name Francis Hitchins Glass Works. We

The Dating Game

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The FHGW Mark

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Tracking down marks and manufacturers is a process that takes weeks, months, sometimes even years. In many cases, the research takes twists, turns, and many blind alleys before the correct answer is realized. Toulouse (1971:202-203) had attributed the FHGW mark to the Frederick Hampson Glass Works in England. When we began discussing the mark, Whitten insisted that the bottles did not look English, so we set out to test the Toulouse assertion. First, we had to figure a date range, and we looked at reported collections from three archaeological sites to determine that the bottles had to have been made during the ca. 1880-1886 period. They could have been made both before and after that time, but they must have been made between those dates. Lockhart e-mailed the Salford Local History Library and discovered that the company was not called Frederick Hampson Glass Works until 1892. We needed a better answer.

May Jones (1968:17) claimed the factory was more likely that of "F. Hitchins." Francis Hitchins was manager of the Lockport Glass Co., but he was too early for the manufacture of these bottles, and there was no evidence that he ever used the

turned our attention to the Federal Hill Glass Works in Baltimore, Maryland. Both Whitten and Lockhart e-mailed and wrote to collectors, libraries, and historical societies in the area. Finally, William A. "Doc" Anderson of the Baltimore Antique Bottle Club checked the city directories for us. Like Hitchins, this factory closed too early to have produced the bottles.

Meanwhile, in a project unrelated to this research, Lockhart was looking into the possibility that some individual mold makers left their "signatures" on bottle bases. One such signature was the Maltese

Meanwhile, in a project unrelated to this research, Lockhart was looking into the possibility that some individual mold makers left their "signatures" on bottle bases. One such signature was the Maltese cross found on bases of beer bottles from several different companies, including F H G W. All of the other companies using bottles bearing this "signature" were located in the St. Louis, Missouri, area. Even before this evidence was presented, Whitten had insisted that the bottles were probably from St. Louis or nearby. He was finally able to visit St. Louis in the spring of 2005. There, he found the answer.

Bottles and Marks

F H G W

This mark is found on export-style, 26-ounce "quart" beer bottles. Toulouse (1971:202-203) dated the mark "circa 1880 to 1900," based on the general timeframe for bottles of that type. In fact, he only discussed the bottle type – not company information.

Wilson (1981:115-117) illustrated 37

bottles with the F H G W mark from Fort Union (1863-1891), three blue (these are a light blue – not cobalt blue), the rest amber in color. In every case, the mark was across the center of the base, although punctuation could be either present or absent. Many of the marks were accompanied by a small, embossed dot above the mark, and one had a Maltese cross over the mark. All included numbers below the mark ranging from 1 to 36. Herskovitz (1978:8) found 129 beer bottles with the mark at Fort Bowie, Arizona (1862-1894). Although he did not include possible variations in his analysis, he noted numbers accompanying the marks ranging from 1 to 89. Lockhart and Olszewski (1994), however, only found two examples at San Elizario, Texas, with accompanying numbers of 4 and 14 [Figure 1]. Ayres et al. (1980:unnumbered page) showed the mark across the center with a number below with or without punctuation and with or without the accompanying dot above. They showed numbers 13 [Figure 2] and 31. Usually a good source for additional information, Ayres et al. (1980:17) only noted that the mark was "unidentified." Jones (1966:8) also only showed the logo across the center of the base and added that numbers ranged from 1 through 38. She noted that bottles were both amber and aqua [actually a light blue] in color. Jones (1968:17) also noted that an F H G W bottle from Fort Union had a St. Louis Lager Beer label.

