

# Grier Brothers Carbide Miners' Lamps

by Dave Thorpe

## Introduction

A cynic might say that Grier cap lamps were no more than cheaply constructed imitations of some of the better known miners' carbide lights. But a *cynic* may not appreciate the subtleties that a collector does. It is true that the early Griers borrowed heavily in design from the Baldwin "pinchwaist" and Justrite "horizontal" cap lamps. However, the classic Grier design that evolved from these, the so-called "vertical" Grier, was entirely unique among carbides.



The classic or "vertical" style Grier

Most surviving specimens are found in horrible condition. Made with a very thin gauge brass, they were prone to stress cracks and denting. But this more malleable sheet brass also allowed for more complexities in design generally not seen in more durable lamps. Griers were adorned with bulging letters and gadgets such as hinged clip-on reflectors and push-button tip cleaners. They were, in a word, ornate. Though the lamp's wide solder seams appear sloppy on first impression, this was actually due to a solder paste technique used in tin-smithing (which had been Grier Brothers' principal business for the previous 70 years) and was in fact, very skillfully done.

Very few of these fragile lamps have survived in mint condition. Ironically, Griers, which may well have been scorned by the miner for their lack of durability, have taken on added value to the collector for just the same reason.

## Early History

A Keystone Mining Catalog, 1919, is cited as claiming that Grier's first lamps were introduced in 1911.<sup>1</sup> Their first patent was issued April 2, 1912. In a review of one of the ongoing patent infringement lawsuits (Baldwin vs. Grier), it is stated:<sup>2</sup>

"Some time in the early part or in the middle of the year 1913, the defendant [Grier Brothers] began the manufacture and sale of its lamp,..."

As the Keystone advertisement may have erred boastfully, and the information given in the courtroom may have tended to minimize the length of time any damage was done, it may be said that the company began production of cap lamps around 1912.

The first Grier cap lamps were virtually identical to the Baldwin pinchwaist except for the stamping. At least one collector has acquired such a lamp.<sup>3</sup> This has led some to speculate that the Simmons-Baldwin team produced the lamp for Grier.<sup>4</sup> Nothing could be farther from the truth, for in 1914 Baldwin sued Grier Bros. Co. for patent infringement and unfair competition of the copycat lamp. The following excerpt from a review of this case is both amusing and informative:<sup>5</sup>

"As to the question of unfair competition. The evidence convinces us that [Baldwin], at the expense of much effort and money, established a large trade among coal miners by coming in contact with the individual coal miners. Being persons of limited intelligence, and probably of no close observation, as well as being unacquainted with the English language, they would depend upon the shape of the lamp to guide them in purchasing. The Baldwin lamp...is of the hour-glass shape... The [Grier ] lamp is identical in shape. It is not only identical in shape, but all its accessories bear such a close resemblance to the Baldwin lamp that it requires very careful inspection to detect even a slight difference. The ordinary purchaser would be easily deceived by the similarity of appearance of the Baldwin and Grier lamps, and purchase the Grier lamp believing he was purchasing the Baldwin, unless he could read the names upon them."

*Note: this unfair stereotyping of the miner in no way reflects the attitude of the authors*

Grier claimed that the presence of a "sparker" attached to the conical push-on reflector differentiated their lamp from a Baldwin. The judge did not agree and the lawsuit was found in favor of Baldwin.

### The Early Series

Legal considerations pending, Grier began to modify their design. Before they completely departed from the original style though, at least three different models were produced *still* resembling the Baldwin lamp to some degree. These "early series" lamps all have in common the conical push-on reflector with sparker. In one instance the water chamber was restamped to have eight sides and the top was stamped with a beautiful zig-zagging perimeter. This model is referred to by collectors as the "Octagon Grier"<sup>6</sup>

In another variation, the pinchwaist lamp is flared out to wider dimensions<sup>6</sup> and the wire brace replaced with a flat strip. Because of its unique skirt-like base, it is known by some as the "Fat Bottom Grier". So different and primitive is this lamp relative to all other Griers, that it may actually have predated the Baldwin look-alike.

