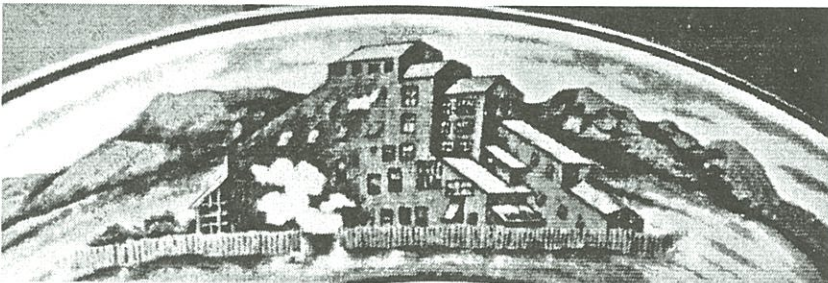


BITS

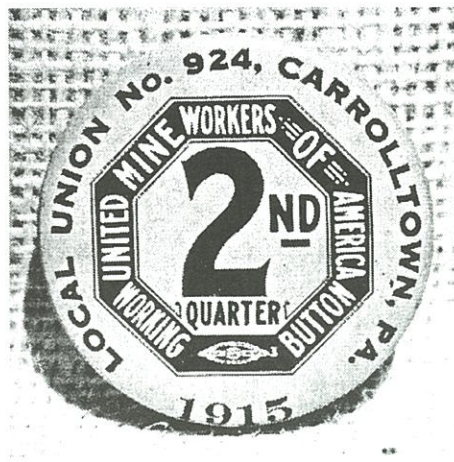


Coal Mining Plate

Tom Stranko of Binghamton, New York would like to know something about this plate with the logo. It appears to be "I" and "H". There are traditional coal mining scenes around the rim. On the back is printed: "O. P. Co. Syracuse China". He wonders if the logo signifies a hotel, but who/which?



UMWA Local Working Button



Most UMWA buttons are generic in nature, but this one is specific to Local 924 of Carrolltown, PA. It is the size of a half-dollar.

Kennecott Copper Corp.

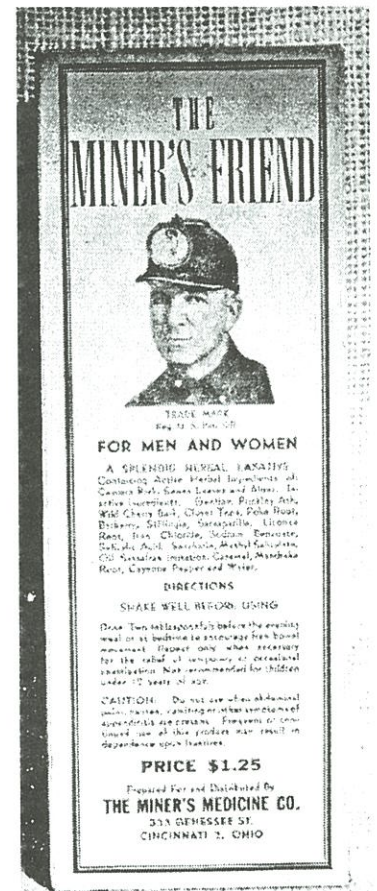
A copper key chain tag advertises the Chino Mines Division in New Mexico.



The DJ
Page

Match Safe

Nickel-plated safe advertises Hunter W. Finch & Co. Coal. Two naked angels adorn the back. One edge is labeled "Indiana Blackhawk Coal" and the other "Powhatan Hocking Coal".



Pocket Knife



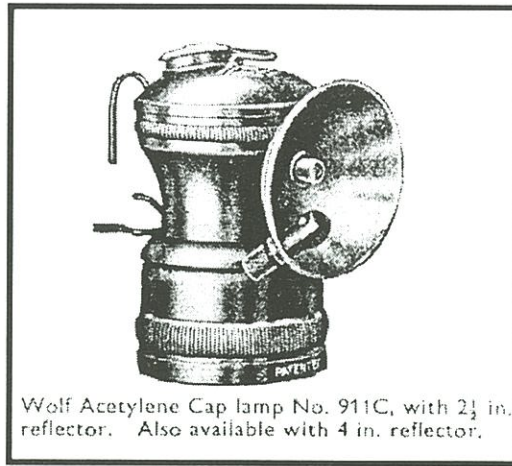
Miner's Laxative

Produced by the Miner's Medicine Co. of Cincinnati, OH. It came in two sizes. The lamp shown on the box appears to be an Edison Model K.

