

Gem Manufacturing Company

by Dave Thorpe

Miners' lamps stamped with the GEM name are relatively rare. Their fairly plain design, typical of lamps from the mid-1920's, has led to a somewhat less enthusiastic desire by collectors than their scarcity might suggest.




GEM cap lamp, brass, 2 1/2" reflector.

The Gem Manufacturing Co. of Pittsburgh, incorporated in 1899, was known primarily for their "steel oilers and torches of every description".¹ They manufactured their own stamped GEM lamp in 1926, however, during the two previous years they were the sole distributors of miners lamps made by the defunct Grier Bros. Company. This included the GEE BEE cap lamp which is much sought after by collectors due to its subtly elegant and long-waisted appearance.

Gem entered the mining lamp business in 1924, announcing themselves as "successors to the Grier Bros. Co."² Grier Bros., also of Pittsburgh, had manufactured various cap lamps from 1912 through 1923.³ Their products were known for their heavy and somewhat sloppy solder application as well as a less sturdy construction than other lamps of the era. The company did not flourish nationally to the extent that Justrite, Universal, and Shanklin did.

During 1922-23 Grier undertook several costly steps to challenge their competitors. They opened a western branch in Hancock, Michigan.⁴ This was the home of the inventors Jacobson and Turja who patented the push-button tip cleaner found on many late Grier lamps.⁵ They also began a westward advertising campaign as evidenced in the *Arizona Mining Journal*.⁶



GRIER "J & T"
PATENTED
**Tip Cleaner
Carbide Lamps**

Improved Model
Strong Carbide Bottoms
"SAFETY FIRST"
The "J & T" Patented
Tip-Cleaner

Mining Companies, Jobbers,
Dealers and Mine Officials
Write for Prices and Cata-
log.
Cap-Lamps with round and
flat hooks.

NO. 300C—HAND LAMP
List Price \$2.00 Each
Nickel Finish

EXCLUSIVE MANUFACTURERS
THE GRIER BROS. CO.
First National Bank Bldg.
HANCOCK, MICHIGAN


Home Office and Factory
PITTSBURGH, PENNA.

June 1, 1923

ARIZONA MINING JOURNAL

33

The Grier "J & T" Tip-Cleaner Carbide Lamp
THE MINERS' DELIGHT—Patented Nov. 15, 1921.



No. 87C—Cap Lamp No. 300C—Inspector's Lamp No. 100C—Cap Lamp

The J & T Tip-Cleaner cleans the burner by a slight pressure on the small push button. Does not extinguish the light.
Our latest lamps are equipped with a heavier wire which will not buckle up, therefore will force out even the hardest substance from the burner.

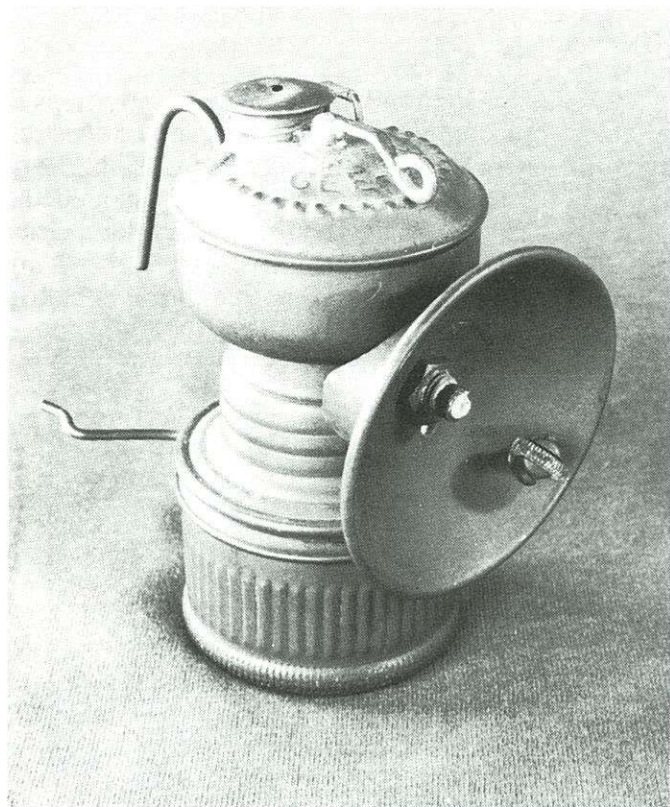
The J & T is the real "Safety-First" Miners' Lamp.
Write us for sample lamp, catalog and prices.
Exclusive Manufacturers

THE GRIER BROTHERS COMPANY
First National Bank Building Hancock, Michigan

April & June 1923 ads from Arizona Mining Journal. This is the last year in which ads are found for Grier Bros. Co. (Courtesy Tony Moon).

