The Dating Game: William Frank & Sons, Pittsburgh, Pennsylvania (1866-1875)

By Bill Lockhart, Pete Schulz, Carol Serr, Jay Hawkins and Bill Lindsey

History

William Frank & Co., Pittsburgh (1846-1866

In a 1975 interview, James A. Frank told how his grandfather, William Frank began his first employment as a pedlar, then worked in a dry goods store in Ohio, where he married Pauline Wormser. The couple moved to Pittsburgh in 1845 (National Council of Jewish Women 2002:75). James also stated that Frank "began operating in 1846 as Wm. Frank & Company, in the general mercantile business" (Creswick 1987:63).

At this point, stories begin to conflict. Citing an 1875 source,1 Innes (1976:218-221) stated that Frank and his brother-inlaw, Ephraim Wormser joined in the glass business in 1854. Elsewhere, however, Innes (1976:221-222) cited William K. Frank (another grandson) who claimed that the initial company was the Pittsburgh Green Glass Co., operated by Wormser, Burgraff & Co. Frank entered the business in 1857, and the group renamed the plant the Franktown Glass Works in 1858. Other sources (McKearin & Wilson 1978:159; Toulouse 1971:193-195) noted that Wormser and Frank established the Franktown Glass Works in 1858.

William Frank & Sons, Pittsburgh (1866-1875)

Wormser deeded his interest in the business to William Frank in 1866, and Frank renamed the company William Frank & Sons (Innes 1976:218-221, 221-222; McKearin & Wilson 1978:159; Toulouse 1971:193-195).² Both grandsons told the story of how H. J. Heinz, as a young man, bought bottles from their grandfather to contain his earliest product, horseradish, obviously a family tradition (Innes 1976:221-222; National Council of Jewish Women 2002:75).

William's son, Himan Frank, was the inventor of the family. On August 6, 1872, Himan received two patents: one for "Forming Bottle Mouths" (No. 130207), and one for a bottle stopper (No. 130208). The forming tool patent (No. 130,207) related "to a tool for forming a screw-thread

on the inside of the necks of glass bottles and jars along with a suitably shaped seat for a gasket." (**Figure 1**) The stopper (**Figure 2**) was made to fit into an internal, continuous-thread finish (Innes 1976:218-222; U.S. Patent Office 1872a; 1872b).

Himan also patented a gas furnace,³ which was put into operation in a new plant built by William Frank & Sons in 1873 (Jones 1968:27). The gas furnace may have been problematic; "the works was entirely destroyed by fire on June 11, 1874, and on the ruins rose a handsome new structure, which, in ten weeks from the time of the fire, was in full operation." (Innes 1976:222; Jones 1968:27). The new factory had "1 furnace, 6 pots" in 1875 (Grier 1877:127).

For reasons currently unknown, William Frank & Sons left the business in 1875, and the plant remained idle for a short time. Thomas Wightman reopened the factory on May 30, 1876, but closed again on December 4 of that year (*National Glass Budget* 1909). The plant still operated using a single furnace with six pots during the final year (*Crockery and Glass Journal* 1876:15).⁴ As a post script, William Franks & Sons were listed in the dry good business from 1877 to 1879 (Hawkins 2006).

Bottles and Marks

WILLIAM FRANK PITTSBURG (1866-1875)

This is one of the few marks where Frank's first name is spelled out. The mark "WILLIAM FRANK / PITTSBURG" was embossed on what appears to be a Ricketts type mold, the earliest plate mold (Figure 3). This plate wrapped around the outer portion of the bottle base. This mark was found on a bar decanter. Although we have dated the mark to the full range of the Frank glass business, it was probably made during the early days of the business in the 1860s.

