



CANDLES AND CANDLE MAKING

Candles have been in existence since the Stone Age. The Chinese and Japanese used candles in the third century BCE. In North America during the first century CE, Native Americans living along the coasts of present-day Oregon and Washington, dried an oily fish, impaled it on a forked stick and lit it. This “candle fish” provided light during the long winter nights.

Candle making consists of covering a cloth wick with a fuel source, usually fat or wax. Tallow, a rendered animal fat, served as the fuel for early candles. Families carefully saved the fat from butchering and cooking sheep, pigs or beef. Once a year, usually in the Fall, women placed the fat in large cauldrons and boiled it to remove most of the impurities. Once rendered, the tallow was poured into a vat to cool. Wicks, flax or cotton strands braided together, were placed over a long bar and dipped repeatedly into the vat of cooling tallow. Each layer was allowed to dry before the next layer was added. At the end of the process, the pairs of candles were removed from the dipping bar and stored. Because the rendering process could not remove all of the glycerin from the fat, tallow candles burned with a smoky flame and a foul smell.

Changes in candle making have dealt mainly with the fuel used to feed the candle flame. In the Middle Ages, beeswax replaced tallow for some candles. Native Americans on the East Coast of North America showed Colonial women how to make fragrant candles from the wax of bay berries. The growth of the whaling industry in the 18th century made *spermaceti*, a wax obtained by crystallizing the oil found in the head of a sperm whale, readily available. Spermaceti candles burned brighter and did not give off a foul smell. At the beginning of the 19th century, two French chemists patented stearin, a form of stearic acid. It was like tallow, but contained no glycerin so it burned more clearly and with no odor. Around 1850, the first paraffin, a waxy substance distilled refining petroleum, was mixed with stearic acid to produce candles. This new mixture burned brightly, emitted no odor and was cheap to produce. Paraffin-stearin candles quickly became the standard.

The demise of the candle as the principal source of light emerged from the same industry that had finally solved the “tallow problem.” In the late 19th century, the refinement of petroleum became a major industry. The main product was not gasoline, but kerosene for heating and lighting. The kerosene lamp replaced the candle in most homes. With the invention of the electric light bulb in 1879, candles, a light source for centuries, were extinguished. Candles, however, did not disappear. Candles continue to light our way in emergencies, brighten our birthday celebrations, enhance religious ceremonies and set the mood for special occasions, as they have for centuries.