Mule Lamps

J. Roger Mitchell

Perhaps the most unusual and uncommon class of oil wick lamps collected today are those known as mule lamps. While these lamps were obviously made by the same manufacturers as their smaller sized cousins, and are as var-

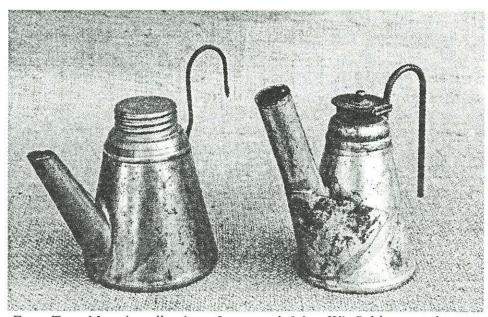
ied in form and shape, they are much more uncommon. Their scarcity can be attributed to the lack of demand for such lamps. While a mine might employ several hundred miners. the number mules needed would be far less. Limiting the number of mule lamps produced even further was the fact

that only the lead mule in each group needed to wear a lamp.

As coal mines became deeper and the distance to the entrance became longer, the miner needed assistance in getting the coal he mined that day to the surface. Throughout history, a variety of animals were used to help the miner with this task. Horses, oxen, goats, and even dogs were used. In fact, dogs were used in the eastern Ohio coalfields well into the early 1900's. They were strong, loyal, and easily trained.

Goats and dogs presented a different

problem. Because so many were needed to pull a loaded coal car, and because each miner was charged a boarding fee by the mine for his four-legged assistants, much of the miners' wages were spent on the "hired help."



From Tony Moon's collection: Lamp on left has Winfield patent dates on lid, 5.1". Lamp on right has C. George patent dates on lid, 4.3".

Oxen proved to be too large and slow, and would not pass through the narrow passages. They were usually hitched side-by-side, which made it difficult for the oxen to straddle the rails. Horses posed another problem. Clydesdales and other larger work horses were too expensive and too big for the underground workings. Ponies were too light to pull the heavy loads. Through experimentation, mules were found to be the best adapted for use underground.

Mules were first introduced to America by George Washington through a gift of King Charles in 1785. They saw their first use in mining during the 1860's, and quickly became the animal of choice. The best mules came from Missouri and Kentucky. Coal company agents toured the south and mid-west where the mules were bred and purchased

them as fast as they could be located. They were brought into the coal regions in cattle cars hundreds at a time.

Mules were preferred for many reasons. They lacked the high-strung nature of the horse, and had a more efficient power to weight ratio. The best mules

had an average weight of 1200 pounds and a height of 16 hands. The easiest mules to train were from 4 to 6 years old.

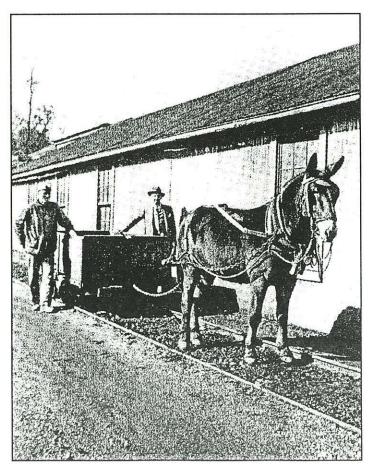
While some mules would give absolutely no trouble when first taken underground, and would pull loads from the start, the average mule had to be trained to pull the heavy cars through the darkness. Many were not given enough time to adjust to their new surroundings, and became ill and deemed unfit for use in the mines.

Those that were deemed fit were first

added to existing teams of more experienced mules until they became accustomed to their new surroundings and learned the routes. Another advantage of using mules was that they ate only two-thirds as much as a horse, a plus in the eyes of the cost-conscious superintendent.

Not only did the mine supply the mules, it also paid for their care. They actually placed the value of a mule over that of a miner. The mules were fed three times a day, although larger companies fed them only twice a day to cut costs. Twelve pounds of grain and fifteen pounds of hay were normally consumed by each mule per day. A feed of bran once a week was recommended as a laxative, and also a handful of pure coarse salt twice a week.

The two main disadvantages of using mules were their stubbornness and their life span. Mules have a much shorter life span than horses, and needed to be replaced more often. The records of the Fairmont Coal Company for 1905 show that in that year, 26% of their stock either died, was killed, or had to be disposed of on account of



Postcard titled "Driver Boys' Friend, Shamokin, Pa.", author's collection.

being sick, crippled, or worn out. The service dates of these mules indicated a working life of roughly five years.

