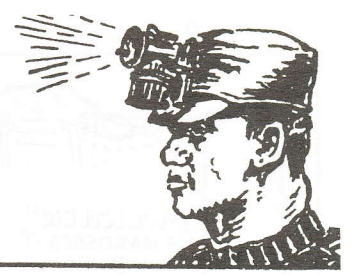


THE UNDERGROUND LAMP POST

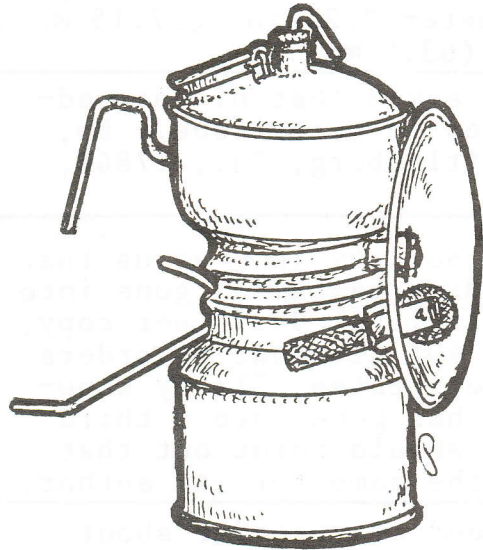


- MINERS WERE THE FIRST ECOLOGISTS -

Vol. V, No. 3

Fall, 1989

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



Unnamed, unmarked lamp - This sketch shows a brass carbide cap lamp which is now in a private collection. It is unfired as well as unmarked . . . no name on it. It is rather delicate in design, very lightweight, and probably would not survive underground service for very long. The diameter of the wire parts is only 1/16 in. (1.588 mm). Height is 4.0 in. (101.6 mm), base diameter is 2.0 in. (50.8 mm), and the reflector diameter is 2.375 in. (60.325 mm). Note the long striker cap 0.5 in. (12.7 mm).

Deal - Now here' a deal you can't resist. From YANKEE magazine for April, 1988, p. 9. Any takers?

Will swop new in-ground pool, completely installed, for parcel of land in western Massachusetts. A 635 MA

Will swop very old leather coal-miner's hat with original Auto Lite lamp attached for building lot in New England or a rocking chair. A 625 NJ

Will swop six ivory hand-carved snuff bottles with scrimshaw for good working 17 jewel pocket watch

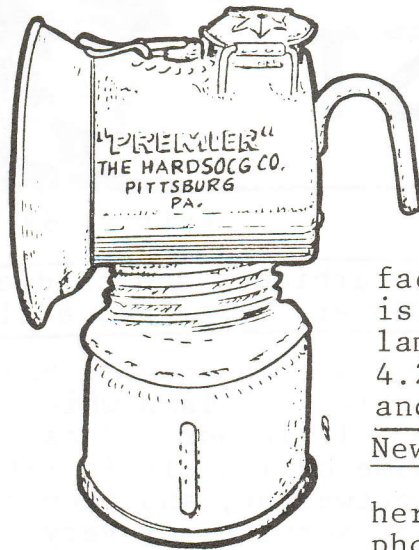
Trading - Bob Batey, 17 Arundel Walk, Grange Estates, Wickham, Newcastle, NE165SF, England, has sent a list of the items he has for trade. They include: Naylor "Spiralarm" safety lamp with methanometer; Gray's shield patent lamp, c. 1900: tin drift lamp in good order (rare); Patter-son safety lamp, c. 1930; anemometer in leather case; microscope in mahogony case; miner's dial in wooden box; Barrograph in wooden box; and a mechanical thermometer in copper case. Bob asks that you let him know your interest and he will send a full description and photo. He is interested in a German blende lamp and unusual folding candleholders.

Sales and trades - Dick Sears, 4831 Vespucci Drive, Sierra Vista, Arizona, 85635, has sent a long, two-page list of his collecting interests, his lamp parts wantlist, his bike and vehicle parts want list, and his items now available for trade. It seems too long to reproduce here, but since it appears to be computerized it would be easier for Dick to send you a copy. Dick's phone number is 602-459-7528.