WILLIAM FRANK PITT (1866-1875)

Ring (1980:237) noted that one bottle of Dr. Henley's California Bitters was embossed on the base with "WILLIAM FRANK'S PATENT PITTSBURGH." In

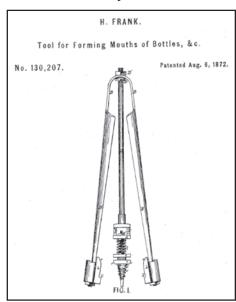


Figure 1: Tools for Forming Mouths of Bottles, &c. (U.S. Patent Office 1872a)

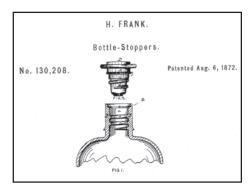


Figure 2: Improvement in Bottle Stoppers (U.S. Patent Office 1872b)



Figure 3: WILLIAM FRANK / PITTSBURG (Jay Hawkins)

her later book with Bill Ham (Ring & Ham 1998:274), they corrected the entry to

"WILLIAM FRANKS PITT" – although the final "S" in "FRANKS" is probably still an error on their part. Wichmann (1999:65) noted the mark as "W. FRANK & SONS PITT." None of the other typical bitters sources (e.g., Umberger & Umberger 1967; Watson 1968; Wilson & Wilson 1969; Wichmann 1999) mentioned the "PATENT" mark.

WM. FRANK & SONS, PITTS, and similar marks (1866-1875)

These marks were used on flasks, bitters, and spirits bottles during the 1866-1874 period when the firm was in business (McKearin & Wilson 1978:160-162; Palmer 1993:383). One flask was embossed "WM FRANK & SONS / PITT." in an oval (Figure 4). Jones (1968:27) provided an interesting variation to the mark. Hers showed WM. FRANK & (arch) / PITTS (horizontal, center) / SONS (inverted arch) on a round bottle base. Variations included:

- WM. FRANK & SONS⁵
- WM. FRANK & SONS, PITTS (including one with PITTS in mirror image)
- WM. FRANK & SONS (front); PITTSBURGH, PA. (back) as a body embossing⁶



Figure 4: W^M FRANK & SONS / PITT. (Jay Hawkins)

A similar mark, "WM. FRANK & SONS, PITTSBURGH"7 was embossed in a circle around a diamond on the base of a green fruit jar (Toulouse 1969:120). Toulouse dated the mark from 1858 to 1866; however, the correct dates should be 1866 to 1875. Creswick (1987:63) illustrated a grooved-ring wax sealer fruit jar embossed on the base with WM. FRANK & SONS (arch) / PITTs (inverted arch) with an elongated diamond in the center (Figure 5). She dated the jar 1866-1876. Creswick (1987:23) also illustrated a jar with a complex front that was embossed: PATENTED BY / G. W. BUFFINGTON / MARCH 5TH 1867 (all

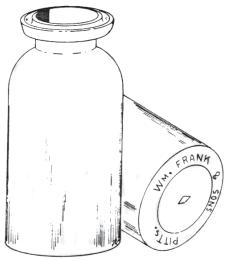


Figure 5: WM. FRANK & SONS / PITTs on a fruit jar (Creswick 1987:63)

horizontal) / MANUFACTURED ONLY (arch) / BY / W^M FRANK / PITTSBURGH PA (all horizontal – with a period under the "A" in "PA"). This is the only mark we have seen with *only* "W^M FRANK" - no "& SONS" (**Figure 6**).



Figure 6: W^M FRANK / PITTSBURGH PA on a fruit jar (Creswick 1987:63)

Innes (1976:220-224) showed variations of this mark on flasks, bitters bottles, fruit jars and cylinder liquor containers. The mark on cylinder bottles was in a circular format on the base, and it was embossed on the sides of flasks. The Frank name was always accompanied by "PITT," "PITTS, or PITTSBURGH, PA." – although one cylinder bottle was embossed "WM. FRANK AND SONS PA." and another had "WM. FRANK & SONS" with "PITTS" in mirror image.

W. FRANK & SONS (1866-1875)

Creswick (1987:184) illustrated a fruit jar marked W. FRANK & SON8 (arch) / PITT. (Inverted arch) on the base (Figure The side was embossed THE/ RESERVOIR, and two lugs were embossed inside the throat to take an internal stopper. Patent No. 136,240 was issued to Ella G. Haller for this type of jar/stopper combination on February 25, 1873. The jar was therefore made by Frank during the last two years of the company's operation. Roller (1983:305) also listed the RESERVOIR and noted that the name was also used by Cunninghams & Ihmsen. A similar jar (without RESERVOIR) was also listed by Roller (1983:128). He dated the jar ca. 1871-1876.



