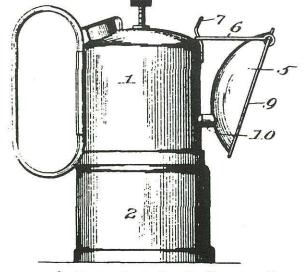
Scranton and Scranto Cap Lamps

by David J. Des Marais



Drawing for second of two patents for the Scranton/Scranto series. Patent No. 1,081,899, Dec 16, 1913. Appl. Sept. 11, 1912.

ortheastern Pennsylvania contributed some of the most interesting and sought-after early carbide cap lamps. As discussed earlier by Dave Thorpe, much of the history of the Scranton, early Victor, Black Diamond and Pathfinder lamps is still uncertain. The present article traces the evolution of the Scranton and Scranto lamps by describing the numerous small design changes which created at least 12 varieties.

Llewellyn M. Evans, a state mine inspector in Scranton, started the "Baldwin Lamp Company" in 1907.1 It is not clear what relationship his business had with the activities of Frederic E. Baldwin or his partner, John Simmons. However, in 1908, the John Simmons Company opened a branch office in Scranton.² In July 1909, Evans changed the name of his company to "The Scranton Acetylene Lamp Company."3 Was the name change caused by the arrival of Simmons in Scranton and the threat of a lawsuit over the use of the "Baldwin" trademark? After all, Baldwin and Simmons began their business association in 1906 and their Baldwin lamps had already gained wide acceptance² before Evans started his company.

As early as January 1910, Francis H. Coffin & Company served as a general sales agent for Scranton lamps.³ By May 1911, The Scranton Lamp Company had taken over its own marketing, but, sometime before April 1914, it designated the A. L. Derry Company of Scranton as its general sales agent. The Scranton Acetylene Lamp Company was sold in 1916 to the American Safety Lamp and Mine Supply Company of Scranton, which continued lamp sales until the early 1920's.³

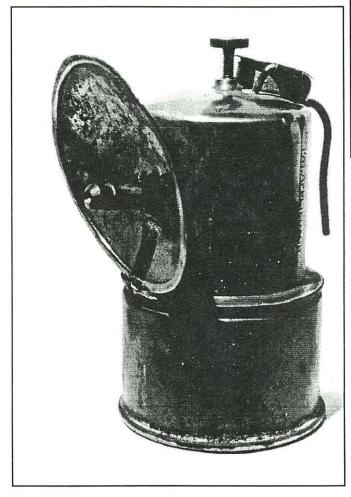
Two patents were associated with the Scranton Acetylene Lamp Company. The first, No. 1,002,890, was granted on September 12, 1911 to David A. Williams. According to U.S. Trademark No. 85,772, both this patent date and the "Scranto" name were first used on September 11, 1911.³ The patent date first appeared in advertisements in 1912. The lamp depicted in the patent draw-

ing does not strongly resemble either Scranton or Scranto lamps, except for the externally-soldered cap hook, the water door, the idea of a slanted "wet-mine" reflector, and the water feed with its relatively thick, blunt bottom end and its knurled finger wheel at the top. The second patent, #1,081,899, was granted to Llewellyn Evans on December 16, 1913 and closely resembles the Scranto hand lamps with their removable reflectors and supervisor handles. The patent drawing embodies many of the features seen on the later Scranto cap lamps, such as their water feeds, reflectors and body proportions.

The accompanying photographs, table, and advertisements document the changes which occurred in the design of the lamp. Five clearly distinguishable variations of the Scranton lamp and six variations of the Scranto lamp have been identified. The Abercrombie and Fitch lamp, a seventh variation on the Scranto, differs from the Scranto Type III only in the stamped name of that well-known outfitting company. The lamp types are described below.

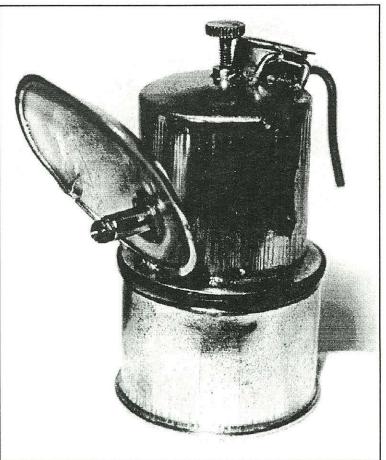
Scranton I.