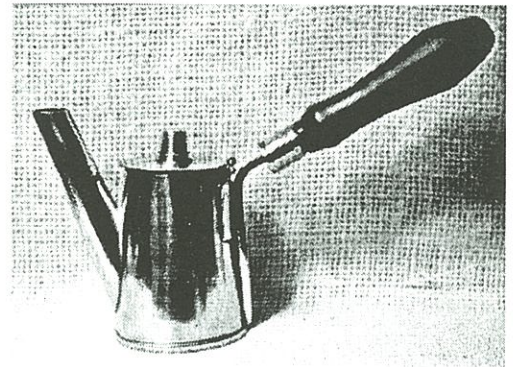
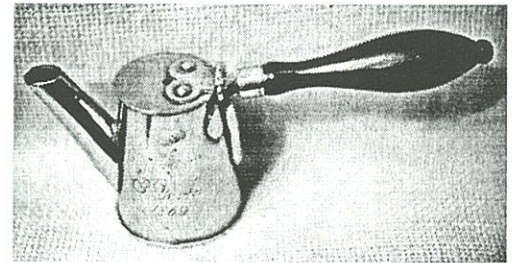
The C & H coal Co. operated in the 1920-40 period.

Wolf 911C

Many will recognize this as a Simmons cap lamp, made in USA. You can even make out the diamond-shaped logo on top. However this illustration is from an English Wolf catalog (Wm. Maurice Ltd.), who evidently imported the lamp and called it the Wolf 911C. One would wonder why they didn't import the US-made Wolf which was manufactured during the same time period. Perhaps there was some competition between the two Wolf firms?



Oil Wicks with Wooden Handles



We have all seen oil wick cap lamps with their cap hooks. These brass oil wick lamps were adapted for use with a wooden handle. The lamps are both brass with copper fittings, the two rivets on the cap of one lamp, the cap hinge wire and the handle attachment, where the cap hook is usually attached are all copper. Both lamps are standard size oil wick lamp.

The handles are made of turned wood, black like ebony. There is a brass band at the end of the handle where it attaches to the lamp.

One lamp has an unusual vent tube on the cap. The other lamp is beautifully engraved with P. York 1869. Any ideas as to their origin?

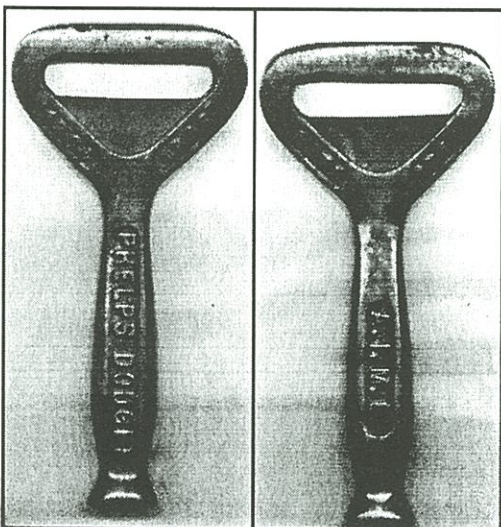
Dave Johnson.

Mini-twister

This small twist blaster has the "Permissible" logo - U. S. Bureau of Mines. No maker. Marked "PAT." No date. stamped "278" (not factory) on bottom. Do you think this could be mining or??



Tom Stranko



Bottle Opener?

This is all brass (or bronze?) and is about five inches long. It has 1871-1946 A.I.M.E. cast into one side and 1834-1946 Phelps Dodge on the other side. It would appear that this commemorative piece dates to 1946, but what is it?

Hercules Item Identified

A letter to Bob Schroth regarding the item shown in the photo:

I just received my 1997 copies of Eureka! (having neglected to keep my subscription up while in the process of moving from Utah to Maryland) and noticed an item in the January 1997 issue that I can help you with. Of course it's possible (probable?) that you already have the answer from someone else.