Wilson (1981:5), however, contradicted Jones by saying that "not a single label of this type [St. Louis Lager Beer] was found at Fort Union, where Anheuser-Busch St. Louis Lager Beer labels occur in profusion." He suggested that, since Fort Laramie (the second fort he excavated) was occupied by civilians after 1891, the brand



Figure 1: F. H. G. W. Beer Bottle Base (with punctuation) [Lockhart]



Figure 2: F H G W Beer Bottle Base (no punctuation) [Avres et al. 1980]

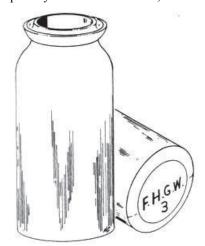


Figure 3: F H G W Fruit Jar Base [Creswick 1995:60]

was an "imitative product" of the Anheuser St. Louis Lager. If this is correct, and Jones identification of the label and mark were correct (although not the location where the bottle was found), this indicates that the bottles may have been made fairly late – in the 1890s. However, Jones may also have been looking at an Anheuser St. Louis beer label and not have been as observant as usual.

Creswick (1995:59-60) showed a grooved-ring, wax sealer fruit jar with the F H G W mark across the center of the base and a single-digit number below it. The marks came in small- and large-letter variations [Figure 3].

There appears to be only one variation of this mark – embossed across the center of the base. Some bottles have an embossed dot above the mark, and a very few have an embossed Maltese cross above the mark in place of the dot. Punctuation in the marks can be either present or absent. Every mark we have found has a number between 1 and 89 below the mark. Bottles were made from amber and light blue (possibly aqua) glass.

F. H.

Creswick (1994:59) listed three slight variations of the F. H. mark (with 1, 6, or no number below the initials) on bases of grooved-ring, wax sealer fruit jars [Figure 4]. She attributed the mark to the Federal Hill Glass Works, 1790 to ca. 1905, although the latter date is after the factory closed (see below). Whitten noted that his wax sealer fruit jars marked with F H G W and F. H. [Figure 5] are identical in all observable ways except for the marks.

Four soda bottles are also marked with F. H. One, noted by both Paul and Parmalee (1973:89) and Miller (1980:11), was a Hutchinson bottle used by E. Auer. Miller

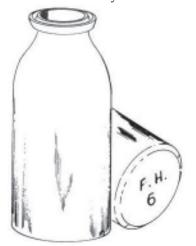


Figure 4: F. H. Fruit Jar Base [Creswick 1995:59]

dated the company "1880s to early 1890s." Another Hutchinson bottle with the mark, used by Geo. Schroeder, was dated "1890s – early 1900s" (Miller 1980:14). A third from "Spannagel S. & M W Co" was used during the 1890s (Miller 1980:15). The final bottle we have found, also a Hutchinson, was a different variation of the Spannagel S. & M. W. Co. bottle (**Figure 6** – Miller 1982:5). All of the soda bottlers using Hutchinson bottles marked with F. H. were located in East St. Louis, Illinois.

Baltimore Glass Works

We include this mark because the Federal Hill Glass Works was also known as the Baltimore Glass Works. The plant was more likely to have used this mark than F H G W. Van Rensselaer (1921:6, 17) noted flasks marked on the fronts with Baltimore/Glass Works. Freeman (1964:68, 94, 104) described a flask embossed with an anchor and a rope marked Baltimore Glass Works, as well as a George Washington flask and one with an anchor. He did not provide a date range. In another instance, Freeman (1964:84) described a "Monumental City" flask embossed "Baltimore Glass Works Est'd 1780. Baker Bros. & Co."

Creswick (1995:10, 14) also showed a fruit jar embossed BALTIMORE (slight downward arch)/GLASS WORKS (horizontal) on the front. She dated the jar ca. 1860. The plant was owned by Baker Bros. who also made jars marked with their names (BAKER BROS. & CO. BALTIMORE, MD.) on the bases.

FH

Toulouse (1971:202) noted an underlined FH as the "modern mark" used by Frederick Hampson Glass Works, Salford, England. This was likely used after ca. 1892.

