

EUREKA!

THE JOURNAL OF MINING COLLECTIBLES

Issue 31



August 1999



New AutoLite Style Discovered!

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General Information

SUBSCRIPTION POLICY: *EUREKA!* is published quarterly (January, April, July, October). Subscriptions are accepted for one year at a time. Price is \$25 per annum in the US, \$35 overseas. Back issues are available for \$8 US, and \$9 overseas delivery. May be purchased for \$6 at Eastern U.S. Reunion. A subscription form is included in the Fall issue. Requests should be mailed to: Todd Town, 38 Agazzi Terrace, Globe, AZ 85501.

SUBMISSIONS: *EUREKA!* welcomes unsolicited articles, reviews, information, photos, and artwork. All photos and artwork need to be of high quality and should be mailed to Dave Thorpe, 130 E. Tierra Buena Ln., Phoenix, AZ 85022. Materials submitted for publication may be subject to alteration at the discretion of the editors.

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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**

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Front Cover: Early AutoLite cap lamp. Photo by Glen Hostlaw.



First the Bad News...

The bad news: this will be the last year of the hard-copy Eureka magazine. Our final magazine will be the October issue. The good news: we'll be fully on-line as of October. The final edition will also be the only issue available as hard copy *and* Internet versions. It will be free.

What will it be like? We're not exactly sure, as the site is under construction at this time. We will have the usual bells and whistles that folks are used to on websites: links to other areas, instant communication to the editors (webmasters as they are known on-line), and color! For those who really miss the hard copy version, there is some salvation. We are committed to making the 'magazine portion' of the online Eureka! look nearly identical to the magazine you are used to receiving. In this way you will be able to print your own copy. If you are not on line, and are planning to buy a computer and/or modem, get the fastest machine your budget will allow. There will be many photos, and these take time on the slower machines.

Here is the initial site location. Remember, it will not be fully loaded until the Fall.

<http://eurekamagazine.net/>

We'll be giving a more complete update of the site in the Fall issue.

Other bad news: John Johnson and Tommy Bish have passed away. Both were well-known collectors of western mining items...and both collections have been liquidated in California.

Good Things Coming

The 9th Annual Eastern Mining Artifact Show and Collectors Reunion will be held in Louisville, KY on Saturday Oct. 16, 1999 at the Ramanda Inn at 1041 Zorn Ave. (I-71 exit 2) just east of downtown Louisville on the Ohio River. For room reservations call the Ramada Inn at (502)897-5101 and tell them you are with the Mining Artifact Collectors in order to receive the group room rate.

'Tucson 2000' will be held on a Saturday, after all. (Feb 5, 2000). See enclosed flyer. Dave Thorpe's 3rd annual pre-show get-together will be held on the Friday evening before, in Superior, AZ. Home made sausage will be served by the camp fire. For info, email Dave at dthorpe@primenet.com

If you have an off-road vehicle, Dave Thorpe will be taking a group into the historic Martinez Mine either before or after the Tucson show. Date and time still to be determined. Several buildings still stand with heavy machinery. Two-wheel drive trucks should make it just fine. Dirt bikes and ATVs will allow more extensive exploration.

Mark Bohannon is writing articles again. This issue features two items submitted by him. We have two more articles by Mark ready to go for the Fall issue of *EUREKA!*

Some Early AutoLites

by Dave Thorpe

Sometimes pictures are worth more alone than with a text analysis. Presented here are three very early AutoLite cap lamps. The first one recently found by Glen Hostlaw bridges a gap between the others.

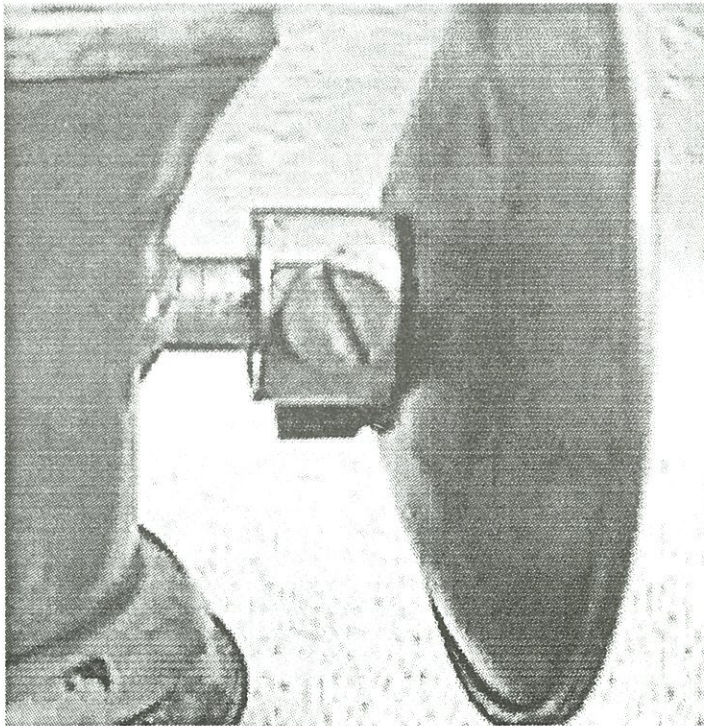
Lamp #1 Glen Hostlaw



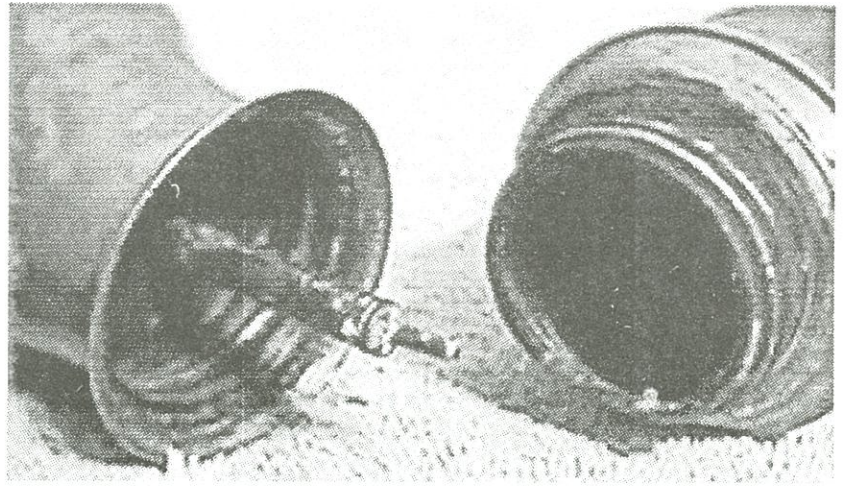
Notable for the 'boat-style' water door and simple water lever.



Smooth base of note.



Yep, this is the right reflector, right down to the set screw.



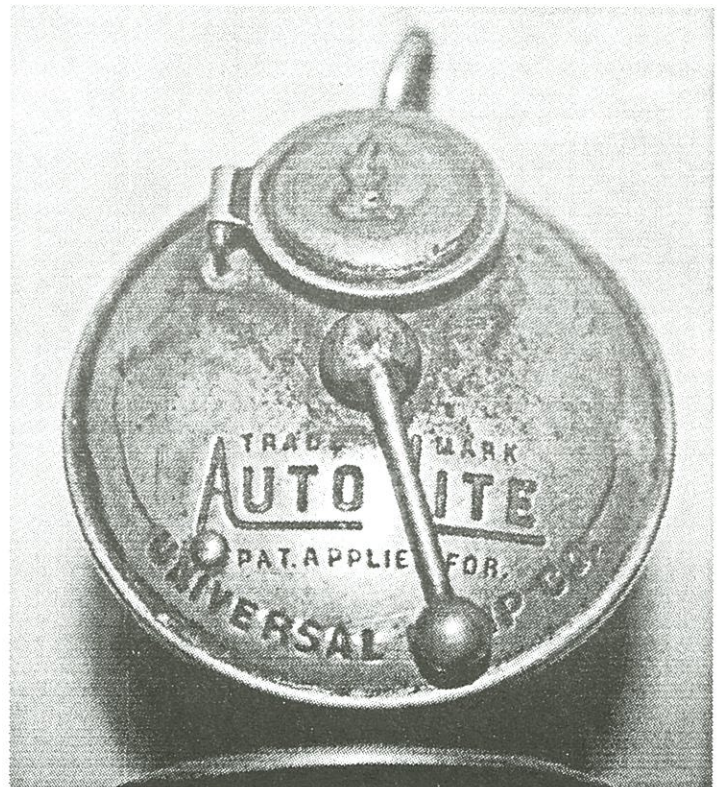
A couple pics for those who have to get personal.

Lamp #2 Mark Bohannon

(More recent)

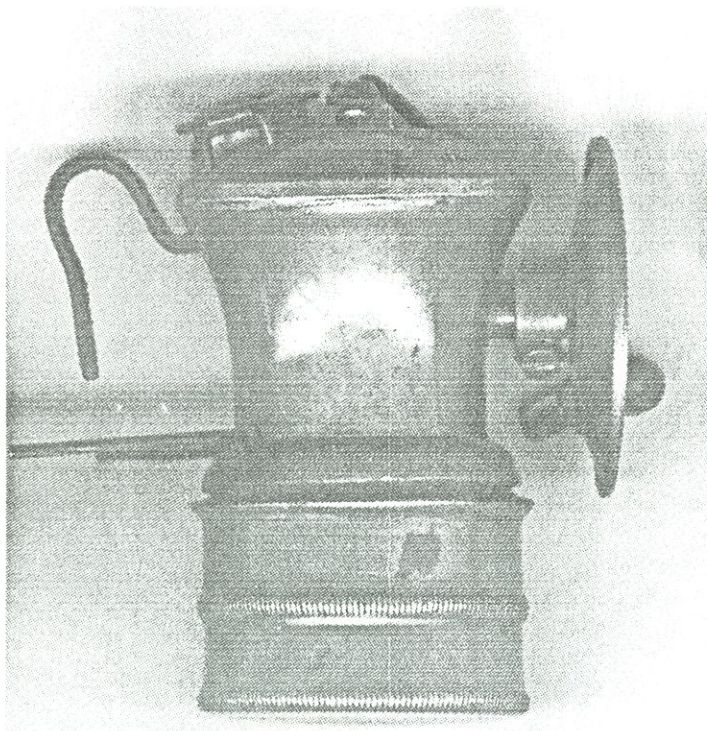


Base is double knurled base.



Changes include single raised dimple to stop water lever, double thickness waterdoor, and ball at end of lever

Lamp #3 Dave Thorpe (Later yet)

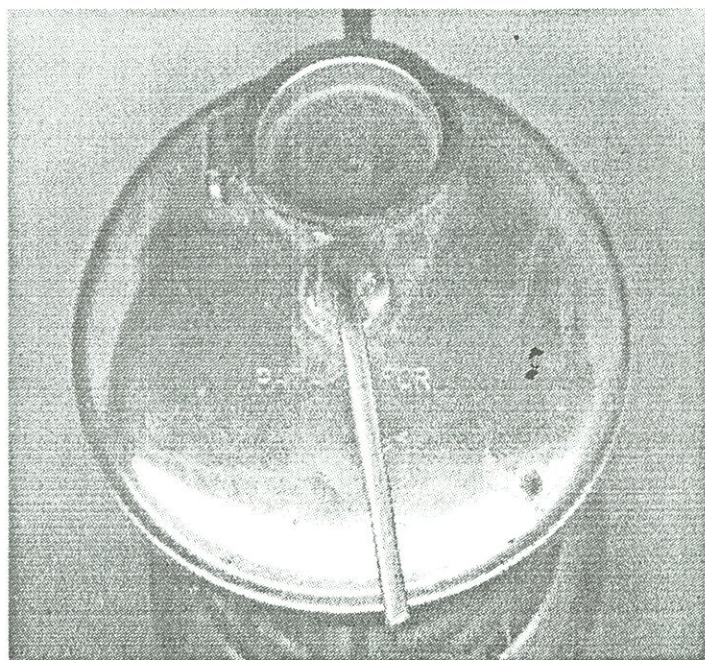


Lamp has now acquired rear braces.



The locating dimple is gone. Additional stamping is added: "REG US PAT OFF"

Lamp #4 Dave Thorpe (earliest)



Simple lever, inset waterdoor, and smooth base are identical to lamp #1.

Stamping on top reads:

"PAT APLD FOR"

Analysis

With the recent discovery of lamp #1 by Glen Hostlaw, the early AutoLite series is unequivocally united.

It is known that in his earliest lamp manufacturing of the 'AutoLite', Sherman collaborated with Meyer Stein, whose product was 'The Springfield Lamp'. Stein, in fact seems to have been in charge of metal-smith operations. Indeed, the watertanks for all of these lamps are identical in dimension to 'Springfield Lamps'.

Perhaps the earliest progenitor lamp for these two manufacturers was the rare S&S lamp (? Sherman and Stein). That lamp had a similar, but narrower tank, but used the same lever and water door as the two earliest AutoLites shown here. The smooth carbide chamber of the S&S, also appears to be identical.

At some point in time, it is known that Sherman began to have certain lamp parts manufactured by Chase Brass, of Waterbury Connecticut. I will suggest that this point in time coincided with the manufacture of Glen Hostlaw's Lamp #1. The reason relates to the double knurled base. This base uses knurling that matches the knurling on later AutoLite tanks that clearly did not utilize the tank dies of Meyer Stein, and which was made at a time when Sherman had moved his entire facility from Springfield to Chicago, and was clearly known to be using Chase products for his assembly.

Much of the above is clearly my own speculation, but I have more! The recent discover of a booklet describing the manufacture of the AutoLite shows an illustration of the plant...this is a massive complex, multistory, and covering several

acres of land. Universal Lamp Co. (AutoLite) made only two items at the time: a cap lamp and a carbide container (also coincidentally made of brass).

It is inconceivable that such a huge plant could be used to manufacture two small items. I would postulate that the illustration of this huge plant is actually a rendition of Chase Brass Works of Waterbury, Connecticut. This facility is known to have made many brass products, including some lamps for Simmons (Pioneer).

I would be very interested if someone in the Connecticut area might be able to dig up some photos of the Chase Brass facility. It would certainly prove me right or wrong!

Mark Bohannon's Lamp #2 is novel, for it is the only one with the single raised dimple to stop the water lever. I have seen a single-dimple AutoLite in Errol Christman's collection.

For collectors, AutoLites have often been categorized by the reflector, either 'setscrew' or held on with a nut over a threaded gas tube. When it comes to rarity though, one might best separate them by tank shape. The earliest lamps share a tank shape identical to Meyer Stein's Springfield lamp. All lamps shown here are of this design. The later lamps, of which people are most familiar, used a more bulbous tank. These more modern lamps are found with setscrew reflectors as well as conventional. These lamps, whether setscrew or not, are relatively common.

Check your early AutoLites for evidence of solder on the back, a sign that it once had cap braces. Some did and some did not. Any early-tank AutoLite, that is entirely correct is highly collectible. By the way, the reflector my Lamp #4 is not correct! It is a Baldwin push-on, somewhat similar to the S&S. I may change this out someday for an early setscrew!

The 'Maine Lighting Company' Patented 'Controllable' Acetylene Dip System Bucket Lamp

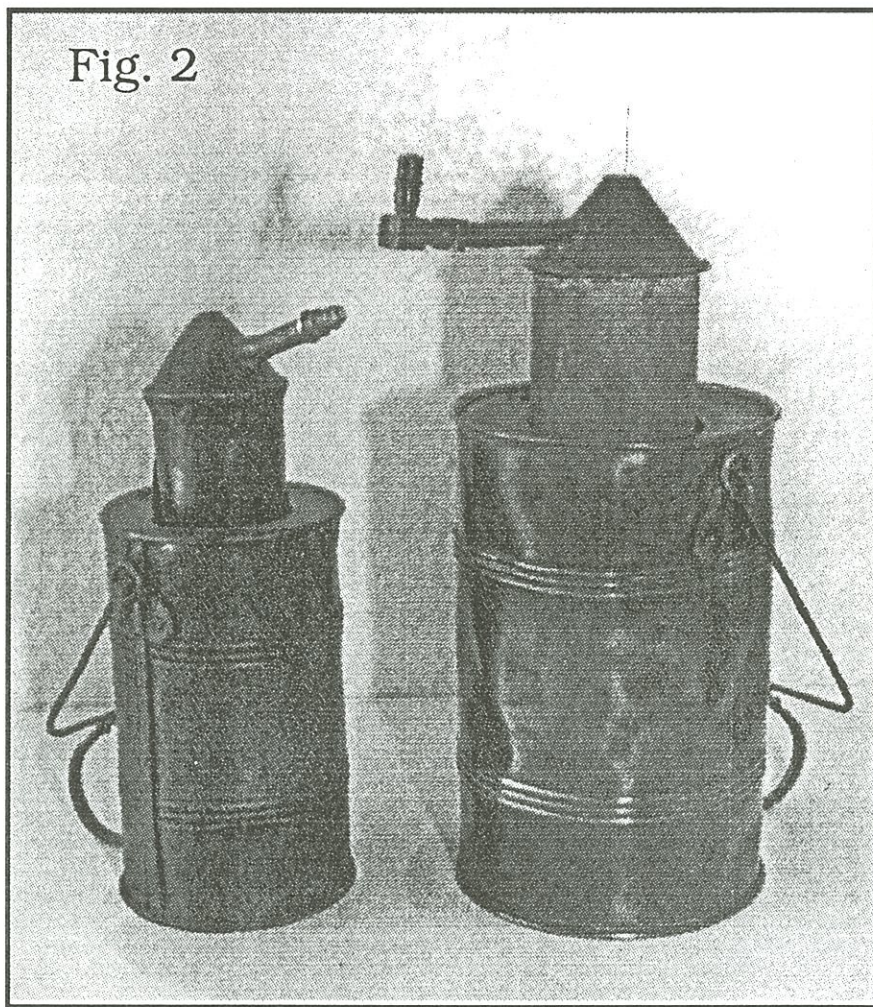
by Mick Corbridge

In Henry Pohs' book - 'Mine Flame Lights', on page 583 is a sketch of a unnamed bucket lamp referred to as 'a iron tank carbide lamp'. This lamp was manufactured around the early 1940's, by 'The Maine Lighting Co.' - England. This style of lamp is normally referred to as a 'dip system bucket lamp' as the internally supported carbide container is dropped or 'dipped' into the water which is contained in the outer 'bucket' container. **Fig. 1** shows the component parts of this style of lamp. The carbide is held in the center shown cylinder, which in turn is fitted inside the gas reservoir section having the conical top & jet outlet stem. These combined cylinders are then slotted into the central tube of the water bucket. The carbide container is drilled with a very fine hole, (this can just be seen on **Fig. 1** which allows a slow feed of water onto the carbide to produce the required gas generation.

Fig. 1



Fig. 2



Several other early carbide lamp manufacturers used this basic system of lamp operation, but all designs previous to the 'Maine' patent had the disadvantage that once dipped, the lamp remained on until the lamp was dismantled: also no control of gas pressure was possible & so flame size was not stable. With the 'Maine' lamp, the designer named 'Shepherd' added a very simple friction spring that could either hold the carbide chamber hole above the water, or it could be adjusted to a position where the hole was 'dipped' below the water level & hence produced gas generation. This spring device can also be seen **Fig.1**. This patented lamp, (Pat. No. 8999), gave the advantage in that gas generation could be somewhat crudely controlled by lifting or lowering the carbide container which was held in position by the friction spring; also the lamp could

be temporally extinguished without having to dismantle the lamp.

