



THE UNDERGROUND LAMP POST



- NOT A HIPPIE NEWSPAPER -

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The Underground Lamp Post, devoted to old mine lamps, carbides, and candleholders. Mini-editor: Henry Pohs, 4537 Quitman St., Denver, Colorado, 80212

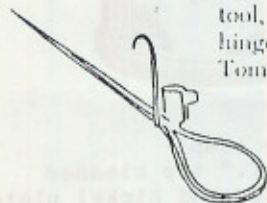
Candleholder terminology - We've just gotta take time to clarify some basic pre-electric underground illuminating device terminology. Many of our correspondents over the years, especially the Rushlight-influenced Easterners, have traditionally referred to our unique Western miner's candleholders as "Sticking Tommys". Now, that's not quite accurate!! We've also heard corruptions such as "candle spike" and "stick-in-the-Tommy". While "Sticking Tommy" is a valid term for a certain design of domestic, industrial, or naval candleholder, nothing upsets our dean of collectors, George Bayles in Cincinnati, more than to hear a splendid miner's candleholder called a "Sticking Tommy".

So, based on our years of exposure to the true terms and our volumes of authentic correspondence, we're carefully examining the terms herewith.

A very good reference for the many and varied early lighting devices is Herbert C. Darbee's A Glossary of Old Lamps and Lighting Devices, (American Association for State and Local History, Technical Leaflet 30, History News, Vol. 20, No. 8, August, 1965, revised 1976; write to the Association at 1400 Eighth Avenue South, Nashville, Tennessee, 37203, for prices). It is an excellently defined reference with good graphics which we can quote as usually infallible. However, the two references copied below are well-illustrated but they are misleading:

WRONG

MINER'S CANDLEHOLDER—Square iron rod, one end bent into loop handle, other end pointed. Spring clip for candle at one side near handle; opposite this an upright hook for hanging. A lighting device, tool, weapon. Patents in 1870's, 1880's for hinged and folding types. See "Sticking Tommy."



Miner's Candleholder

WRONG

WRONG

STICKING TOMMY—Miner's candleholder, often a socket with circular drip pan mounted on a spike or spikes, some with wooden handle, for thrusting into crevice or timber. Reported also used in holds of fishing vessels.



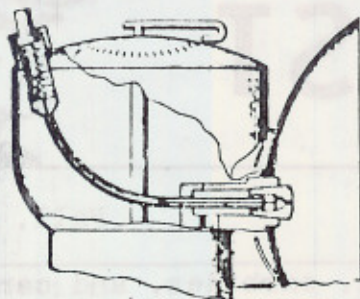
Sticking Tommy

WRONG

As George Bayles will confirm, "Miner's candleholders were made by miners, for miners, for use in underground mines, and to their own unique functional design . . . 'Sticking Tommys' they aren't!"

Darbee's two illustrations for the two terms are very accurate, but it is the written description which goes astray.

The rigid classifications of the U. S. Patent Office stayed pretty much with "miner's candelstick", but occasionally wandered off with "miner's candleholder". Our peers generally recognize both terms as valid, with individual preferences often obvious. This mini-editor tends to use "miner's candleholder" simply because when you ask about miner's candlesticks in most shops, they will show you mantle-style, upright, heavy brass candlesticks and try to con you into believing that they were used in a mining area (community, house?), hoping that you don't know your subject. Ask for a miner's candleholder, however, and an element of specialization is immediately established. We certainly do recognize both of these terms.



A 'New' Idea From 1921

NSS NEWS: September, 1978

Push Button Tip Cleaner

By Donald G. Davis

Fifty years ago, an ingenious device was invented which, when built into a carbide lamp, would clean a clogged burner tip by discharging the obstruction outward at the touch of a button, without putting out the flame. The mechanism consisted of a wire enclosed on a small tube, extending through the lamp to the inside of the tip and operated by a spring-loaded plunger in a housing in the lamp top. This cleaner, patented Nov. 15, 1921, was incorporated for a time into some lamps produced by Grier Bros. of Pittsburgh, but was then forgotten, perhaps because it did not lend itself well to cheap machine manufacture.