This first variety in the series introduced all of the characteristic features of Scranton lamps. It is most clearly distinguished from all later varieties in two ways: it lacks any stamping of brand or patent information, and the burner tube emerges only 0.67 in. above the bottom edge of the water tank. In later varieties, the tube emerges about 0.85 in. above the bottom edge. This first Scranton also has pronounced vertical striations in the water tank and base, reminiscent of the ones on non-Justrite Victor lamps. These striations are much more subdued in later varieties of Scranton lamps.



Scranton II.

This variety is distinguished from all others by the stamping PAT. APPLIED FOR, which is oriented vertically on the water tank.



Above: Scranton I. lamp (Ken Rupp collection.)

Left: Scranton II. lamp (David J. Des Marais collection.)



Above: January 1911. This ad appeared from June, 1910 to January, 1911. The lamp resembles Scranton styles II. and III.

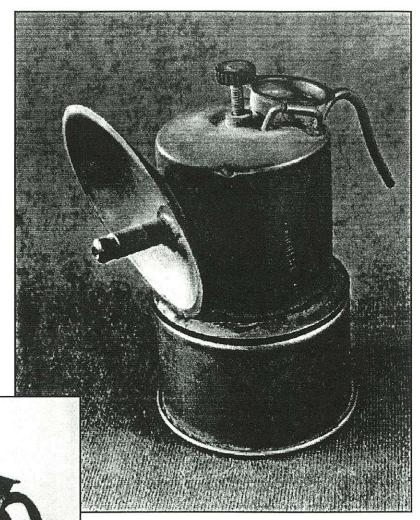
Scranton III.

This variety bears only the stamp PAT. PENDING.

Right: Scranton III. lamp (Dave Thorpe collection.)

Below left: Scranton IV. lamp (John Podgurski collection.)

Below right: Scranton IV. stamping.





Scranton IV.

This variation is identical to Scranton III except for the label "SCRANTON" which appears on the water tank next to the label "PAT. PENDING."

The Scranton Acetylene MINE LAMP Covers Many Fields of Usefulness As a miner's lamp it is the peer of all, Eliminates smoke, sparks, soot, grease and the danger of fire. Consumes minimum of oxygen. Eighteen candle power light, instantly regulated, and at lowest operating cost. Indispensable to Farmers, Plumbers, Machinists, Automobilists, Hunters and Campers, WRITE FOR OUR BOOKLET THE SCRANTON ACETYLENE LAMP CO. 147 Belmont Terrace, SCRANTON, PA.

Above: May 1911. This lamp style appeared in advertisements between May, 1911 and April 1912. It resembles Scranton style IV.

Scranton V.

The last lamp to bear the Scranton label is the first to include a nickel silver reflector which very much resembles those with the Scrantos. A reflector brace appears for the first time, and is soldered both to the reflector and to the top of the water tank.

Below: Scranto I. lamp (Mike Puhl collection.)





Above: Scranton V. lamp (Mike Puhl collection.)

Scranto I.

The first of the Scrantos actually resembles the earlier Scrantons more than the later Scrantos. It is identified as a Scranto only by the vertically oriented SCRANTO stamp and the patent date SEPT. 12, 1911. Unfortunately the only known example of this lamp, which is shown in the photo, lacks its original reflector (it also lacks the original cap hook). Though this example has no reflector brace, it is likely that it once may have.

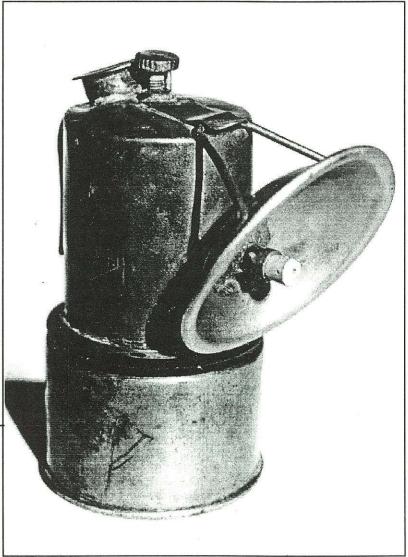
EUREKA! January 1994

Scranto II.