The earliest examples- of this lamp were made when the company was based in Blackpool - England, & many lamps then produced were not fitted with company logo badges although some do exist from this period of manufacture.

Fig. 2 shows two lamps from this period, one been of metal & of the small pattern size, (with a bucket height of around 160 mm), & the other example been of all brass manufacture & of the middle sized pattern, (bucket height 195 mm).

It then appears that the company's main factory moved to nearby Burnley & it is from here that the majority of Maines lamps were manufactured. Now it appears that from

Fig. 3



Fig. 4



Burnley, all lamps were supplied having the oval embossed brass manufacturers badge fitted on the front of the bucket, this gave the manufacturers name & address with 'Shepherds Patent No. 8999'. **Fig. 3** shows a mainly metal, and an all brass version of lamps from this factory, both of the small pattern size.

'Maine Lighting' then either moved again, or acquired a further base in Newcastle-upon-Tyne on the eastern side of the country. **Fig. 4** show examples of lamps supplied from this base, & the badges show the new base town along with a partial address of

43A Side ? This photo shows a unusual small pattern lamp with a vertical jet stem exiting from the center top, and the body having a combined handle/bracket on the side. The other lamp shown is of the large pattern size where the bucket height is the same as the medium size lamp, but each section is of a much larger diameter; this lamp size has a metal supporting base ring for extra strength & protection.

This larger pattern lamp design was later acquired under the same Shepherds patent No. 8999 by the firm 'Leading Light Syndicate' of Hull - Yorkshire - England. They modified the design to incorporate a reflector which was held by a substantially cast brass sliding bracket; **Fig. 5** shows a example of this lamp and also shows the larger brass oval embossed badge of this company.

Fig. 5



The lamp patterns described above were designed for industrial & mining use, but a further pattern was developed for general lighting. This variant had two jet stems & burners. **Fig. 6** shows the small and mid-size lamps with this variation; the badge on the larger one has been added later and is 'J. E. Draper - Poultry Appliance Maker Blackburn', it probably replaced the removed Maine badge and it is almost certain that the lamps were manufactured by Maine when at nearby Burnley. The ring on the bucket top of the small lamp is a dip-stick to allow checking of water level.

I have seen Maine lamps with the badge showing 'Maine of Edinborough', and so it appears that some form of base also existed in Scotland.

Fig. 6



The Pioneer Miner's Carbide Cap Lamp

Excerpts from brochure of the E.D. Bullard Co., San Francisco. Date unknown. (Mark Bohannon). The following should help those with Pioneer lamps to identify which model number they have, and to establish which accessories are correct.

by Mark Bohannon

A CARBIDE LAMP THAT WILL HOLD ITS LIGHT IN STRONG AIR CURRENTS.

Ask mining man to tell you what advantages, **if** any, the oil lamp has over the carbide lamp and he will more than likely say "The carbide lamp loses its light when used where the air currents are a bit heavy, whereas the oil lamp will stay lighted, and the carbide lamp will go out when heavy shots are fired, while the oil lamp will usually hold."

We have long known the need of a carbide lamp which would **hold** its light in strong air currents and as well have known that the lamp should be shot-proof. Besides this, complaints received from miners have convinced us that the carbide lamp is not always entirely satisfactory when used in damp mines on account of the drip from above and sometimes moisture from the lamp itself finding its way into the burner tip and choking it up.

We have for years been trying to overcome these faults and now after several years of effort and experimenting we are able to report that we have succeeded in perfecting certain attachments, which when used on the carbide lamp will make it

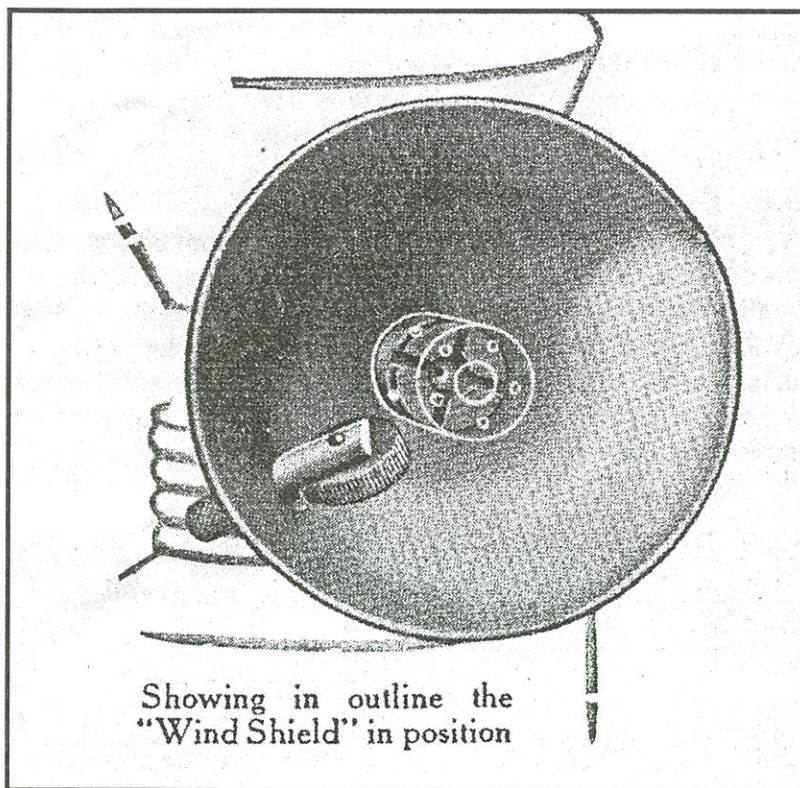
WIND-PROOF, SHOT-PROOF AND DRIP-PROOF

These improvements were completed some time ago. We first put them in the hands of practical men, who thoroughly tested them, giving them hard usage the same as they would receive in regular use and since then we have had lamps with these improvements in practical use in most all mining fields and reports are that they do what is claimed for them.

In reporting on these lamps miners are unanimous in recommending that every miner who believes in "safety first" should use a carbide mine lamp, equipped with this windshield and shot-proof attachment.

As one old miner expressed it:

"There are times when it makes no difference if you lamp does go out, but there are other times when it means a whole lot, and me for the lamp that will not leave me in the dark after I have spit my fuse."



As the burner tip is completely housed-in by the wind shield, overhead drip or leakage from the top of the lamp cannot get into the small gas-way and stop it up. This lamp will not only burn in a windstorm but burn in a rainstorm as well.

HOW WELL WILL THIS LAMP STAND SHOT FIRING?

We can best answer this by submitting extracts from letters received from drivers and shot-firers who have used our new shot-proof attachment.

"I am running a drilling machine and we fire very heavy shots-I can say that the new lamp at a distance of about 100 feet when firing a heavy shot charged with 18 sticks of giant powder, remained lighted

"I have tested the lamp on special occasions with the following results: First trial was made in the presence of the fire bosses. We extended chamber lines about 60 feet from inside of the place where shot firing was done. When was fired, the fire bosses' lamps were extinguished - mine remained lighted.

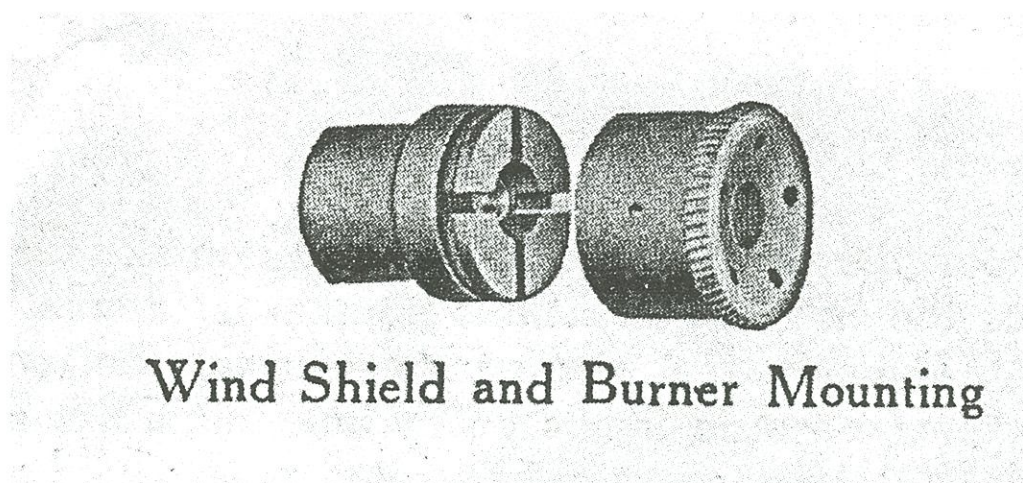
"Another trial was made in the presence of five men, three of these used other makes of carbide lamps, the other two used common oil lamps. At a distance of 100 feet when shot was fired, the other lamps were extinguished; mine remained lighted. Another shot was fired in the same place ten minutes afterwards and at the same distance with four other makes of carbide lamps present-all of these were extinguished - mine held the light."

We have hundreds of other letters on file which are just as emphatic in their recommendation of these attachments.

CAN BE USED AS AN OUTSIDE LAMP IN STORMY WEATHER

On a windy rainy night the carbide mine lamp might be used to good advantage by the miner, lighting his way home from the mine. Heretofore, however, the carbide lamp could not be used for this purpose, as the wind would blow it out and if not that, the rain would get into the

'burner, choke it up and put out the flame, so the miner was forced to go home in the dark or use some other kind of a lamp.



The new wind-shield as you will see completely houses-in the burner tip so you can readily understand why this would prevent moisture getting into the burner and stopping it up and as the shield makes the burner immune to the strongest air current, a lamp equipped with this wind-shield will work as well on a stormy night, as it will when the weather is clear and calm.

HOW MUCH AIR WILL THE LAMP STAND?

The best answer to the above question is "More air than will ever be met with inside a mine."

On the next page we print extracts from some of the many letters recently received from miners and let us add if there is the slightest doubt in your mind as to the authenticity of these, simply write us and we will send you copies of the original letters; these will give you the names of the writers, their addresses and the names of the mines where these men are employed.

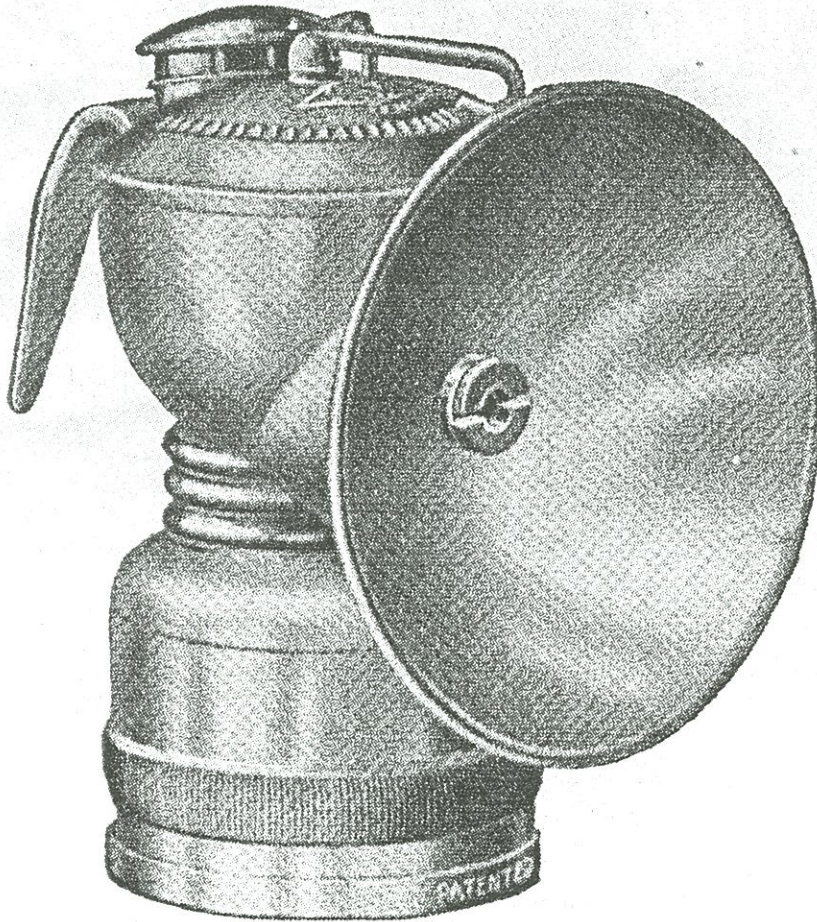
"I used one of the new lamps while riding on the front of a locomotive going fifteen miles an hour, running into 90,000 cubic feet of air. On the locomotive there were others carrying lamp - every other lamp lost its light - mine was the only one which remained lighted during the entire trip."

"I took the lamp inside the main air-intake directly back of the fan, the air at this point was calculated to be 81,000 cubic feet per minute-in this current no oil or other carbide lamps could hold their flame and even safety lamps were extinguished unless held under the coat-the lamp showed 100 per cent. Efficiency - it was taken in and out twice as the severest test came when opening and closing the air doors, which test it stood perfectly."

SPECIAL FEATURES FOUND IN PIONEER LAMPS

Larger water tank give greater capacity without increasing weight - Notches on top of lamp hold valve lever in position - Knurled band on container which strengthens it and enables the miner to get a firm grip when unscrewing container from water tank - Water cap non-leakable, water will not run down on miner s neck Burner tube and hook that cannot be twisted loose - Felt holder, easy to put on and take off - Reflector brace made fast to lamp body, can be used as reflector if desired. All parts are readily accessible for cleaning.

NO. 124 WITH BOTTOM VALVE FEED



Lava Burner-Rigid Removable Reflector
Weight, 5 1/2 oz. Height, 4 inches
Burns 3 hours on one charge

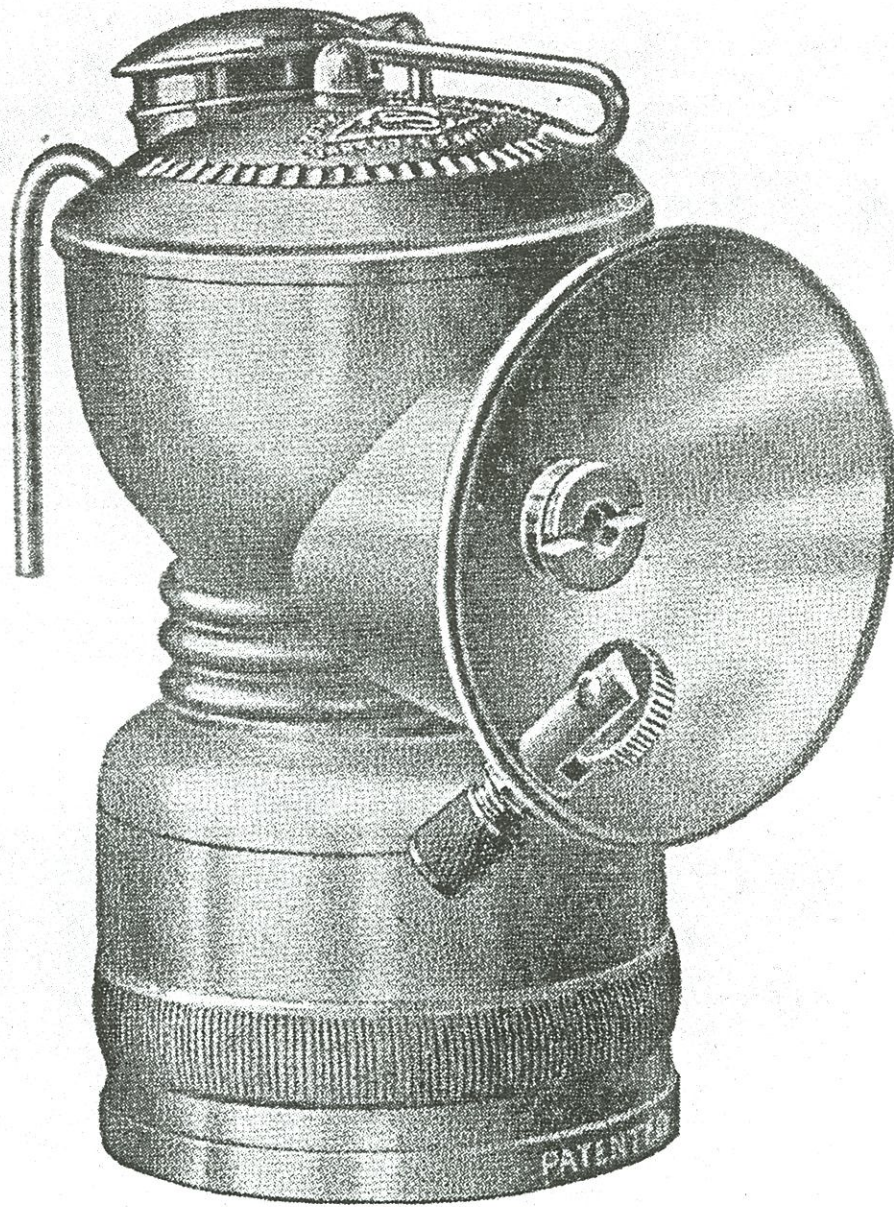
Notches on top of lamp hold valve lever in position.

When lamp is operated according to directions packed with each lamp, it will burn with a steady flame and require very little regulation.

Lamp equipped with a flat hook, No. 5 Brass reflector 3 3-16 inches in diameter, and one extra container.

Price Complete..... \$1.25

No. 125
WITH BOTTOM VALVE FEED



Lava Burner - Rigid Removable Reflector
Weight, 5 1/2 ounces Height, 4 inches
Burns 3 hours on one charge.

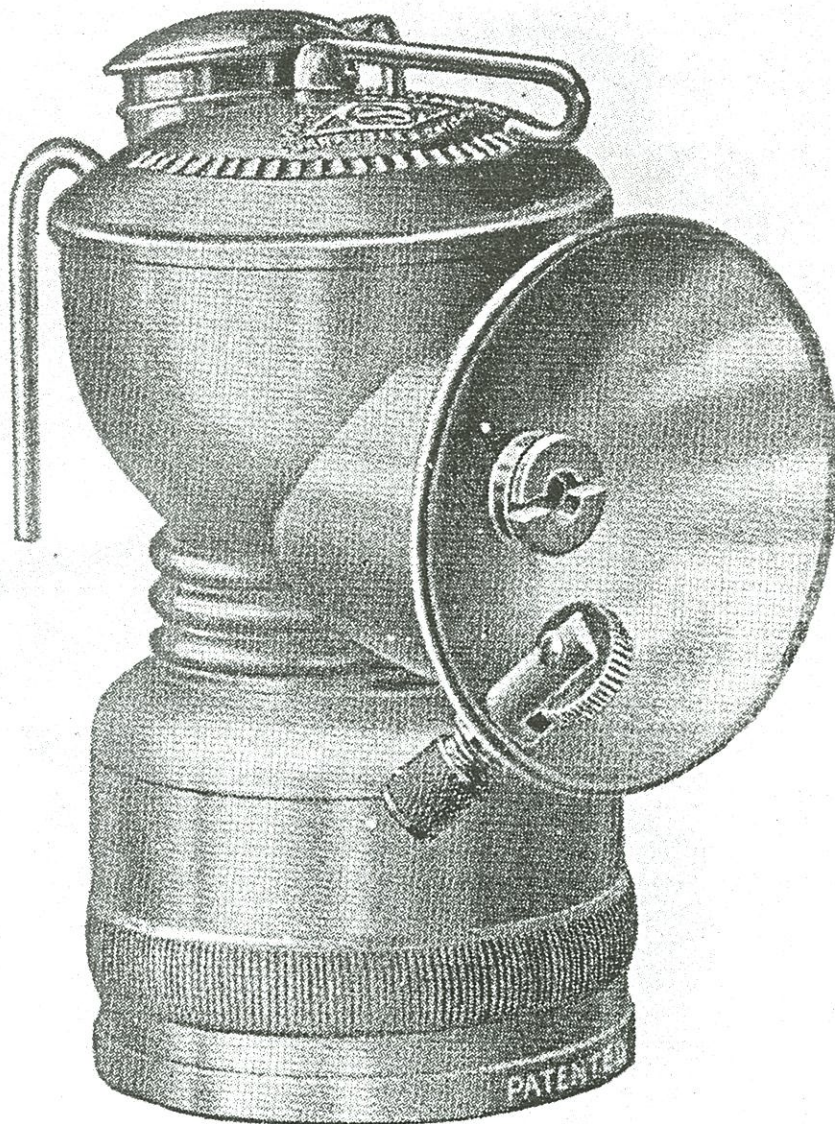
Notches on top of lamp hold valve lever in position.