This contrivance does work, and is perhaps the most useful of the many patent gadgets devised for carbide lamps. A caver with lamp so equipped can clean its burner instantly, without the need of stopping to use a separate tip cleaner or fumbling with it in the dark or in difficult places. (A standard cleaner should still be carried, but will generally be needed only to brush deposits from the outside of the tip.) A lamp with the internal cleaner can also be used to flash Morse code, and is a great conversation piece for its owner!

I have managed to copy the Grier device and adapt it to a modern lamp, using a section of violin E string, a 2 1/4" length of 1/16" brass "telescope tubing" (obtainable from industrial supply houses), and parts of an old Justrite carbide-lamp lighter unit. No operations more complex than bending, filing, drilling and soldering are involved, but tedious trial-and-error adjustments are required, and the project can be expected to run into a good day's work. (Since several small parts must be made to fit together as a whole which itself must fit the lamp properly, the job is not a simple one.)

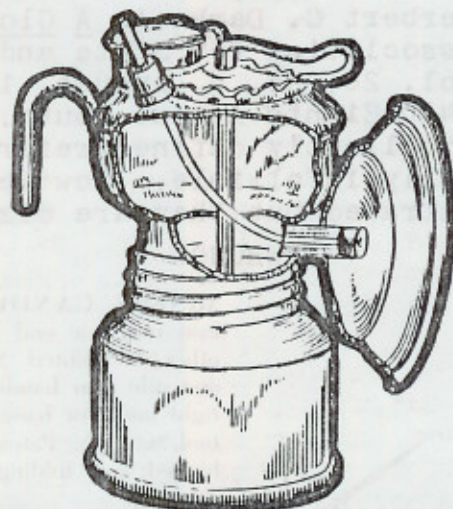
Since no two readers will be working with exactly the same set of items, I cannot give precise details for construction and installation. My own version, in brief, is made as follows: File one flange off the hollow copper rivet holding the sparker wheel in the lighter, and press out the rivet, which then is used as the push-button. File down the other flange

until it will fit into the bore of the lighter body. The body, inverted and with excess metal filed off the fork area, becomes the spring housing. The 1/16" tubing is bent to shape and soldered into the fork end (taking care not to clog the tubing). An extra lighter hex nut is needed, one to go below the hole, drilled in the lamp top, in which the housing is to be inserted, and one to go above. The violin wire is inserted in the flanged end of the push-button and is affixed by filling the button with solder. The lighter spring (shortened if necessary) is slipped over the wire before the wire and spring are fed into the housing. The lighter spring cap (filed somewhat shorter and with a hole drilled for the push-button) serves to hold the moving parts in. The lighter body used must have a bore large enough to accept the flange of the push-button—most modern lighters are not suitable without rebor-ing. I used a 50-year-old brass lighter, and have extras if anyone is seriously interested in the project but cannot find usable parts.

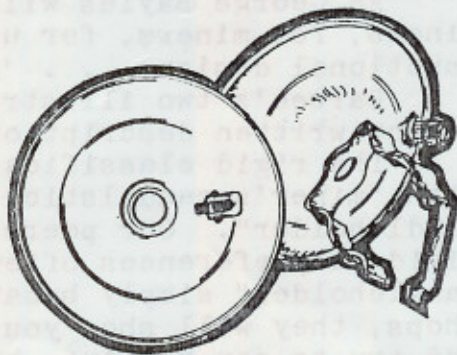
Perhaps the most challenging aspect is drilling the hole in the lamp's gas tube, to admit the wire tube from the water chamber into the tip seat. This hole is hard to start, as it must be aligned obliquely through the gas tube's wall in order to miss the water valve. I solved this problem by filling the gas tube with Cerro-Bend (an alloy melting below the boiling point of water). The drill was then started at the desired angle into the alloy plug, which guided it properly into the brass. The Cerro-Bend was later removed by heating the lamp in water. Epoxy resin could probably be used, but would have to be drilled out, or treated with a solvent.

