



CARBIDE LAMPS

People first used carbide lamps on carriages starting in the early 1890's. Miners, farmers and hunters soon started using them because they were lightweight and produced a bright light.

Frederick Baldwin invented the carbide lamp. The lamp is made up of two parts called chambers. The upper chamber holds water and the lower chamber holds a chemical called calcium carbide. When the water from the upper chamber drips into the lower chamber a gas is formed. It is called Acetylene gas. The gas is then funneled to the burner. The burner is lit with a match. Some carbide lamps had built-in strikers so a match wasn't needed. To make a brighter flame, more water was dripped into the lower chamber. The direction of the flame was controlled by a reflector in the lamp.

Miners liked the carbide lamp better than oil-wick lamps or candles for four reasons. First, it could be attached to the miner's cap. Secondly, the lamp didn't make any carbon monoxide which is a poisonous gas. Thirdly, it used less oxygen. Lastly, the carbide lamp made 4 to 6 times more light.

There were some things that miners didn't like about the carbide lamp. It only burned for 4 hours and then needed to be refilled. That meant the miner had to stop in the middle of his day to have his lamp refilled. He also had to stop several times during the day to unclog the burner. By the 1930s flashlights and electric lamps replaced the carbide lamp.