Anyway, on page 35 you show a picture of a Hercules item. That is a container for an explosive charge used in offshore seismic prospecting, and (as shown on the can) the product name was "SuperSeis," and it was classed as a blasting agent. The can held one-half pound of explosive. It was designed for use with the Western Geophysical Company "Maxipulse" system. In use, these cans would have a percussion delay detonator inserted in the cap well, and would be loaded into a breechblock and transported through a hose by flowing water. At the end of the hose there was a SuperSeis "gun" with a small wheel which had a sharp perimeter. The gun was trailed behind the moving

boat, and kept at a constant depth of 40 ft. by a paravane. Upon hitting the wheel, the percussion delay detonator would be activated, the can would be ejected from the gun, and one second later (and about six feet behind the gun, due to the motion of the ship) the charge would detonate, putting seismic energy into the water, and hence into the underlying rock formations.

The charges were fired at a rate of about one every 10 to 12 seconds. Digital computer processing handled the acquisition of data.

The system was popular in the 1970's, shooting hundreds of thousands of miles of seismic line all over the world. The improvement in nonexplosive systems, and a general aversion to explosives, resulted in the SuperSeis becoming obsolete by the early 1980's.

I was involved in the development of the system for Hercules.

Robert B. Hopler
The Old Powderman - Books



Found Inside Bicycle Lamp

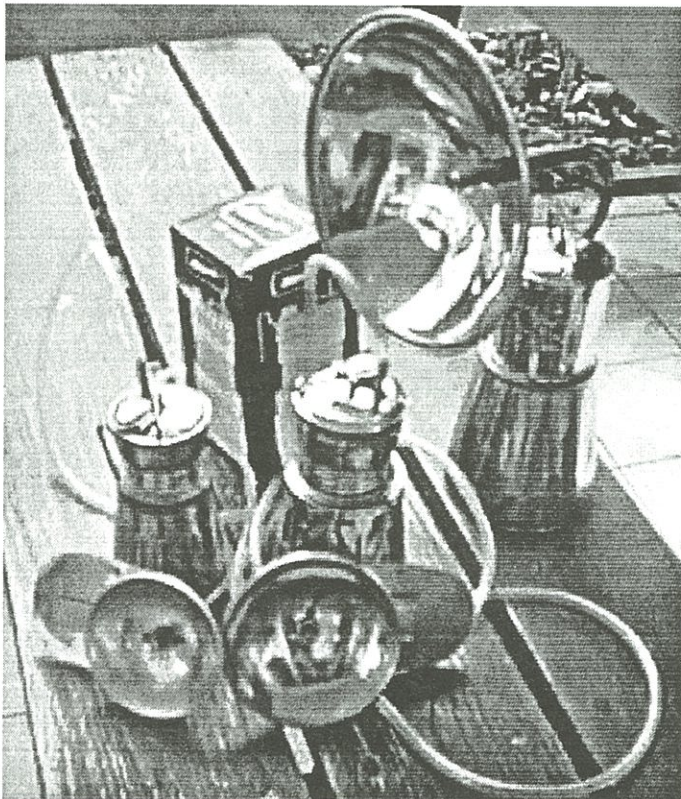
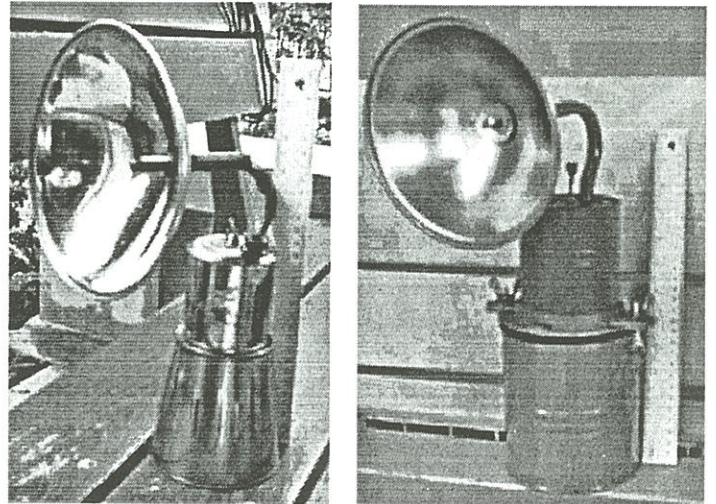
I picked up a cool kero Bicycle light this weekend a Search Light but the real cool thing was inside it was a brass pin advertising piece for the light.