Inserting the cleaner in the lamp may be quite tricky, depending on the configuration of the lamp and the holes you have drilled in it. Once in, it should be positioned with the hex nuts so as not to project higher than necessary (the device will also be less vulnerable to blows if used on a lamp with a large reflector). After the wire tube is in position, the hole through which it passes must be sealed with solder or epoxy to prevent leakage. There is also, of course,

a tendency for gas to leak back along the wire. In the original the wire passage was sealed at the bottom of the spring housing by a brass wire-guide pellet with packing underneath. In the copy I found it easier to adapt a small neoprene O-ring (available from suppliers of industrial seals) for a seal around the push-button. (The hole in the O-ring, if originally too small, can be enlarged with a jeweler's file until it seals without binding.) *Do not* use oil or grease, or the wire will become a tip-clogger rather than cleaner!



Grier Bros.
Carbide cap lamp
with "J. & T." tip cleaner
Made in brass and nickel plate



Grier "Loc-on"
Removable reflector

More foreign lamps - Dr. Wendell E. Wilson of Crofton, Maryland, who is the dignified editor of The Mineralogical Record Magazine, has supplied us with a voluminous amount of well-prepared material. We will use as much of it as often as time and space will allow. Dr. Wilson's initial offering follows; the beautiful drawings were uncredited. Many thanks to Dr. Wilson for his keen interest and helpfulness.

CARBIDE LAMPS of the TSUMEB MINE

Although the name Tsumeb may mean nothing to caver-lampers, it has almost religious significance to mineral-lampers. Those who collect minerals know that Tsumeb, in Southwest Africa, (Namibia), may well be the single most spectacular locality for mineral specimens on earth.

A little background: The Tsumeb outcrop was discovered by Matthew Rogers in 1893 (although it had been mined by the Bushmen long before that), while on an exploratory mission for the South West Africa Company. The company had been formed as a mining concern the year before by a group of German financiers. The Germans had begun taking over Southwest Africa from the British in 1883, and within ten years had complete control; the country accordingly became known as German Southwest Africa.

In 1900 the South West Africa Company was refinanced and reorganized as the Otavi Minen und Eisenbahn-Gesellschaft (Otavi Mining and Railroad Company), commonly known thereafter by its initials, OMEG. The first shipment of copper ore was made from Tsumeb in that year. The mine has operated almost continuously since then and is still in full operation today under the Tsumeb Corporation (a consortium of which Newmont Mining, an American company, is a part). Not long ago, incidentally, a new mineral found at Tsumeb was officially named tsumcorite in honor of the Tsumeb Corporation.

The mining literature on Tsumeb does not go into the mundane details of mine lighting. However, the use of carbide lamps probably continued until well after the introduction of electricity because the mine was wet, complex, and difficult to wire extensively. I have a collection of old mining photos taken at Tsumbe around the years 1923-1925, a number of which show underground scenes and types of lighting.

One remarkable photo shows two men standing by an ore lift. Above their heads is a single, rather large electric light bulb. To the right hangs an oil wick lamp of the "frog" type, and next to that burns a rather common looking kerosene lantern. To the left hangs a large carbide lamp ... four different types of underground lights all in use on one photo.