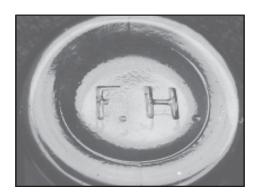


Figure 5: F. H. Fruit Jar Base [Whitten]

The Companies

Frederick Hampson Glass Works

According to Toulouse (1971:202-203), the Frederick Hampson Glass Works, Salford, Lancashire, England (which he dated "1851-?") used the F H G W mark. Unfortunately, he provided virtually no other information. His discussion centered around the bottles, themselves, rather than the company. It is likely that he could find no other factory with the necessary initials.

Founded in 1851, the company was originally called Phillips and Hampson. About 1892, the name was changed to Frederick Hampson Glass Works (1892-1893 directory). The company remained in business until about 1980. According to an 1892 article, Hampson did a brisk trade with "Australia and the colonies" (personal communication with Tricia Nuttall, library assistant at the Salford Local History Library, 2004) "The colonies" may have loosely referred to the United States (no longer a colony by that time), but it may have meant other British colonies.

Francis Hitchins

May Jones (1968:17) claimed the factory was more likely that of F. Hitchins. She cited the McKearins in their discussion of the beginning of the Lockport Glass Co., Lockport, New York. The factory began in 1840, but one of the original four owners, one "Hitchins," bought out the rest sometime between 1850 and 1860. Another collector provided her with the information that Hitchins first initial was "F."

The Hitchins identification as the user of the F H G W mark on beer bottles will not stand close scrutiny. Two main facts



Figure 6: F. H. Soda Bottle Heel [Miller 1982:5]

eliminated Hitchins from the list of contenders for the use of the mark. First, there is no indication that the Lockport Glass Works, which he owned, was ever operated under any other name. Nor is there any indication that he owned any other factory. Second, Hitchins operated the Lockport Glass Works from 1850 to 1866 (see McKearin & Wilson 1978:137-142 for a more thorough history of both Hitchins and Lockport). McKearin & McKearin (1941:194), however, placed the date of Hitchins' sale at 1872. The national use of amber beer bottles, such as those found at the sources listed above, however, did not begin until 1872 or 1873. Therefore, Hitchins was in business too early to have made these bottles.

Other Possibilities

We looked through all our 19th century sources for anyone with a last name beginning with "H" and a first name beginning with "F" to produce the following list:

Herdman, F. H. – part of the Kearns glasshouses, 1870s (McKearin & Wilson 1978:166-167)

Hirsch, Francis – involved with Boston Window Glass ca. 1825 (Wilson 1972:86-87)

Hitchins, Francis – owned Lockport Glass Co. – 1850-1866 (McKearin & Wilson 1978:137-142)

Houghton, Francis – involved with Union Glass Co. Ca. 1854 (Wilson 1972:309-310)

All four of these men were in the glass business too early to have been the "F H" we seek, and none owned a glass house that was labeled with their names.

Federal Hill Glass Works

Interestingly, there was a Federal Hill Works (also known as Federal Hill Glass Works) in Baltimore, Maryland. It was also known as the Patapsco River Glass-House and the Hughes Street Works and was initially operated by Frederick M. Amelung & Co. The plant was apparently in production from about 1799 to 1853 (Knittle 1927:297, 299, 302).

McKearin and McKearin (1941:587) traced Frederick Amelung & Co., located at the "foot of Federal Hill" from the company's inception on November 16, 1799, to at least 1905 at which date they noted: "Company was still in operation."

The firm made "bottles and flasks of all kinds" in 1853.

