

Casting a Pewter Spoon

By Henry J. Kauffman

One of the most thrilling experiences a pewter craftsman can have is to cast a pewter spoon in an old mold. The experience is thrilling because the craftsman is using a tool which craftsmen used as long as two hundred years ago. However, the real thrill comes when a craftsman produces a perfect spoon, possibly on his second or third try, and consistently thereafter.

To back track a bit, the story of the spoon mold might be told more fully. In the first place, it should be said that throughout most of the eighteenth century all objects of pewter were produced by casting molten metal in a bronze or brass mold. There were not only molds for spoons, but also for basins, buttons, plates, tankards, mugs, teapots, sun dials, porringers, etc.

These molds, all of which are rare today except spoon molds, were not made by pewter craftsmen, but by a man known as a brass founder. Before he could make the mold, a pattern had to be made, usually of wood. This pattern was probably made by a cabinetmaker or woodcarver. In the nineteenth century a trade known as pattern making existed. Such a trade is not listed in the records and business directories of the late eighteenth century.

The fact that molds were made by brass founders is documented by an advertisement which appeared in the *Pennsylvania Gazette*, May 3, 1752, as follows:

THOMAS GREGORY

In Third Street, Philadelphia, and opposite Church alley near Market Street, Makes and sells all sorts of brass work suitable for mills, heads for dogs, brass dogs, shovels and tongs, candle sticks of all sorts, spoon molds, shoe buckles, bell metal skillets, kettles, house and horse bells, and a variety of other things too numerous to mention, at the most reasonable rates.

N.B. The said Gregory turns all sorts of iron, brass, and pewter, and silver likewise, gives the best price for old brass, and mends all sorts of old brass work.

The presence of a reasonable number of spoon molds—and the scarcity of other molds—is attributed to the fact that many tinkers traveling the countryside recast spoons which were broken or badly worn. The average life of a pewter spoon in daily use was probably less than a year. Thus there was a constant demand for recasting spoons. It is also likely that every pewter craftsman had a number of molds to serve his retail city trade.

A word might be said here about the shape of the bowls of spoons. The oldest piece of American pewter extant is a spoon made by Joseph Copeland of Chuckatuck, Virginia, in the seventeenth century. This spoon has a round bowl. Contemporary with the round bowl is also the fig and the elliptical shape. The high cost of molds caused considerable overlapping of styles, and it is difficult to determine exactly when each shape was used. By the end of the eighteenth century the bowls became slightly pointed at the front end, and by mid-nineteenth century the bowl was the shape that most are today.

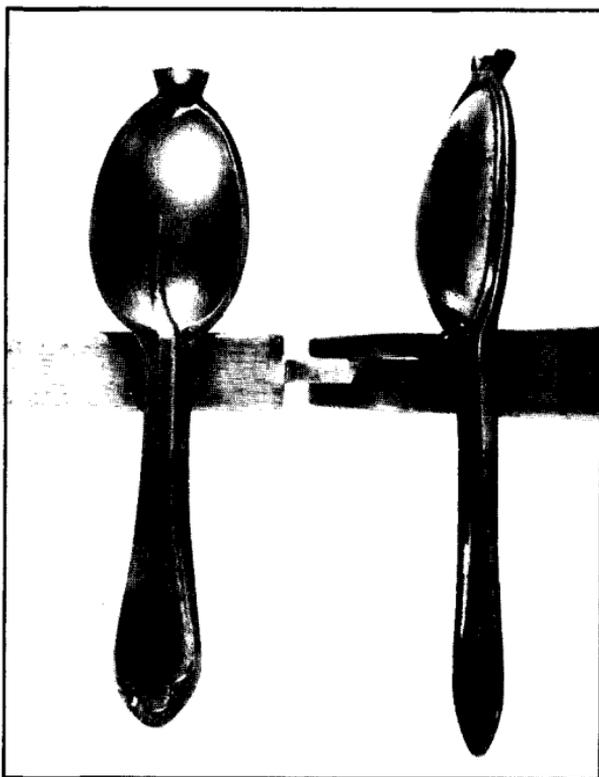
Another feature of old spoons is the rat-tail under the bowl. The use of this form thickened the area where the handle joined the bowl, and unless reinforced was likely to break at that point.

A small number of spoon molds were engraved, some under the bowl on each side of the rat-tail, and others on top of the handle. Although such a procedure claimed high esteem among patrons, it must be admitted that such "fancy work" was a bit "out of character" for objects made of pewter. Most of the styles in pewter were very simple, and it is this quality that distinguishes pewter styles from objects of silver, which often were highly decorated.