The carbide lamp in that photo is interesting (see Fig. 1). It consists of large carbide and water chambers, a hook-and-wire arrangement for hanging, and an underslung burner. Unfortunately the burner is burning so

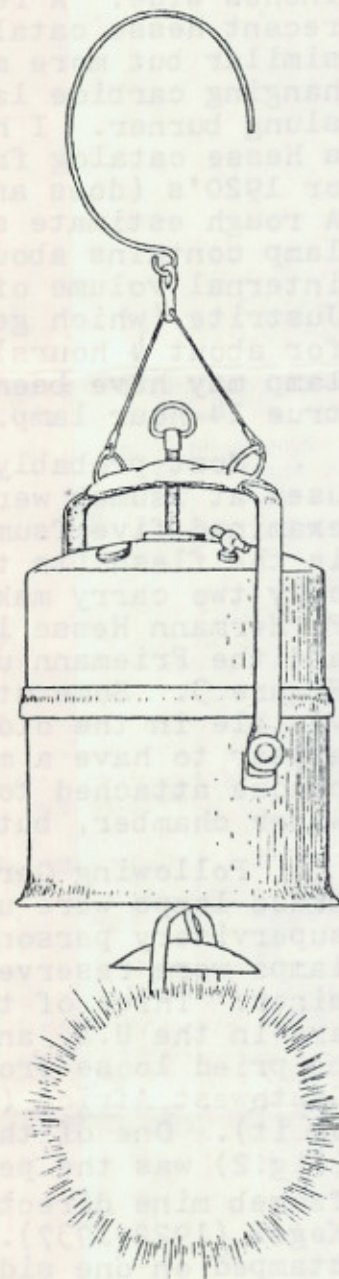


Figure 1. Large hanging carbide lamp, about 6" wide, with underslung burner. Drawn from an old underground photograph.

burning so brightly in the photo that it is almost entirely obscured by its own glare, except for a little hood, a hanger, and what must be an acetylene tube. The lamp appears to be about 6 inches wide. A relatively recent Hesse catalog shows a similar but more modern-looking hanging carbide lamp with under-slung burner. I have not seen a Hesse catalog from the 1910's or 1920's (does anybody have one?). A rough estimate suggests that the lamp contains about 5 times the internal volume of an "8-hour" Justrite (which generally burned for about 4 hours). Therefore this lamp may have been designed as a true 24-hour lamp.

Most probably all of the lamps used at Tsumeb were German. I have examined five Tsumeb carbide lamps in the flesh (in the metal?), and only two carry maker's marks: the F. Hermann Hesse lamp in Figure 2 and the Friemann und Wolf lamp in Figure 3. Some steel lamps are visible in the old mine photos and appear to have a manufacturer's plaque attached to the back of the water chamber, but they are illegible.

Following German tradition, the brass lamps were used only by supervisory personnel, and the steel lamps were reserved for the common miner. Three of the brass lamps are in the U.S. and two have yet to be pried loose from their owner in Southwest Africa (but I'm working on it). One of the brass lamps (Fig.2) was the personal lamp of Tsumeb mine director Frederick W. Kegel (1922-1937). It has his name stamped on one side of the bail as shown, and his title of "DIRECKTOR" stamped on the other side (probably

Figure 3. Supervisor's lamp, all brass. Marked by an upper plate carrying the mining company's initials O.M.E.G., and a lower plate FRIEMANN u. WOLF G.m.b.H. ZWICKAU i. Sa. One of two from the John Carter collection, Normal, Illinois.