Most costly of all perhaps was the development of the GEE BEE (phonic initials for Grier Bros.) cap lamp. It would appear that this lamp represented a serious attempt to upgrade the appearance and construction of their product. Solder seams were much more carefully done, most from the interior of the lamp. Unlike previous Griers, the hook penetrated the tank and was soldered to the inside. The once flimsy water lever

was now forged to add strength. Long vertical ribs were added to the base in keeping with other competitors of the day. The resultant lamp was, in a word, beautiful.



GEE BEE cap lamp, brass, 2 1/2" reflector. Note factory soldered plug where J & T push button would normally be.

Interestingly, neither the GEE BEE nor any lamp resembling the GEE BEE was ever advertised by Grier. Their final ads of 1923 displayed only vertical style lamps with J & T[®] tip cleaners and the Loc-on[®] detachable reflectors. If any GEE BEE's were ever sold by Grier, it is not indicated by their advertising. The company failed in late 1923 before the GEE BEE could be marketed.

Grier's remaining stock was acquired by Gem Manufacturing Co. who, in 1924, began to advertise and sell Grier cap lamps. A Gem ad in the 1924 **Keystone Catalog** depicts vertical style Grier lamps that differed from Grier's last 1923 Keystone ad only by the more modern base. If an inventory of GEE BEE lamps were in Gem's possession at this time, they were not yet advertising them.

In 1925 however, Gem advertised what appeared to be GEE BEE lamps in both the **Keystone Catalog** and their own **Catalogue Number Fourteen**. All GEE BEE cap lamps bear the Grier name stamping on top. Since these lamps could not rightfully be called Gem lamps, the ads refer to them simply as "tip cleaner lamps". Later, in the same advertisement, mention is made of "GEM LAMPS without J & T Cleaners...of the same general construction" ... but no picture is shown. This may refer to their own GEM stamped lamp which had a shorter waist,* a Guy's Dropper style reflector brace, and narrower screw threads. It is also consistent with the fact that GEM stamped lamps are not found with the push-button tip cleaners.

The 1926 **Keystone Catalog** contains Gem's last advertisement for miners' lamps. There is but one lamp pictured: it is a true GEM cap lamp. No mention is made of the once touted J & T cleaner. Gem apparently did not feel these were worthwhile in the lamps they themselves manufactured.

* An occasional GEM stamped lamp is found with the taller GEE BEE style waist (Errol Christman collection).

Opposite page: Keystone Catalog ads showing the progression of lamps from Grier to GEE BEE to GEM. It appears that GEM rather than Grier sold the GEE BEE cap lamp. (Courtesy Tony Moon)

Below: 1930 Gem letterhead from a memo found inside Gem's 1925 catalog.

E. S. FOWNES, Pres.

D. A. McCaffrey, Secy.

J. A. FOWNES, Vice Pres. & Treas.



QUOTATIONS SUBJECT TO CHANGE WITHOUT NOTICE. ALL AGREEMENTS ARE CONTINGENT UPON STRIKES, ACCIDENTS AND OTHER DELAYS BEYOND OUR CONTROL.

GEM MANUFACTURING COMPANY

INCORPORATED 1899
MANUFACTURERS

STEEL AND BRASS BENCH OILERS
ELECTRIC WELDED STEEL OILERS, TORCHES, TALLOW POTS,
SUPPLY CANS, FOUNDRY CHAPLETS, FLEXIBLE SHAFTING
DIES AND SPECIAL STAMPINGS

BRANCH SALES OFFICES
NEW YORK
PHILADELPHIA
CHICAGO
MEMPHIS
WASHINGTON, D.C.
SAN FRANCISCO

Pittsborough, Pa. Sept. 23-1930.

1923

THE GRIER BROTHERS COMPANY

1411-1417 Brighton Road, PITTSBURGH, PA.
 Factory: PITTSBURGH, PA. Western Branch: HANCOCK, MICH.

