Cast Aluminum Wick Lamps

by Dave Johnson

Most miners' oil-wick cap lamps were manufactured of thin sheet steel and many were tin-plated to protect the steel from rusting. This tin-plating has resulted in many people erroneously referring to them as "tin" lamps rather than tin-plated. After steel, the next most common material used was sheet brass, followed by sheet copper. There were also several combinations of materials — steel and brass, steel and copper, brass and copper, steel, copper and brass.

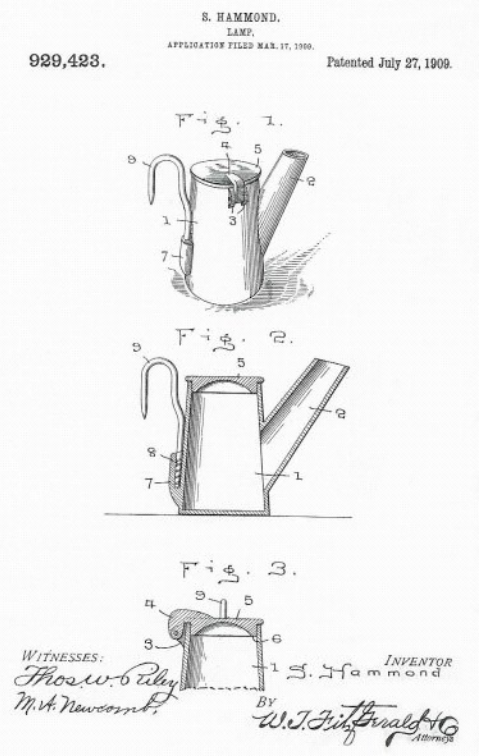
The material used least often by oil-wick lamp manufacturers was cast aluminum, which required an entirely different manufacturing process than the sheet metal lamps. Shown here are seven different models of cast aluminum oil-wick cap lamps. Two of them are much more common than the other five, these are the two marked PAT. APD. FOR.

Above: PAT. APD. FOR lamp.

Above: A second variety PAT. APD. FOR lamp.

The only cast aluminum oil-wick cap lamp with a name appearing on it is the rare NO MELT lamp with the raised cast name appearing vertically on the side of the font shown here. This lamp also has the patent date of JULY 27, 1909 cast into the lid. This patent date corresponds to patent number 929,423 issued to Scott Hammond of Freeport, Stephenson County, Illinois. This lamp measures 2 1/8" to the top of the lid.

Above: The NO MELT lamp follows the 1909 Hammond Patent shown next page


S. HAMMOND.
LAMP.
APPLICATION FILED MAR. 17, 1909.
929,423. Patented July 27, 1909.
Fig. 1.
Fig. 2.
Fig. 3.
WITNESSES:
Thos. W. Riley
M. A. Newcomb
INVENTOR
S. Hammond
BY
W. J. Fitzgerald & Co
Attorneys

Left: Hammond patent as followed by the No Melt lamp.

Hammond's patent addresses a lamp with a "one piece cast body and spout". The patent also addresses "a pair of ears cast integral with the body and adjacent the upper end thereof between which is pivotally secured a tongue, which tongue is integral with a cover, said cover having a flange which is adapted to extend into the upper end of the body and form a perfect closure." The patent further states that "the outer face of the body is also provided with an integrally cast socket which is cast around the threaded end of a suspension hook thereby making the hook a fixture with the body and holding the same against removal from the socket." The patent finally states "By constructing the lamp in this manner and casting the various parts thereof, it will be readily seen that the lamp will be indestructible and will have no joint of points of leakage and it will be further seen that the lamp may be cheaply constructed and comparatively light and will not become battered and broken as is the case with lamps constructed of tin and similar metal."

This lamp was also produced without the NO MELT name or patent date as shown in the example pictured here. This lamp is identical to the No Melt and may have been produced prior to the July 27, 1909 patent.

Above: A small cast aluminum lamp that is identical to the NO MELT, but without stamping.

Right: Cast lamp with match striking surface and drip ring on spout.

One of the PAT APD FOR lamps mentioned earlier is a slightly larger model cap lamp with small letters and the other is a slightly smaller lamp with larger letters. The larger lamp measures 2 5/8" to the top of the lid and the smaller lamp measures 2 ?" to the top of the lid. The smaller lamp has the spout sitting higher on the side of the font than the slightly larger model. The lid of the larger lamp has a small cast tab to facilitate opening the lid, while the smaller lamp does not have this feature. The lid hinges on the two lamps are identical. These hinges differ from Hammond's patent in that on the No Melt lamp the two cast "ears" are integral to the lamp font, while on the PAT APD FOR lamps the "ears" are integral to the lid. On both the NO MELT and the PAT APD FOR lamps the lid is attached with a steel pin. As many collectors know, steel and aluminum are not a good combination. With age, the steel pin reacts with the aluminum and the hinge no longer swings freely. In an effort to open the old lamps force is used and the weaker cast ears tend to snap off rather than the steel pin breaking. An unmarked lamp with the same hinge style as the PAT APD FOR is the unique lamp pictured here with a cast match striker on the side of the font. Also cast-in is a ring near the end of the spout and a raised spiral that runs around the spout. This lamp measures 2 3/8" tall to the top of the lid.

The last two cast lamps are of different but similar designs, they both have flat backs. The flat back allowed the lamp to side flat against the lamp bracket and not tip side to side as the round back lamps with wire hooks would do. The first of these is the very rare INDESTRUCTIBLE oil-wick lamp made by the American Safety Lamp and Mine Supply Co., manufacturers of many models of safety lamp and the Scranto carbide cap lamp. This lamp appeared in ASL&MSCo. advertisements but does not carry their name. This example measures 2 13/16' tall to the top of the lid. This lamp has the "ears" integral to the lid and the lid is held in place by a brass pin, a much better design than the steel pinned lids found on the other cast oil-wicks.

Above: The flat backed "Indestructible".

The last cast oil-wick lamp is a real anomaly, it is another flat back lamp but the manufacturer never completed it. There is no lid, no hinge, and the opening to the font was never machined to accept a lid. The steel hook is very thin wire, much thinner than any other full-size oil-wick cap lamp I have ever seen. The base of the font flares out to give the lamp more stability when sitting.

Above: an unfinished flat backed lamp.

I am aware of another cast aluminum oil-wick with a squared spout, making it very unusual. Cast aluminum oil-wicks are just another of the myriad differences found in oil-wick cap lamps. There seems to be no end to the differences that can be found among oil-wick cap lamps.