Figure 7: W. FRANK & SON⁸ (arch) / PITT. (Creswick 1987:63)

Innes (1976:221) illustrated a flask embossed "W. FRANK & SONS." A similar flask from the Hawkins collection was embossed "W. FRANK & SONS" horizontally across the heel (Figure 8). The flask had the internal threads patented by Himan Frank in 1872 (see H FRANK below). Palmer (1993:383) illustrated a Union flask with clasped hands on one face, below which the mark "W FRANK & SONS (arch) / PITT. (Inverted arch)" is arranged in a horizontal oval. The flask is noted as being pontil-scarred, an interesting late use of that technology.



Figure 8: W. FRANK & SONS flask (Jay Hawkins)

W. F. (1866-1875)

This mark was found on a "blobtop" soda bottle and was attributed to William Frank by McKearin and Wilson (1978:160), provided who photos of both sides of the container (Figure 9). Innes (1976:222) also illustrated the bottle (used by J. C. Buffum & Co., Pittsburgh) with the W.F. initials embossed on the reverse near the heel and noted that the mark "probably" indicated William Frank.



Figure 9: W. F. on the reverse of a blob-Top soda bottle (McKearin & Wilson 1978:160)

F (1874?-1875)

Toulouse (1971:193) claimed the "F" mark belonged to William Frank & Sons, although he did not supply any information about why he chose either the mark or the company. Thus far, we have not had reports that confirm the use of this mark by Frank. A beer bottle from the Tucson Urban Renewal (TUR) collection is a possible contender for this claim (Ayres et al. 1980). The bottle had a medium-sized "F" embossed in the lower right quadrant of the base (Figure 10). In our experience, this placement is unique among export beer bottles. The bottle was topped by an applied, two-part finish with a sharp lower ring. These sharp lower rings (in both downwardly flared and wedge shapes) were apparently used from the inception of the bottle style in 1873 to ca. 1882 (Lockhart 2007:54-55).

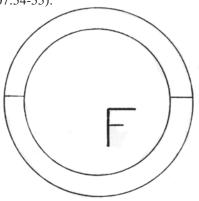


Figure 10: F Mark on export beer bottle base (Ayres et al. 1980)

The export beer bottle was invented in 1873 and first made by William McCully & Co. The use of manufacturer's marks on export beers, however, cannot be verified earlier than ca. 1875 (Lockhart 2007:53). Thus, an export beer bottle would have had to have been made by Frank prior to closing in 1875 and would have been one of the earliest marked export bottles. The presence of a wedge-shaped lower part on the two-part finish, however, indicates that the bottle *could* have been made during the last two years that Frank was in business.

We question whether Frank used a single-letter mark. All of Frank's other marks were much more complex, and we have never seen any advertisement from Frank that included beer bottles. It is thus unlikely that Frank made the beer bottles with the "F" mark on the base, but the possibility cannot be completely eliminated. One final somewhat remote possibility is that the "F" mark was used by Thomas Wightman to represent the Frank works during the short time Wightman operated the factory in 1876.

W. F. & SONS (1866-1875)

Knittle (1927:442) and Toulouse (1971:193) both attributed the WF & Sons mark (without MIL - which would indicate William Franzen & Son)9 to William Frank & Sons. Griffenhagen and Bogard (1999:129) listed the mark as being used on Henley's Wild Grape Root Bitters. Fike showed two slight variations of Dr Henley's Wild Grape Root Bitters but did not mention any manufacturer's mark. The product was introduced in 1866 and was advertised as late as 1915. Ring (1980:237), Ring and Ham (1998:275), and Watson (1968:55) all listed several variations of Dr Henley's Wild Grape Root Bitters, including one marked on the base with W. F. & SONS.

The mark also appeared on flasks. McKearin and Wilson (1978:653) discussed a flask with an ornamented shield design the was marked "W.F.& / SONS" below the shield. Unfortunately, they did not illustrate the flask. We have also seen this mark on medicine bottles in the Pittsburgh area. Bottles of these types could not have been made by Franzen, who only manufactured beer and soda bottles.

We have also observed the mark with "PITTS" on the base of a Citrus of Magnesia-type medicine bottle (**Figure 11**).