Manufacturers of
Grier J. & T. Carbide Lamps
 The Miners' Delight

Products

Carbide Lamps for Miners; Carbide Flasks—Tips and other repair parts; Miner's Dinner Pails, Powder Cans and other miner's equipment.

J. & T. Tip Cleaner

The J. & T. Tip cleaner with which Grier Lamps are now equipped is a recent invention, and thoroughly covered by patents. The cleaner is always with the lamp ready for instant use. The tip can be cleaned as often as necessary without extinguishing the light. It will save the miner both time and money. The cost added to the price of the lamp is very little compared to the advantages to be derived.

Construction—The device is so simple that there is nothing to get out of order from corrosion or otherwise.

A small wire of special composition works inside of the lamp, being housed in a brass tube and attached to a push button. A slight pressure on the button on outside of lamp injects the wire into the gas orifice in the burner and forces out any dirt or other matter lodged in the burner.



Cut Showing How J. & T. Cleaners Are Installed in Grier Lamps

The diameter of the cleaning wire is slightly less than the diameter of the gas opening in the burner, so that when the wire is projected into the opening the light will not be extinguished.

It is not necessary to remove the lamp from the cap.

All lamps tested before leaving our factory. Lamp equipped with Grier "Loc-on" reflectors and brass, lava insulated tips. All parts are easily replaced. Lamps made with 2 1/2", 2 3/4" and 3" reflectors. Not a better made lamp on the market.



Round Hook Coal Miner's Lamp



Flat Hook Metal Miner's Lamp



Inspectors Lamp—Large Carbide Bottom

WRITE FOR CATALOG

SECTION 1

MINING CATALOG

1924

GEM MANUFACTURING COMPANY

THE GRIER BROTHERS COMPANY
 1229-1243 Goebel St. PITTSBURGH, PA.

Manufacturers of
Grier J. & T. Carbide Lamps
 The Lamp You Have Waited For

Products

Carbide Lamps for Miners; Carbide Flasks—Tips and other repair parts; Miner's Dinner Pails, Powder Cans and other miner's equipment.

J. & T. Tip Cleaner

The J. & T. Tip cleaner with which Grier Lamps are now equipped is a recent invention, and thoroughly covered by patents. The cleaner is always with the lamp ready for instant use. The tip can be cleaned as often as necessary without extinguishing the light. It will save the miner both time and money. The cost added to the price of the lamp is very little compared to the advantages to be derived.

Construction—The device is so simple that there is nothing to get out of order from corrosion or otherwise.

A small wire of special composition works inside of the lamp, being housed in a brass tube and attached to a push button. A slight pressure on the button on outside of lamp injects the wire

into the gas orifice in the burner and forces out any dirt or other matter lodged in the burner. The diameter of the cleaning wire is slightly less than the diameter of the gas opening in the burner, so that when the wire is projected into the opening the light will not be extinguished.

It is not necessary to remove the lamp from the cap.

All lamps tested before leaving our factory. Lamp equipped with Grier "Loc-on" reflectors and brass, lava insulated tips. All parts are easily replaced. Lamps made with 2 1/2", 2 3/4" and 3" reflectors. Not a better made lamp on the market.

Recent improvements made in our lamps—lower push button on tip cleaner; heavier cleaning wire will not bend or break; strong carbide bottoms; newer felt holder; general construction throughout improved to make our lamps stronger and better than ever before. Lamps furnished with round or flat hooks.

Write for Catalog.



Cut Showing How J. & T. Cleaners Are Installed in Grier Lamps



Round Hook Coal Miner's Lamp



Flat Hook Metal Miner's Lamp



Inspectors Lamp—Large Carbide Bottom

1926

GEM MANUFACTURING COMPANY

1229-1243 Goebel St. PITTSBURGH, PA.
 Gem Miners' Lamps, Oilers and Welded Ware

GEM Lamps

Gem lamps combine all the latest improvements in the lightest weight lamp on the market. Being lower in height and more compact this need often expressed. The reflector is detachable, being held in place by a small hexagon nut. The felt holder fully protects the felt from the wet carbide. The hook is riveted and soldered to the bottom of the water bowl inside the lamp. Wire brace on back removable, not soldered.

The water supply lever is a full spring and stays put, while the water feed is positive, as it cannot work loose. Brass tip Lava inserts used throughout.

