SEEING THE PAST IN A DIFFERENT LIGHT
by Kevin W. Wright

Old habits die hard but over time much that is commonplace fades from the scene without record or regret. In cold and dark ages, humankind huddled for warmth and protection within a pulsating ring of firelight. But dazzled by an incandescent haze detectable from outer space, electrified civilizations have lost count of the stars and the supposed mystical influence of their perambulations across the night sky. We have nearly lost our primal fear of the dark and of supernal beings and mischief-makers who once inhabited the unseen world of night just beyond the fire’s halo. In those times it was early to bed and early to rise, the labor of farm and shop flowing to the schedule of available light. Most honest business ceased upon nightfall, except when ample moonglow graced the dusk. As one grateful pen explained: “No sooner does the sun set towards the middle of September, than the moon immediately rises in her glory for several days, by which the day is considerably lengthened out in that most important of all seasons, and Nature, as it were, points to the husbandman, to make the best of his time in cutting down and securing his crops before the equinoctial gales and storms of winter set in.”1 This “wonderful phenomenon,” he continued, “has been distinguished in different ages of the world by different appellations, according to the favorite occupations and pursuits in which mankind happened to be engaged at that time — being first called the Hunter’s, then the Shepherd’s, and now the Harvest Moon.”
When Nature turned out her lights, only fire on the hearth illuminated handicraft or literate pursuits. A thick back-log, three feet long and about as thick, rested in the open fireplace on crude andirons or, in more primitive circumstances, upon two large stones. Its blaze brightened the chimney-corner. Burning “pitch-pine knots,” collected in pastures from decayed logs, sparkled in dim interiors.

According to the old usage, a candlestick was “a household utensil, contrived to hold one or more lighted candles.” Branches or girandoles were elegantly and skillfully contrived to display several candles. Glass candlesticks were called lustres. The evidence from Bergen Dutch household inventories suggests that candlesticks and lamps were rare even in well-appointed homes. Upon his death in 1719, Cornelius Epke Banta owned but one “Iron Handle and Candlestick,” valued at 2 shillings. Hendrick Blinckerhof’s personal possessions, inventoried May 22, 1760, included blue earthenware dishes, earthenware pots and bowls, and pewter plates and platters, for everyday use. His tinware included a pudding pan, sugar box, coffee pot, and tea canisters. China cups, saucers and a porcelain bowl were objects of status. Yet no lighting devices were counted among his belongings. Only “one candlestick,” valued at 5 pence, brightened Barent Spear’s household in 1768. In May 1771, the Justices and Freeholders of Bergen County ordered Guilliam Bertolf to “Buy and Supply the Court House of this County with Six Iron Candlesticks with Brass Knobbs. Also Two Tin hanging Candlesticks and one Glass Lanthorn...” The Sheriff was entrusted with the care of the “Candlesticks & Candles,” supplying “from time to time when wanted ... good Mole [molded] Candle ...”

Brass, an alloy of copper and zinc, was not made in America much before the middle of the nineteenth century. The gleam of brass candlesticks was therefore a token of prosperity in any colonial farmhouse that could afford them. Estate inventories from 1771 show that a tin lamp, a lanthorn, and two old iron candlesticks belonged to Jacob Brinkerhoff. Jacobus Brinckerhoff prized a “Brass Candlestick,” while John Hennion, Senior, made do with one iron candlestick at the time of his death. Harmen Lutkins, a tavernkeeper at Hamburgh (now Paramus), owned “1 Standard to hang Candles,” worth 6 pence, when he died in December 1771. This was probably a free-standing post and crossbar for suspending candleholders. John Sheperd Cato’s house on New Barbadoes Neck, possibly a public house, was inventoried May 13, 1772. It was better lit than most as he owned “5 Brass and 2 Iron Candlesticks,” appraised at 8 shillings.