Figure 11: W.F. & SONS / PITT (Jay Hawkins)

It appears in a circle around the edge of a small post-bottom mold. All examples recorded have periods after both initials.

W F & S (1875)

Peters (1996:9, 184) attributed this mark to William Frank & Sons, although the mark is usually reserved for William Franzen & Son. He based his claim on a single Wisconsin blob-top soda bottle used by Mostert & Bischoff of Waukesha. Peters dated the bottlers from 1875 to 1877, a date much too early for Franzen, although it fits in the last year of the Frank operation. The bottle style is one that was abandoned long before Franzen joined the bottle-making crowd. The manufacture of this bottle by William Frank currently remains a possibility.

W F & Co. (ca. 1865-1869?)

Griffenhagen and Bogard (1999:129) showed this mark as being used by William Frank & Co., Pittsburgh, on Schwab McQuaid & Co. bottles in the 1890s. Assuming that the attribution to William Frank & Sons is correct, the date is far too late. Watkins (1968:143) and Hunt (1997) both listed Red Jacket Bitters by Schwab McQuaid & Co. with the W F & Co mark on the base.

According to Cannon (2005), Edward McQuaid, Charles H. Schwab and John B. Smith engaged in a wholesale wine and liquor establishment from 1866 to 1869. This is more in keeping with the dates for William Frank & Co. (see above). It is possible that the mold for this bottle (and mark) was made just at the transition between Wm. Frank & Co. and Wm. Frank & Sons in 1866. William Frank & Sons may have continued to make the same bottle in the same mold for the next few years.

H FRANK

A great find is a flask base fragment embossed "PAT AUG. 1872 / H FRANK" (Figure 12). Wedel & Walker (1992:165-166) noted, "The maker's mark is for Wm. Frank & Sons, Pittsburgh 1866-76, with this particular mark being used between 1872-1876. The patent is by Hymen Frank (a son)." They also stated that Toulouse (1971:193-195) discussed "the bottle design." This last statement is incorrect. The cited section referred to the Frank company and discussed *other* bottles.



Figure 12: PAT AUG. 1872 / H FRANK (Wedel & Walker 1992:165-166)

This is actually a new mark to us and almost certainly a correct identification. The only patents we could find for Himan Frank (*not* Hymen as the report says), were both issued on August 6, 1872. The most likely patent indicated by the bottle was the one for "Improvement in Bottle Stoppers." As noted in the history section, the patent (No. 130,208) was for an internal-thread finish with a beveled gasket seat. Frank noted in the report that this was not the first patent for an internal-thread finish; his beveled gasket was what made the patent unique.

Discussion and Conclusion

This research helps define the dates of use for these marks, but it also brings up more questions. The dates provided by Hawkins (2006) are more in keeping with the types of bottles we have seen than some ranges suggested by earlier researchers. A closing date of 1875 even brings the questioned beer bottle mark into the realm of possibility.

We can thus hypothesize that toward the end of his term in business, Frank and his sons not only made soda and beer bottles, they abbreviated their marks to initials, more in keeping with the growing trend. More and more soda bottle makers were using initials above the heels of the bottles (e.g., C&Co, C&I, AGWL, etc.). Beer bottle manufacturers were just beginning to mark bottles at all – and always on the base during the earliest period. The timing may have been perfect for a change from

full name to initials.

All marks used by William Frank & Sons (with exceptions noted above) should be dated 1866-1875, although this range is somewhat in dispute. The early sources along with family traditions placed the glass factory (Wm. Frank & Sons) in business beginning 1866. However, the city directories continue Wm. Frank & Co. to 1869, and do not begin Wm. Frank & Sons until 1870.

It has been demonstrated elsewhere (e.g. Lockhart 2000) that city directories are often slightly inaccurate, especially about beginning dates for establishments. It is entirely possible that either a lazy employee for the directory company failed to check on the listing or that Frank did not think about sending in a change – or both. A member of the Frank family may have checked the directory in 1969 and pointed out the discrepancy. In weighing the evidence, we have elected to follow the 1866 date.