When lamp is operated according to directions packed with each lamp it will burn with a steady flame and require very little regulation.

Lamp equipped with spark lighter, and one extra container.

Price Complete.....\$1.25

NO. 129-130
WITH AUTOMATIC WATER FEED



Lava Burner - - - Rigid Removable Reflector
Weight, 5 1/2 ounces Height, 4 inches
Burns 3 hours on one charge.

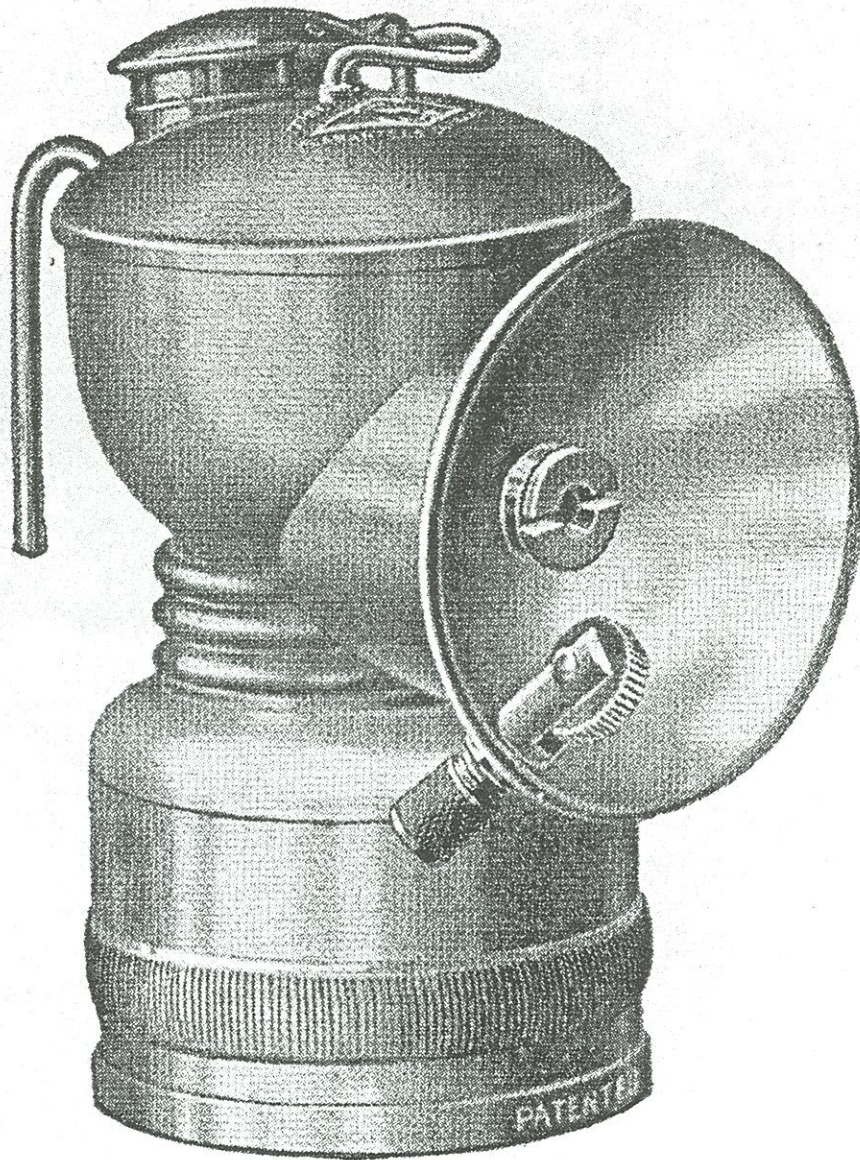
No. 130 operates similar to the No. 132, but is equipped with . water shut-off. This valve construction is proof against change of regulation and **loss** of light due to the swing of the miner's head, a common fault with most valve controlled lamps.

Lamp equipped with spark lighter and one extra container.

No. 129 is the same as No. 130 except it is equipped with a flat hook and No. 5 polished brass reflector. 3 3/16 in. in diameter. No sparker; one extra **container**.

Price Complete..... \$1.25

NO. 131-132
WITH AUTOMATIC WATER FEED



Lava Burner-Rigid Removable Reflector
Weight, 5 ounces Height, 4 inches
Burns 3 hours on one charge

The No. 132 is fitted with the patented Automatic Water Feed. The automatic regulation of the water makes hand regulation unnecessary.

No. 132, as illustrated, equipped with spark lighter and one extra container.

No. 131 is the same as No. 132, with the exception of being made with a flat hook and equipped with No. 5 polished brass reflector. 3 3/16 in. in diameter No sparker; one extra container.

Price Complete..... each \$1.25

VARYING EQUIPMENT

We can furnish any of our lamps either with or without the wind shield and shot proof features and with various equipment such as hooks, reflectors, etc.

HOOKS-Lamps are usually furnished with round wire hooks. If flat hooks are desired they will be furnished without extra charge.

REFLECTORS-All lamps except where otherwise specified are equipped with No. 9 reflectors. These are 2 1/2 in. in diameter and 3/4 in. in depth. We can, upon order, furnish other reflectors-see page 19.

Lamp with extra container \$1.25 ea.

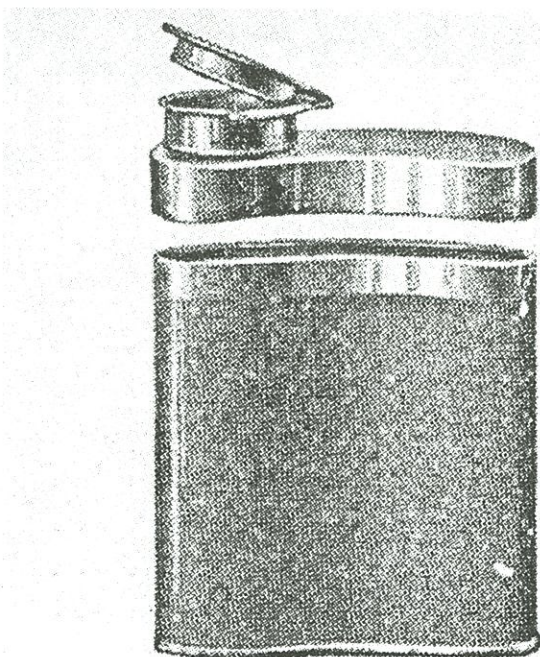
Wind caps..... .05 ea.

Shot proof attachment on lamp. .10 ea.

Extra plain containers20 ea.

Extra shot proof containers . .30 ea.

When desired we can furnish a 1/2-lb. carbide can at same price as extra container.



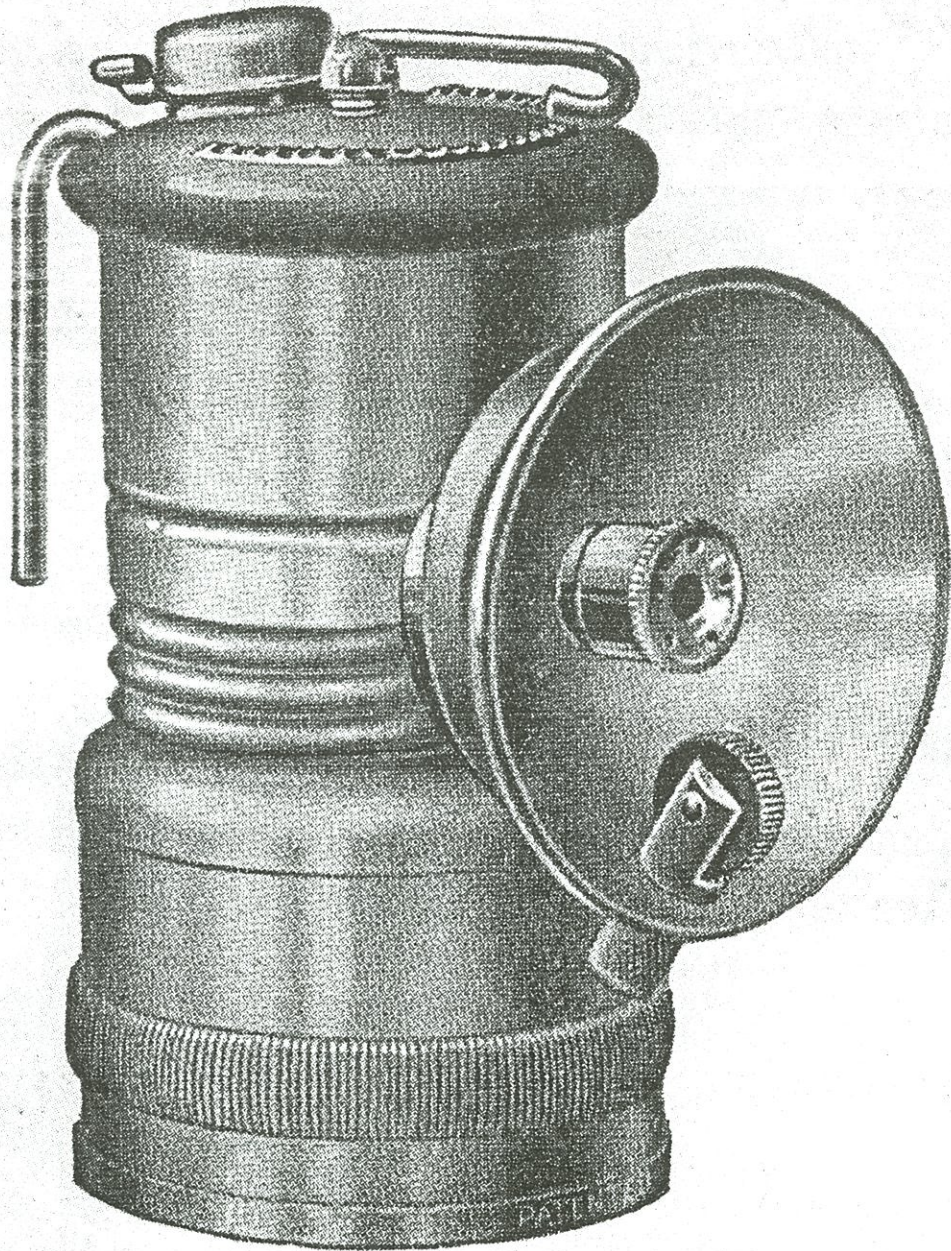
NO. 307

Hip Flask

Curved to fit the hip pocket-holds one-half pound-has snap top, one-half inch opening for charging your lamp. Entire top is removable for filling.

Price, each..... 5c

HOLD-A-LITE
BOTTOM VALVE FEED



Lava Burner-Rigid Removable Reflector
Weight, 5 7/8 oz. Height, 3 3/4 inches
Burns 21 1/2 hours on one charge.

Notches on top of lamp hold valve lever in position.

Hook cannot be wrenched loose. Reflector strongly braced by rigid shell attached to lamp body.

This lamp equipped with spark lighter, wind shield and two shot proof carbide containers.
Price Complete..... \$1.25

THE BOTTOM OF THE CARBIDE CONTAINER IS REINFORCED AND STRENGTHENED

The carbide container, by this we mean, the bottom half of the lamp, wears out more quickly than the water-tank (upper half of the lamp) as the carbide containers are battered and dented so badly, they are frequently unfit for further use.

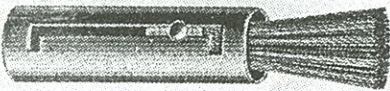
The bottoms of the containers used on our shot-proof lamp are reinforced by an extra thickness of sheet brass. The edges of the container are just double the thickness of other containers. They will stand the battering and pounding the miner gives them when dumping out the used carbide. The knurled band around the containers adds to their strength and is also an aid in gripping to unscrew the container from the water tank. The extra strength of the container will add many days of usefulness to the lamp, and the user, instead of being compelled to throw away a 'II serviceable water-tank because the containers are worn out, will find that the containers will outlast the water-tank.

CLEAN YOUR LAMP

It will mean several months more service from your lamp if you empty the used carbide from it after using. Slacked carbide eats into the brass and weakens it, if left standing in the lamp. So, clean your lamp every day after work; also clean the burner before using, it will give you a better flame as particles of dirt may distort the flame.

Brush Burner Cleaners

These cleaners are far more convenient and Tdurable than the ordinary disc cleaner. Wires can be used as a brush to remove surface dirt, or a single wire used separately to clean the gas outlet.

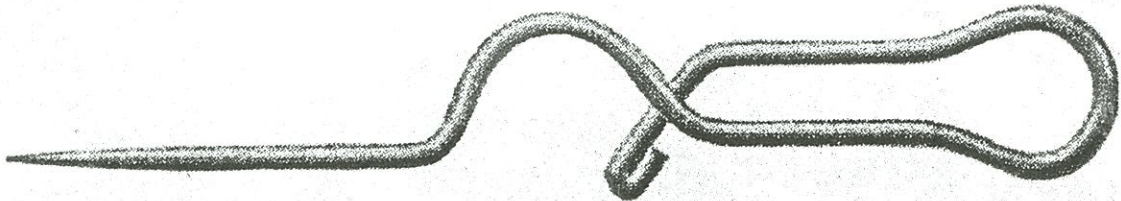


No. 61 consists of 60 wires, solidly set in a brass case with sliding base. This case protects the pocket when cleaner is not in use. The knob allows the cleaner to be locked into position.

Price, each 1 Oc.



No. 62 consists of 40 wires set in a rigid holder. Has no protecting case. Price, each 5c.



No. 73

A Strong, Sturdy Lampholder

Made of one solid piece of steel-snaps on to the lamp easily and holds securely. Hold lamp firmly in one hand and force it into the opening on holder which can be put on right or left so that light can be thrown in any direction. Can be easily jammed into the earth or timbers. Holds securely-you will find it practical and simple.

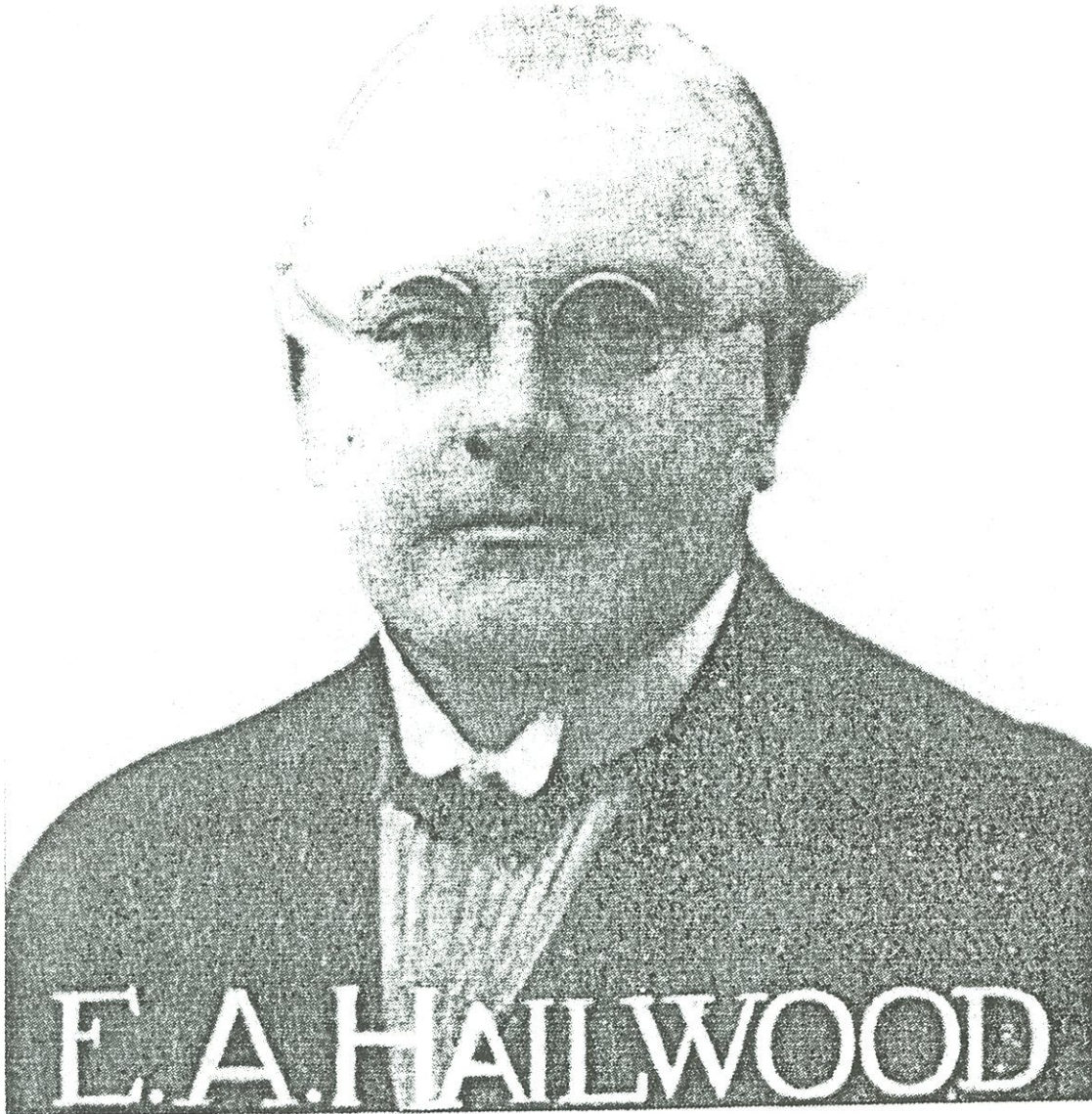
Price, each 25c.

EUREKA! August 1999

Ernest Arthur Hailwood

A Colourful Character

by Werner Horning



ERNEST ARTHUR HAILWOOD was born in St. Helens, Lancashire, on the 30th April 1877, the son of an Engineer with a propensity for invention.

The family moved to Sheffield when Ernest was still only a small boy, and it was in Sheffield where he started school.

In the evenings after school, young Ernest would occupy his time by helping his father in the cellar of the family home. Even at such a tender age, he would assist in the preparation of patent applications for his father's various inventions.

There was perhaps something hereditary for one of Ernest's grandfathers was also an Engineer - the other being a Candle Maker - and the development of inventions did appear to be a strong family trait. It was an attribute which was to manifest itself throughout Ernest's life. For during his lifetime, Ernest Hailwood took out upwards of 200 patents, covering a range of items from miners lamps to glass and lighting products.

Ernest was one of 12 children, during his childhood, times were hard and money

short. In Sheffield, as in every other town, there was a great deal of poverty, and at that time working life began early. Ernest became a working'man' at the age of 12 in a large Sheffield millinery store, where his wages were the princely sum of three shillings(1 5p) per week.