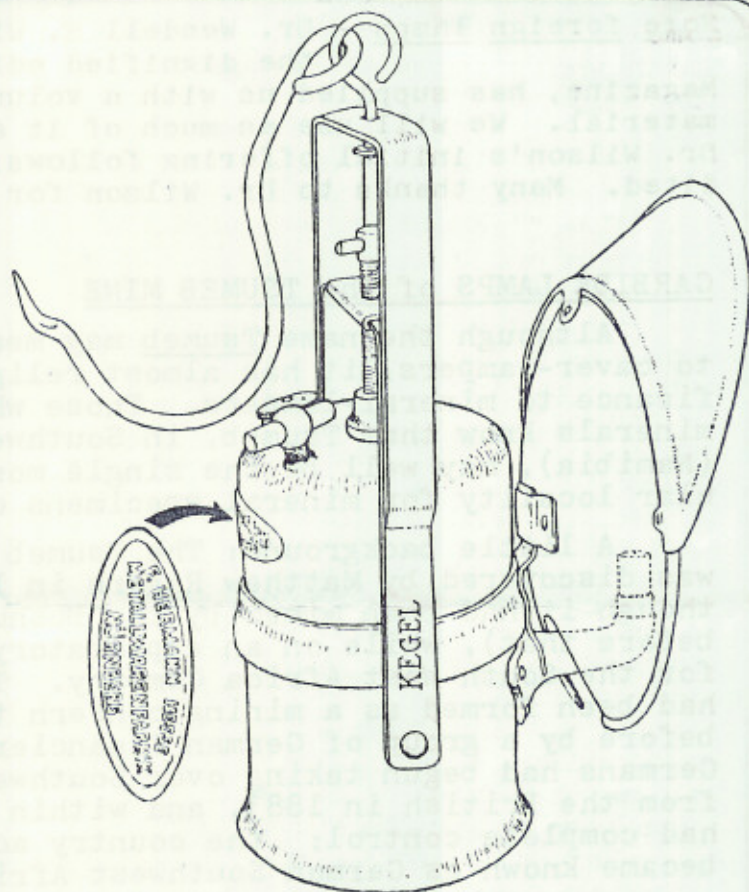
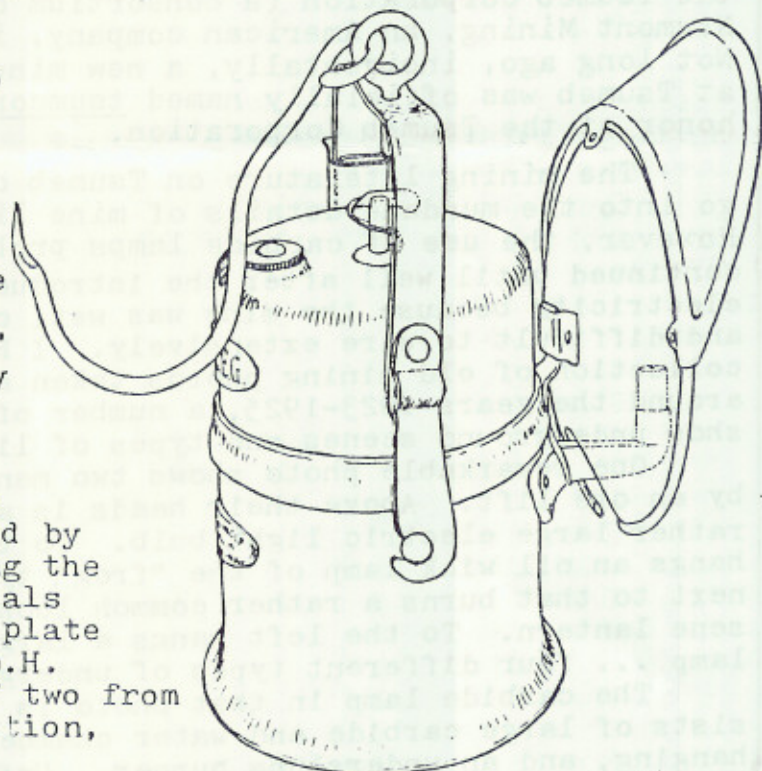


Figure 2. F. Hermann Hesse all-brass carbide lamp, the personal lamp of Tsumeb mine director (1922-1937) Frederick W. Kegel. 7½ inches tall excluding hook. Wendell Wilson collection.



somewhat to his chagrin, because the smith who stamped those letters on the bail misspelled the German word "direktor" by adding a "c"). The other brass lamps carry an oval tag with the mining company's initials "O.M.E.G." and one also carries the Friemann und Wolf tag soldered on. The brass lamps and some, but not all, of the steel lamps (judging from the mining photos for the latter) carried reflectors with visors as shown in the drawings here. Such reflectors were used in wet mines where dripping water might hit the burner tip and put out the flame.