Rubber gasket cannot cut as provision is made for its insertion into the screw cap where no contact is made with the edge of the cap. The removable wire hook encircles the outside of the gasket.

All parts interchangeable, damaged parts can be replaced.

Every lamp is carefully inspected before leaving the factory, and carries our guarantee against defect in workmanship and material.

GEM Welded Steel Ware — Black Enamel Finish

The Gem Method of Electric Welding Produces a line of oilers, torches, carriers and supply cans superior to anything the trade has ever known.

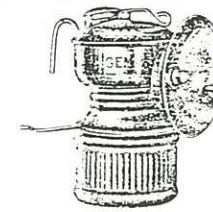
The Gem method of electric welding has been created after many years of experimental work. We have found by tests that it shows 25% of the original strength of the material.

The handles, ears and baits of all our patterns are spot welded securely to the cans.

The Gem electric welded line has proven to be the most economical and durable and they have adopted it as their standard. We will submit samples, complete specifications on request, free of charge.



Black Enamel Oiler



POLISHED BRASS

No. 96—2 1/2" Ref. \$15.00 Doz. list
 No. 95—3" Ref. 16.00 Doz. list

Packed 1 dozen in carton, weight 6 pounds dozen packed

POLISHED NICKEL

No. 104—2 1/2" Ref. \$17.00 Doz. list
 No. 103—3" Ref. 18.00 Doz. list

Packed 1 dozen in carton, weight 6 pounds dozen packed



Black Enamel Oiler



Black Enamel Oiler



Black Enamel Oiler



Black Enamel Oiler



Black Enamel Oiler



Black Enamel Oiler



Black Enamel Oiler



Black Enamel Oiler

1925

GEM MANUFACTURING COMPANY

1229-1243 Goebel St. PITTSBURGH, PA.
 Manufacturers of
Gem Miners' Lamps
 Equipped with The J. & T. Tip Cleaner

The introduction of the carbide lamp into the ore mining industry was one of the greatest aids toward safety and stimulating a greater production per man. While it was a great improvement over the lamps using various kinds of oil, yet the fact that the burner was always clogging up caused it to be held in poor esteem by many miners. Unless he had a wire or reamer of some sort with him the lamp was useless. Even when he carried a bundle of reamers with him, these were often misplaced and caused him inconvenience, and he was as badly off as though he had none. As a result of having no light part of the time, his production and, therefore, his earnings fell off, due to the inefficiency of his light.

The J. & T. Tip Cleaner—What It Is

It consists of wire, of a special composition, which will not break or corrode. This wire extends from a push button, located on the top of the lamp, through a brass tube and into the gas chamber. Its length is such that it does not interfere with free passage of the gas through the lava tip. (See illustration). This is accomplished by means of a spring located within a small pocket in the top of the lamp.

Operation
 The burner tip having become clogged, the miner merely reaches up and presses the small push button which projects out of the top of the lamp. The wire, being slightly smaller than the gas orifice in the tip, is forced into the orifice and pushes out whatever foreign matter may have collected in the orifice. And this is accomplished without extinguishing the light or without removing the lamp from the head. As the operation requires but a few seconds the miner is able to keep production up to a maximum.

Each lamp is thoroughly tested before leaving our factory, so that only perfect lamps are shipped.

The lamp illustrating the J. & T. Tip Cleaner on this page is one-half the size of the actual lamp and can be furnished either in nickel or brass with round or flat hook.

We also make an Inspectors' Lamp with a larger carbide container, as illustrated below, which is also equipped with the patent cleaning device.

GEM LAMPS without J. & T. Cleaners are of the same general construction and have the same guarantee as our tip cleaner lamps. Write us for any further information required, or better still, order an assorted dozen, showing the different size reflectors and finishes



Cut Showing How J. & T. Cleaners Are Installed in Gem Lamps



Flat Hooks For Metal Miners With Cleaner

Polished Brass
 No. 420—2 1/4 in. Reflector
 No. 410—2 1/2 in. Reflector
 No. 400—3 in. Reflector

Polished Nickel
 No. 320—2 1/4 in. Reflector
 No. 310—2 1/2 in. Reflector
 No. 300—3 in. Reflector



Large Carbide Bottom

Polished Nickel With Cleaner
 No. 300—3 in. Reflector

The ideal lamp for Inspectors, Superintendents, Mine Foremen, Campers, Hunters and for all outside work.