In his *first week*, he was promoted to a position on the cash desk where he was paid an additional one shilling, (5p) bonus, if the cash was right at the end of the week. Two pence (that's less than 1 p today), was Ernest's personal allowance for the week, despite having worked between 12 and 14 hours per day!

Following his first working experience in that store, he took on a number of other jobs including working for a Rent Collector, an Estate Agent and an Accountant, all of which brought him into contact with the seamy side of life. Nevertheless those jobs provided him with the necessary business confidence, experience, and the 'push' required to progress.

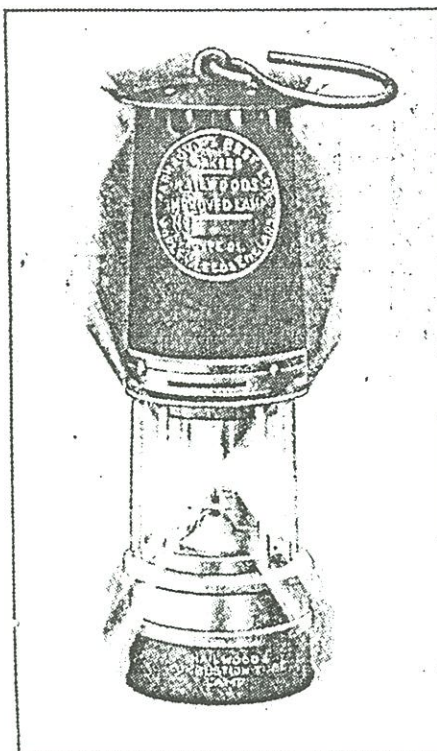
Eventually he moved into Engineering, as perhaps destiny and heredity dictated. In 1893, at the age of 16, he began working at the Hadfield Steel Foundry in Sheffield, where he remained for the next six years.

In 1899, Ernest's father obtained employment with a rival engineering company. Ernest was then 22 years old.

Having obtained a good grounding in the Engineering Industry at Hadfield's, Ernest decided it was time to move on.

His ultimate ambition was to work over-seas, and in 1899, when he moved to Morley to take up a minor secretarial position with Ackroyd and Best, he only intended his employment with the company to be of a temporary nature. He obtained the position by displaying his knowl-

The very latest in SAFE



The Hailwood Combustion Tube Oil Lamp

(approved by British Government) gives an illumination of over 2 candle-power. Only half weight and half cost of electric Lamps, but 100 times less worry. We will guarantee it to regularly and constantly give from 1½ to 1½ candle-power.

Simple in action and easy of manipulation, it is a safe and sure detector of gas.

The light is soft and mellow, and is the finest known preventive of Nyctagmus.

It is most difficult to extinguish by jerks or jolts; is not readily smoked up; and may be tilted to one side without being extinguished.

If extinguished, it may be safely and certainly re-lit in a moment on our

SPECIAL RE-LIGHTING MACHINES,

which comply with Government requirements, and do away with naked light lamp stations, and ensure maximum safety to men and mine.

ACKROYD & BEST Ltd.,

Telephone No.- 86 MORLEY.

edge of business principles - superior for someone of his age his out-going personality and dignified bearing.

Hailwood's lowly childhood ignited a fighting spirit which remained with him throughout his life. He was equally able to account for himself orally, in several languages, and he was constantly ready to challenge the tyrannical attitude of William Best, one of his superiors.

There was a constant clash of personalities between Hailwood and Best; and it was that struggle which gave rise to Hailwood's resolve to see the 'scrap' through to the bitter end!

That end came in 1908 when Hailwood was 31 years old. The entire Best family were ejected from the company, and he - Hailwood - was appointed General Manager and Secretary.

During the First World War, the company turned over much of its manufacturing capacity to the production of munitions for the war effort.

At the end of hostilities, Hailwood decided to follow his lifetime ambition and moved overseas. He was interested in working a farm in the Canary Islands, but after visiting the farm, decided it would be much more 'fun' fighting the commercial competition from Morley!

He returned to the company where, following the war, munitions manufacturing was dropped in favour of a return to lamp production and expanding the glass making side of the business.

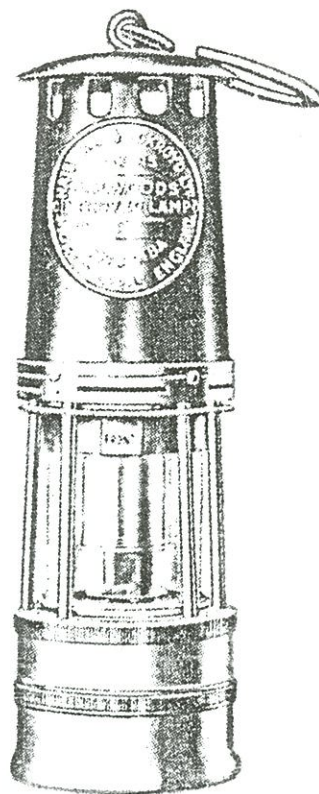
Hailwood was instrumental in developing the company to become the largest manufacturer of illuminating glassware and fittings in England, during the 1920s.

He began travelling the world in search of new markets for the company's products. His travels took him to the continent, Russia, America, Canada and Mexico. It was said, during working time he would be away on business, returning unexpectedly to the Morley works at holiday times.

It was in 1927 that Hailwood saw his name go up the company buildings, it replaced that of William Best, only now Hailwood's name was in front, and the company had become Hailwood and Ackroyd.

Hailwood's Safety Lamps

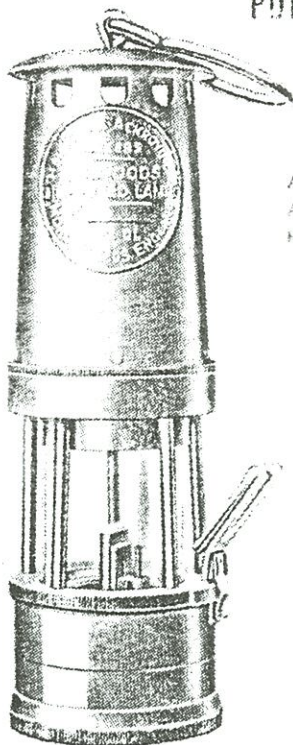
O.I.B. COMBUSTION TUBE LAMP



An approved Schedule "B" (Class 1) Lamp, complying with The Safety Lamp (Condition of Use) Order 1934.

Hailwood's Safety Lamps

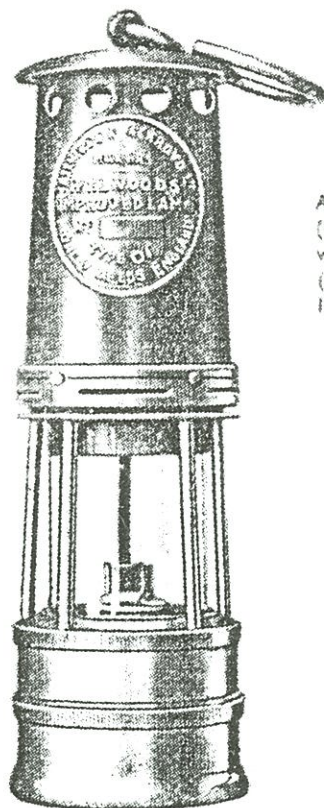
A.P.60. SAFETY LAMP FOR SHIPS PUBLIC SERVICES ETC.



An approved Lamp by The
Admiralty for use in
H.M. Ships.

Hailwood's Safety Lamps

O.I.B. LAMP (DOUBLE GAUZE)



An approved Schedule "B"
(Class I) Lamp, complying
with The Safety Lamps
(Condition of Use) Order
1934.

Hailwood was a family man, he lived with his wife Effie, and their five children at Beacon Lodge. All five children became involved with the firm in different capacities.

Gertrude Beatrice Hailwood received a BSc degree in glass technology from Sheffield University - believed to be the first woman in England to receive that honour. She joined the company in 1934, as a Materials Analyst in the Laboratory.

Muriel Hailwood, qualified as a Pilot in 1936 - possibly Morley's first female Pilot. She was employed to write the company's advertising material.

In 1934 she wrote a song: 'We are a Happy Crowd' (see issue 29 from January 1999, page 24, 25, submitted by Manfred Stutzer) intended to be sung by Miners, and copies were circulated to every time in the country. The song sheet carried a picture of the Hailwood Miners Lamp on its cover.

Sylvia Hailwood (see advertiser's announcements for Hailglass) studied Art at Leeds College of Art and Industrial Design, and went on to produce several glassware designs which were taken up by the company.

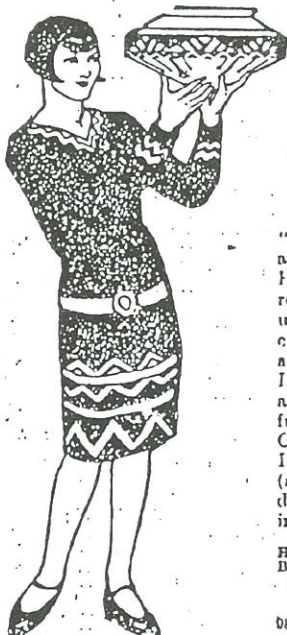
Mary Hailwood was also an accomplished Artist, she had a painting accepted by the Royal Academy in 1931. Mary drew many of the sketches used by the company for publicity purposes.

Hailwood's only son was also employed by the company.

Ernest Hailwood's career was brought to an abrupt end in 1937, when irregularities were discovered with regard to redundant stock disposals. An ignominious end to an other-wise splendid, albeit controversial, working life!

Reference: Michael Warwick and others.

"It is Hailglass
and made only by
**HAILWOOD &
ACKROYD, LTD."**



"It is Hailglass and made only by Hailwood & Ackroyd, Ltd., at their up-to-date works covering five acres at Morley, near Leeds; they make all kinds of beautiful artistic Opal, Clear and Coloured Illuminating Ware (and Fittings), the designs are burnt in and washable."

Head Office & Works:
Benson Works, Morley,
near Leeds.

Branches:
08, Mansell Street,
London, E.C.1.
32, Shaftesbury Av.,
London, W.1.
28, High Street,
Birmingham.
21, Waterloo Street,
Glasgow, C.2.



149

Miners' Safety Lamps.

**RAPID LAMP CLEANING
and FILLING MACHINES.**

Reduce cleaners' wages to a
minimum.

**ELECTRIC LIGHTING &
UNLOCKING MACHINES,
LAMPSTANDS, TABLES,
LAMP TRUCKS,
and all necessary
LAMPROOM
APPARATUS and
FITTINGS.**

**HAILWOOD'S PATENT
CHECK OR TALLY BOX,**

For conveniently storing a
large number of checks with the minimum amount of wall space.

Best Government Approved **SAFETY LAMP
GLASSES** of all kinds and sizes. Our own make.

HAILWOOD'S PATENT GAUZE BRUSHES
with Renewable End and Reversible Body.

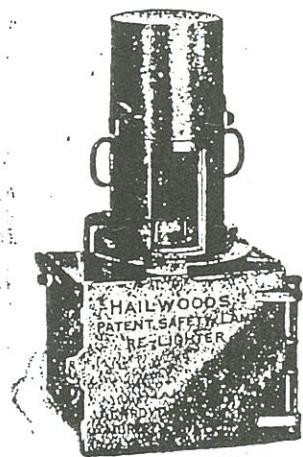
Lamp Cleaning Brushes of all kinds.

J. HAILWOOD'S PATENT TUB GREASERS,
ensuring great saving in greasing bill.

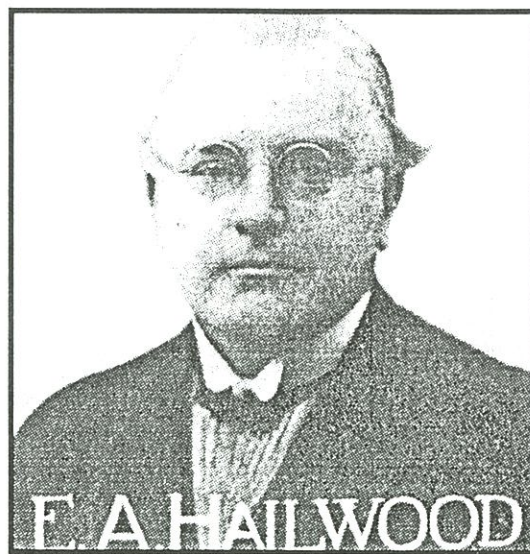
J. HAILWOOD'S PATENT FURNACE CEMENT.

Air Grooved Firebars. Fire Bridges or
Smoke Consumers for Boiler Furnaces.

MORLEY, near LEEDS.



An invention of Hailwood.



Designed by Sylvia Hailwood.

Nothing Like a Good Dump

by Todd and Tina Town

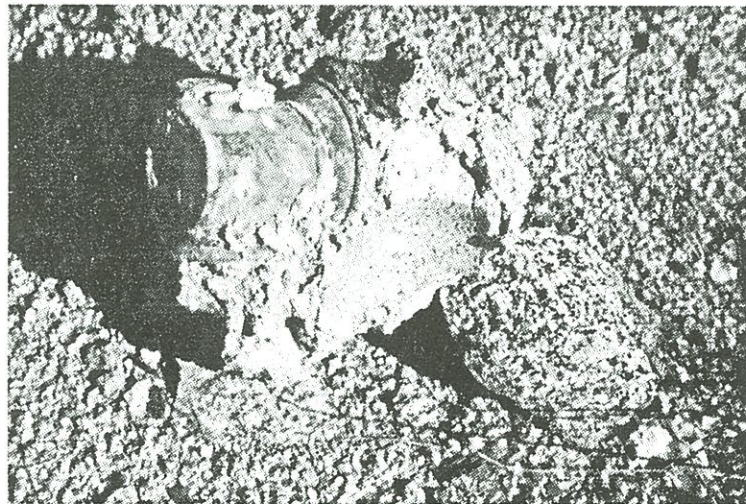
Relic hunting at old mine sites is way up there on our list of things to do. Priority, after getting to one, was always to

find the way to the underground workings. "That's where the good stuff is." Well that holds true, but recently we've been more interested in finding where the dry house was.

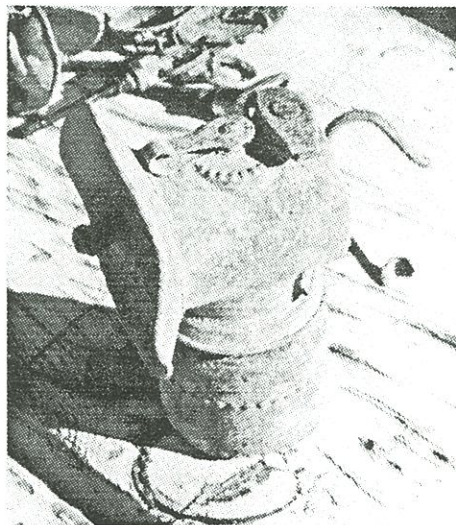


More than likely, At large abandoned mines, nearby was an area that the miners would empty their spent carbide and dispose of what other articles they were no longer in need of. We've been digging one dry house dump for the past two years. It has yielded some really exciting finds. And a small insight as to what the miners were using in their daily work.

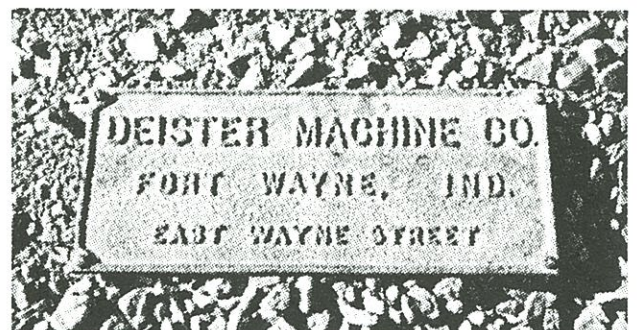
Some of the more fascinating things were the repair jobs made to their carbides. They truly worked the hell out of them and did not let them die easy.



We've pulled out over 200 lamps from a single dry house dump. And almost as many cut locks. The story of the end, for this mine can be seen in the layers in the dump. When the mine closed, it was very evident that somebody was assigned to go in and clean house. The locks were cut and the belongings were taken to the back of the building and tossed in a small drainage. Some lamps being complete, but well used. In the pocket of one pair of Levi's we recovered 18 cents and a spiral feed for a Little Giant and two candle stubs.



So if your artifact hunting at an old mine site, keep your eyes out for chunks and pieces of spent carbide and follow it uphill. It might get fun.



Electric Cap and Hand Lamps for Miners

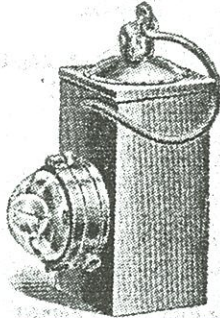
by Dave Johnson

Most American collectors of miner's lamps concentrate first on carbide cap lamps, followed fairly equally by safety lamps, oilwick lamps, and candlesticks, with hand held carbide lamps lagging far behind. Two types of lamps that get little attention from most collectors are electric cap lamps and hand held electric lamps. They tend to be rejected as "too new".

Actually patents for electric hand lamps preceded those for carbide cap lamps by several years. The earliest U.S. patent for an "Electric Safety Lamp for Miners" was granted to Theophilus Coad of Forest Gate, County of Essex, England on October 29, 1889. He was granted a British patent for the same lamp January 5, 1884. This was rather heavy affair with the removable battery alone weighing over 6 lbs. One early English electric hand lamp, the Wilson-Swan, had a battery that weighed more than 9 lbs.

Miner's Safety Lantern

ABSOLUTELY SAFE



Cannot cause fire or explosion. Burns 12 hours on one charge. Easily recharged by any one. Simple—Compact—Durable. Price and Leaflet on application.

Portable Electric Safety Light Company

37 N. J. R. R. Ave. NEWARK, N. J.

Numerous unsuccessful electric lamps were patented early on. The first U.S. patent for an electric miner's cap lamp was granted to Lewis Cogswell and James Abel of Taylorsville, Illinois on September 1, 1908. This was followed by a patent for an "Electric Lamp for Helmets" issued to Johann Drager of Lubeck, Germany issued on October 27, 1908. These patents appeared during the first decade of carbide cap lamp use.

Lewis Cogswell received patent number 985,660 on February 28, 1911 for a lamp considerably different than his earlier patent. Harry Becker of Baltimore, MD received a patent for a similar cap lamp on March 12, 1912, closely followed by Victor Patton, of Tollarburg, Colorado on May 21, 1912.

Steve Koroby, of Smithdale, PA, received a patent for an electric miner's lamp on June 17, 1913. This lamp featured a battery pack attached to the miner's cap, undoubtedly making this a rather heavy and uncomfortable device, if it were ever produced and used.

Perhaps the most unusual design was that patented by Richard Harris, of Bearden, TN, on September 1, 1914. This patent shows what appears to be a flashlight stuck through the top of a hardhat. The following year, Angelo Tolen received a patent for a lamp with a headpiece that bears a resemblance to what we think of as electric lamp headpieces today. None of these aforementioned patents achieved anything approaching commercial success. They all failed to address the problem of a reliable rechargeable battery system and an efficient filament bulb.

The patent for the first miner's electric cap lamp to achieve commercial success was filed by

Paul D. Payne, of Irvington, New Jersey, assignor to the Edison Storage Battery Company of West Orange, New Jersey, on May 17, 1923. Although filed in 1923, the patent was not granted until July 24, 1928. As can be seen on the photo of this early Edison lamp, the lamp was being manufactured and sold prior to 1928 since it is stamped Patent Applied For.