As always, we welcome comments from our readers:

Bill Lockhart 1313 14th St., Apt. 21 Alamogordo, NM 88310 (575) 439-8158 bottlebill@tularosa.net

Sources Cited:

Ayres, James E., William Liesenbien, Lee Fratt, and Linda Eure

1980 "Beer Bottles from the Tucson Urban Renewal Project, Tucson, AZ." Unpublished manuscript, Arizona State Museum Archives, RG5, Sg3, Series 2, Subseries 1, Folder 220.

Cannon, Richard

2005 "The Medicine Chest: Two in One." *Antique Bottle & Glass Collector* Webpage. http://glswrk-auction.com/mc12.htm

Creswick, Alice

1987 The Fruit Jar Works, Vol. I, Listing Jars Made Circa 1820 to 1920's. Douglas M. Leybourne, N. Muskegon, Michigan.

Crockery and Glass Journal 1876 "Pittsburgh Glass Factories

1876 "Pittsburgh Glass Factories." *Crockery and Glass Journal* 4(7):15-16.

Grier, W. Hayes

1877b "Among the Industries of Central, Western and North-Western Pennsylvania."

Commonwealth of Pennsylvania, Annual Report of the Secretary of Internal Affairs 4(3):90-227.

Griffinhagen, George and Mary Bogard 1999 History of Drug Containers and Their Labels. American Institute of the History of Pharmacy, Madison, Wisconsin.

Hawkins, Jay

2006 Glasshouses & Glass Manufacturers of the Pittsburgh Region 1795 - 1910. Draft

Hunt, William J. Jr.

1997 Embossed Medicine Bottle Labels: An Electronic Finding Aid for the Identification of Archeological Specimens. National Park Service, Midwest Archeological Center, Lincoln, Nebraska. Revision of the 1995 publication.

Innes, Lowell

1976 Pittsburgh Glass, 1797-1891: A History and Guide for Collectors. Houghton Mifflin, Boston.

Jones, May

1968 *The Bottle Trail, Volume 9.* Nara Vista, New Mexico.

Knittle, Rhea Mansfield

1927 Early American Glass. Appleton-Century, New York.

Lockhart, Bill

2000 Bottles on the Border: The History and Bottles of the Soft Drink Industry in El Paso, Texas, 1881-2000. Townsend Library, New Mexico State University at Alamogordo. http://alamo.nmsu.edu/~lockhart/EPSodas/

2007 "The Origins and Life of the Export Beer Bottle." *Bottles and Extras* 18(2):49-57, 59.

McKearin, Helen and Kenneth M. Wilson 1978 American Bottles & Flasks and Their Ancestry. Crown Publishers, New York.

National Council of Jewish Women

1993; 2002 Pittsburgh and Beyond: The Experience of the Jewish Community: A guide to the NCJW Pittsburgh Section Oral History Collection. National Council of Jewish Women, Pittsburgh, Pennsylvania. www.library.pitt.edu/guides/archives/ncjw.pdf

National Glass Budget 1909d "In a Reminiscent Mood." National Glass Budget 25(9):11. [7-10-09]

Palmer, Arlene

1993 Glass in Early America. W. W. Norton, New York.

Peters, Roger

1996 Wisconsin Soda Water Bottles, 1845-1910. Wild Goose Press, Madison, Wisconsin.

Ring, Carlyn

1980 For Bitters Only. Nimrod Press, Boston.

Ring, Carlyn and W. C. Ham 1998 *Bitters Bottles*. Privately published, Downieville, California.

Roller, Dick

1983 *Standard Fruit Jar Reference*. Privately published.

Toulouse, Julian Harrison 1969 *Fruit Jars*. Thomas Nelson & Sons, Camden, New Jersey.

1971 *Bottle Makers and Their Marks*. Thomas Nelson, New York.

Umberger, Art and Jewel Umberger 1967. *It's A Bitters!* Corker Bottle Company, Tyler, Texas.

U.S. Patent Office

1872a "Improvement in Tools for Forming Mouths of Bottles, &c." No. 103,207. U.S. Patent Office.

1872b "Improvement in Bottle Stoppers." No. 103,207. U.S. Patent Office.

1872c "Improvement in Regenerative Furnace-Valves." No. 134,370. U.S. Patent Office.