The steel lamps came in at least two types as shown above. They appear to have been tin plated and appear in the old photographs almost always without their reflector. The lamp in Figure 4 still carries a rectangular soldered spot from which the miner had removed the spade mount for attaching the reflector.

For these drawings I have "restored" missing parts (dashed lines) through examination of the old mining photos.

The two varieties of steel lamp shown here differ in the shape of the bail (one is more squared off), the shape of the base of the water chamber (one is rounded under, the other flared out), the shape of the loop at the top of the bail (round or triangular), and the angle at which the burner tip points (out at an angle or nearly vertical). If some readers have old Hesse and Wolf catalogs perhaps they can precisely identify these lamps.

Don Olson of Glendale, Wisc., owns two of the steel lamps and Tom Gressman of Oconomowoc, Wisc., owns one. Those and the collections mentioned here in the figure captions are the only ones in North America, as far as I know, which contain Tsumeb lamps. All of these lamps were brought into the U.S. by a mineral dealer who obtained them from a museum in Tsumeb, but others may exist.

According to Karsten Porezag, the F. Hermann Hesse company operated in Nuremberg from about 1890 until 1965. "I know the old Hermann Hesse (no ca. 85 years old) - I think his father had begun that business," he said.

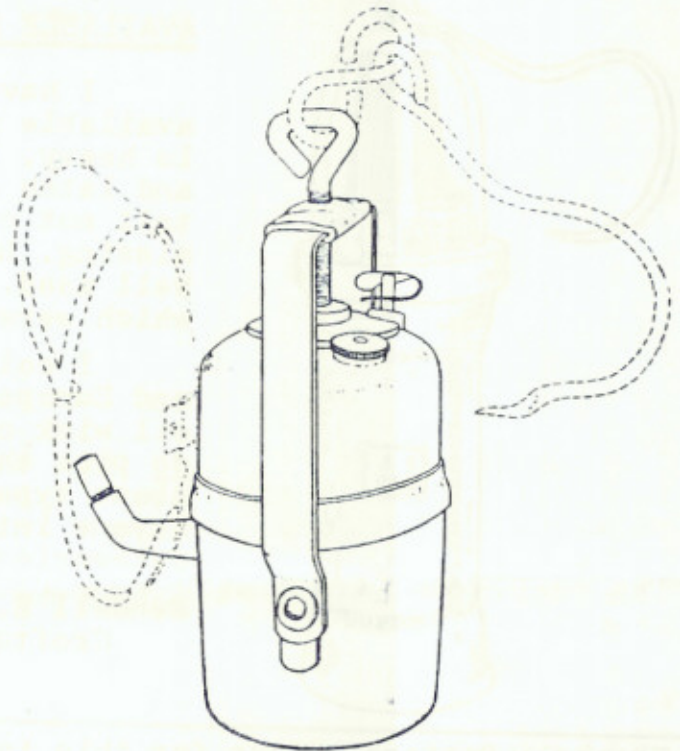


Figure 4. Steel carbide lamp (no maker's mark). $7\frac{1}{2}$ inches tall. Ken and Betty Roberts collection, Twain Harte, Cal.