Buy and trade - Guisepppe Croce, Italesplosivi, Via F. Turati, 25, 20121, Milan, Italy, is interested in buying old mine lamps (oil, carbide, safety, and electric). He would appreciate a photo and description about condition and workability. He has some STELLA brand carbide lamps for trading just now.

Wanted - Mark Ballard, 1204 Anderson Drive, Marion, Illinois, 62959, 618-993-8482, writes often. He has defined his wants as follows: "Wanted: FLAME SAFETY LAMPS from around the world. Have traders or will buy. Write or call any time."

Husson? - Herman Berube, St. Elelithere, Co-Kam, QC, G0L 2T0, Canada, would like to have information about a factory which might be currently making the 1900-style Husson oil wick cap lamps. If anyone has heard such a rumor, please let Herman (and us, too) know about it. This would be the first we have ever heard of this type of reproduction.



"PREMIER" lamp - Some of our readers already know of the "PREMIER" carbide cap lamp made by the Hardsocg Co. of Pittsburgh, Pa.; yet many other readers haven't heard of this recent discovery. Bill Spence has kindly sent us a photograph which has been translated into this sketch. This lamp has been reported in both brass and nickel-plate. Until someone can find out more facts about this brand named lamp we can suspect that it is entirely unrelated to the PREMIER series of carbide lamps produced in England (UK). Dimensions are: height 4.25 in. (107.95 mm); base diameter 2.25 in. (57.15 mm); and reflector diameter 2.5 in. (63.5 mm).

New address - Jim Van Fleet has asked that his new address be publicized in this issue. So, here it is: 222 Market St., Mifflinberg, Pa., 17844, phone 717-966-3308.

Book corner - A letter from the Arizona Historical Society informs us that our original book Early Underground Mine Lamps has gone into its third printing recently. It is now again available at \$9.95 per copy, plus \$1.00 for postage and handling. They offer a 40% discount on orders of five or more copies. The editor's letter further states, "To my knowledge, Mine Lamps is the only AHS publication that has gone into a third printing. It's far and away our best seller." We should point out that this is a non-profit organization and the book is the same for its author.

Safety lamp glass? - We have an inquiry from a friend of a reader about what might be a safety lamp glass. The glass exhibits a faint, but distinct, purple-blue hue, comparable to that which develops on old bottles when exposed to sunlight over a span of time. The dimensions are: O D 2.75 in. (69.85 mm), I D 2.1875 in. (55.56 mm), length 2.5 in. (63.5 mm), and thickness 0.219 in. (5.56 mm). For comparison, we list here the Wolf and Koehler dimensions. Wolf: O D 2.3125 in. (58.74 mm), I D 2.0 in. (50.8 mm), height 2.0 in. (50.8 mm). Koehler: O D 2.3125 in. (58.74 mm), I D 2.0 in. (50.8 mm), height 2.5 in. (63.5 mm). Send your information to: Vikki Church, Rt. 1, Box 133M, Baker, Oregon, 97814.

Wants list - Bob Salika, 3917 Sunnyside, Brookfield, Illinois, 60513, has recently added items to his collection which need parts. He needs the following: a reflector brace for an X-RAY lamp (assumed to be the original style, not the JUSTRITE style); a smooth JUSTRITE bottom; JUSTRITE felt holders which look like a four-leaf clover; a JUSTRITE fuse lighter; an adjustable JUSTRITE reflector hood; a spare spiral feed lamp.

Wants list - Your mini-editor still needs a water valve and a water door for a LITTLE GIANT carbide hand lamp and two (2) brass reflector braces for the standard AUTO-LITE cap lamps. Someone must have these items in their junk parts box. Please let us hear from you.

George Bayless' original "anthracite lamp" reference.