Evidence of household lighting from Revolutionary times is fairly consistent. On December 27, 1776, British soldiers looted a brass candlestick from Roelof Westervelt’s home. In 1777, Refugee raiders stole “brass candlesticks of the
neatest sort” and two common candlesticks from Thomas Canaday of Harrington. Likewise, Abraham Ferdon, of Harrington Township, reported the theft of a single brass candlestick, taken in October 1778. Continental soldiers stole a brass candlestick from widow Mary Day’s house in April 1779.

Many inventories make no mention of any lighting equipment. Jersey Dutch households inventoried between 1698 and 1840 list no chandeliers, even in homes of the better sort. Nor were lanthorns commonplace, being primarily associated with craftsmen who required artificial light for close work. For example, blacksmith Peter Tibow, of Franklin Township, had one in 1804 and Albert Terhune owned a Cooper’s Lantern in 1808.

Domestic lighting only incrementally improved with the new century. In April 1804, the late Abraham Hopper, of Franklin Township, had a candlestick and a lamp sitting next to a Dutch Psalm book in his Dwelling Room. In November 1806, Christian Campbell, of Harrington Township, owned “A stand and a Candlestick” worth $1.25. John Banta, late of Harrington, had an arm chair and three candlesticks in his Dwelling Room in 1806. A household inventory compiled in 1807 listed two brass candlesticks. According to careful appraisal of his personal property, George C. Doremus owned two lamps in 1807. A household inventory from 1810 describes “1 Iron Candle Rod and Branch.”

The house of Philip Williams, Esquire, a well-to-do Jersey City lawyer, was inventoried in November 1812. It was a side-hall townhouse, two stories in height. A mahogany table and framed picture on the wall furnished the carpeted entry hall. A mahogany tea table, large mirror, window curtains and mahogany stand outfitted the carpeted Front Room. Here were “two pare {sic} plated candlesticks, snuffer, 1 stand,” appraised at $12. The Back Room had a sideboard, two tea tables and a dozen bamboo-turned chairs. The service of meals and refreshments required five decanters, tumblers, a plated castor and cruets, wine glasses, china tea service, plated coffee pot, mustard cup and cake baskets, silver tea pots, sugar and cream cups, silver ware, English china plates, and a Britannia metal tea pot. A pair of pictures decorated the wall. “One pare Plated Candlesticks and Stele {sic} snuffer” ($3.50) and “one pair brass candlesticks” (50¢) provided the only light. “One brass Lamp,” worth $1, lit the adjoining Kitchen. No
lighting device was listed in Williams’ Law Office, despite a large book case with law books, a high writing desk, a paper case, eight windsor chairs and a stove. The hall on the second floor was carpeted and furnished with a common bedstead, two window blinds and two toilet dressers. The front room upstairs held a Mahogany Bedstead, bedding, bolster, pillow and dimity curtains. This bedroom also included a child’s crib, wash stands, and “one bedroom lamp” (worth 25¢). The backroom upstairs had a field bedstead, curtains and bed linen. As late as September 7, 1829, when Uzal Meeker’s stone dwelling, situated on the north side of Main Street in River Edge, was inventoried, his only light came from “5 Brass Candle Sticks,” worth $1.00.

In primitive lamps and candles, the heat of a flame melted solid tallow or wax, forming a tiny but constantly replenished reservoir of fuel at the base of the wick. With oil lamps, a tiny nozzle held the burning wick’s tip above the small almond-shaped, oil-filled vessel. Capillary action constantly drew fuel from the reservoir and, as need be, tongs or snuffers regulated the length of wick to sustain a clear and steady light. The imperfect combustion of too long a snuff and too great a flame spewed a greasy, sooty smoke. A snuff-dish fixed underneath caught sparks and drips. In primitive circumstances, the Jersey Dutch simply inserted a piece of cotton in a clam shell filled with melted lard. Such shell lamps were laid aside for future use, furnishing a dim and flickering light when needed. In certain circumstances, a grease-filled skillet with a rag wick sufficed for a lamp.