Like its predecessor, this variety has the vertically-oriented stamps SCRANTO and the patent date SEPT. 12, 1911. However, some key changes are evident. First, the water door is smaller than in previous versions. Second, the water tank is joined at the bottom to the threaded insert by a rolled seam instead of a simple soldered seam. In addition, the lamp has the characteristic Scranto nickel silver angled reflector which is soldered both to the gas tube and to the reflector brace. A unique feature of this lamp is that the brace is secured against the water tank by a metal strap soldered to the tank top.

Right: Scranto II. lamp (David J. Des Marais collection.)





Scranto III.

This lamp resembles the Scranto II. except for the reflector brace, which was attached to the reflector by a loop-in-hole configuration. The brace was secured to the lamp by a wire loop which penetrates the water tank. The brand label and patent date are oriented horizontally for the first time.

Left: Scranto III. lamp (John Podgurski collection.)

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Abercrombie and Fitch

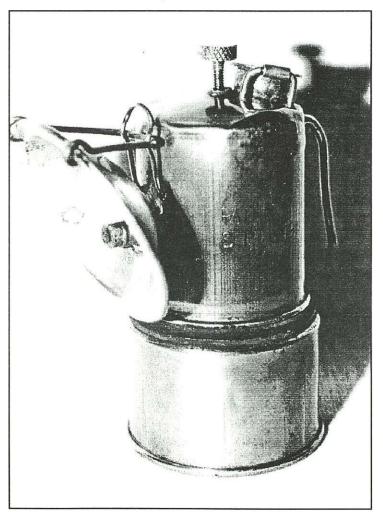
Of the three Scranto III lamps known to the author, two are stamped with the name of this well-known outfitting company. At least one of these two lamps is also stamped with the SCRANTO emblem.

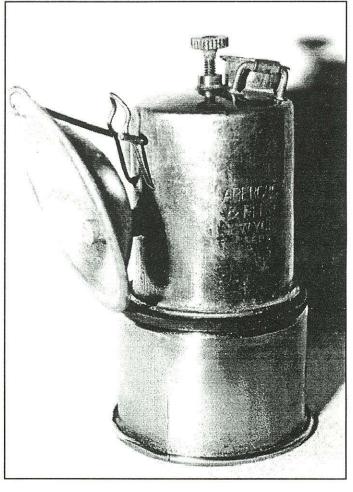
> Right: Abercrombie and Fitch lamp (Dave Johnson collection.)

Scranto IV.

This variety closely resembles Scranto III, except that the cap hook wire penetrates the water tank. However, this general resemblance masks a profound change in the lamp's dimensions. Both the water tank and the threads joining the top and base have larger diameters. The change in thread size is sufficiently great that earlier bases will not fit the Scranto IV and later varieties.

Below: Scranto IV. lamp (Dave Johnson collection.)





THE PROGRESSIVES

Mine lamps always constructed according to the latest and best knowledge of the art.

Write for information about SCRANTO Lamps.
Manufactured by the first company ever organized for the manufacture of Acetylene Mine Lamps: always Pioneers; always Progressives.

Mine Lamps-UP-TO-DATE. Model No. 1 Cap Lamp. Model No. 2 Hand and Hanging Lamp.

The Scranton Acetylene Lamp Co. 150 Belmont Terrace, Scranton, Pa.



Above: February 1913. This lamp appeared between September, 1912 and February, 1914. It resembles Scranto style III, style IV., and the Abercrombie and Fitch lamp.

EUREKA! January 1994

Scranto V.

The major change is in the reflector and brace. The reflector edge has a flattened rim, and the reflector brace is secured to the water tank by a metal strip instead of the hairpin wire.



Scranto V. lamp (John Podgurski collection.)

Scranto Acetylene Lamps Cheaper Than Candles or Oil

The practical lamp for the miner.

Leaves the air clear and free from soot, sparks, smoke or noxious gases.

Send for circulars and prices.

A. L. Derry Co.

Gen'l Sales Agents
524 Connell Bidg., Scranton, Pa.



Above: June 1914. This lamp style appeared between April 1914 and the year 1921. It resembles Scranto styles VI.



Scranto VI. lamp (Errol Christman collection.)



Scranto VI. lamp Neal Ressler collection.)