The third "early series" lamp represents a transition to the modern design. Like the Octagon, it bears the zig-zag top stamp and push-on reflector, but like the modern vertical Griers, the watertank is rounded out, the waterdoor is stamped with an ornate star, and an S-shaped waterlever replaces the Baldwin-style raking wire.



"Octagon Grier"



"Fat Bottom Grier"



Intermediate Style

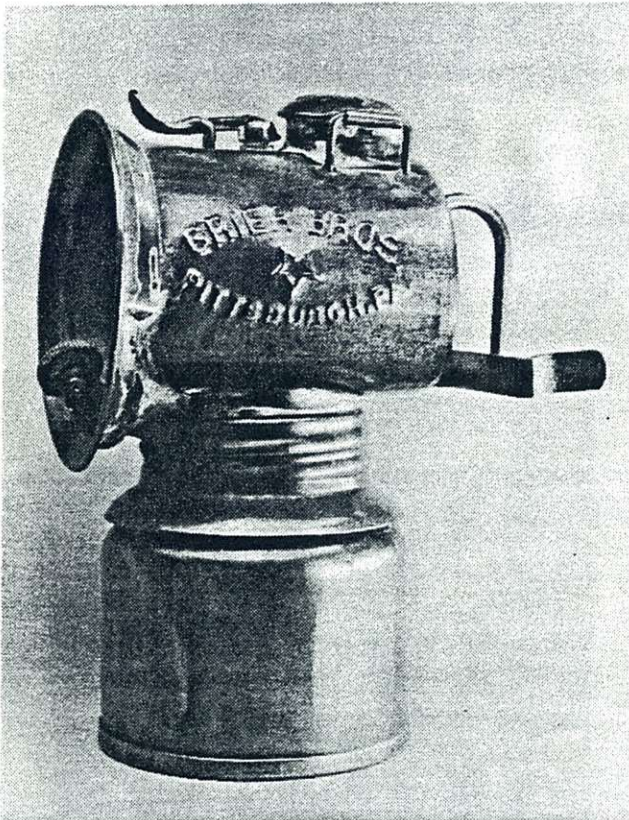
## Late model Griers: Horizontal

Grier Bros.' first true departure in design from the Baldwin-style lamps was the so-called "Horizontal Grier". This, of course grossly resembled Justrite's popular lamp design. The waterchamber was a horizontal cylinder, flattened on the bottom, and soldered onto a threaded screwcap...a much less sophisticated construction than its Justrite counterpart.

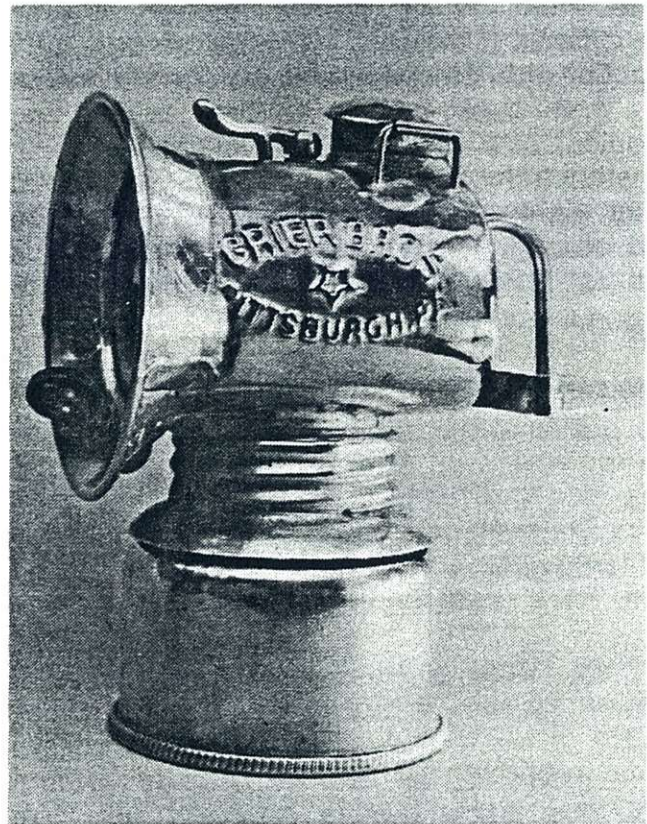
The reflector, like Justrite's, was double-concave, with the inner concavity soldered into the front of the watertank. The reflector was available 2 1/4", 2 1/2", and 3" diameters. On earlier models, the rear of the reflector was reinforced with an extra piece of sheet brass, a fact that was highly touted in Grier advertisements. This was deleted in later models. Horizontal Griers are found in three general tank styles. They are described in chronologic order below with the base that usually accompanies.

