

Thomas Cox Miners' Candlesticks

by Al Winters

Thomas Cox, blacksmith and inventor working at the Gloster mine in Montana Territory, patented two miners' candlestick holders. The mine is located about three miles west of Marysville which is home to the famous Drumlummun gold mine located in Lewis and Clark County, 25 miles Northwest of Helena, Montana. In 1881 the Gloster mine was owned and operated by the Boston and Montana Company, which worked a 10 ft wide gold-silver vein. Milling was through a 10 stamp mill that was later expanded to 60 stamps. The ore averaged \$18/ton but recovery was very poor at just over 50%. The property was later combined with the Piegan and Shannon properties and operated through 1923.

Thomas Cox patented his first candlestick on July 7, 1885 and his second on August 17, 1886. Both candlesticks incorporated a snuffer in the patent papers but the actual models did not include the snuffer. The first patent describes a socket-piece (spring steel thimble) attached to a bar (spike). The patent then describes the snuffer and benefits of not having a candle heating up the socket and dropping out the bottom.

Cox Patent # 321,798



The spring steel (socket) portion of the thimble which secures the candle is separate from the spike in Cox's first patent and riveted above the candle opening in the spike as shown.

Following his first patent, Cox worked to improve his candlestick and focused on a positive mechanism for preventing the candle from slipping out of the holder (thimble). Rather than relying on a spring steel thimble as built into his first candlestick his patent papers for the improved candlestick describe the incorporation of a spring held candle locking pin or plunger designed to secure the candle in the holder.

Cox Patent #347,691



The second patent incorporates a spring held pin or plunger which secures the candle.



1886 Cox candlestick with original 1886 patent papers.

*After his second patent was granted Cox continued his pursuit to improve his candlestick. The exposed spring tensioning the candle locking pin probably proved impractical in a mine environment. Recognizing the design flaw (?), Cox kept the idea but modified the candlestick by concealing the spring and candle retaining plunger within the spike itself. This final (?) modification incorporated a spring release and plunger retraction lever located on the spike between the handle and thimble.

Improved Cox Candlestick



The spring and plunger are retained within the spike itself by means of a screw located in the handle. The improved version incorporates a release lever and is nickel-plated.



Tom Cox never patented his improved candlestick though the idea was very unique.

The Cox sticks shown are very rare and may be the only examples (?). The latter two were found in Montana and the first Cox patent and patent papers were acquired from Roger Peterson of Amador City, California. Peterson acquired them from Errol Christman of Grass Valley who secured them from the Cox family (?).

Cox Candlesticks Compared



*The Cox candlesticks were among the earliest patents and illustrate the development and improvement of an idea by an inventor having the desire to build a better widget. Other mechanical candlestick examples illustrate the same type of development as the blacksmith/inventor sought to improve his product. Because of the lack of known examples, the Cox candlesticks were probably (?) never produced commercially.

*Assumptions made by the author.
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