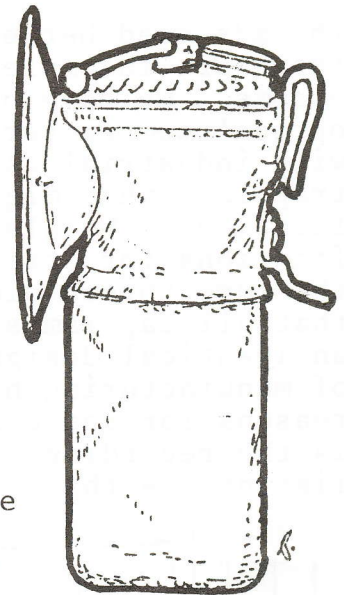
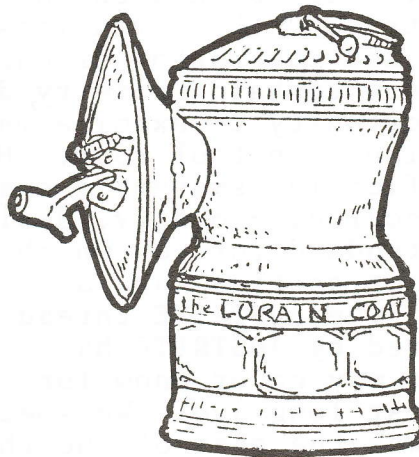
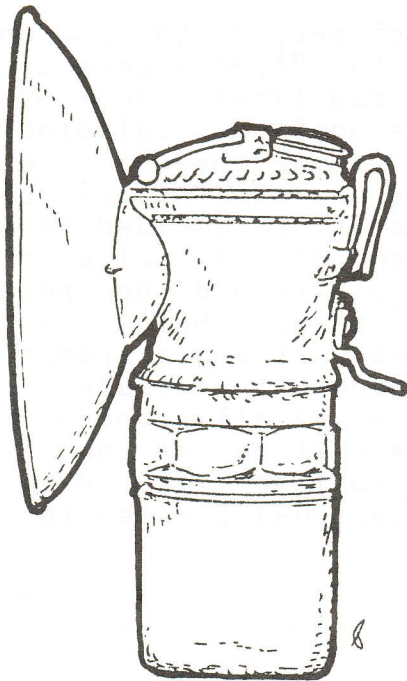
MINE LAMPS AND LIGHTING

309

Owing to the brightness of the acetylene flame, the carbide lamp has very largely replaced the old open-flame torch so commonly used in mines generating no gas. The general form of carbide lamp in common use is shown in Fig. 66, although there are different styles of this lamp manufactured, some having no reflectors behind the flame and differing in other details. The lamp shown in the figure is a type very largely used in the anthracite district. Most of these lamps in use differ only in slight details.

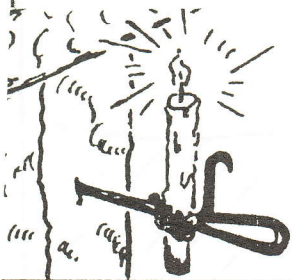


Fig. 66.



More strange Auto-Lites - Recall the strange modified Auto-Lite carbide cap lamp shown on page 5 of our last issue. Here are several more for your enjoyment and envy. At the left from the Skip Older collection is a standard AUTO-LITE top on an elongated AUTO-LITE bottom. Dimensions are: 5.0 in. (127.0 mm) diameter reflector, 2.0 in. (50.8 mm) diameter of the bottom, and 5.625 in. (142.9 mm) tall. In the middle, from several collections including the G. W. Pedlow collection, is a novelty . . . an AUTO-LITE lamp modified into a cigarette lighter; no hook, no brace, top full of cotton, bottom half-full of lead, a flame snuffer added to the reflector, and the commercial legend "the (sic) LORAIN COAL & DOCK SALES CO., CLEVELAND, OHIO" in red and gold on a band around the top of the carbide chamber bottom. At the right from a private collection is a standard AUTO-LITE top on a foreign bottom with the incised markings as shown. Dimensions are: 2.5 in. (63.5 mm) diameter reflector, 2.0 in. (50.8 mm) diameter bottom, and 5.625 in. (142.9 mm) tall.