A candle was little more than a wick of several loosely twisted threads encrusted with tallow, wax, or spermaceti, in a cylindrical figure. Coarse cotton thread made the best wicking material, though tow fibers of hemp or flax sufficed. Modern self-consuming candlewicks yield a steady flame with no maintenance. Homespun wicking burned unevenly and flaring candles were prejudicial to the eyes. A large snuff reduced the heat of the flame and the oxygen supply at its center, causing smoke and an undulating light. The spent portion of the wick had to be trimmed and one observer remarked that “this is an unavoidable evil in candles, and must be corrected by the constant application of the snuffers.” In December 1748, fancy spermaceti candles with cotton wicks sold at Philadelphia for two shillings, nine pence per pound, while common tallow candles sold for only eight pence per pound. Spermaceti candles burned brightly without dripping and hardly ever needed to be snuffed. They also did not soften in the hand as did tallow candles.

Botanist Peter Kalm reported that bayberry candles were used “by poor people, who live in the neighborhood of a place where the bushes grow, and have not cattle enough to kill to supply them with a sufficient quantity of ordinary tallow.” The seaside bayberry bush (Myrica caroliniensis), also known as Tallow Shrub or Candle-Berry Tree, produces gray berries whose waxy covering was rendered for
candle wax. Gathered in late autumn and boiled, bayberries yielded a fatty substance that congealed into a dirty green tallow. A second melting refined it into “a fine and rather transparent green color.” Bayberry candles did not soften and bend as easily as tallow candles in summer. They burned slowly, brightly, without smoke or foul odors, and even left “an agreeable smell, when they are extinguished.” In 1748, a pound of bayberry tallow sold for a shilling in Philadelphia, “while a pound of the common [tallow] kind only came to half that money, and wax costs as much again.”

Its supply was usually extended with common tallow since harvesting large quantities of the berries proved too troublesome for most.

The monarchical community, engineering skills and ceaseless industry of honeybees have become the stuff of fables. In 1748, botanist Peter Kalm concluded “that the common bees were not in North America before the arrival of the Europeans, but that they were first brought over by the English who settled here.” As proof, he cited the fact that the natives called them English flies. Escaping their keepers, bees soon abounded in the forests, though in Kalm’s time they had not spread to the far side of the Blue Mountains. He also reported that several English and Swedish farmers kept beehives for profit, the wax being sold to tradesmen and the honey consumed in their own households. Hives reportedly yielded from sixty to a hundred pounds of honey in a season. Though pure white in the comb, impurities of gum, resin and pollen cause beeswax to yellow upon exposure to the air. Few householders bothered to boil, skim and strain it to restore its transparency. Beeswax melts at temperatures ranging from 125° to 160° F, depending upon the degree to which it is refined. Beeswax produced a clean and bright light, but scarcity generally limited its use.

The first Jersey Dutch farmers introduced apiary culture for the production of honey and beeswax. By the start of the nineteenth century, estate inventories commonly list two or three beehives on a farm, though occasionally more. Honey crops such as turnips, buckwheat, mustard or clover, were widely cultivated and a variety of wild and garden flowers provided good seasonal pasture for bees. A rich corn country, however, was considered unsuitable. Some farmers set beehives in their orchards for pollination, ensuring their annual supply of apple cider. Beeswax was not only used in candle making but also for a sealing wax to preserve food in earthenware crocks. Among the Revolutionary War damage claims, we find that
Eva Huyler lost five pounds of beeswax. In 1778, Mary Huyler claimed the loss of 100 cwt. of honey and three pounds of beeswax. Few farms, however, produced a commercial surplus. In 1780, Continental troops did damage or destroy twelve beehives on Henry Naugle’s farm and Cornelius Van Saan claimed the loss of thirteen bee hives in 1778. In March 1804, chairmaker Daniel N. Demarest, late of Hackensack Township, had twelve bee hives, but only one with bees. He also had “a lot of tallow & Candles” worth $1.00. On December 29, 1806, John Banta’s Harrington farmstead included “one Beehive with Bees”, worth $3.00, another worth $1.50, and 18 empty beehives worth $1.50.