Coal Miner's Lamp With Cleaner

Polished Brass
 No. 960—2 1/4 in. Reflector
 No. 870—2 1/2 in. Reflector
 No. 980—3 in. Reflector

Polished Nickel
 No. 1060—2 1/4 in. Reflector
 No. 1170—2 1/2 in. Reflector
 No. 1190—3 in. Reflector



I have an original 1925 issue GEM catalog with an enclosed letter from Vice-president James A. Fownes in which he makes reference to the catalog. The letter is dated Sept. 24, 1930 indicating that this 1925 catalog was used for at least five years. Pictured within are a line of miners' lamps...*but each page showing lamps is stamped "discontinued"*. (See opposite page)

Although we may strongly speculate from the journal advertisements that Gem ceased selling miners' lamps after 1926, we can state with certainty from the catalog with enclosed letter that they had stopped by 1930. The Gem company itself continued in existence until 1961.⁷

GEE BEE lamp in Grier Bros. Co. box sold by Gem. Nelson Ressler collection. (Photo by Jim Van Fleet)

How long were the GEM lamps manufactured? Probably only during 1925 through 1926. Although the **Thomas Directory of Manufacturers** show Gem manufacturing lamps in 1927,⁷ this listing may only refer to their line of steel railroad torches which was carried on into the 30's. No Keystone ads for Gem miners' lamps have been found later than 1926.

HEAVY WELDED SEAM LOCOMOTIVE TORCHES

This torch is made from heavy gauge steel and electric welded throughout. Guaranteed not to leak and will stand exceptionally hard usage.

Numbers	125-H
Capacity	1 pt.
Length of nozzle	3 ⁷ / ₈ "
Diameter of bottom, inches	6 ¹ / ₂ "
Diameter of cap opening	7 ⁸ / ₈ "
Diameter of nozzle opening	5 ³ / ₈ "
Height over all	7 ³ / ₈ "
Pattern weight per dozen	12 lbs.
Per dozen (list)	\$9.00



Above: Gem railroad torch, not to be confused with oil wick lamp. (From 1925 Gem catalog)

Right: Nickel plated GEE BEE cap lamp, 2 1/4" reflector, with J&T tip cleaner.

Opposite page: Taken from 1925 Gem catalog. These appear to be GEE BEE cap lamps. Similar lamps appear in 1925 Keystone Catalog ads.





MINERS' CAP LAMP

With J. & T. Tip Cleaner

POLISHED BRASS

Round or Flat Hooks

Number.....	960	870	980
Reflector size....	2 1/4"	2 1/2"	3"
List price per doz.	\$16.00	\$16.50	\$17.00

NICKEL FINISH

Number.....	1060	1170	1190
Reflector.....	2 1/4"	2 1/2"	3"
List price per doz.	\$18.00	\$18.50	\$19.00

Lamps made of the best materials, highest grade workmanship and finish.

Latest improvements combined, detachable reflectors, round hook, riveted to bottom inside water bowl.

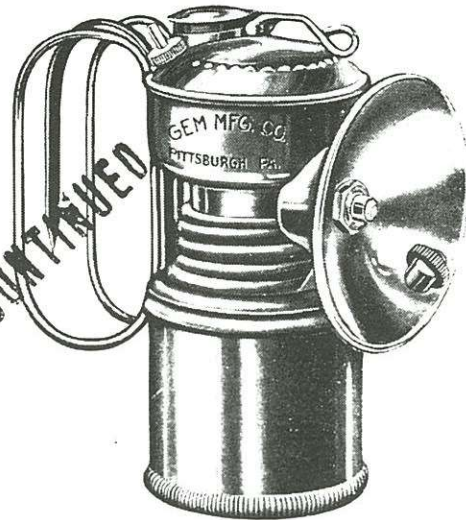
Felt Holders of latest type, protect felt from wet carbide.

J. & T. Patent Tip Cleaner installed in the last word in perfection.

Plain lamps are identical except they have no cleaner installed.

Lamps all equipped with brass tip Lava insert.

Packed one dozen in carton, weight 6 pounds per dozen packed.