### Style #1

This earliest horizontal was the most prone of all Griers to stress cracking. The side stamp lettering is raised. The tank is most easily identified by the waterlever which folds back upon itself and down into dimpled notches. The reflector is reinforced. An eight pointed star is sharply stamped into the waterdoor. It is found only with bottom seamed bases which are unstamped. Base A has a smooth bottom seam and three faint ribs stamped into the side. Base B has crude knurling stamped into the bottom seam and has smooth unribbed sides. The earliest base (A) will not fit any of the more recent tanks as the threaded neck is slightly wider. Interestingly, this is the only base that fits the rare triangle spare base carrier. This carrier has a waterdoor with a similar, sharply stamped, eight pointed star. The stamping of the star became increasingly indistinct on all later style Griers. The triangle carrier can therefore be linked in time to the earliest horizontal Griers ( pre-1918).



Horizontal style #1, Base A, 2 1/4" refl



Horizontal style #1, Base B, 2 1/2" refl

## Style #2

This style is identified by the wire waterlever which bends under itself and rides over raised bump notches. The star stamping in the waterdoor is now becoming indistinct. During the production of this lamp, the reinforcement behind the reflector was dropped, so it is found both ways. The base was upgraded to one with a seam at the top and high quality fine tall knurling at the bottom. They were stamped with either two or three patent dates on the bottom (see index):



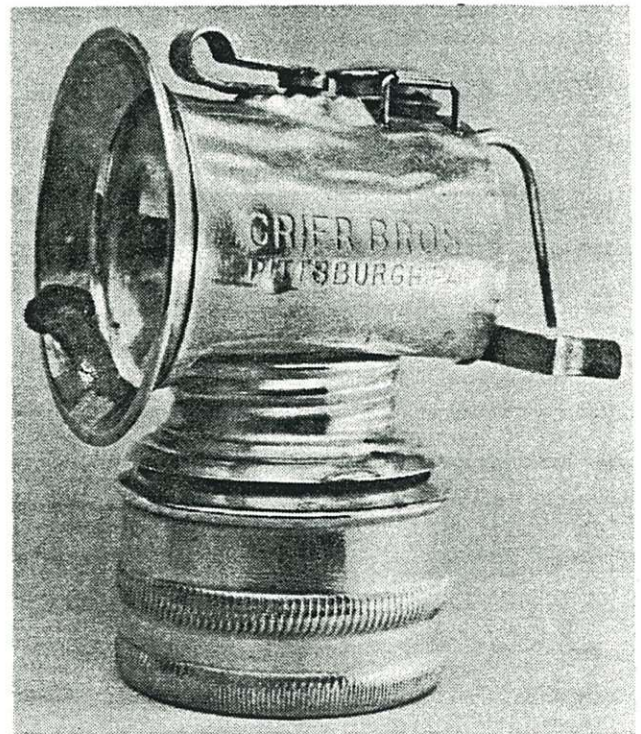
Horizontal style #2, base C, 2 1/4"



Horizontal style #2, base C, 3" (unreinforced)

## Style #3

This latest style is also the rarest. It is identified by the flat strip waterlever, the incuse side stamping, and the unique double knurled base. The reflector is unreinforced and the bottom unstamped. The waterdoor is of new design: smaller and unstamped as seen on the Gee Bee and Gem.