McKearin and Wilson (1978:71-74, 130-131; 665), however, called the factory the Baltimore Glass Works, and a number of flasks were embossed BALTIMORE/ GLASS/WORKS (see above). Production of glass actually began at Federal Hill on January 1, 1800. After a series of owners had come and gone, the Baker Brothers, headed by William Baker, obtained the factory by 1845. The Bakers allowed a group of blowers from the Federal Hill factory to start a cooperative known as the Spring Garden Glass Works. The cooperative failed by 1859, and the Bakers bought the factory. By 1863, they had moved all bottle production to the Spring Garden plant to concentrate on making window glass at Federal Hill. About 1870, all production ceased at the Federal Hill plant. Thus, it is very unlikely that beer bottles made after 1872 were made or marked with the F H G W logo at Federal

Creswick (1995:262) noted that the Baltimore Glass Works was also known as Federal Hill Glass Works and the Baltimore Glass Manufactory. She dated all the names at 1799 to 1905. The 1864 Baltimore city directory (online at http://www.bcpl.net/ ~pely/1864/) listed both the Baltimore Glass Works and the Federal Hill Glass Works. The factory was known by both names at least that late. Doc Anderson, however, checked Baltimore city directories from 1870 to 1900 and could find no listing for the Federal Hill Glass Works. This confirms the McKearins' claim that the factory ceased production in 1870.

Heitz Glass Works

When David Whitten checked the St. Louis city directories, he found Frederick W. Heitz (usually as Heitz, Frederick) listed under the Glass Manufacturers category. Heitz was located at the northwest corner of Main (Dorcas & Main) from 1883 to 1896. Although little remains known about this company, it fits the time period when bottles marked F H G W are known to have been made. Heitz was listed as a grocer prior to his involvement with the glass business. In the 1898 directory, he was listed as "foreman," presumably at one of the other glass factories in St. Louis. A Christian Heitz was one of the officers at the Lindell Glass Co. in 1880.

Frederick Heitz was born in 1839 in Prussia and was 41 years old when he was interviewed during the 1880 census. Heitz was married and listed himself as a "Retail Grocer." His wife, Mena, was 40 at the time and was also born in Prussia. Christian Heitz was born two years earlier (also in Prussia) and was probably a brother to Frederick. Christian listed his occupation as "Owner Glass House" (probably referring to Lindell) and lived with his 39-year-old wife, Minna, their son, and their two daughters (1880 Census). According to St. Louis death records, Frederick died in 1907 at age 67. He was again listed as a grocer.

Mold-Makers' Signatures

During the 19th century, very few glass houses made their own molds. In reading glass company histories, it is unusual to find a glass plant with its own mold-making capacity. Thus, it is likely that many glass houses used the same mold maker to produce the molds they needed.

It is possible that some of the individual mold engravers included their own "signatures" on baseplates they created. Toulouse (1971:537) discussed the possibility of the use of the mold-cutter's "signature" in connection with Nuttall & Co. from 1872 to 1913. Although Nuttall & Co. was an English company, the time period is similar to the possibilities we cite below. Numerous beer bottle bases are embossed with small lines, tic marks, or similar extraneous markings. We suggest that two other likely "signatures" are Maltese crosses and Xs found on baseplates of amber and aqua beer bottles from the ca. 1875-1890 period.



Figure 7: Maltese Cross on I G Co Beer Bottle Base [Lockhart]

Maltese Crosses

Essentially identical Maltese crosses appear above the manufacturer's marks on amber, aqua, and light blue beer bottle bases [Figure 7] with logos of F H G W, M G Co, L G Co, S B & G Co, I G Co and I G Co L. Initially, we thought that these Maltese crosses might have been engraved by an itinerant mold maker who moved from company to company, adding his individual "signature" to each baseplate. However, because few glass houses produced their own molds, it is more likely that this individual worked for a single moldproducing company and engraved baseplates for each of the glass houses during the same time period.