While Payne was waiting for his patent, Grant Wheat filed for a patent for a miner's electric cap lamp on November 22, 1926, he was assignor to the Koehler Mfg. Co. of Marlboro, Massachusetts. On May 6, 1930, Wheat received patents 1,757,887 through 1,757,889 filed on June 23, 1929, November 22, 1926 and December 16, 1926, respectively.

Edison and Koehler were to be the two major manufacturers of American electric cap lamps in the early years of production. However, foreign manufacturers tried the American market. On May 26, 1931, Paul Wolf, of Zwickau, Germany received two patents for a miner's electric cap lamp. With Edison, Koehler and Wolf setting the pace, the future of the electric cap lamp was ensured and the carbide lamp slowly declined until today they are used only by some miners in small mines in third-world nations and by cavers.

Many attempts to devise a reliable portable electric lamp for miners' use were made by inventors, the first of which was in England in 1883. It was apparent that a practical lamp would have many advantages over the oil lamp.

But the first commercially produced electric lamps all had three common defects; first, they were too heavy, second, they used a liquid electrolyte, which proved undesirable for several reasons and, third, they were unable to hold a charge for an entire shift underground. A portable lamp is necessarily composed of two parts, the battery which furnishes the current, and the bulb. The latter was quickly brought to a high perfection; the former became the troublesome element.

The Sussman electric lamp was the first to receive favorable notice in England, and was introduced about 1894. Instead of a liquid electrolyte, paper paste, impregnated with sulfuric acid was used, the total weight being 4 1/4 pounds. The illumination was twice that of a safety-lamp. The Sussman lamp was placed in regular use at the Murton Colliery, near Sunderland in 1897 and eventually had 1,500 lamps in daily use. The Sussman lamp weighted 3 1/4 lbs. And had two 2-volt cells and a capacity of 5 1/2 amperes and maintained a charge for

The Edison Model E Electric Cap Lamp

Lead wires connect back cap lamp to battery and prevent tampering.

Cap lamp is much simplified, being built according to standard.

Laminated "Silvex" glass lens is non-shatterable and does not break readily.

Bulb contains 150 ampere 1.5 volt and has a much longer life than the requirements for normal use by the Bureau of Mines.

Two solid steel sections cap back.

This lamp is so designed that in case of accidental breakage of bulb, filament shall at once cease to glow at a temperature sufficient to ignite the most explosive mixture of gas and air.

"Tires" No. 16 Cord is used exclusively. Two rubber covered wires wrap non-slippery around a corner case, reducing great flexibility without breaking or breaking of wires, with great mechanical strength.

Cable is braided on battery end to prevent slipping or tearing at cable connection in battery.

Cable passes through tapered fitting with locking clamp, to hold securely.

Non-spilling of solution assured by specially designed patented safety approved safety test by the U. S. Bureau of Mines.

Practical Key Lock well indicating Key is required to open.

M-18 Cell will illuminate increased in 211 in. or 127% more than Model G Lamp Cell. Solenoid are constructed to further shorten the cell run.

The M-18 Edison Cells have a capacity of 12 amperes hours at 2.5 volts. Actual capacity exceeds this figure, depending on actual heating of the bulb for a full 12-hour period.

Edison Storage Battery Co.

Specifications:

Type of Battery.....	M-18
Number of Cells.....	2
Rated Capacity.....	
Ampere hours.....	12
Hours illumination after full charge.....	12
Normal Charging Rate.....	
Amperes.....	1.5
Length of Charge, hrs.....	8
Weights:	
2 Cells Assembled, ozs.....	52
Metal Container, ozs.....	13
Headpiece, ozs.....	20
Total ozs.....	84
Capacity BM-18 Bulb.....	1.30 Amps.
List Price BM-18 Bulb.....	45c

Thomas A. Edison's famous Nickel-Iron Alkaline Battery is used as part of this Lamp. Light in weight, with the strength of steel and the non-corroding long-life of Nickel.

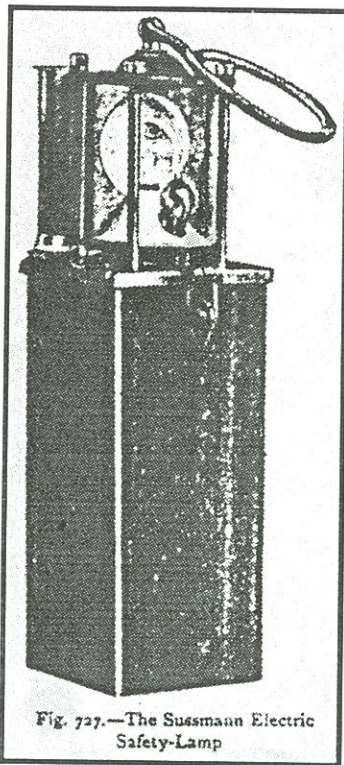


Fig. 727.—The Sussmann Electric Safety-Lamp

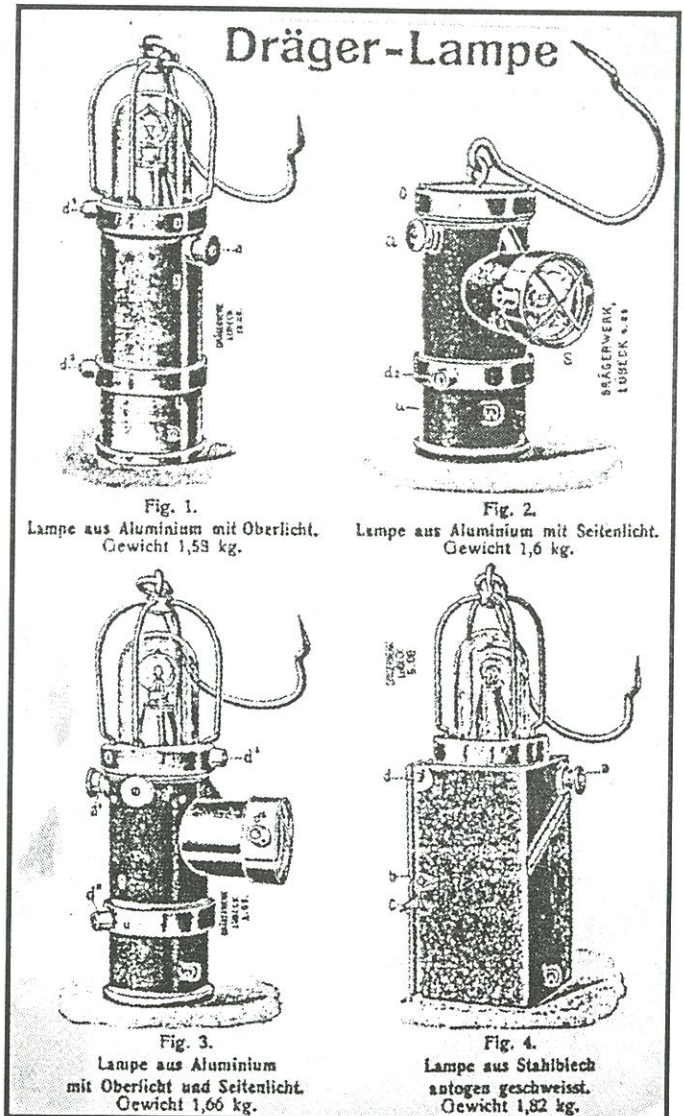
8-12 hours. Several thousand of these lamps were employed in English and Belgian collieries in 1904, the Bracquegnies colliery, Belgium, being reported as using 2,000 of them, and an English colliery 1,400. The cost of the lamp, including all repairs and renewals of the incandescent filament, was found to be 1/4cent per day of 12 hours. The life of the lamp was stated as five years. It was charged by connecting the battery to the wires of a dynamo for nine hours, the current for charging not exceeding eight amperes. At an English coal pit a record of the lamp's performance was kept for one month, and showed that, out of 504 lamps in use, an average of 96.73 per cent completed the shift, the remainder being rendered unusable from various causes.

The Neu-Catrice, another miners' lamp, was used at the Bruay collieries, France, and the Float lamp was introduced in Wales.

In the United States electricity as a lighting medium also received much attention. In 1896 it was suggested that arc lights be used in headings in place of incandescent lamps, and that the light be reflected so as to light the face. In 1901 the Pennsylvania legislature seriously considered making it compulsory for all mine owners to electrically light the entire underground interior of the mine.

Electric lamps were placed on the market as early as 1902 in the U.S., but, on account of the objections common to all the earlier types, were not favorably received. Early types were experimented with by the Philadelphia & Reading Coal & Iron Company, the Lehigh Coal & Navigation Company, and the Lehigh Valley Coal Company in the East, and the Colorado Fuel & Iron Company in the West.

None of the early experimental lamps proved successful. One of the principal difficulties lay in the inefficient carbon filament bulb which required a storage battery of too considerable a weight to be carried on the body with comfort. It was also soon demonstrated that the leakage of acid was a serious problem, as it was impossible to prevent the acid from seeping out around the cell connections and vent plug when used in a stooping position or when jostled. It attacked every metallic part of the battery with which it came in contact, destroyed the men's clothing and even burned the bodies of the miners.



In 1909 the Tungsten filament lamps were first placed on the market in America for limited or special commercial uses. The efficiency, or watts per candle, was about three to four times better than the carbon filament lamp. The effect of this improvement was to stimulate the search for a battery of sufficient lightness to enable it to be worn about the body.

The next two years were given to testing and developing lamps under actual working conditions and in trying to overcome the obstacles usually associated with the introduction of a new and novel product. Fully a dozen makers devised lamps during this period, the foremost cap lamp being the Hirsch, while the Ceag was the best known of the hand type. In March 1911 Thomas Edison became interested in the development of a practical miner's lamp and in May 1912 the first lamps made by the Edison Storage Battery Company were tried out in the mines of the Philadelphia and Reading Coal and Iron Company.

Concurrently the Wico lamp was introduced and tried out by the same company.

During the latter part of 1913 the Bureau of Mines, through H. H. Clark, became interested in the electric cap lamp, and after a personal tour of inspection and investigation at the Philadelphia and Reading Company's mines, took up the work with the view of standardizing its various features. Their chief concern was safety, thus making the lamp acceptable for general mine use. All available makes were studied and tested, and as a result a schedule of official tests were prepared which were used in establishing a list of permissible electric safety lamps for use in mining. This step was the means of bringing home to the manufacturers the realization that the electric cap lamp was here to stay and created not a little competition to produce the best lamp possible.

By the 1920's we find the cap lamp comprising a non-spillable battery mechanically protected by an aluminum or steel case having the cover locked and arranged to be carried on a belt, a

KOEHLER MFG. COMPANY, INC

Factory and Main Office
MARLBORO, MASS. U S A

BRANCH OFFICES
1634 Jefferson Avenue, Scranton, Pa. 530 Fernando Street, Pittsburgh, Pa.

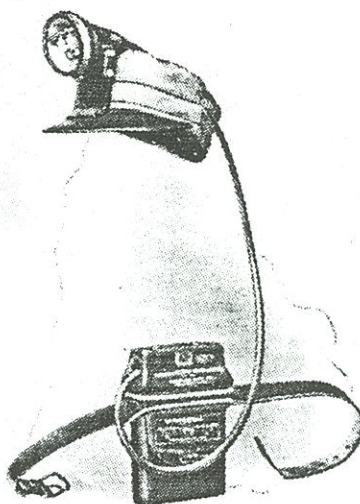
Wheat Electric Mine Lamp

"WHEAT" FOR LIGHT "KOEHLER" FOR TESTING

The Important Features

Two Bulbs in Headpiece—A bulb always in reserve. Eliminates lost time and accidents through being "left in the dark."

More Lighting Power—The bulb gives a clear white light and will burn from 12 to 16 hours on one charge.



U. S. Bureau of Mines Approval No. 17

Headpiece Always Sealed—The headpiece is provided with a locking and sealing device which prevents its being tampered with, and keeps out dirt and can be quickly opened or sealed by the lamp attendant.

Absolutely Safe—Should the lighted bulb be broken its electric current is instantly and automatically disconnected.

Lamp Burns with Battery in Any Position—The battery casing is so constructed that it can be carried in any position without leakage, or affecting the lighting capacity of the bulb.

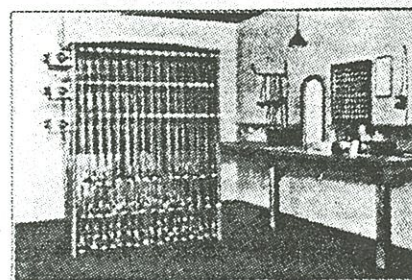
Easy Charging—The Wheat Electric Mine Lamp does not have to be taken apart for charging, but goes into the charging rack completely assembled.

Durability—The headpiece and battery casings are made of a special vulcanized material that is as strong and light as cast aluminum, and is absolutely unaffected by acid fumes or water.

Lamp Cord Cannot Bend Short—An improved cord connection, without springs, prevents short bending and breakage at entrance to battery case—gives greater security and longer life to lamp cords.

Greater Comfort to Wearer—The two belt connections to the battery case are as far apart as possible, thus greatly increasing the wearer's comfort.

Superior Construction—All parts are specially designed for convenient removal and assembling. This saves time and labor, and insures perfect condition of lamps at all times.



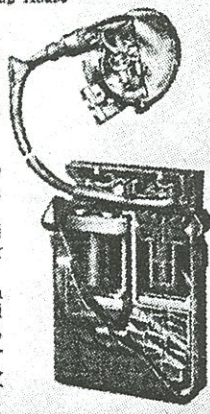
Layout of Lamp House

Repairs

All replacements and repairs on this lamp can be made in your lamphouse by your lampmen. This advantage is recognized by all our users.

Koehler Flame Safety Lamp
U. S. Bureau of Mines Approval No. 201.

The ideal lamp in testing for gas.
Made in steel, brass and aluminum, either magnetic or key lock, with round or flat wick.



special twin flexible conductor conveying the current from the battery to the lamp on the cap, encased for a short distance at both ends by flexible steel armor, serving as an anchor and preventing sharp bending. The lamp consisted of a parabolic reflector equipped with safety features, in which is mounted a tungsten lamp, the opening supporting a glass lens cushioned on gaskets held in place by a cap or spring, and provided with a hook to fit into the miner's cap.

When wearing this setup a man could exercise a full range of motion without restraint. He could use all tools and perform any desired work with as much freedom as when wearing the oilwick cap lamp, without the spillage of oil being a problem, as was the case with an oilwick cap lamp.

Special combination charging stations were provided with facilities for charging, cleaning and filling both the electric lamps and the oil safety lamps.

Advantages of Electric Cap Lamps

The advantages to be gained in the use of the electric cap lamp, approved by the United States Bureau of Mines as "permissible" for use in gaseous mines, are enumerated by the Bureau of Mines from a 1920's bulletin as follows:

- (1) It reduces, to the lowest possible, the hazard of gas explosions.
- (2) It reduces the danger of getting burned by lighting gas which may accumulate from a feeder found by drilling a hole.
- (3) It reduces the possibility of a serious dust explosion which may easily start by an open light igniting a pocket of combustible dust.
- (4) It reduces the great danger of mine fires which are so frequent in mines, due to setting off a gas pocket at the face of the advancing narrow work in nearly all mines.
- (5) It reduces accidents from handling explosives in the magazine, also during transportation and preparing shots at the face, etc.
- (6) It gives a much greater chance for a miner to escape for his life after a local explosion or through smoke from a fire due to having a light to travel by.
- (7) Reduces accident to drivers, motomen, rope-riders and shotfirers, as the electric light is more dependable against any velocity of the air-current, windy shots, etc.

The electric hand lamp differs from the cap lamp only in detail. The battery and bulb are brought together into one unit and thus the cord is eliminated. As with the oil safety lamp it is carried by means of a bale and when at the working face can be hung on a post conveniently close to the workings. While the weight of the hand lamp is frequently cited as an objection it must be borne in mind that this weight is not continually carried as is the case with the cap lamp.

Anyone collecting electric mine lamps will quickly notice that electric hand lamps were most popular in Europe and cap lamps most popular in the U.S.

Many of the earlier electric lamps are quite unusual looking and quite attractive, especially when produced in copper or brass, or a combination of both. Early electric mine lamps are one field that I feel has been too long neglected and deserves more attention and respect than it has been accorded.

SOURCES:

Keystone Mining

Catalog - 1916, 1922,
1923, 1925 and 1927

Practical Coal Mining,

W.S. - Boulton

U.S. Bureau of Mines

Bulletins

Proceedings of the Coal Mining Institute of America 1916, Article by J. T. Jennings

Edison Storage Battery Company

Factory and Main Office
316 LAKESIDE AVENUE, ORANGE, N. J.

Manufacturers of the
Edison Electric Safety Mine Lamp



NEW YORK
ATLANTA
NEW ORLEANS

BOSTON
CLEVELAND
DETROIT

Distributors in
PHILADELPHIA
PITTSBURGH
WASHINGTON

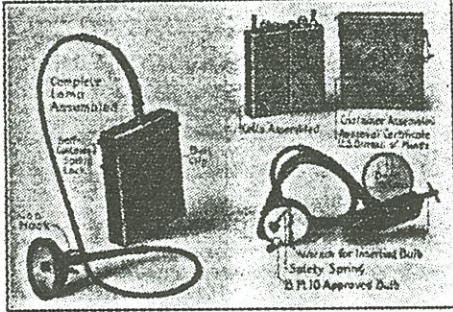
CHICAGO
ST. LOUIS
MONTREAL

SAN FRANCISCO
SEATTLE
LOS ANGELES

General Distributors
Mine Safety Appliances Co., Pittsburgh, Pa.

The Edison Electric Safety Mine Lamp

The Edison Mine Lamp is a permissible portable Electric Mine Lamp. It is the first to be approved by the Bureau of Mines for Safety, Practicability, Efficiency and General Durability in Mine Service.



Unassembled View Edison Mine Lamp

Standard in over 1,000 mines, over 175,000 in use in Metal and Coal Mines of the United States. Older installations show uninterrupted service over five years.
Burns 12 hours without recharge.
Fire Protection for your valuable operation.

Method of Attaching

The miner straps the battery case to his back by an ordinary belt. The lamp is attached to the



Method of Attaching

leather support in his cap, leaving his arms entirely free of lamp, cord and battery case.
Described in Bulletin No. 300.
See Page 695 for details of the Edison Battery.

The Edison Electric Shot-Firing Battery

Showing cover for M-8 Mine Lamp Battery arranged for shot-firing. Shot-firing cable is attached to a key furnished with cover. Key is then inserted in receptacle on cover, and detonation accomplished by pressing key into contact. Cover is furnished with or without fittings for lamp attachment.

It is simple, lightweight, strong and durable. One charge of the battery is capable of firing a great many shots.



Edison Shot-Firing Battery.
Showing how special cover for shot-firing is attached to regular Edison Mine Lamp.

Edison Electric Safety Trip Lamp

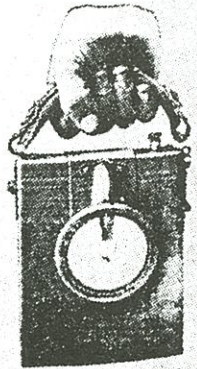
Consists of M-8 (Mine Lamp) Battery in steel case with special cover and lens. The case is provided with hook for attaching to mine car as "head" or "tail" light. This device is approved by the Workmen's Compensation Insurance Inspectors.