Rendered animal fat was universally used in candle making. Mutton fat produced tallow of the highest quality, but beef fat was often added to extend the supply. Hog’s fat, called lard, was too greasy. According to The Family Encyclopedia of Useful Knowledge and General Literature: “A tallow candle, to be good, must be half sheep’s and half bullock’s tallow; the fat of hogs makes them gutter, gives an ill smell, and a thick black smoke.”

With the onset of cold weather in late November, farmers thinned their herds, dispatching hogs and beeves to stock their kitchens, sheltering such livestock as could be fed over winter, and driving the rest to market on hoof. The so-called “killing time” was a rural ritual and oftentimes the occasion for great jollification. Butchering began very early in the morning, leaving time enough for the meat to chill before curing. Scraps of fat were sliced from cuts of meat and scooped from the innards, especially the kidneys. Hides were sent to tanners who commonly exacted one-half of the quantity tanned as payment for their services. Fatty matter scraped from hides had the lowest content of useable tallow. Nothing was wasted as womenfolk prepared sausage, head cheese and mince meat and tried the fat for tallow and soap. Some ground the fatty mass before melting it in an iron pot over a low fire, skimming off meat fragments and other impurities. After several hours, they strained the purified fat or tallow through a piece of cloth, separating the floating chunks of fat called cracklings. To prevent hardening, the sieved liquid was returned to a low heat and water slowly added. This mixture was brought to a boil and allowed to simmer for several more hours before being poured into an earthen container and set in a cool place. As gelatin and sediment settled to the bottom, a pure white tallow formed on top. The tallow cake was stored in a cool place for use in making soap or candles. If available, beeswax was admixed to produce a harder candle.

An encyclopedist writing in 1849 noted that “tallow candles are of two kinds; the one dipped, the other moulded: the first, which are those in ordinary use are of an old standing; the latter are said to be the invention of the sieur le Brez, at Paris.” Requiring no special expense, tallow dips were the mainstay of domestic lighting.
Wicks of appropriate length were braided from strands of linen, cotton or hemp thread, then looped and hung from a rounded stick. A number of dipping-rodgs, each holding twelve to fifteen wicks, were prepared in advance. By one century-old account: “These were repeatedly ‘dipped’ into a vessel nearly full of warm water, with melted tallow floating on the top, a small quantity of which adhered to the cotton or flax wicks, and this was hung away to cool while the rest were being ‘dipped.’ This process was continued till the candles were of the desired size.” Some candlemakers poured the tallow over the wicks with a dipper or ladle, building the candles in this way. To speed production, a large number of wicks were sometimes suspended from the radially protruding dowels of a hoop. This device was called a rake.

Tallow dips had to be safely stored in a rodent-proof box or container and set in a cool place. Most Jersey Dutch farmers kept tallow, candles, soap and lye in their milk rooms or cellars. Some simply kept a “Dish with Fat &c” or a “cake of taller.” Candles were placed in casks or chests. In March 1780, Trenton storekeeper Jacob Benjamin offered “a brass candlebox; brass candle-sticks; a brass dredging-box, a pair of brass stands for snuffers…” among his stock for sale.19 By 1805, several Jersey Dutch estate inventories included wooden or tin candle boxes. An 1804 inventory listed “a box with 2 lbs. candles,” while another compiled in 1812 listed “5 lbs. candles in the Box.” In March 1804, the wealthy New Barbadoes household of Gerard Bancker included a box with fourteen candles, a tin candle box, a tin candlestick and a tinder box. Nicausie Terhune, a blacksmith, owned “25 lbs. of Candles and Tallow” worth $4.38 in December 1807.

**Candle Recipe**

Dissolve 25 lbs. of beef tallow in a copper or brass vessel, adding 20 lbs. of water. With this mix 1-1/2 qts. of brandy, 5 oz. of cream of tartar, 5 oz. of sal ammoniac; 5 oz. of salt of tartar, 2 oz. of dry, clean potash. Cake and then cut up into slivers to whiten in the air. Make wicks of the best cotton; steep these in wine and wax them.