Horizontal style #3, Base D, 2 1/2"

## Late model Griers: Vertical

The so-called "vertical" Griers were manufactured concurrently with the horizontal series. They represent a natural transition in design away from the "early series" lamps. Instead of the push-on Baldwin-like reflector, they simply borrowed the double concave reflector which was originally designed for the horizontal cap lamps.

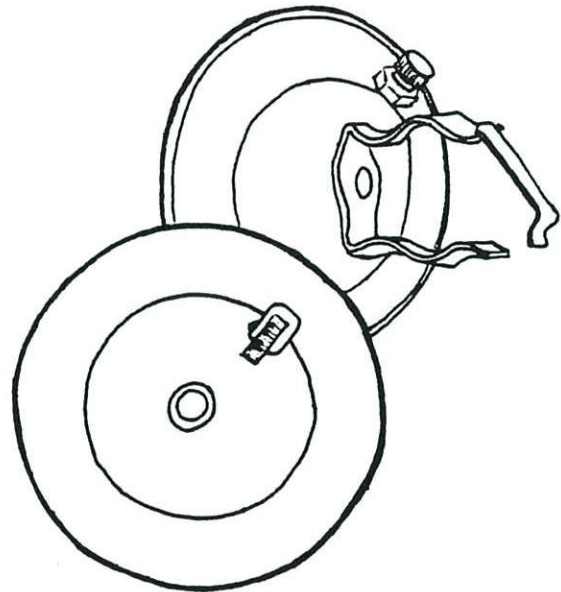
\* \* \*

Two mechanical gadgets appear on some vertical Griers. One was the 1922 patented push-button "J&T" cleaner (Jacobsen & Turga). By simply pushing a lamp mounted plunger button, the burner tip was cleaned by an internal wire *without extinguishing the flame*. It is found in both high profile (early) and low profile (late) styles.



High profile J & T with cutaway

Later low profile J & T (advertised 1923)



The Loc-on reflector

Also available as an option on vertical Griers was the "Loc-on" reflector. Available in the usual sizes, this device allowed one to easily remove and replace reflectors which, like all Grier products, sustained rough use poorly.

## Late model Griers: Vertical

Like the horizontals, these are grouped into three broad styles, based on tank design.

### Style #1

This was the daintiest in design. The waterlever follows a graceful S-shape and slides over a notched wire that is soldered onto the tank top. The double concave reflector was soldered to the tank from behind via two brass arm braces. Like the Style #1 horizontal, two bottom seam bases are found on this vertical Grier, one with three ribs for gripping, and the other with crude knurling stamped into the seam. The J & T tip cleaner is not seen with this style.



Vertical style #1, base B, 2 1/4 "

---

### Style #2

This style was heavily promoted in advertisements along with the optional J & T cleaner and "Loc-on" reflector. It is found with bottom seam base with crude knurling (B) and, more commonly, with top seam base with fine tall knurling (C). Like its horizontal counterpart the water lever is changed to a simple wire that bends under itself. There is no longer a notched wire for the lever to ride over. Instead, notched segments are raised up from the tank top.



Vertical style #2, base C, 2 1/4"  
(low profile J & T)



Vertical style #2, base C, 3"  
(high profile J & T)

## Late model Griers: Vertical

### Style #3

This most recent tank style of the vertical Griers, differed from its predecessor only in that raised dots formed the notches for the waterlever. Its production, however, was a bit peculiar. While catalog illustrations show the lamp with the J&T cleaner, it is displayed with the earlier style soldered on reflector. In fact, all style #3 lamps known to the authors are of the soldered reflector type. The Loc-on reflector was apparently phased out with the earlier style #2 lamps.