Edison Trip Lamp—Hooks over Either End of the Car

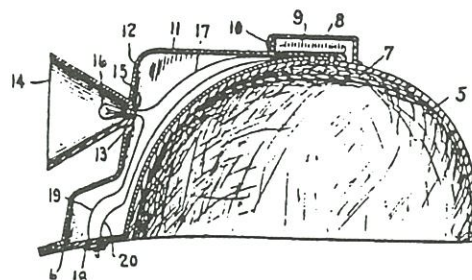
Edison Electric Safety Hand Lamp

Illustration shows arrangement of Edison Safety Mine Lamp as a hand lamp. This consists of a standard M-8 Battery in steel case with special cover. The lamp is attached directly to cover and the cover provided with bails for attaching leather handle. Largely used as Inspector's, Official's and Visitor's lamp.

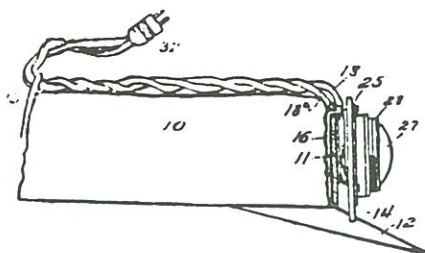


Electric Safety Hand Lamp

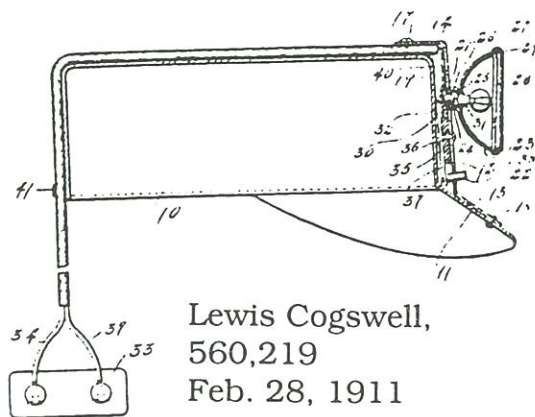
Electric Cap Lamp Patents



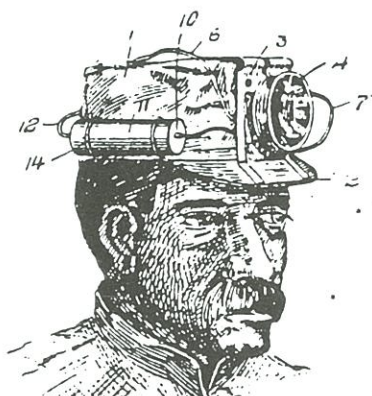
Lewis Cogswell and James Abel
413,710
Sept. 1, 1908



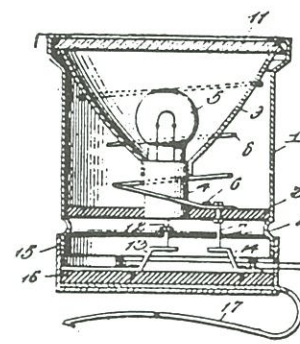
Harry Becker
621,220
March 12, 1912



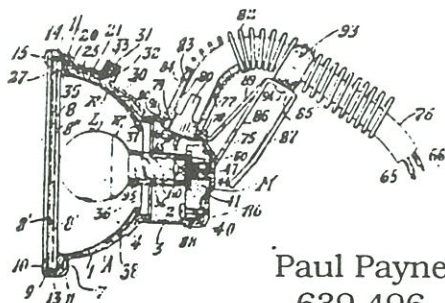
Lewis Cogswell,
560,219
Feb. 28, 1911



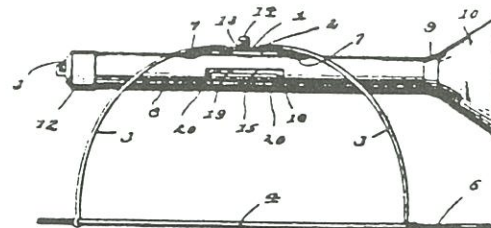
Steve Koboly
741,087
June 17, 1913



Victor Patton
594,760
May 21, 1912



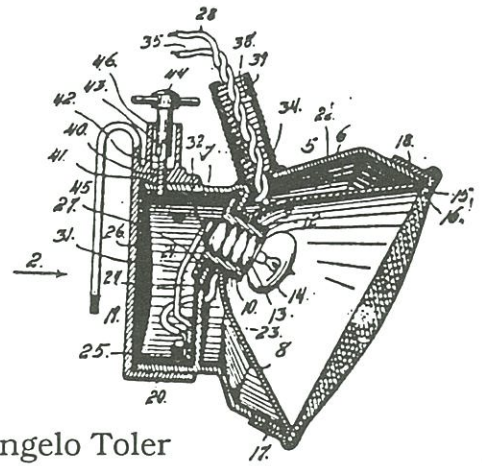
Paul Payne
639,496
July 24, 1928



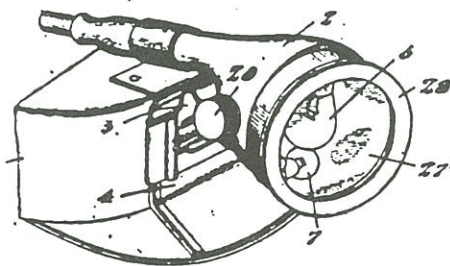
Richard Harris, James Hill, Ira Hill
806,614
Sept 1, 1914



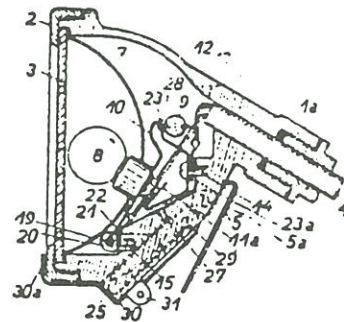
Grant Wheat
1,757,887
May 6, 1930



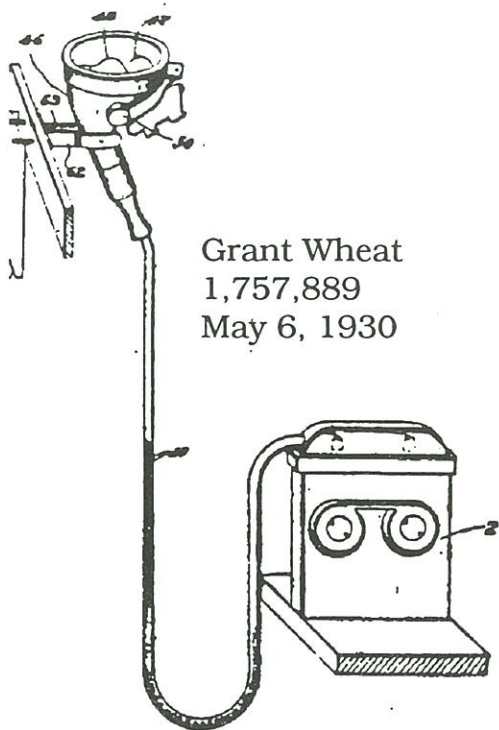
Angelo Toler
23,745
June 6, 1916



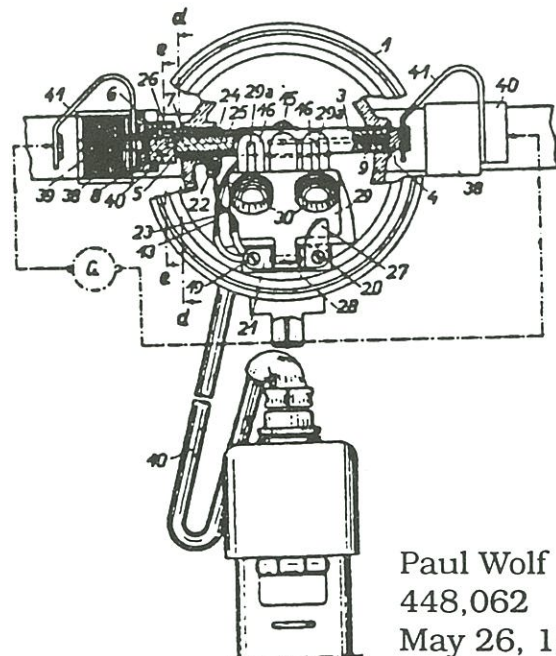
Grant Wheat
149,890
May 6, 1930



Paul Wolf
448,061
May 26, 1931

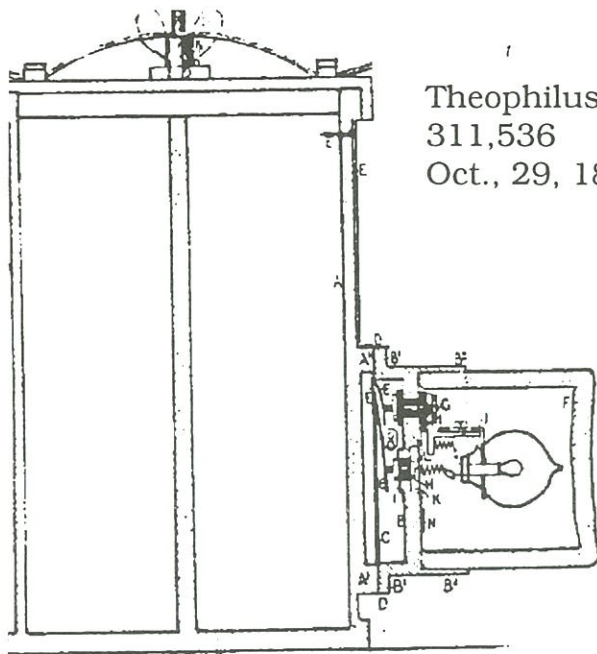


Grant Wheat
1,757,889
May 6, 1930

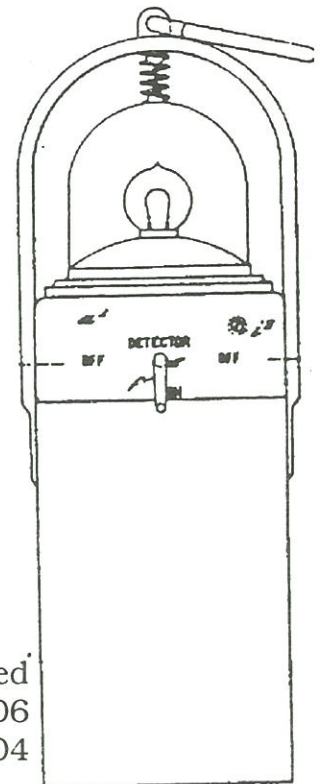


Paul Wolf
448,062
May 26, 1931

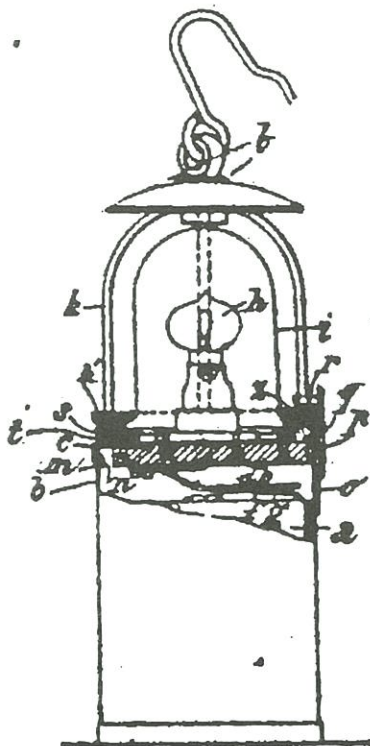
Electric Hand Lamp Patents



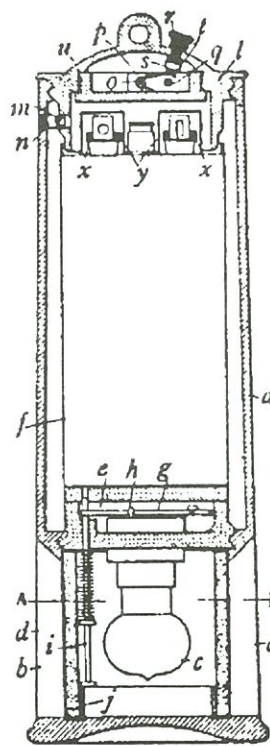
Theophilus Glad
311,536
Oct., 29, 1889



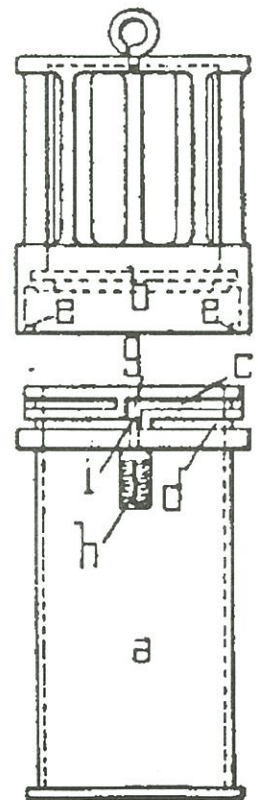
Henry Prested
142,406
Jan 12, 1904



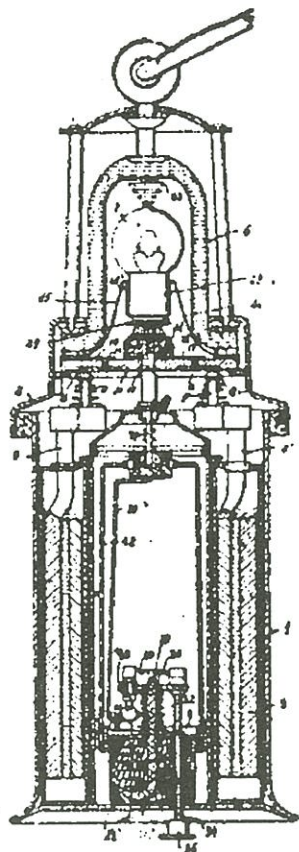
Hermann Remane
434,254
Nov. 9, 1909



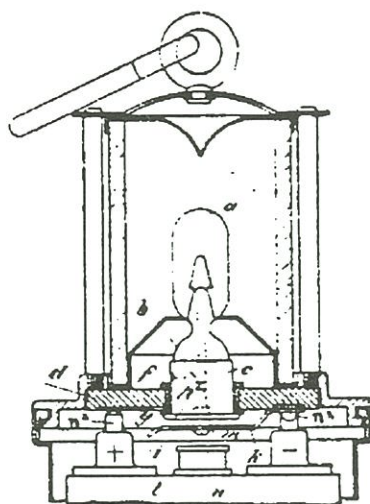
Charles Eley and Thomas Patrick
528,833
Apr. 4, 1911



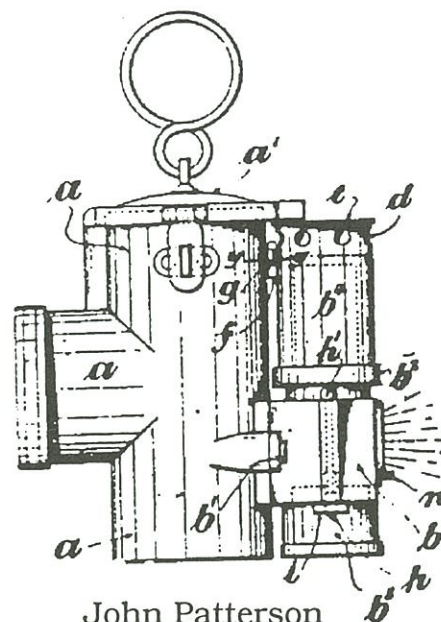
Paul Rennert
539,291
Mar. 28, 1911
EUREKA! August 1999



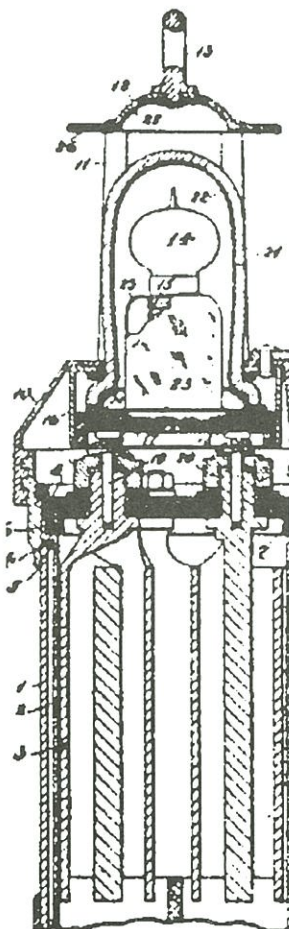
Fritz Farber
1,116,048
Nov 3, 1914



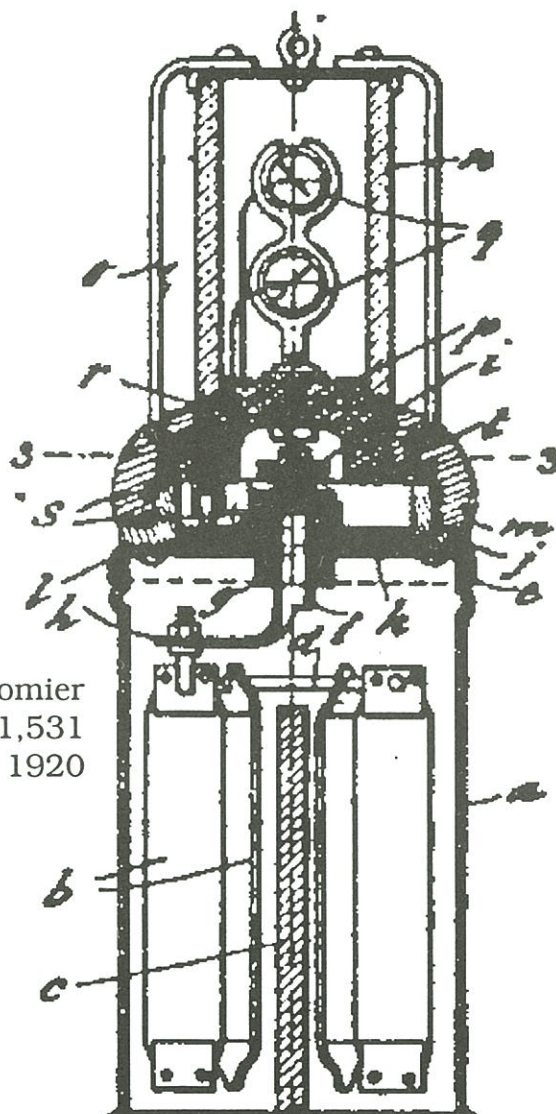
Paul Wolf
745,206
June 16, 1914



John Patterson
1,070,522
Aug. 19, 1913

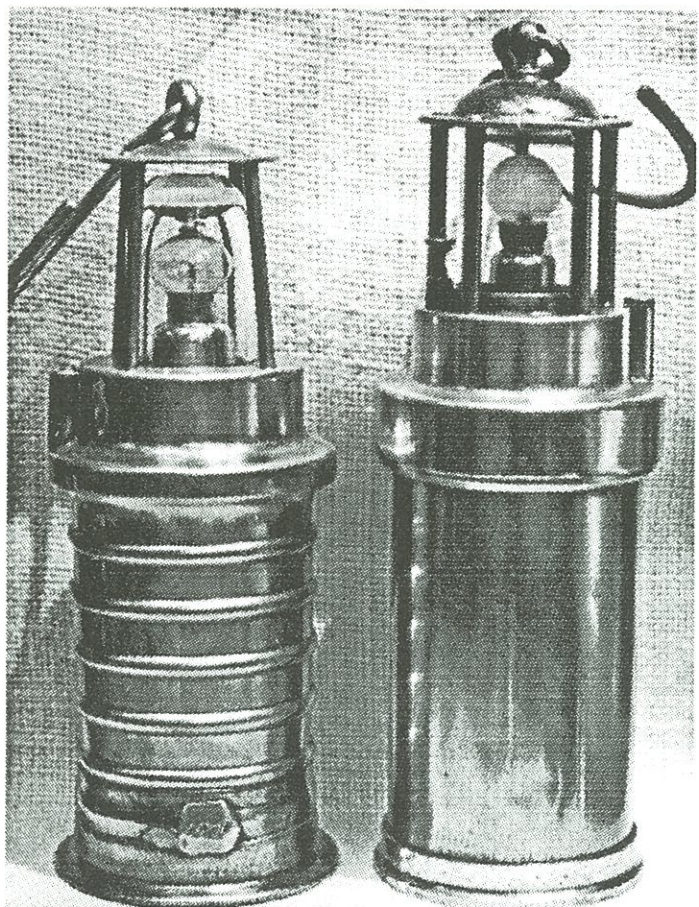


Louis Chomier
261,531
Feb. 17, 1920



No. 1,947,022
Feb. 13, 1934

Electric Lamp Photos

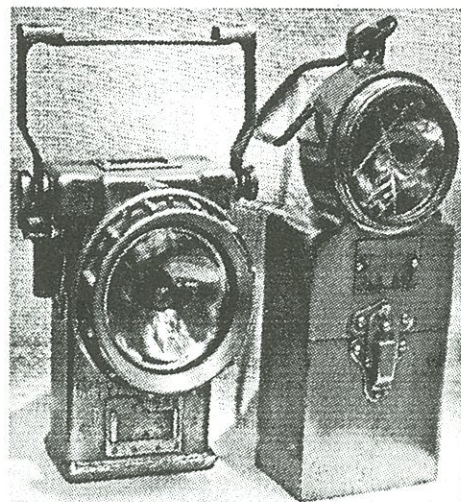


Left: unmarked brass English lamp.