Manufacturer's Marks and Maltese Crosses

These manufacturer's marks (F H G W, M G Co, L G Co, S B & G Co, I G Co and I G Co L) all have two things in common:

1) they are occasionally accompanied by a Maltese cross, always positioned above the logo on export-style beer bottles; and

2) the identification of the manufacturer has been in dispute in most cases. The I G Co mark may have been used by either the Ihmsen Glass Co. (Pittsburgh), the Illinois Glass Co. (Alton), or both – although the IG CoL mark was certainly used by Ihmsen (see Lockhart et al. 2005b). Although there were many contenders for the M G Co mark, we have narrowed it down to the Mississippi Glass Co. (St. Louis) on beer bottles. As with M G Co, there were many possibilities for the user of the L G Co mark, but we have reduced that to a very strong case for the Lindell Glass Co. (St. Louis) as the user on beer bottle bases (articles on these marks will be forthcoming). The S B & G Co mark from Streator, however, is not in contention, and the glass house using F H G W is discussed above.

If the Maltese cross is, indeed, a conjoining factor (as in the case of a single mold maker using it as a "signature"), then we can look for commonalities. We already know that all six made export-style beer bottles with no embossing on the body of the containers. Both Mississippi Glass and Lindell were in St. Louis; Alton, Illinois (home of the Illinois Glass Co.), is just across the river. Streator and Ihmsen, however, were farther north and east.

Because three of the five identified companies were in the St. Louis area, then the unknown member of the group might also be located in St. Louis or fairly nearby in Illinois. This supposition fits perfectly with Frederick Heitz. His location in St. Louis makes him an ideal candidate for the user of the F H G W mark.

Dating of the marks becomes interesting. Six of the San Elizario bottles had Maltese crosses embossed on their bases. Two were I G Co; four were M G Co. Although L G Co, S B & B G Co, and F H G W bases were in the assemblage, none had Maltese crosses as part of the basal markings. This may just indicate that this sample was too small to include any of the cross-marked bottles. However, it may mean that the Maltese cross was just phasing in during the ca. 1880-1887 period when the bottles were discarded.

Discussion and Conclusion

Bottles marked with F H G W were common at both Fort Bowie and Fort Union. The presence of the bottles at the forts indicates that the manufacturer must have made them during the 1863-1891 period. We can shorten the timeframe to 1872-1891 because bottled beer was not transported over long distances until after the development of Pasteurization for beer by Anheuser Busch in 1873. Since Lockhart reappraised the time period for the use of the San Elizario bottle pit to 1880-1886 based on more recent data about marks, and only two bottles with the F H G W mark were found at San Elizario, we can hypothesize that the bottles were probably deposited at the forts in either the early or later segments of the San Elizario dates.

Whitten's discovery of the Frederick Heitz glass factory operating in St. Louis, Missouri, from 1883 to 1896, fits perfectly with all currently-known information about the F H G W mark as well as the time periods for both forts and the San Elizario deposits. The F H G W mystery is solved at last.

Bottles with the F. H. mark, however, remain in question. Containers with the F. H. mark seem out of character with the rest of Heitz's known products. All his export beer bottles and fruit jars (at least the ones marked F H G W) were otherwise unembossed (i.e., no logos or names of local companies). He seemed to rely on the generic market. The soda bottles marked F. H., on the other hand, are all embossed with bottlers' names. If those were his earliest products, however, he might have tried that approach and decided that generic bottles were easier, faster, and more

profitable.

We have seen or been informed about only four bottles with the F. H. mark, but these have all been made for bottlers in East St. Louis – across the river in Illinois. Whitten suggested that St. Louis bottlers could have ignored Heitz because of his small glass house, and he may only have made name-embossed containers for East St. Louis businesses. The larger St. Louis companies (Lindell Glass Co. and Mississippi Glass Co.) and the nearby giant, Illinois Glass Co. (Alton), may have badly undercut his prices.

It is also possible that the mysterious F. H. mark belongs to another company altogether, although this is unlikely. We have not run across any other company or individual (see above) that fits the initials and would have been in business during the correct time period. All bottles (of which we are aware) with the F. H. mark were used during the time period when Heitz was in business. In addition, as noted above, Whitten's examination of fruit jars marked with F. H. and with F H G W are identical in all respects except the initials. Frederick Heitz is the most parsimonious identification for the initials.