As for their stubbornness, not much needs to be said. If a mule lowered his ears, the driver knew trouble was brewing. Many drivers were kicked or stomped on by angry mules. In a narrow tunnel, a mule might try to squeeze the driver against the rib or wall. Drivers in the Pennsylvania anthracite region around Plymouth would carry a "sprag," normally used as a brake for the wheels of coal cars. Sharpened at both ends, the sprag was just the thing to keep a mule from trying to push the driver against the rib. The mule also knew his route and his working hours. Any attempt to alter these usually resulted in resistance, and the driver again suffered the consequences.

Once the mules were purchased and given an examination by the mining company veterinarian, they were taken underground where they would spend the rest of their working lives. Most collieries with deep mines had stables located within them. Here the mules were fed, watered, and cared for each day. New mules were assigned to a driver boy also known as a "mule skinner." He was usually an advanced door boy, aged 14 to 15. Every mule driver was held strictly responsible for the safety of all the mules in his custody. If a driver lost a mule due to neglect or carelessness, he was fired immediately. Unlike earlier times when the miner purchased

(Left) Miners' mule. Note electric lamp on mule's breast.



Mule lamp, oil wick. Diam - 2.5", Height to shoulder - 3 1/8", vert. height to spout tip - 5 1/8". John and Nancy Hyatt collection.

his own help, the companies owned the mules. While miners were expendable, mules were not. When a mule died or was injured, it was examined and a report was issued to the management.

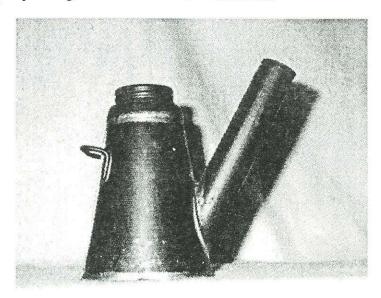
As a new mule was introduced to mining, it was hitched in tandem with a more experienced mule in front of him. The lead mule wore a large oil wick lamp on his head to help guide the less experienced. Mules were taught four basic commands: "gee" meant to turn right, "wah-wah" meant to turn left, "whoa" to stop, and "giddap" meant to proceed.

Many of the mule drivers were European immigrants, and spoke little English. Most spoke to their mules in



their native tongue. For this reason, many mules would not obey other drivers. Drivers also pampered the mules under their care. They fed them candy, sugar cubes and fruit, and some taught their mules to chew tobacco and drink beer. The mules were given biblical names or the names of girls the drivers admired. After a period of time, depending on the mule, they would learn their route and would advance to lead mule and earn the right to wear a lamp.

It is the opinion of the author that these lamps were not used to provide light for the lead mule, but used to help guide the trailing mules, much like Rudolph and his nose. Mules have a keen sense of vision in darkness; they knew every step of their route. Some were even blind from spending most of their lives in darkness.



(Above)Mule lamp, oil wick. Diam. - 3 3/8", height to shoulder - 4 3/8", vert. height to spout tip - 5 1/8", all tin, round stock strap bar instead of hook, unmarked. Hyatt collection.

A second reason for wearing a lamp was to warn others, such as miners or door boys, of their approach. Where the miner needed his own lamp for light, the mule did not. Because the lamps were mounted to the mule's harness, or attached to a leather cap on his head, there is no doubt that many a mule was burned or injured by his lamp. Burning of the mule's ears was common. The mule

(Left) Mule lamp, oil wick. Diam. - 2 1/2", height to shoulder - 4 1/4", vert height to spout tip - 5". Hyatt collection.



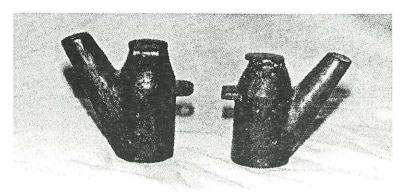
Mule lamps, John Podgurski collection.

probably did not like having the lamp on his head for other reasons. He used his ears to detect overhead obstructions, and surely did not like receiving a thump on the head as a substitute.

The size of these mule lamps can be attributed to several factors. Because the mules were exposed to many different air currents throughout the mine, a larger flame was needed, and was less likely to be extinguished. Also, since they were worn on long journeys, they were away from filling stations longer and needed a larger reservoir to hold more fuel and sustain the larger flame.