In casting pewter objects in permanent metal molds, certain technological problems must be solved. First, every mold must be checked for tightness of fit, and corrected as need be. The original high cost of molds made their long use a necessity, and inevitable wear often resulted in openings through which molten metal could leak. Accidental dropping on a work bench or floor could cause burrs which prevented parts from fitting together perfectly. Pressure from a vise can "spring" some cracks closed and make a mold leakproof.

Second, the inner surface of the mold must be smooth. Any dents or scratches in the mold will be reproduced on the spoon. Such irregularities must be removed, for it is easier to perfect the condition of the mold, than each spoon cast in it.

Third, the inner surface of the mold must be protected from direct contact with molten metal. Bronze and brass have an affinity for tin-based metals, and, unless a coating is applied to the mold the molten metal will turn the casting and the mold into one solid mass of metal. The problem can be eliminated easily by applying the smoke of a candle to the inner surfaces of the mold. Smoke should be reapplied after casting six spoons.



This brass spoon mold was found in the attic of an old house in Terre Hill, Lancaster County. Although most pewter spoons were made by professional craftsmen, this example proves (more or less) that pewter spoons were made by non-professionals for themselves or their neighbors. This is a rare "find." The holding device is not original but was made by a local craftsman so he could cast some spoons. (Photograph courtesy of Russell Weaver, New Holland, Pa. in whose parents' home the mold was found.)

Next, some technique must be planned to hold the mold during the casting process. The mold soon becomes too hot to hold, so a simple solution is to place the mold in a small machinist's vise. Pressure should be applied about the middle of the handle. If cracks in the bowl cause the mold to leak, the mold should be moved farther down in the vise. If the leak continues, a small C clamp is used to grip the bowl.

A spoon mold was found in an attic in Pennsylvania with the halves attached to the jaws of a blacksmith's tongs. It is a more likely technique for holding the mold than the machinist's vise, but less reliable for a mold with an imperfect fit.

For the casting procedure, a reservoir of metal is melted in a small melting pot or a ladle. Heat from a torch or small furnace for heating soldering irons is satisfactory. After the proper temperature is achieved—a matter of trial and error—the molten metal is poured into the top opening of the mold. Because it is unwise to preheat the mold, several imperfect spoons must be cast to bring the mold up to the correct temperature. If openings appear in the castings the vise, or the mold, should be tapped to minimize bubbles and chills.

Small castings require only a few minutes to cool. The mold then can be separated, and the spoon removed by tapping the mold on a hard piece of wood. After the casting has cooled completely, the sprue is cut off with a tin snips or a hacksaw. The edges are filed and all surfaces made smooth by using a file and fine abrasive cloth (grade 350). Final polishing is done on a rotary buffer with a soft cloth wheel. Tripoli must be applied to the wheel. A dull finish can be obtained by rubbing the spoon with a soft cloth sprinkled with oil and pumice stone.

Pewter spoons can be displayed in a cupboard shelf which has cutouts for spoons or on a separate spoon rack. Old spoon racks are virtually impossible to find; however, directions for making one can be found in many woodworking books.

Henry J. Kauffman was born in York County on 1 November 1908. He graduated from Millersville University (the Millersville State Teachers College) in 1932 and taught industrial arts in high schools in Connecticut and Delaware County, Pennsylvania. In 1937 he earned an M.A. from the Pennsylvania State University. For 31 years he taught metalworking including blacksmithing and silversmithing in the Industrial Arts Department at Millersville, becoming the only teacher without a doctorate to earn a full professorship. His knowledge of antiques, hardware and guns soon made him the consummate authority on the Pennsylvania German material culture including its architecture. His museum-quality works in copper, brass, iron, pewter, and silver attest to his great skill as an artist and artisan.

Professor Kauffman's expertise extends to writing. He has written more than 14 books including Early American Copper, Tin, and Brass (1950), Early American Gunsmiths, 1650 to 1850 (1952, reprinted 1965), The Pennsylvania-Kentucky Rifle (1960, reprinted 1965), American Ironware, Wrought and Cast (1966, reprinted 1978), The Colonial Silversmith (1969), The American Pewterer (1970), The American Axe (1972), American Fireplaces, Chimneys and Mantels (1972), American Andirons and Other Fireplace Tools (1974), The American Farmhouse (1976), and Pennsylvania Dutch American Folk Art (1964). He also has published more than 300 articles in scholarly journals and historical publications on antiques, folk art, and architecture. Now in his 83rd year, Professor Kauffman keeps his mind active with research and writing.