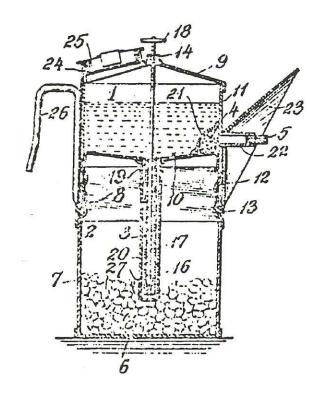
Scranto VI.

The final and most common Scranto has a seam at the base of the water tank which flares out more prominently to make a better support for the rubber gasket. Also, the lamp shows two patent dates: SEPT. 12 - 1911 and DEC. 16 - 1913. The cap hook on some lamps is a thin metal strip instead of a wire.

If only the chronology of the advertisements is used, the dates of manufacture for these lamp varieties are somewhat uncertain. The first appearance of a style in ads might have postdated its first manufacture, and a given body style

was probably retained in ads sometime after manufacturing changes had been made. However, the patent dates can improve the estimates. The Scranton Type I lamp has a low gas tube which differs from the gas tube depicted both in the September 1911 patent and in all later lamp styles. As the 1911 patent was first submitted to the U.S. Patent Office in July 1909, it seems likely that the Scranton Type 1 lamp was manufactured between 1907 and 1909. Furthermore, the Scranton Type II and III lamps appear in advertisements between June 1910 and January 1911. In the advertisements between May 1911 and April 1912, the flange at the base of the water tank is more subdued and resembles the flange in the Scranton Type IV lamp. Scranto-brand lamps

began officially with the September 12, 1911 patent. Therefore it is assumed that Scranto I and II lamps were manufactured between September 1911 and the summer of 1912. This short time interval for manufacture perhaps explains why these two types are so rare; the author is aware of only one example of each. The Scranto Type III lamp clearly appears in ads from September 1912 to February 1914. The Abercrombie and Fitch lamps probably were also produced during this period. Because the Scranto Type IV and V lamps show only the one 1911 patent date, it is likely that they too were produced before 1914, as the second patent was granted on December 1913. Therefore the Scranto Type VI lamp, with its two patent dates, was manufactured after 1913 and is



First patent for the Scranton. Patent No 1,00,890 Sept 12, 1911. Appl. July 2, 1909.

depicted in advertisements from April 1914 until the early 1920's, when production of the lamp ceased. This relatively long six- to eight-year production period indicates why, today, the Scranto style VI. is the most common of the Scranto lamps.

As with other companies such as Justrite, the Scranton Acetylene Lamp Company was actively experimenting with lamp designs in the pre-World War I era. The most important structural changes to Scranton/Scranto lamps were the

attempts to strengthen the fragile early reflectors and their bracing, to improve the seam on the water tank, and to strengthen the lamp body and simplify its manufacture. Unfortunately, compared to lamps like the Justrite or Auto-Lite, the

Scranton/Scranto reflectors were fragile, the water feeds tempermental, and the thin sheet metal prone to cracks. These features, together with the declining market and the successes of the larger manufacturers, probably assured the demise of Scranto lamps by the early 1920's. Still, the Scranton/Scranto lamp family offers both a glimpse of Pennsylvania mining history and also an interesting challenge to all serious collectors of early mine lighting.

I thank Errol Christman, Dave Johnson, John Podgurski, Mike Puhl, Neal Ressler, Ken Rupp and Jim Van Fleet for information and permission to photograph lamps.

References

¹Thorpe, D. (1992) A brief review of Scranton, Victor and Black Diamond. Eureka! 4, 11-13.

² Clemmer, G. S. (1987) <u>American Miners' Carbide Lamps</u>, Westernlore Press, Tucson, AZ, p. 66.