Oops - Many of our readers have noticed that the masthead volume, number, and date were missing from the last issue. For those who keep careful records, the duplicate masthead below can be xerox copied and pasted on the last issue. Or, only the volume, number, and date can be cut from the xerox as a narrow strip and pasted on. Or, some may opt to simply print the missing information on their last copy. At any rate, we're embarrassed. It is quite a chore to "get it all together."

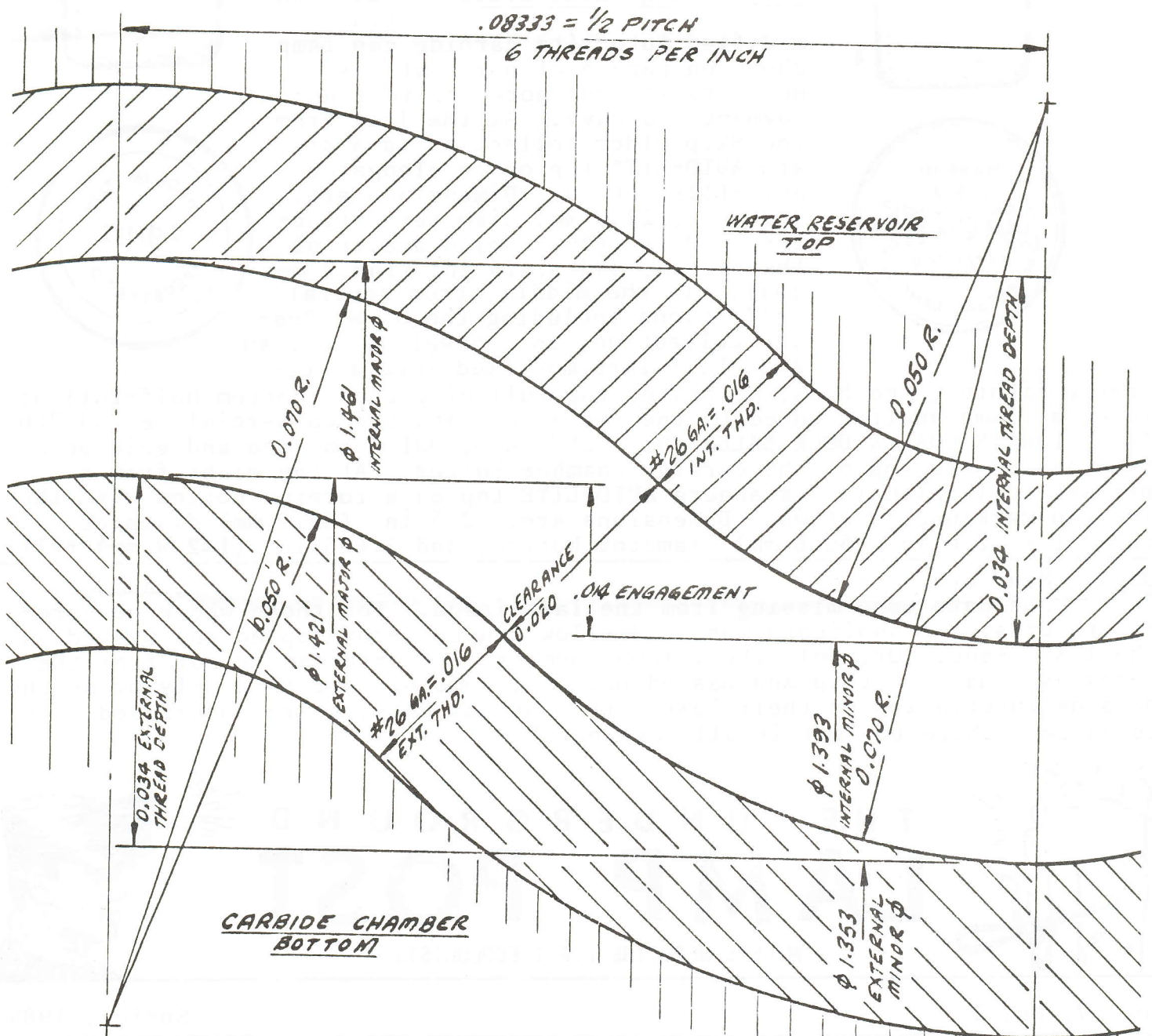


THE UNDERGROUND LAMP POST



- MINERS WERE THE FIRST ECOLOGISTS -

Carbide lamp threads - We have seen some documents which perport to show the geometry and the dimensions for the "lamp socket-type" threads used between the top and the bottom of carbide cap lamps. Some of these are incomplete and others contain geometry, dimensional, and calculation errors. We have had the opportunity to examine many of these threads on an optical comparator in a machine shop tool room. Having had some experience with industrial thread specification