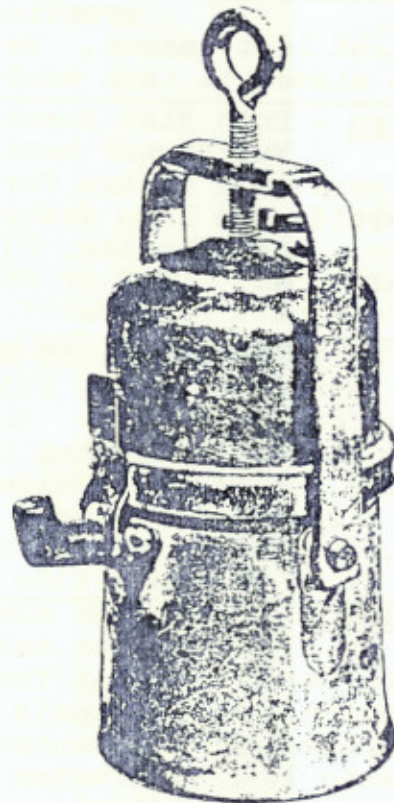
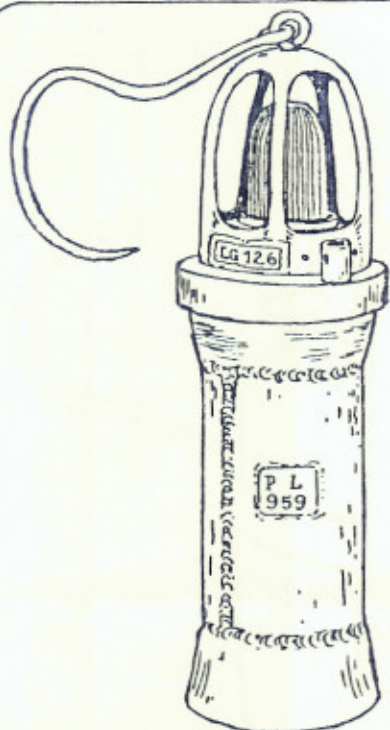


Figure 5. Steel carbide lamp (no maker's mark). $7\frac{1}{4}$ inches tall. Bob and Carol Mathiasen collection, Fremont, Cal.



AVAILABLE FOR TRADE

I have this early Welsh electric safety lamp available for trade, as illustrated at left. It is heavy, bright steel with brass number plates and latch cylinder (latch missing); 11½ inches tall not counting hook. Some internal parts are missing, but nothing visible from the outside. Well used. The lamp has two internal chambers which were used to produce a wet-cell battery.

I collect safety lamps, brass carbide lamps, and European oil wick lamps. I do not collect oil wick cap lamps (American ones at least) but I do pick them up to use as trading stock for the above types of lamps. I'd like to hear from anyone interested in trading in any of the above categories.

Wendell E. Wilson, 1550 Bandury Ct.
Crofton, Maryland 21114

Thanks - Postage thanks for this issue go to our good friends in Washington state, California, Indiana, Illinois, Oklahoma, Alabama, New Jersey, Maryland, and Colorado. Your kindness helps us to keep up the exchange of information.

Surface carbide man - Jim Whidby used the greeting card shown to the right last season. We thought that those who missed it then would enjoy it now.

Lamp design - Both Rick Banning and Steve Wurzburger have indicated plans to work on a design for a contemporary carbide cap lamp design. Write either one: Rick Banning, 7304 Flower Ave., Takoma Park, Md., 20012 or Steve Wurzburger, Box 67, Goodyears Bar, Calif., 95944.

Trades - Larry Peterson, 55 Seminole Ave., Washington, Pa., 15301, has the following for trade only: Sun Ray, Springfield top, Grier horizontal top, Simmons, Elkhorn top, Lu-Mi-Num, Baldwin 38 no reflector, ITP superintendent, Big Boy hand, Wolf 856, Justrites, Droppers, Autos, and flasks. Write for condition of items.



Scranto lamps - Some time ago Tony Moon sent several old ads which included a Scranto carbide cap lamp item. We have had various odd reports on this name, but Tony listed his information as follows:

Scranton lamp - Francis Coffin Co. - 1909, 1910

Scranton lamp - Scranton Acetylene Lamp Co. - 1911

Scranto lamp - Scranton Acetylent Lamp Co. - 1913

Scranto lamp - American Safety Lamp & Mine Supply Co. - 1921

The dates, of course, from the advertising media dates only. Anyone to help unravel the dates and the similarity between Scranto, Scranton, non-Justy Victor, and Pathfinder designs as more than coincidence can write Tony at his new address - Tony Moon, 330 Second St., Montara, California, 94037