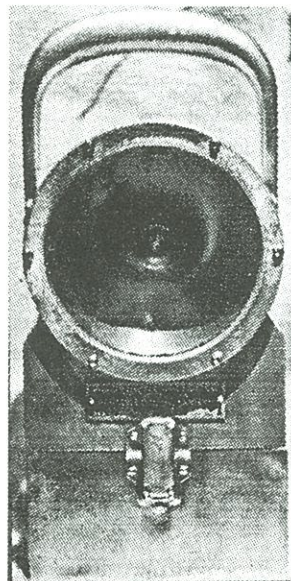
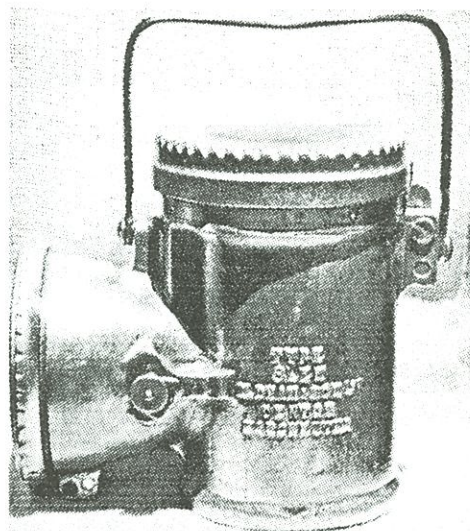
Right: Unmarked copper & brass safety lamp from England.

Left: steel
handlamp
marked: TYPE
16621D

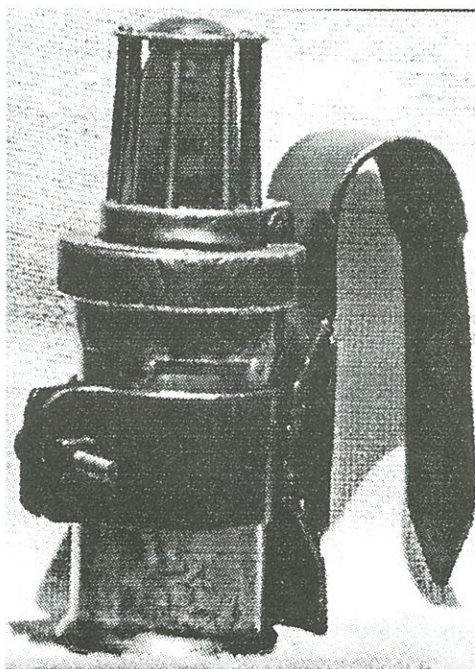
Right: Brass
Pioneer Electric
Mine Lamp Co.
hand lamp.



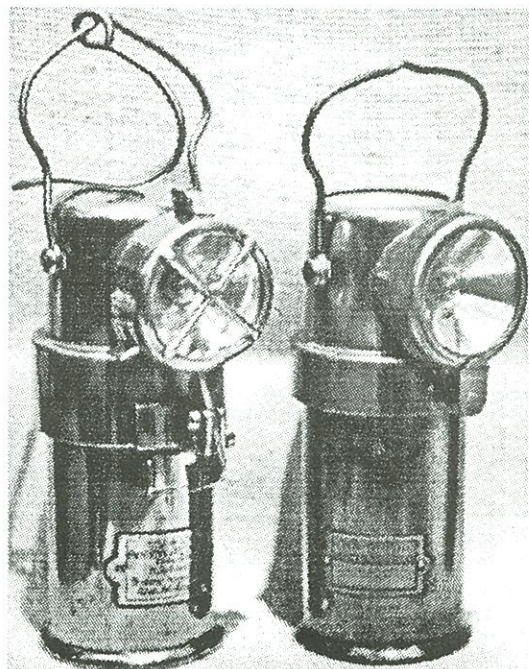
Large sheet
aluminum
hand lamp
manufac-
tured by
Oldham &
Son, Ltd.
Manches-
ter, En-
gland.



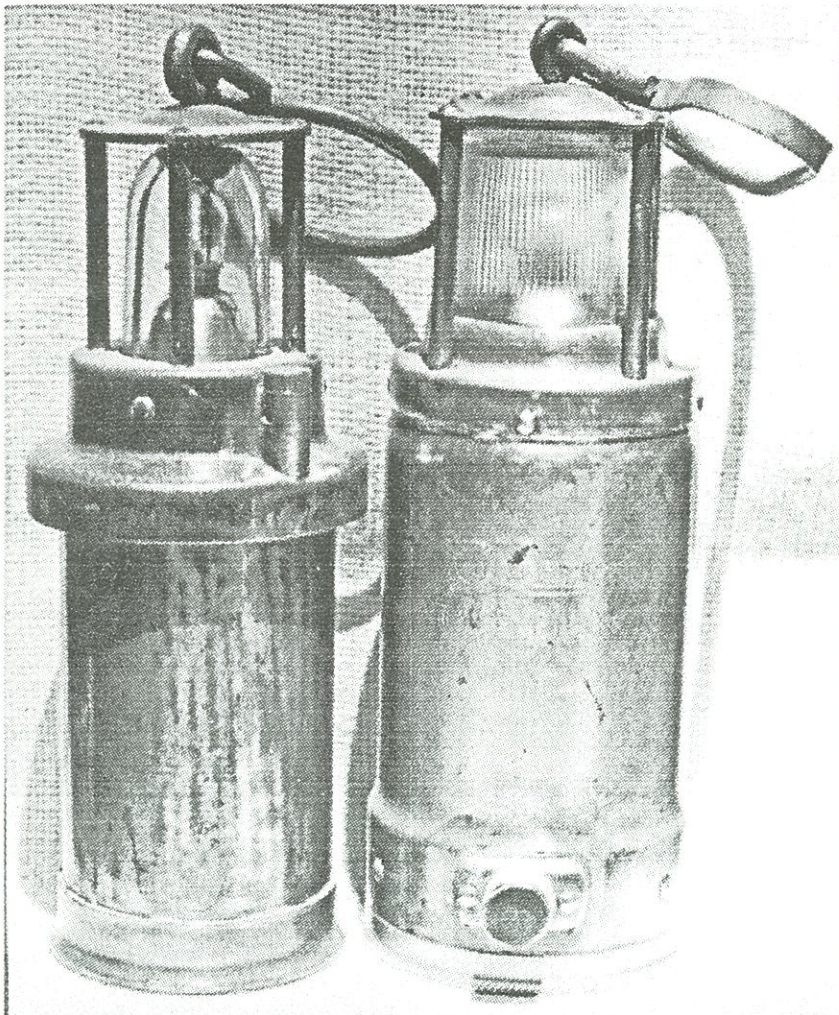
Aluminum Mine Locomotive Battery-powered headlight manufactured by the Pioneer Electric Mine Lamp Co.



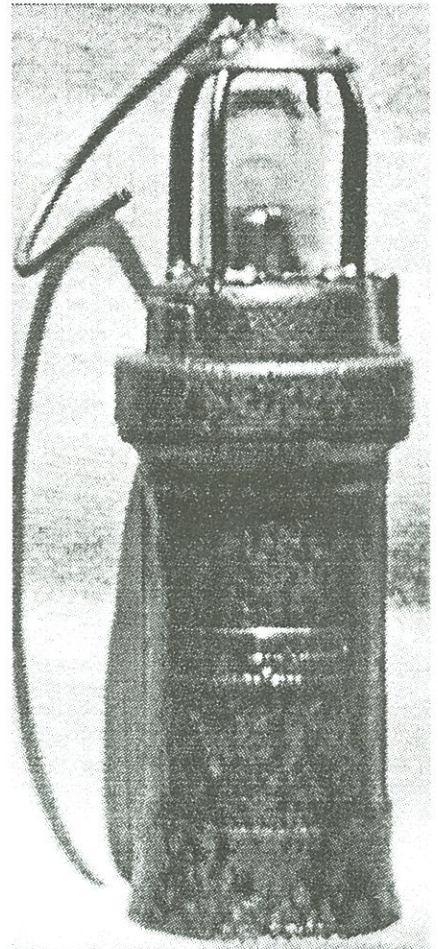
CEAG RMCT trip lamp with red glass dome lens.



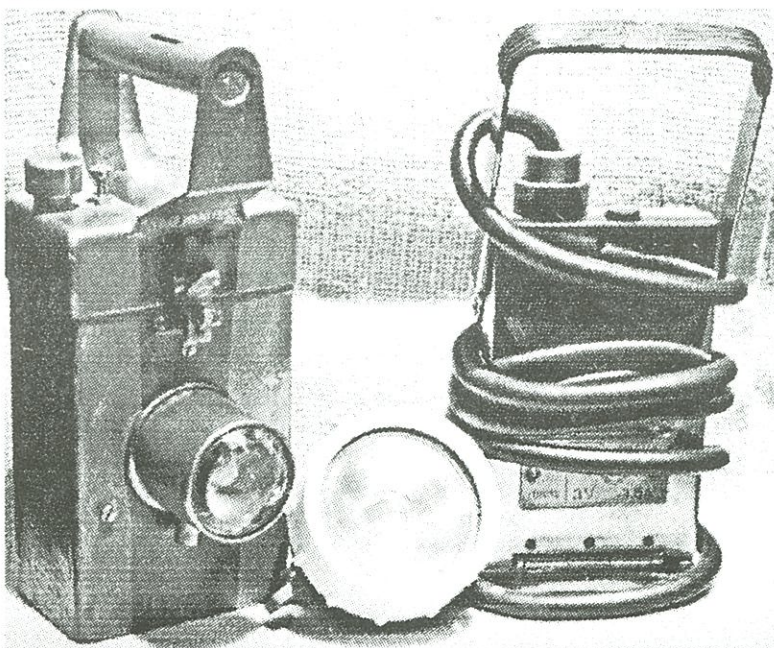
Two different brass & copper CEAG electric hand lamps.



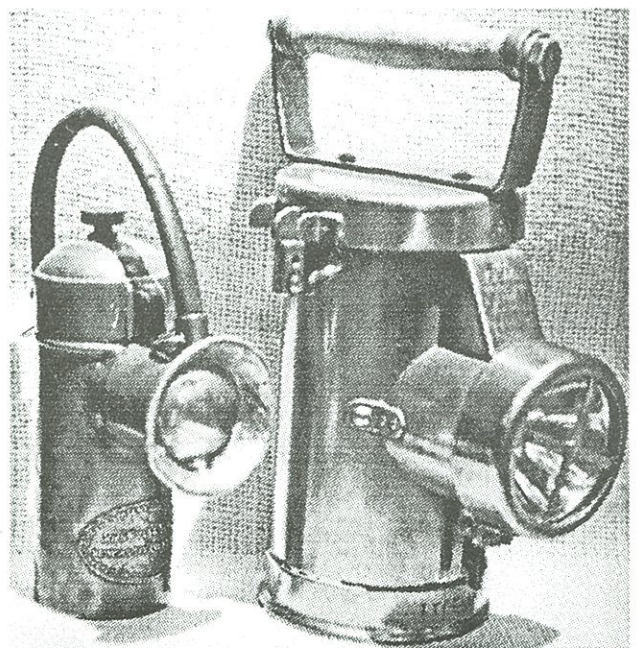
Left: CEAG Electric safety lamp - steel. Model RMC.
Right: Oldham Type 8115M Electric Safety Lamp - steel.



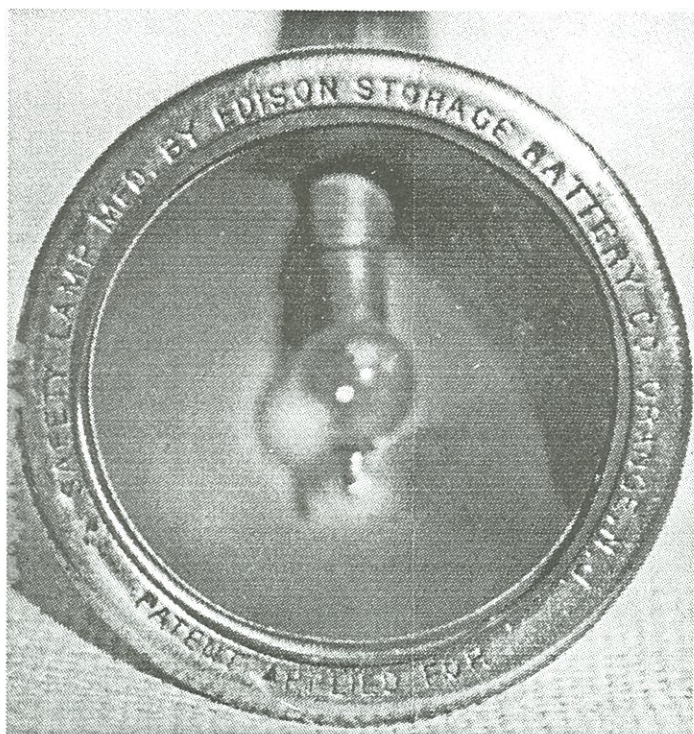
French, marked Comite du VIEUX-MARCHE BRUAY.



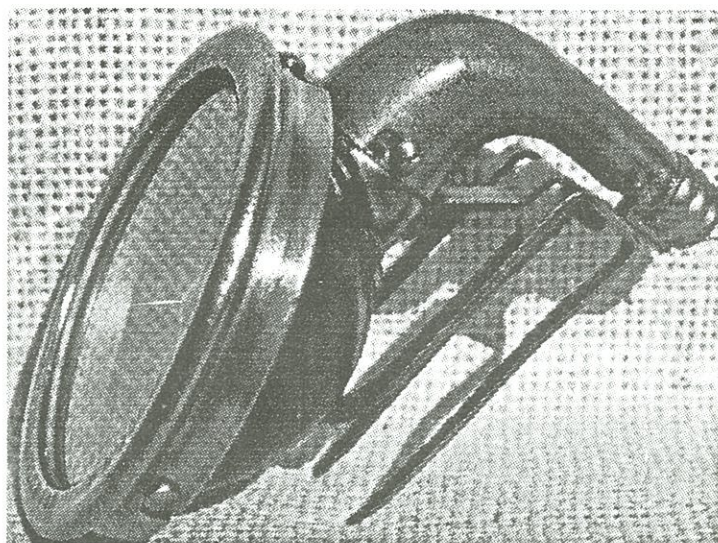
Left: Unmarked aluminum lamp.
Right: Friemann & Wolf with handle and belt loop.



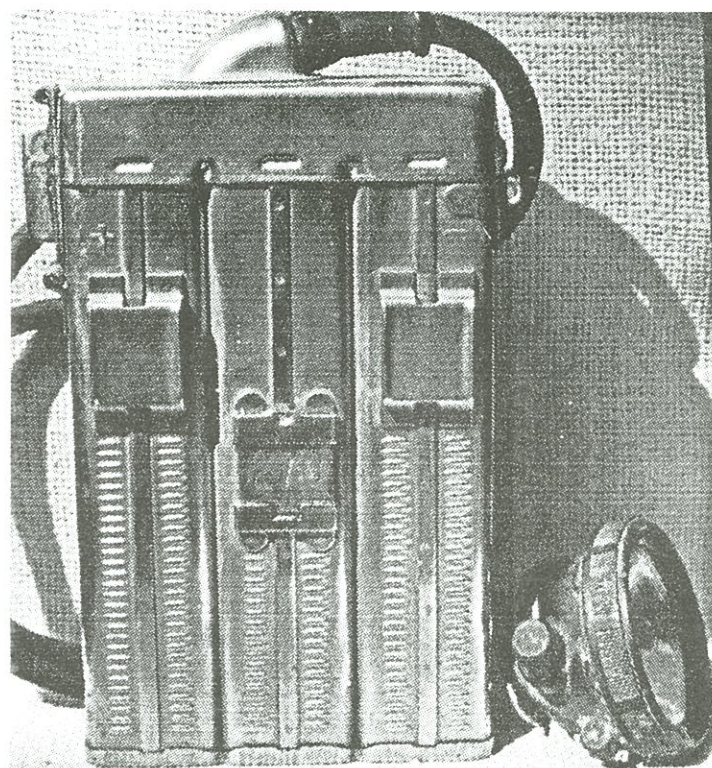
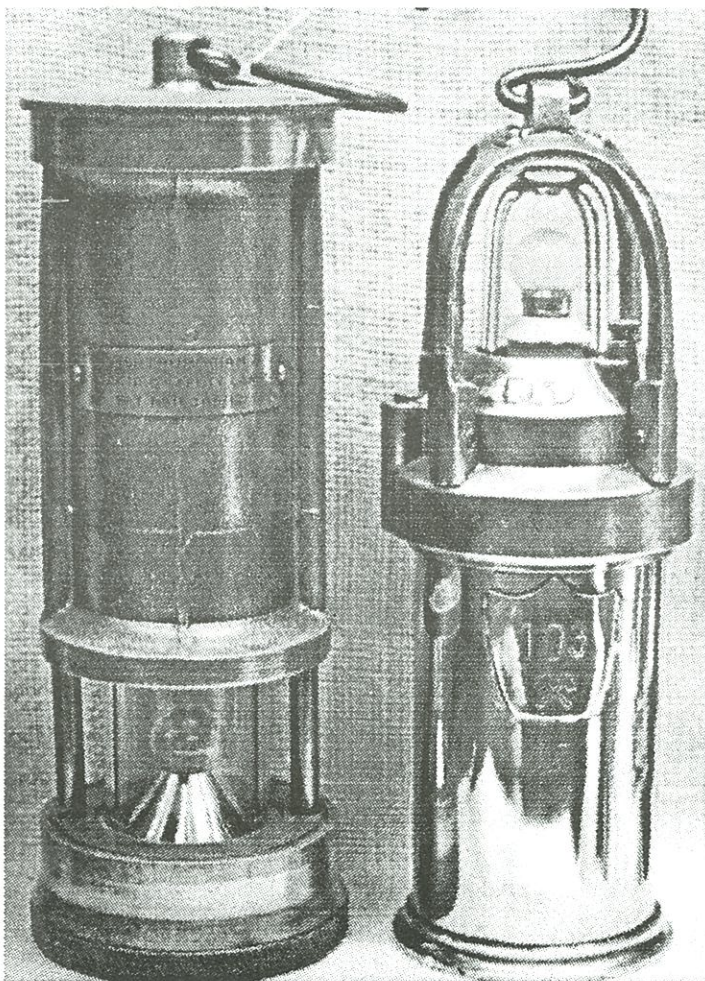
Left: Copper Joel-Fors Patent lamp made by John Mills & Sons.
Right: CEAG inspection lamp, Type BE, all brass.