systems and standards, we decided to extrapolate what might be the correct geometry, design, and dimensional specifications. We also made a standard form on which we could record the specifications for various models of carbide lamp threads. Illustrated below are the pure thread dimensions of the JUSTRITE thread system. It would appear that all cap lamps manufactured by JUSTRITE had interchangeable threads from an identical design. But we may never know for sure, since all records of manufacturing have been lost long ago. We speculate that one of the reasons for the consistency was the cost of the thread rolling dies. Page 5 is the recording form (filled in with JUSTRITE specifications) for use in listing the thread data and in making calculations.



CARBIDE CAP LAMP THREAD SPECIFICATIONS

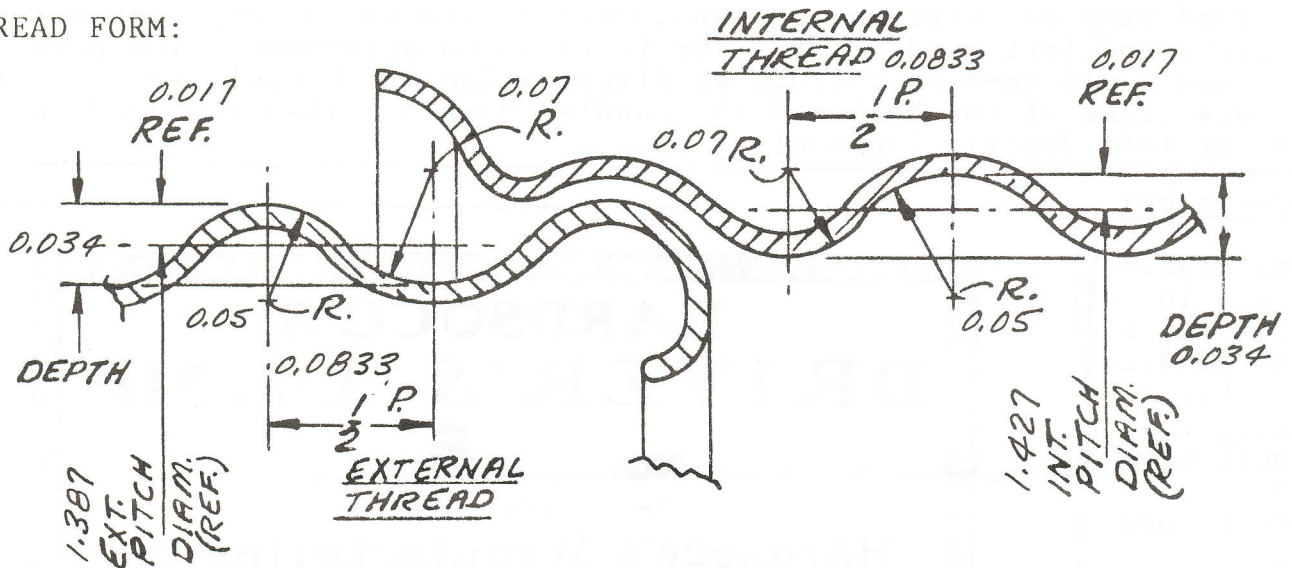
LAMP NAME JUSTRITE MODEL • ALL JUSTRITE CAP LAMPS
 DESCRIPTION • 1911 PLAIN • 1915 BEADED • X-RAY #1 and #2
• 1919 REINFORCED • VICTOR
 MANUFACTURER JUSTRITE MFG. CO. • DEFENDER
 LOCATION CHICAGO, ILL., USA DATE 1911, 1915, 1919