Acknowledgments

We would like to thank Douglas M. Leybourne, Jr. for permission to reprint drawings from the *Fruit Jar Works*. Our gratitude also to our fellow researchers, Bill Lindsey and Carol Serr for proofreading, comments, and reading/listening to endless discussions. Finally, a great debt is owed to Kathy Hopson-Sathe for editing such a great publication!

Updates on Illinois Glass

In our column on the Illinois Glass Co. marks (Lockhart et al. 2005a), we noted that catalog numbers were embossed to the right of the I G Co mark on bottle heels from about 1895 to about 1911. We have found further confirmation for those dates. Date ranges on bottles used by local companies in Colorado were shown in Clint (1976). Information was drawn from local sources and empirical study of the bottles. All I G Co logos were embossed on heels. Heel logos with no accompanying numbers fell within a range between 1882 to 1887. and all four examples were made with applied finishes. Heel logos accompanied by numbers embossed on bases dated 1894 to 1900. Heel logos with numbers immediately to their right dated from 1894

to 1915. All numbered bottles were topped by tooled finishes. Clint showed some unusual numbers such as $10 \frac{1}{2}$ and $72 \frac{1}{2}$.

I. C. Co.

Griffenhagen and Bogard (1999:124) claim that a mark of I. C. Co. was found on bottles used from 1873 to 1881 by the Home Bitters Co. of St. Louis. They almost certainly took their information from Ring (1980:248). Ring listed the Home Stomach Bitters and noted either I.C. CO or I P G C on the base of the bottle. We have been unable to find confirmation for this mark from any other source. It is possible that either an engraver mis-struck a "C" for a "G" or that the serif on the "G" was so faint that it was misread. According to Fike (1987:35) the Home Bitters Co. advertised during the 1870-1873 period and was last listed in directories in 1881 - all within the period when Illinois Glass used the I G Co mark.

IG Co in a Diamond

Teal (2005:20-21) noted that "from 1897-99 Illinois Glass Company supplied the [South Carolina] Dispensary with twenty-two carloads of clear, quart, round, palmetto-tree Dispensary bottles. These bottles carry the company's trademark on their base, a diamond with the initials, 'I. G. Co.' inside of it." Teal visited the former Illinois Glass Co. factory in Alton and obtained his information from their records. This indicates that the I G Co-ina-diamond mark was used at least as early as 1897 - about three years earlier than indicated by any other source we have found. It is even possible that the diamond form of the mark was developed specifically for the Dispensary bottles.

'01, '02, or '03

In the process of helping Ron Fowler develop the New Mexico segment of his International Hutchinson bottle database, Lynn Loomis discovered a previously unknown New Mexico Hutchinson bottle from Gamble & Rascoe, Roswell. The bottle was embossed 122 '02 on the back heel. Lynn asked if the '02 were a date code for 1902. That began the search.

Similar marks (11. '03 and 11 '03) were embossed on heels of other New Mexico Hutchinsons (Wood 1998), and Ron recalled an 11 '02 on a Hutch from North Yakima, Washington. Clint (1976:101, 171, 188) illustrated two numbers (33'02 and 55.02) on Colorado Hutches, and Kyte

(2005:10) cited 11.02 on anther one from Colorado. The trail seemed to lead to a Colorado glass house. With the exception of the Western Glass Mfg. Co., no Colorado company was in business during the right time period (1902-1903). Western used other codes, so it did not seem likely that the company would have used still another marking. Later, reports of similar codes came from all over the U.S.