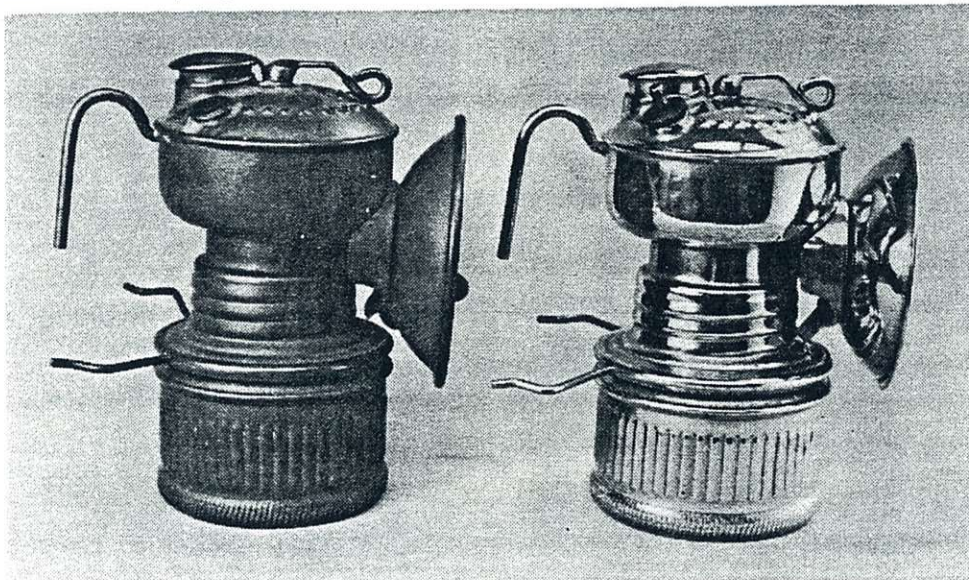


Vertical style #3, base A, 3"

Since the top stamp is quite similar to the Gee Bee, a lamp equipped with a detachable reflector, it may have been the company's intention to slate all of this new tank design for Gee Bee production if the reflector was to be removable. This lamp is frequently found with old style bottoms (see photo), possibly to use up old stock and make way for the Gee Bee. This style is found not only with the double concave reflectors, but with simple concave reflectors as well (see example in above photo).

## GEE BEE

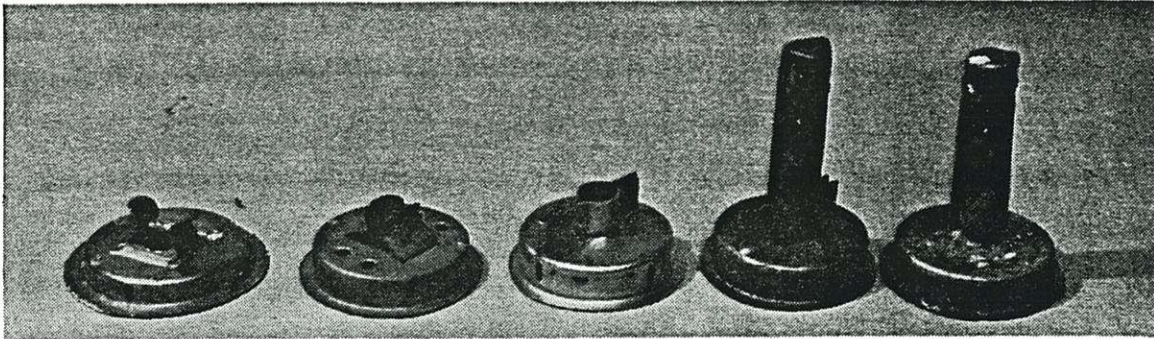
The GEE BEE was Grier Brothers' last and most magnificent product. Quality of construction was far superior to any predecessor's. The hook penetrates the tank and is riveted inside to the base. Like conventional Griers, some early GEE BEE lamps are found with both soldered-on and "Loc-on" reflectors. The cap brace is a flat strip. The later, and more common GEE BEE, had a threaded gas tube with a hex nut holding the reflector against a unique brace. A small dimple in the reflector seats it in alignment. Reflectors are usually 2 1/2" on brass lamps and 2 1/4" on nickle plated models. On this model, the cap brace is a removable wire. Early GEE BEE bases were smooth sided (Grier base C), while the later base picked up fine ribs, as shown below. The nickle plating is outstanding in quality. Most examples have the J&T cleaner, while others have a professionally soldered in plug.