THREAD SPECIFICATIONS

CALCULATION DATA:

1. NUMBER of THREADS (SINGLE, or DOUBLE, or ETC.) SINGLE
 2. R H or L H LEAD RH
 3. PITCH ($1 \div T P I$, no tolerance) 0.1666 in. 4.233 mm
 4. LEAD (Single = $1 \times$ Pitch, Double = $2 \times$ Pitch) 0.166 in. 4.233 mm
 5. T P I, Threads per Inch ($1 \div$ Pitch) 6
 6. CLEARANCE - Maximum 0.020 in. 0.508 mm
 Minimum _____ in. _____ mm
 7. PITCH DIAMETER (Reference only, no tolerance)
 External 1.387 in. 35.230 mm
 Internal 1.427 in. 36.246 mm
 8. METAL THICKNESS (Reference only) 0.016 in. 0.406 mm
- #26 BW GAGE

THREAD FORM:



PRODUCTION DIMENSIONS:

INTERNAL THREAD- LAMP TOP - plus (+) tolerances

8. MAJOR DIAMETER - Minimum 1.416 in. 37.109 mm
 Maximum _____ in. _____ mm
9. MINOR DIAMETER - Minimum 1.393 in. 35.382 mm
 Maximum _____ in. _____ mm

EXTERNAL THREAD - LAMP BOTTOM - minus (-) tolerances

10. MAJOR DIAMETER - Maximum 1.421 in. 36.382 mm
 Minimum _____ in. _____ mm
11. MINOR DIAMETER - Maximum 1.353 in. 34.366 mm
 Minimum _____ in. _____ mm

___ in. x 25.4 = ___ mm

Questions and answers - As mentioned in our last issue, we get inquiries in our mail. Here are several repeaters.

Q. What is a mint lamp? A. We do not know. We do know an unfired, unused lamp when we see one, and we do recognize a used lamp. A junker is also easy to identify. But we never have seen a definition or have heard a description of a 'mint' lamp.

Q. What is meant by the term KNOWN for types of lamps or for quantities of items? A. We have never understood this term. A person writing about something knows SOME THINGS about the subject or about the item, but would be hard-pressed to prove that he/she can list ALL KNOWN items or information. It would seem self-evident that ALL things within a given subject were indeed KNOWN at some time by someone (and/or to others) at various other times. It would also seem to be quite humbling to claim ALL KNOWN, only to find out something additional later . . . usually after publication of an article, book, and/or list. After we got our bare feet wet in the technical publications business and they were burned enough times, we finally decided to take the advice of a sage, old chief engineer and we learned not to use certain all-encompassing and limiting terms, and to leave space for more information. Hence, phrases like 'have been discovered to date', 'partial list', 'I know so far', and 'I KNOW this much at this time' have found favor in our later writings. Kinda philosophical, eh, but an honest attempt at the true perspective.

Q. What is 'right hand' or 'left hand' for a miner's candlestick? A. We don't know. People are right handed and left handed. Technical writers have historically used human anatomy to describe mechanical items, i.e., head, foot, arm, leg, neck, eye, ear, nose, throat, mouth, lip, etc. We have read many descriptions of candlesticks with varied applications of the right and left handed terms, so there is no agreement. The best description would seem to include an illustration which would show the relative positions of the hook and the candle thimble. Then the need for right or left description would disappear.

Hardsocg box

6 in. (152.4 mm) x 6 in. (152.4 mm) x 8 in. (203.2 mm). Label printed red on buff with a purple hand-stamped "5".



Thank you - The past summer has been a difficult (medically speaking) period at our house. Our thanks go to those who have helped put this issue together and to all who have so kindly helped with the postage . . . the packet from Louisiana was especially generous and helpful. We are also indebted to the following locations: New Mexico, California, Pennsylvania, Massachusetts, North Carolina, Missouri, Arizona, Oregon, Ohio, Kentucky, Colorado, New Jersey, Idaho, Illinois, Virginia, Alabama, Michigan, Florida, Wisconsin, Utah, Canada, France, and England. Sincere thanks to all.

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