Neal Ressler



Asian Carbides

This lamps are still available in southeast asia, and were recently advertised on miningcollect as well as the eBay Internet auction. Whether they are still being manufactured or not is unknown.



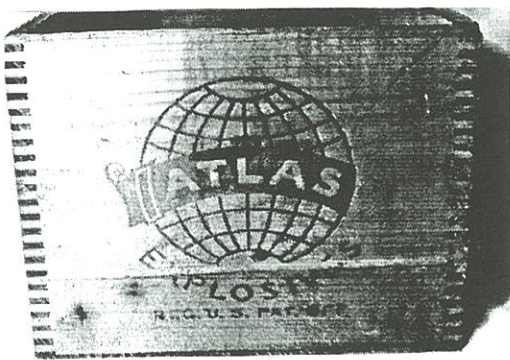
More on Coalite

Andy Martin had this to add on Roger Mitchell's Coalite box seen in the last issue:

"The brand is mentioned in the 1928 Keystone Metal Quarry Catalog, as shown in the included Xerox. Permissible Explosives had special chemistry to allow their use in blasting coal. Ordinary dynamite might ignite methane or otherwise be hazardous when used to shoot coal.



Coalite is a good name for a permissible explosive, since the primary use would be for coal. These permissible explosives were rarely/never used in hard rock mines - at least I can't remember ever seeing any. They were probably weaker or more expensive than regular dynamite.




The Keystone Ad mentions "Twelve grades", so it is possible the "S" on your box is the grade type. "5" and "424" might be date encodings, "w" might be a factory code (Wilkes Barre?) though this is a long shot.

Finally, Eric Twitty of 3750 Darley Ave, Boulder CO 80303, is working on a book on explosives. He might have more info. He might also be able to date the box, I would guess 1920 - 1930, but this could be off. The design of the ATLAS globe on the back is a potential clue."

Another correspondent wrote:

"Your Coalite box is a little unusual because it is 25 lbs. ATLAS was pretty big in the 20's - 30's, so I would place it in that age range. Coalite was developed for hard coal mines and had less fumes than black powder."



ATLAS POWDER CO.

WILMINGTON, DELAWARE

Atlas Permissibles — COALITES—Twelve grades to meet every coal mining requirement. No objectionable fumes. Cold resisting.

GEL-COALITES—Two grades of gelatinous character for wet work. All grades tested and approved for permissibility by the U. S. Bureau of Mines.

From 1928 Keystone Metal Quarry Catalog.



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 **nonsubscribers** is \$15 for ads up to 75 words. For larger ads, add \$25 to fee for subscribers. Fee includes custom computer layout.

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Ads must be submitted for each issue in which they will appear. Send all ads to Dave Thorpe 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 one of the Eureka staff.. 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!

Somebody help me! I need the 4th (1925) and the 9th (1938) editions of the DuPont Blaster's Handbook to complete collection. Ron Champeau, 100 Indian Run Road, Bellingham, MA 02019, tel: (508) 883-8026,