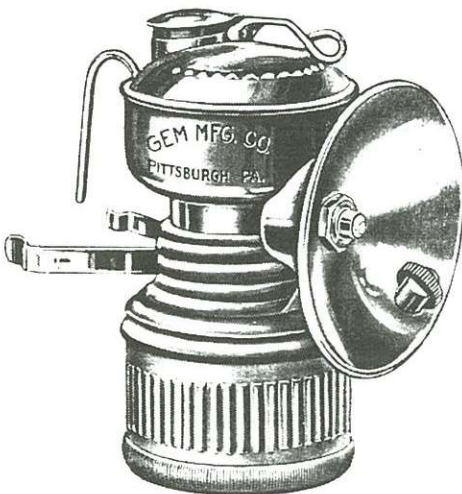


SUPERINTENDENTS' LAMP

POLISHED NICKEL—3" REFLECTOR

Has J. & T. Tip Cleaner

Number.....	300
List price per dozen.....	\$27.00



PLAIN LAMPS

(Without Cleaner)

POLISHED BRASS

Round or Flat Hooks.

Number.....	96	87	98
Reflector size....	2 1/4"	2 1/2"	3"
List price per doz.	\$15.00	\$15.50	\$16.00

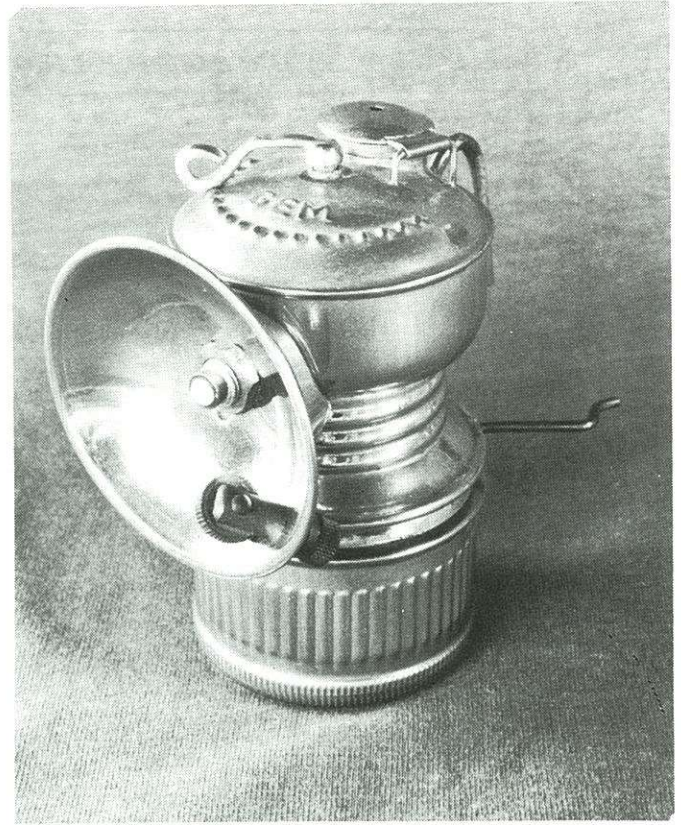
NICKEL FINISH

Number.....	106	117	119
Reflector size....	2 1/4"	2 1/2"	3"
List price per doz.	\$17.00	\$17.50	\$18.00

Prices quoted subject to change without notice.



Perhaps the earliest GEE BEE cap lamp, brass, with 2 1/4" reflector. Note soldered on reflector and flat strip braces as on early Grier Bros. lamps.



Nickel plated GEM with 2 1/4" reflector. Note small dimple locating notch in reflector just under burner which is common to all GEE BEE reflectors and GEM 2 1/2" reflectors.



Unfired Gem lamp with box. (Nelson Ressler collection)

References

1. GEM Manufacturing Company Catalogue Number Fourteen, 1925, p. 1.(introduction).
2. Keystone Catalog, 1924, p. 517.
3. Thorpe, D.H., 1990 *Mining Artifact Collector* #7, p.3, and #9 p. 29.
4. *The Mining Catalog* (Metal and Quarry Ed.), Keystone Consolidated Publishing Co., 1922, p.482. This is the first year that the Hancock branch is advertised.
5. U.S. Patent # 1,397,170. J. W. Jacobson and J. E. Turja. Appl. Sept. 3, 1920. Pat. Nov 15, 1921.
6. *Arizona Mining Journal*. April, May, and June 1923. The May issue displays Grier lamps on the cover.
7. Clemmer, G. S. *American Miners' Carbide Lamps*, 1987, p.71.