Then pour the heated tallow on them in the moulds.24

Molded candles were a French invention, rarely mentioned in these parts before the Revolution. French troops may have popularized their use and method of
manufacture during the war. Molding candles was principally a commercial process, largely limited to tallow chandlers who set up shop in market towns opposite an abattoir, whence they derived a large supply of animal fat. In December 1781, William Richards, a Trenton storekeeper, included “Fine Mould candles, White and castile soap,” among the goods he offered for sale. On October 24, 1785, Henry Pike, a tallow-chandler on Queen Street, Trenton, offered cash for tallow. He made and sold candles in various quantities. Thompson Neale, a tallow chandler and soap boiler, opened his Burlington shop in April 1790, where he made “dipped and mould candles and hard and soft soap.” In July 1824, John Cowan placed the following advertisement in The Hackensack Star and Bergen Farmer:

NOTICE:
The subscriber commencing the Manufacture of Fancy, Fullers, Yellow and Soft Soaps and of Dipped and Mould Candles, at New-Bridge, near Hackensack, solicits a share of public patronage. He flatters himself that an establishment of this kind will be found useful; and so long as the Public can be served with articles as cheap and as good as those purchased in New-York, that he will receive the preference. Merchants and Fullers supplied on reasonable terms and the goods delivered. Ashes, Tallow, and Soap Grease taken in exchange for for cash. John Cowan.

Many old tin candle molds, and a few pewter ones, have survived. These range in size from two to thirty-six tubes. “Running” candles into molds was the simplest and most efficient method of production. J. H. Hanaford described the procedure for Wide Awake magazine in 1893: “A pair of tin molds were used, just in the proper form for a candle and wicks ran through the centre of the mold, passing through at the point, and were fastened at the other end by a stick, the pointed end of which was stuck into a potato. The melted tallow was poured into these molds, cooled, then slightly warmed on the surface, that the candles might be easily slipped out. These were set in a block of wood, or in a rude candle-stick. A pair of ‘snuffers’ was at hand when the candle was lighted, for the purpose of removing the burnt wick when it grew so long as to be in the way and effect the light, which may have been equal to about one-eighth of that of the ordinary kerosene lamp.” The earliest local record of a “candle mould” is found in the estate of Helena Bogert, inventoried
August 20, 1803. Another was listed in 1810. A household inventory from 1811 mentions “a Candle Mold and stand.”

Improvements came slowly. Factories began to produce machine-made wicking. On November 5, 1815, Henry Godwin, a Paterson grocer and dry goods merchant, advertised the sale of both candles and “a constant supply of Cotton Yarn and Candlewick.” John Parke’s Phœnix Cotton Manufactory in Paterson offered a constant supply of manufactured articles for sale in January 1816, including “Mould and dipt Candlewick.” Flat-band wicking with a cotton weft gave a brighter flame by exposing more of the wick to the air. Even greater illumination was achieved when flat wicks were rolled into cylindrical form. Technological advances in metallurgy and glass-making moved the lamp beyond a small open cup to larger, closed containers. Jappaned tin “petticoat lamps” burned a cheap grade of whale oil and were named for the convenience of fitting into a pocket. Such lamps originally had a single wick, but later ones featured two. Beautifully molded glass lamps came next. Common street lamps comprised an oil-holder inserted in a glass globe. Gradually sperm oil gained currency among middle-class families. It was superseded by kerosene, called rock-oil, made by heating cannel coal (literally, candle coal). Later it was refined from crude oil.

Footnotes
15. Van Winkle, Daniel, op. cit, p. 304
17. Van Winkle, op. cit., p. 305
18. Blake, Rev. John Lauris, op. cit, p. 156
22. Wilson, Thomas B., Ibid., p. 386
23. Hanaford, Dr. J. H., op. cit.