³ Clemmer, G. S. (1987) <u>American</u> <u>Miners' Carbide Lamps</u>, Westernlore Press, Tucson, AZ, pp. 84-85.

| Interview Interview <t< th=""><th></th><th></th><th></th><th>SCRANTON</th><th>z</th><th></th><th></th><th></th><th></th><th>SCRANTO</th><th></th><th></th></t<> | | | | SCRANTON | z | | | | | SCRANTO | | |
|--|-----------------|------|--------------|-----------|--------------|--------------|-----------|--------|--------------|-----------------|----------|--------------|
| Simple flare below a soldered seam | TOP | 37 | | = | 1 | > | _ | = | = | 2 | > | IN |
| intert None None Scranton Scranton Scranton Aber & Ftch Heat | Flange on | | Simple flare | e below a | soldered se | eam | | | Sm | all rolled se | eam | Flared rol'd |
| in. None None Pat. appl. Pat. pending Scranton Scranton 1 date - 9/12/11 | threads | | | | | | | | | | | seam |
| in. Wire soldered on outside of tank None Pat. appl. Pat. pending In for For None Pat. appl. Pat. pending None Pat. appl. Pat. appl. Pat. pending None Pat. appl. Pat. appl. Pat. pending None Pat. appl. Pat | Tank diameter, | | 1.67 | 1.67 | 1.68 | 1.67 | 1.67 | 1.67 | 1.67 | 1.77 | 1.78 | 1.78 |
| in. Wire soldered on outside of tank None Pat. appl. Pat. pending None Pat. appl. P | inches | | | | | | | | | | | |
| in. Wire soldered on outside of tank None Scranton Scranto or Aber & Ftch In For Pat. pending 1 date - 9/12/11 ent Vertical Hate | Water door | 0.87 | 0.88 | 0.88 | 0.85 | 0.88 | 0.88 | 0.75 | 0.75 | 0.75 | 0.74 | 0.75 |
| None Pat. appl. None Scranton Scranto or for | outer dia., in. | | | | | | | | | | | |
| None Pat. appl. Pat. pending Aber & Ftch | Can Hook | | | 5 | Vire soldere | ed on outsid | e of tank | | | Wire penetrates | netrates | Wire or |
| None Scranton Scranto or Aber & Ftch None Pat. appl. Pat. pending 1 date - 9/12/ nt Vertical | | | | | | | | | | ta | tank | strip |
| None Pat. appl. Pat. pending 1 date - 9/12/ nt Vertical Vertical | Label | | None | | Scrant | on | S | cranto | Scranto or | | Scranto | |
| None Pat. appl. Pat. pending 1 date - 9/12/ for Vertical | | | | | | | | | Aber & Ftch | | | |
| for Vertical | Patent | None | | | at. pending | D | | - | date - 9/12/ | /11 | | 9/12/11 |
| nt Vertical | information | | for | | | | | | | | | 12/16/13 |
| orientation | Label/patent | | | | Vertical | | | | | Horizontal | | |
| | orientation | | | | | | | | | | | |

| RASE | | | | | | | | | | | |
|----------------|------|-----------|-----------|------|------|----------------|------|----------|-----------|-----------|------|
| Diameter, | | 2.03 | 2.03 2.03 | 2.03 | 2.03 | 2.03 2.03 | 2.03 | 2.03 | 2.02 | 2.02 2.03 | 2.04 |
| inches | | | | | | | | - 1 | | | |
| Total | 1.97 | 1.97 1.95 | 1.94 | 2.05 | 1.96 | 1.96 1.97 2.03 | 2.03 | 2.00(a) | 1.93 1.99 | 1.99 | 1.95 |
| height, inches | | | | | | | | 3 | | | |
| Thread, | 1.58 | 1.59 | 1.56 | 1.6 | 1.6 | 1.6 1.59 | 1.59 | 1.56 (a) | 1.7 | 1.69 | 1.71 |
| O.D. inches | | | | | | | | | | | |
| | | | | | | | | | | | |

| REFI FCTOR | | | | | |
|-----------------|-------------------------|--------------|----------|---|----------------------|
| Composition | Brass | Nickel ? (b) | | Nickel | |
| • | | silver | | silver | |
| Edge | Simple creased edge | Simple ? (b) | | Simple | Rolled edge |
|) I | COLUMN SERVICE SERVICES | rolled edge | | rolled edge | with flat rim |
| REFLECTOR BRACE | ACE | | | | |
| Connection | No brace | Solder ? (b) | Solder | Wire loops through holes in reflector rim | les in reflector rim |
| to reflector | | | | | |
| Mounting | None | Solder ? (b) | Strap on | Wire clip on | Metal strap on |
| on lamp | | on top | lamp top | front of lamp | front of lamp |
| | | | | | |

Footnotes in table: a Dimensions measured from Abercrombie & Fitch b Original reflector and bracing are missing.