Late model GEE BEE lamps in brass and nickle. (Note difference in reflector sizes.)

## Felt Holders

Shown below, in rough chronological order, are the varieties of Grier felt holders. Curiously, the second in line is also used on the most modern GEE BEE and GEM lamps.



## Spare bottom carriers

Two Grier bottom carriers are shown below. The triangle is the earlier. So far, only bottom style A has been found with unused carriers.



## Pittsburg or Pittsburgh?

Grier lamps are stamped with both spellings. It is oft rumored that Pittsburgh changed its name and that this accounts for the stamp variations. A review of history books at any library establishes one fact: Pittsburgh has always been "Pittsburgh".

At the Pittsburgh History and Landmark Society, historian Walter Kitney provides some clues. Pittsburgh with an "H" is the Scottish spelling. Between the years 1891 and 1911, due to immigrant German influence, the Post Office officially recognized both the German "-burg" and "-burgh".<sup>7</sup>

Why the Griers (a family of German descent) used "-burg" on their vertical lamps and "-burgh" on the horizontal and "Fat Bottom" styles follows no obvious logic, especially in light of the fact that their first carbide lamp was manufactured *after* 1911.



## Closing History

While Grier's home office and factory was located in Pittsburgh, they opened a western branch in Hancock, Michigan sometime around 1923. Too costly or too late, this was to be Grier Brothers' last year of operation. In 1924 the Gem Manufacturing Company had announced themselves as "Successors to The Grier Brother Co." and advertised Grier lamps with J & T cleaners. One year later they advertised their own GEM cap lamp, a small model resembling the GEE BEE. Sale of the lamp was discontinued by 1930.<sup>8</sup>

## Collecting Grier Bros. Lamps

The preceding article certainly does not cover all variations of the Grier carbides. We have not covered the supervisor's style lamps or their taller bottoms. We are also sure that several other variations of the "Early series" exist.

Most Griers are still found in Pennsylvania. Their western branch office in Michigan, open for one year in 1923, arrived too late for nationwide distribution. The lamps were supposedly marketed in eastern Europe and South America...possible hunting grounds for the more avid.

Although the lamp is not difficult to obtain, it is almost always found in appallingly poor condition. Significant stress cracks are common even in unfired examples. Any complete and excellent condition Grier is highly collectable.

Bottom styles A and B (the earliest of the modern series) seem to be most common. They are the usual styles found as spares and on carriers. They are also commonly found on vertical style #3, suggesting that many of these were stockpiled as spares.

"Early series" lamps, in any condition, are extremely rare. The "late series" can be obtained with some diligence and luck. In that category, horizontal tank styles are rarer than vertical by about 2:1. Probably the most desirable of the late series lamps would be a vertical style with the high profile J & T and a small size (2 1/4") Loc-on reflector, however personal preference varies. Some consider the GEE BEE to be the most valuable, due to its quality of construction and relative rarity. Others feel it is too generic looking to take seriously. Now *that* is getting a little picky!

## References

1. Clemmer G S, American Miners' Lamps, Westernlore Press 1987, page 71
2. Baldwin et al v. Grier Bros. Co., 215 Federal Reporter, No. 26, July 7, 1914, page 736
3. Personal communication with Chuck Young 1982
4. Clemmer G S, American Miners' Lamps, Westernlore Press 1987, page 71
5. Baldwin v. Grier Bros. Co., 210 Federal Reporter, No. 26, Jan 3, 1914, page 54
6. David Thorpe, Mining Artifact Collector, Issue Number 3, Spring 1989, page 8
7. Personal communication with Walter Kitney, Pittsburgh History and Landmark Society, tel: 412-255-2100, Jan 1990
8. 1925 Gem Manufacturing Co. catalog showing lamps with "Discontinued" stamped over them. An enclosed letter from James A. Fownes, Vice President is dated September 24, 1930.