Watson, Richard

1968, Supplement to Bitters Bottles. Thomas Nelson & Sons, Camden, New Jersey.

Wedel, Dale L. and Danny N. Walker 1992 "Artifacts and Faunal Remains." In Archaeological Survey and Test Excavations at Fort Fred Steele State Historic Site, edited by Mark E. Miller and Dale L. Wedel. Project Number WY-12-90. Office of the Wyoming State Archaeologist, University of Wyoming, Laramie, Wyoming.

Wilson, Bill and Betty Wilson 1969 Western Bitters. Old Time Bottle Publishing Co., Salem, Oregon. [Bit, Ds, H. Me.]

Wichmann, Jeff

1999 Best of the West: Antique Western Bitters Bottles. Pacific Glass Books, Sacramento, California. [Bit,]

Footnotes:

- ¹ John P. McMaster, *Manufactures of Pennsylvania* Galaxy Publishing, Philadelphia, 1875.
- ² Although virtually all secondary sources, including both grandsons agree with the 1866 date, the Pittsburgh city directories place William Frank & Co. from 1866 to 1869, and William Frank & Sons from 1870 to 1876 (Hawkins 2006). We have not reached a satisfactory explanation for this discrepancy.
- ³ Actually, this 1872 patent (No. 134,370) was for an improvement in furnace valves (U.S. Patent Office 1872c).
- ⁴ The article in the *Crockery and Glass Journal* still listed the plant as William Frank & Sons, 92 First Ave. in August 1876.
- ⁵ Some of these marks had a smaller capital "M" in "WM"; some had an underlined, superscript "M" in "WM"; and one flask had two dots under the "M" in "WM"
- ⁶ Currently, we do not know how many of these actually have the superscripted "WM" instead of "WM."
- ⁷ Although Toulouse showed this mark with a lower-case "m" in "Wm," the "M" was probably a smaller-sized capital.
- ⁸ This is the only use of "SON" (singular) that we have encountered. This may have been an error in the drawing or an error by the engraver.
- ⁹ Another indicator is the plural of "SONS." All Franzen ads and discussions call the company "William Franzen & *Son*" (note singular).

Bill Lockhart 1313 14th St., Apt. 21 Alamogordo, NM 88310 (575) 439-8158 bottlebill@tularosa.net

Pottery of the Eastern U.S. by Mark Zipp Continued from page 31.

including a log cabin commemorating the Civil War battle of Fisher's Hill, which was fought near Strasburg. The Eberlys' marks include, "J. EBERLY & BRO./STRASBURG VA," within a shield and "J. EBERLY & CO."

Both the Bells and Eberlys were unusual among nineteenth century potters in that they produced pottery both in the form of stoneware and redware. Though potters elsewhere sometimes produced ware in both mediums, no other families made redware to such an extent of ornamentation. When their fellow potters in Strasburg and elsewhere began to fade away, these two families made "fancy ware," which is now termed among collectors "multi-glaze," or "polychrome." When cheaper but less decorative types of containers emerged, these potteries began to produce redware much in the style that earlier makers produced utilitarian pottery: as something that was useful, but also attractive. Thus, they glazed their vessels with lead, manganese and copper, creating colorful swirled surfaces of green, cream and brown. Using these vibrant colors on utilitarian objects like pitchers and spittoons, as well as ornamental objects like vases and handsculpted dogs, kept these businesses alive into the twentieth century. Spurred by the success of their polychrome redware, these families continued to produce wood-fired stoneware, the way they had learned to make it, along with their more ornamental redware pieces, later than any other potteries in America. Ashby Bell, the last of the Bell potters, revived old styles, producing ovoid, lavishly decorated jars as late as 1915.

Conclusion

The mass production of glass and various other, more efficient types of containers ultimately led to the end of salt-glazed stoneware and the potteries that created it. In response to a waning demand, crocks became less and less decorative and more and more utilitarian. Cobalt was used sparingly or not at all, giving rise to white, Bristol slipglazed stoneware and then brown and white crocks and jugs. Today, cobalt-decorated stoneware has gone from the storehouse shelves to the shelves of collectors' cupboards. And despite the humble purposes they were endowed with by the hands that formed them, they now sit quietly, behind glass, admired and unused.