

# Lighting

Written by Becky O.

The candle is one of man's oldest answers to the problem of supplying light after sunset. The principle of wrapping a solid inflammable substance around a fiber which was apparently known in Egypt and Crete as early as 3000 BC. In Britain, lighting a candle, or a form thereof, probably dates to the Roman occupation. Though their purposes varied, including religious connotations, their greatest importance was in the home, where they were the most common form of lighting. And though scattered references to candles survive from the Middle Ages, their use probably did not spread far beyond the great halls, churches and monasteries occupied by the wealthy. It was probably not until the sixteenth century that candles began to be used by the masses. This is made evident not only from the formation of the Guild, but also by the regular appearance of candles and candlesticks in household inventories. Most families lived by the sun in the summer months, rising at sunrise and retiring at sunset. But for the rest of the year candles and rushlights were used sparingly, along with the fire in the hearth, to light the home enough to finish the day's work. One of the simplest forms of candles, rushlights, are made by drawing a rush through waste kitchen fat. In 1673 John Aubrey, and antiquarian, reported that the inhabitants of Ockley in Surrey, England, made their own rushlight, and other evidence suggests that rushlights were used locally throughout the British Isles where ever the common soft rush (*juncus effusus*) was to be found. Most parts of Britain discontinued their use in the late nineteenth century, but they are still found today in more rural parts of Wales and lingered commonly until the late 1940s-1950s when electricity finally became widespread.

Late summer is the best time to gather rushes. By then they had obtained their full height but were still green. One source stated waiting for a full Harvest Moon to begin cutting. The rushes could then be stored, tied in bundles, in a dry place. The ends would then be cut off, leaving the rush about 18 inches long. The skin was peeled off, leaving only a thin strip to support the soft pith. Some rushes have a sharp edge, and care had to be taken not to slice through the hands peeling them. After the outer skin was peeled off, the pith was allowed to dry. Traditionally, families would work together, telling stories or singing songs to pass the time and keep fingers moving quickly. Wales also incorporated a tradition called "pilnos" or "noswaith bilo", a night of gathering to peel rushes to prepare them for dipping. Entire communities would gather together at homes to visit and enjoy storytelling or musical entertainment to pass the time.

When the rushes had dried, kitchen fat, preferably beef but usually a mixture of whatever was available, was melted in a wide boat-shaped or rectangular shaped pan called a "grisset". If possible, pork fat was avoided because of the thick, black acrid smoke it would produce while burning. The "grissets" were made of either wrought or cast iron and had legs so they could stand in the fire and crimps on the corners to aid in pouring the leftover fat into a storage vessel for the next time. Several rushes were then carefully drawn through the liquid fat until the pith was completely saturated. Finally, the rushes were put out to dry on pieces of bark or slate. According to William Cobbett's *Cottage Economy* of 1821, these were sometimes strapped to the wall so that the rushlights could be stored out of reach of smaller fingers. We saw several tin or iron containers in the Welsh Fold Museum which had the same purpose and are called "dils". These were long cylinders with a hinged top which would have hung on the wall near the fireplace. The ranged from plain to highly decorated with pierced designs. Enough rushes would be done at a time to completely dill the "dil". If either bayberries or candleberries were available, they would be boiled until the wax rose to the tip. It would be skimmed off and steeped rushlights would be lightly coated. This would keep the smell of the stored rushes much more pleasant, as well as allowing them to be harder, non-greasy and remain solid in warmer temperatures. during the entire procedure, care had to be exercised to keep from crushing the thin, fragile piths to crush or bend it would ruin the draw of the fats through the entire length and ruin the future use of it.

Rushlights were burned in specially made holders with jaws which held the rush at roughly 45 degrees. About 1 1/2 inches was drawn through at a time. Rushlights burn with a soft constant glow but on average only last fifteen to thirty minutes. Rushlight holders were never mass-produced but were individually made in wrought iron by local blacksmiths. Surviving examples often exhibit considerable grace and variety of form. These range from table top models to hanging on the wall to a combination rushlight/candleholder that were adjustable in height.

Candles for everyday use were made of tallow, animal fat separated for the membranous matter which might putrefy. Most animals yield tallow, but candlemakers usually took fat from bulls and sheep. Beef tallow comprised the fat of oxen, cows and bulls. Sheep or mutton tallow was obtained from rams, ewes, bucks and she-goats and was valued by chandlers for its gloss and hardness. Generally, the cheaper candles were made solely of beef tallow while the better-quality kinds contained roughly equal portions of beef and mutton tallow. It was non unknown for the very cheapest to include pig's fat, with its horrid smelling smoke. In areas of mixed or pastoral farming, it was traditionally the duty of the farmer's wife to make candles, tallow being a readily available commodity.

Documentation of candle making in the sixteenth and seventeenth centuries is relatively sparse, for while farmhouse inventories included ample evidence of domestic production of cheese, butter, beer and other commodities, it very rarely listed any of the necessary items for making candles. Farmers, so it would seem, were content with buying candles, and it was the cottagers, the very poor and the city or town dwellers who had no other options but to buy candles, due to the lack of excess kitchen fat to make them. There were men who combined farming with candle making. Records support that John Elford, a farmer in north Dorset who died in 1637, left not only dairy cattle, but a workshop full of tallow, wicks and candle molds. Evidence suggest he supplied the neighboring farms and villagers with all the candles they required. There were others like him, but they usually kept a low profile, due the Chandler Guilds, which were established before the end of the fifteenth century. The tallow obtained by the slaughter of one bullock was sufficient for one homes three year supply of tallow candles. However, most people still preferred the mutton tallow or a combination of the two.

To render tallow, the most essential piece of equipment was a large cauldron or boiler, made of iron or copper. Not only was this a smelly process, there was a high risk of fire should the melting tallow spill or boil over. one way to avoid this was to use a boiler fitted with a cavity around the top rim to catch any drops or splashes. After the fat was melted, any impurities, including membranes and skin, would rise to the top and be skimmed off. To further refine the tallow, water would be added and any remaining impurities would settle between the water and the fat. the tallow would be skimmed off and strained into storage tanks until it was pressed to extract the final product. This cake, called a "greave", was often fed to dogs, pigs and ducks.

The cheapest tallow candles were known as "dips" (because of the method of making them). A chandler would have several wicks prepared for dipping on a rod about 3 feet long, called a "broach". Holding the broach by both ends, the wicks would be submerged in a tub of melted tallow. After being raised out of the tallow, they would be hung on racks to dry until they were set enough for the next coat. This was repeated until the candles reached the desired thickness.

Better than the dipped candles, easier and of better quality, were the molded candles. Molds are thought to have originated in France during the fifteenth century. There are records of English chandlers in the early seventeenth century including mold in their inventories. The mold gave the candle a smoother, more regular finish. They were also made of higher quality tallow, otherwise the candles would stick to the molds. Molds were usually made by pewterers, although in the eighteenth-century tinned iron ones became more common. Details varied on the molds, but they all had to keep the wick tight in the center of the cylinder. The conical end of the mold had a hole through which the wick was inserted. the other end was usually doubled or looped so a wire could hold it in place. Sometimes the chandler would stop with the molds half full to verify that the wicks were in the center before filling the mold to the top. After they were set, the tallow candles were set out to bleach so they would look like the more expensive wax candles. Wicks were also dipped in beeswax before being placed in the molds to help them burn better. Tallow candles had to be stored somewhere relatively

airtight because tall will rot (and start to smell even worse) if exposed to air for long. It was common for candles to be buried in bran or to be stored in candle boxes for protection until it was time for them to be used.