Front view of headpiece for Edison Model E.
Notice Patent Applied For stamping.



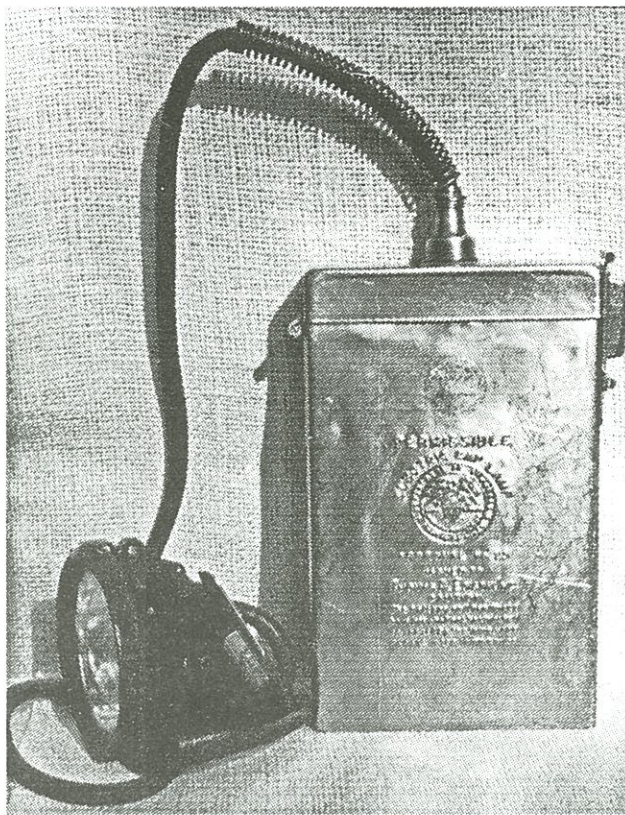
Side view of headpiece for Edison lamp Model E. Brass and steel construction.



Edison Model P electric cap lamp.

Right: Northumbrian electric safety lamp -
England - aluminum construction.

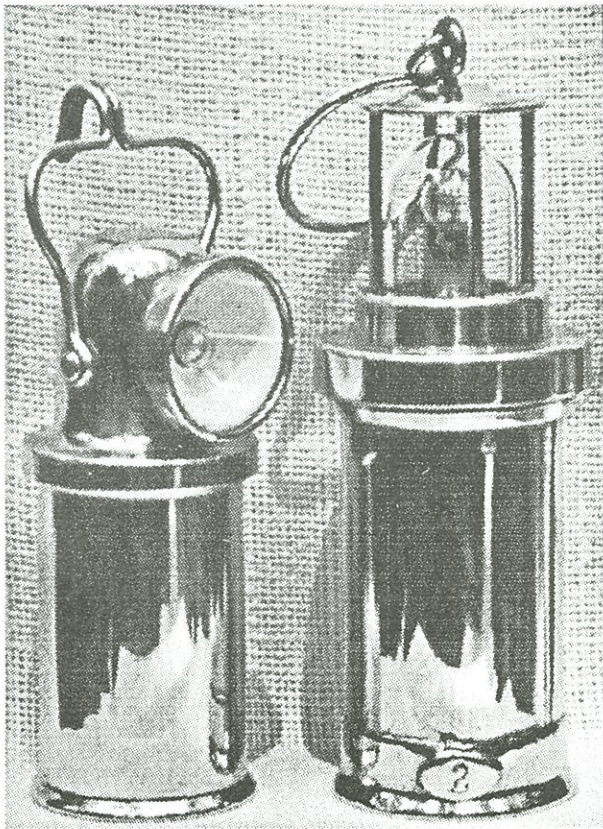
Left: Copper and brass electric safety lamp
marked: Brevets Lemaire.



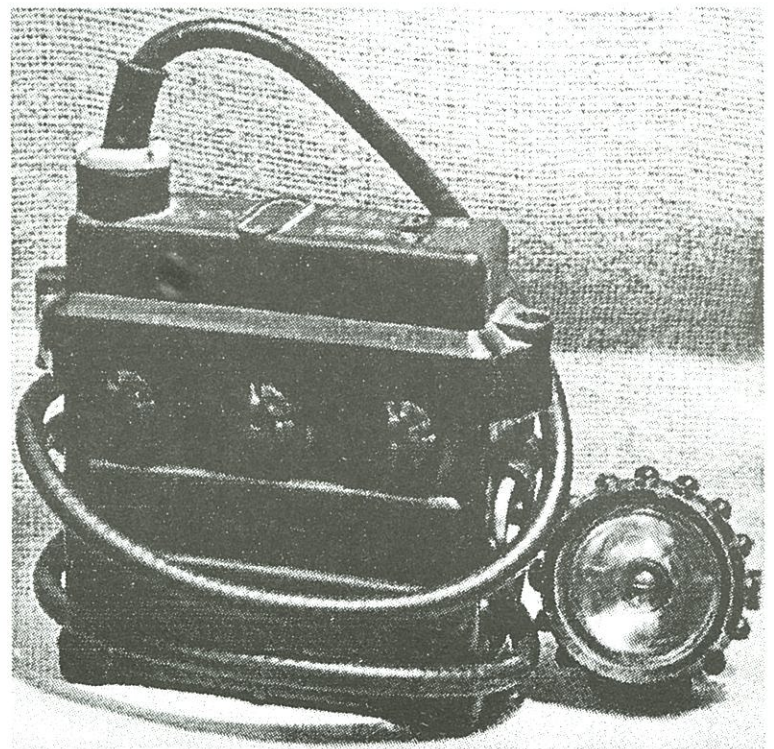
Edison Model K electric cap lamp.



English version of Edison Model K made by NIFE Batteries of Redditch.



Left: CEAG Model GMS, brass hand lamp with white porcelain reflector.
Right: Unmarked brass electric safety lamp.



Russian electric cap lamp.

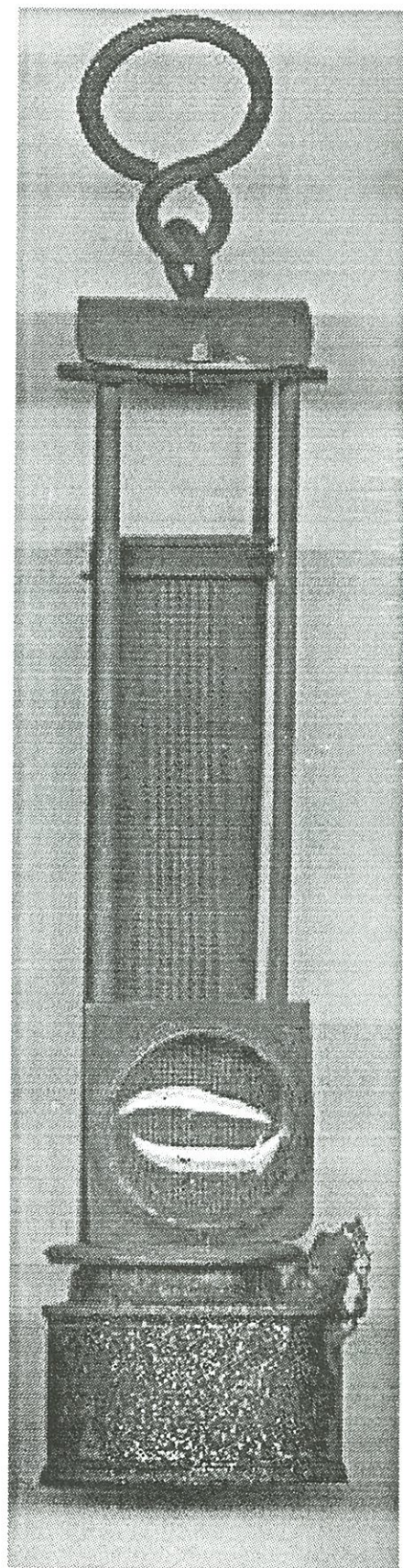
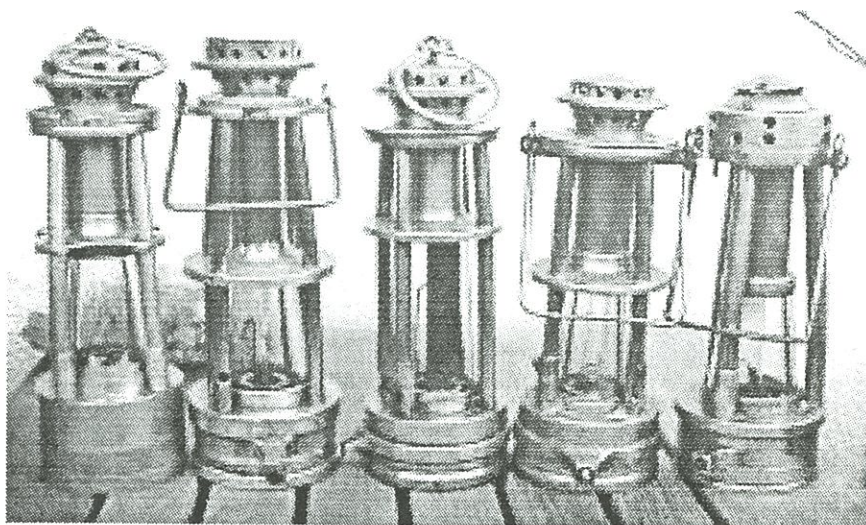


Al Grazevich Scores a Big One

I picked up a interesting "Davy" style lamp this past weekend while beating the bushes. Its only marking is NEWMAN on one side of the font, and LONDON on the other. I've attached a scan of it, hopefully small enough to go through to everyone. I haven't attempted do clean it at all, so it may appear to be a little dirty.

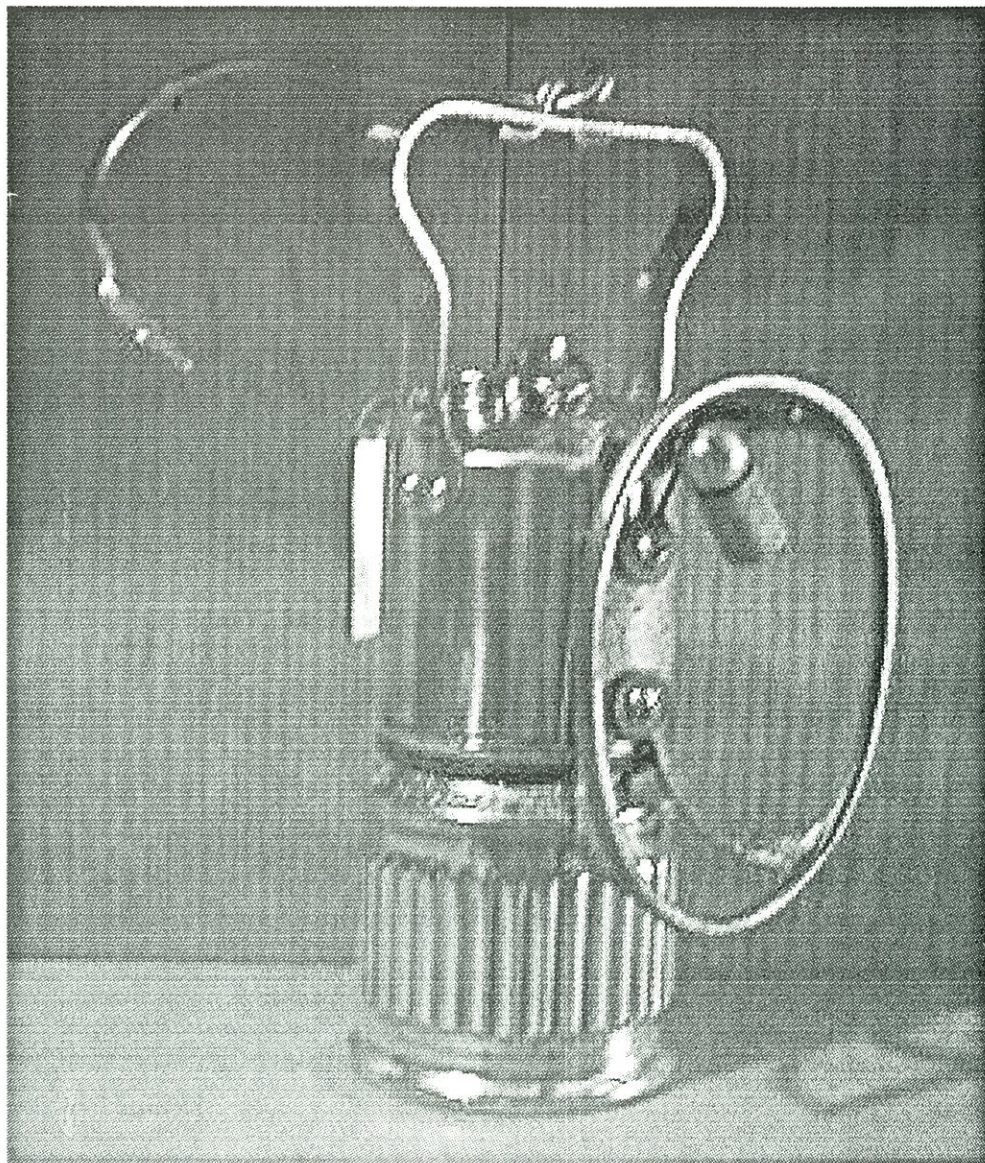
The lamp is 13" overall; 10 1/4" from bottom of font to top of hood. The font is constructed off center as can tell from the scan. There is a 2"x2" square brass frame with a bulls eye lens at the bottom of the gauze. The lens can be swung out. The filler plug is on the exterior of the lamp, and is just a tapered brass plug attached with a small chain. Of the upper framework, the standards are steel, while the rest is of brass. Missing, I believe, is an upper gauze enclosure, that was inserted through the top, and fit over the ring that is visible at the top of the existing gauze.

Collection of Ashforth Lamps by Manfred Stutzer



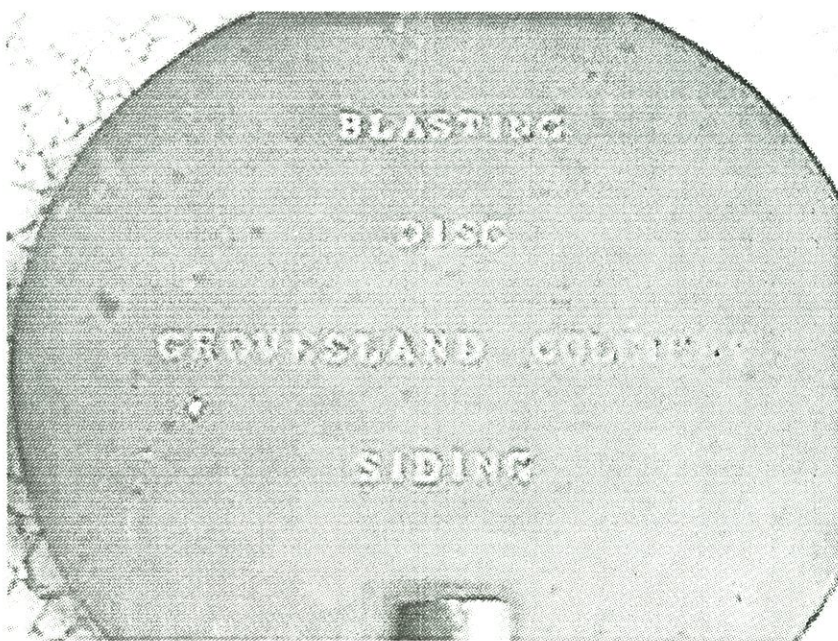
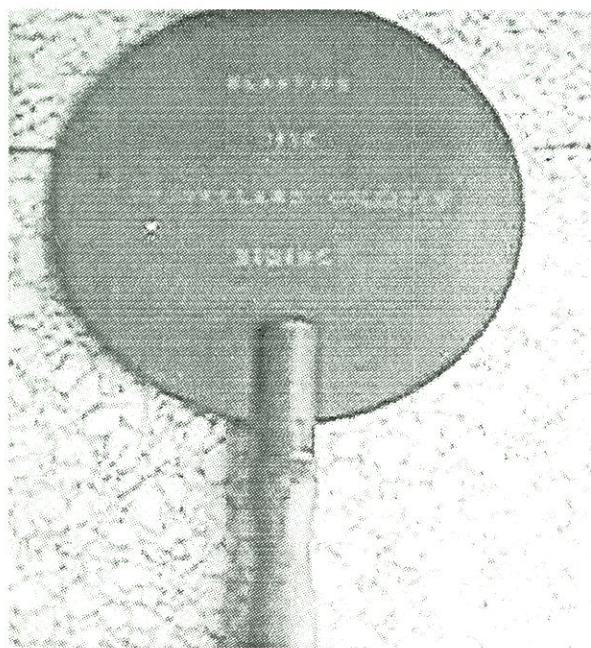
Clickster Finds Rare Style Reflector on Dewar Lamp

Larry Click found this lamp. The reflector has been seen before on a Justrite hand lamp, and still no one seems to know what the lamp was intended for.



Blasting Disc

I can not remember who submitted the photos below to mining collect. Can anyone identify this item?





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.

Higher prices will 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 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!

Will buy, trade/cash for rare carbide cap lamps I need. Will trade anything in my collection (have rare carbides to trade) for an **OSHKOSH** or **SNELL**. Call, write or e-mail me for further info. Larry Click, 1021 North Jefferson Street, Arlington, VA 22205-2454 1-703-241-3748, e-mail: lclick@erols.com

Free: Write for a free copy of my NEWSLETTER listing mining related books, videos, photos, etc. Robert L. Fox, 1235 N. Westfield Street, Oshkosh, WI 54901-3218.

Wanted: Buy or trade for Justrite cast aluminum Jumbo hand lamp (stamping reads Justrite on side of lamp). Todd Town, 38 Agazzia Terrace, Globe, AZ 85501, 520-425-0423, ttown@cybertrails.com

For Sale: Back issues of EUREKA! Get 'em while they last. Serious consideration given to offers to buy entire stock. ttown@cybertrails.com

You'll always be happy with Cap Tin Bob: If you are looking for quality mining artifacts, I buy, sell, and trade 'em. Besides, after the first deal, I'll be your only friend in the world! For honesty and satisfaction in deals, ask for Cap Tin Bob. bschroth@aol.com

Wanted: Cap lamps, hand lamps, candle sticks, vintage Italian motorcycles. D. Thorpe. email: dthorpe@primenet.com

I want it, I want it: If it's mining and old, and if it will fit in my basement museum, I'll make a fair offer. If it's a rare oil wick lamp that I do not have, you won't get a better offer. Ask for DJ: dj@msdlouky.org

Justrite Specialist: Buy, sell, trade. Contact Len Gaska: gaska@ibm.net