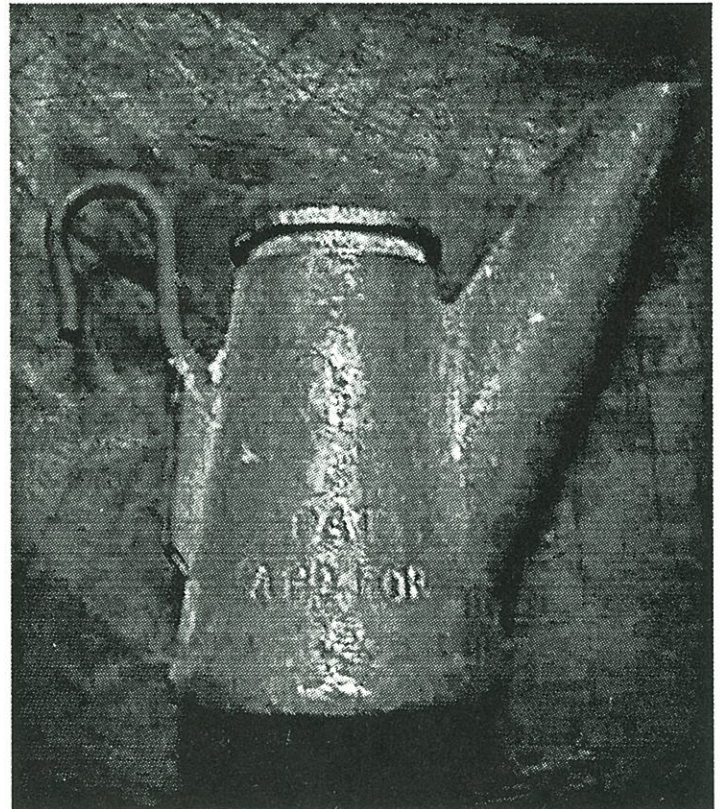
Who loves ya baby? Looking for mining artifacts? If they are in PA, I'll find 'em. Let me know what you want, and I'll go searching. Neal Ressler, (717) 656-4230, email: nastynsr@redrose.net

For Sale: Stereoview cards of mining in Pa. area anthracite regions. Group of western hard rock mining real photo post cards and a few small b/w photos of same. Brass/steel Kohler safety lamp, Two copper miners blasting needles. Tom Stranko, PO Box 832, Binghamton, NY 13902-0832

Friemann & Wolf Catalog: Photocopy of original catalog for sale. Contact Dave Gresko: email: trigeek@msn.com.

Wanted: Parts for early Rand rock drill, need split front collar that goes around piston as it leaves the body of the drill. Have other parts for trade or sale for early rock drills. Contact Bob Hauck, Sterling Hill Mining Museum, 30 Plant St., Ogdensburg, NJ 07439-1126, (973)209-7212

For Sale: Reproductions of the Pamphlet "How the Auto-Lite is Made". These aren't just the copies that some of you got earlier, but folded and stapled with a cover to duplicate the original. Send your orders with \$10 + \$1 shipping per copy to Robert Youngs PO Box 4376 South Colby, WA 98384. Questions can be e-mailed to robyoungs@sinclair.net



*Aluminum oil wick lamp.
Steve Loftin collection and photo.*

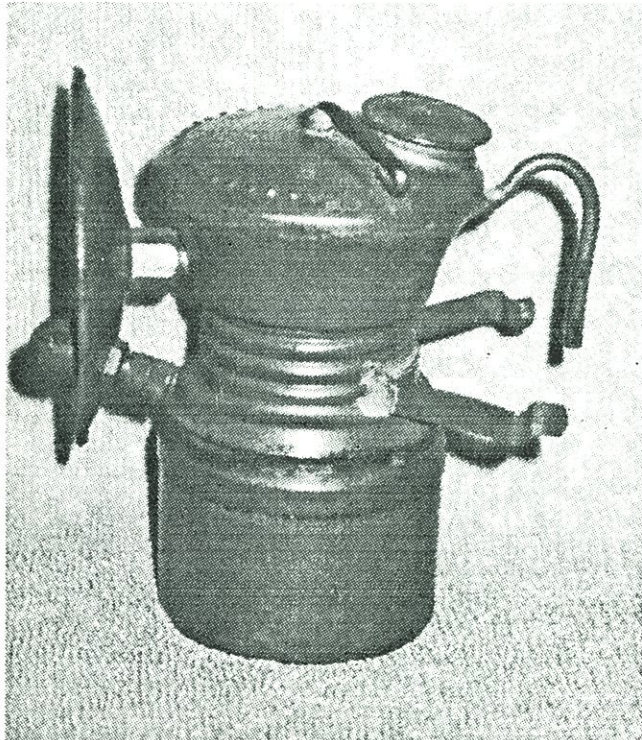
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