Many mule lamps were equipped with shields to protect the flame from air currents and dripping water. They also protected the mule from dripping fuel. Another feature found more frequently on mule lamps is a screw cap lid, as opposed to the standard oil wick lamp's hinged lid. This was probably to prevent the lid from popping open if the mule were to bump or jar the lamp. A larger screw-cap opening made it easier to refill the lamp.

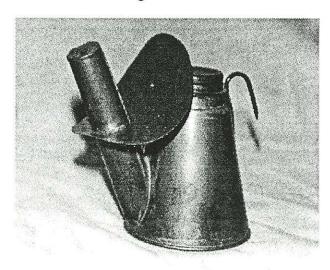
While the screw-caps themselves were made of either tin or brass, there is a definite absence of all-brass or copper mule



Cast oil wick lamps for mules. John Podgurski collection.

lamps, as found with their smaller cousins. Cost is the main reason. Although examples exist, because the companies purchased the lamps cheaper tin models prevail. There are a few examples of heavy cast brass lamps weighing almost two pounds! I'll bet the mules loved wearing these.

The other obvious difference in a mule lamp is the size and shape of the hook, or its absence. The hook needed to be larger and sturdier in order to stay secured to the harness or cap, and to withstand the larger size and weight of the lamp. About half of the examples the author has seen have harness loops instead of a hook. This style of lamp was probably more secure on the harness, but it took longer to refill as the driver had to remove it each time and then put it back on after filling.



Mule lamp from John Podgurski's collection.

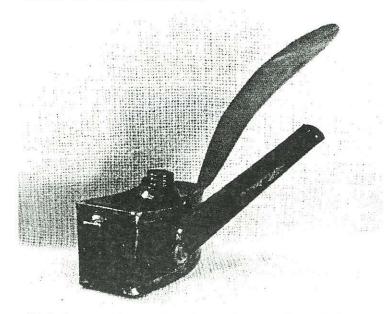
Perhaps the most disappointing aspect of mule lamps is the absence of the makers stamping. Even though some of these larger lamps look just like their smaller cousins, its difficult to tell who made them. Several lamps have the Crown patent dates on the lid, indicating that they may have been made by C. George. Some have the Crown boot guard also. The author's lamp has a lid identical to a Felix oil wick lamp. Others have the O'Keefe patented shoulder brace used by Trethaway Bros., while still others are unique designs. At least one mule lamp, complete with harness loops, is stamped "Tunnesen Mfg. Co, Scranton, PA."



Mule lamps, Podgurski collection.

With the advent of electric cap lamps for miners, so did the mule lamp change over to the much safer and efficient source of light. These new lamps were much like the miners' electric lamps but were fitted with special carriers to mount to the harness. These new lamps were attached near the breast of the mule, which provided more light on the tracks rather than the ceiling of the mine. They also eliminated the burning of the mule. One would expect these electric mule lamps to be produced by Edison, but in fact they were made by Koehler.

While researching this article it was the author's intent to find a picture of a mule wearing an oil lamp, but one was never located. Nearly one hundred museums, archives, and collections were searched to no avail. Several post cards depict mules with lamps, but none were secured for the article. If anyone knows of such a picture, please contact the author or Eureka!



Mule lamp with overhanging reflector. Dave Johnson collection.



Copper mule lamp with tin screw cap and steel hook. Dave Johnson collection.

Lastly, don't forget to celebrate Mule Day on October 26th of each year, to pay homage to the animal that helped make a miner's life a little easier (or difficult depending on which end you were on).

Sources:

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Personal Communication:

Stuart McGehee, Craft Memorial Library, Bluefield, WV

Jean Gormley, Greater Hazleton Historical Society, Hazleton, PA

Florence Fisher, National Coal Assoc., Washington, DC

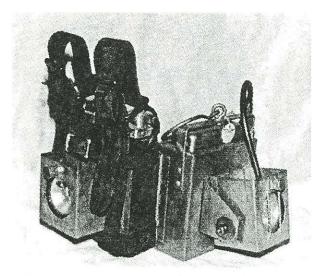
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All brass mule lamp. Dave Johnson collection.



Electric mule lamps. Podgurski collection.





Miner's Mule cigar box. Made by A.C. Overholter, Lykens, Pa. Miner's Buffalo cigar boxes have also been seen, Harry Lyons, maker. Minersville, Pa. (Bill Lorah collection.)



(Above) Ad from The Fairbanks Company catalog, 1906 (Left) Mule lamp, Tunnesen Mfg. Co., Scranton, Pa. (author's collection.)

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