A look at the 1903 Illinois Glass Co. catalog revealed the answer. Illinois Glass made Hutchinson bottles with catalog numbers of 11, 22, 33, 44, 55, and 66

[Figure 8]. All were available with round plate molds except 55, which only came with a horseshoe plate. Except for #44, all were available with "Hutchinson Stopper, or Baltimore Seal, or Cork and Wire." Number 44 could be supplied with "Cork and Wire, Lightning Stopper or Baltimore Seal." A later page showed more Hutchinson bottles with catalog numbers of 111, 122, 133, 144, and 155. All but #155 could be "furnished for Hutchinson Stopper, Baltimore Seal or Cork and Wire." The catalog further noted that "No. 155 is designed especially for Twitchell's Floating

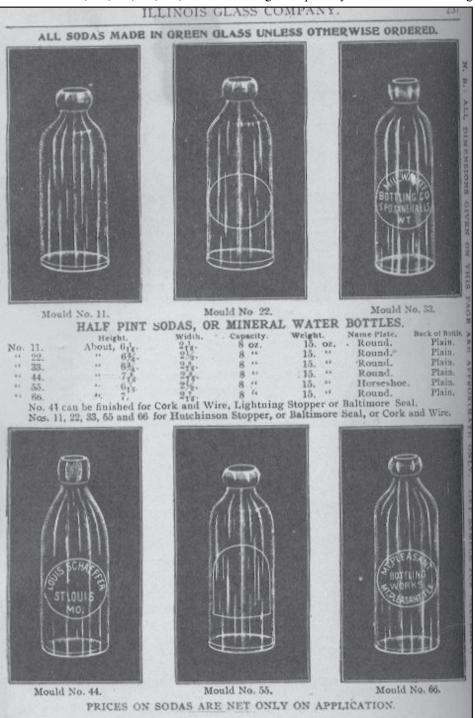


Figure 8: Hutchinson Soda Bottles [1908 Illinois Glass Co. Catalog]

Ball." Ron Fowler confirmed that Hutchinson bottle photos he has (of bottles marked with the '02, etc.) consistently match the pictures in the Illinois Glass catalog.

Similar codes are found on crown-finished bottles. Two crown-topped soda bottles from El Paso, Texas, are marked on the back heel with 322.02. Other crown-finished bottles (422 and 722) are from Illinois Glass but do not have the secondary code. The last page of the 1903 Illinois Glass Co. catalog shows the same style

bottle with a catalog number of 322 [Figure 9]. Also on the same page is a Hutchinson bottle (#311) and crownfinished sodas numbered 322, 333, 344, 355, 366, 377, and 388. Numbers in the 1903 catalog extended to 477. Bottles with all of these catalog numbers may have included date codes of 01, 02, or 03. Thus, it is possible that virtually any number for soda bottles from the 1903 catalog will probably include date codes for these three years.

The 1906 catalog extended the numbers

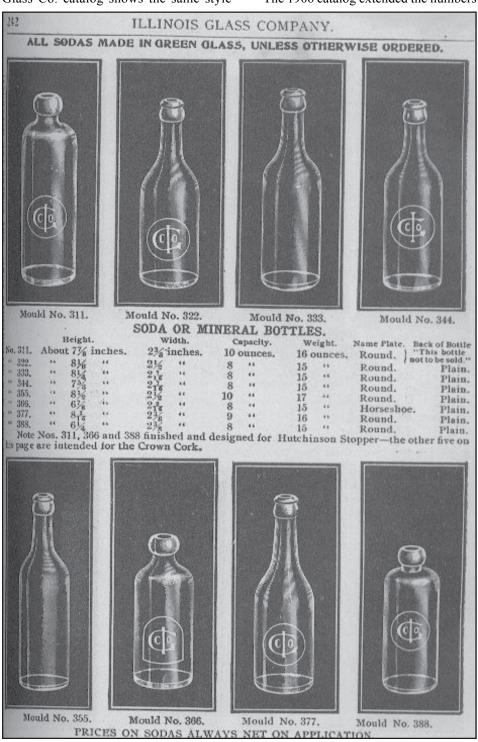


Figure 9: Crown-Finished Soda Bottles [1908 Illinois Glass Co. Catalog]

to 666. The same bottles numbering 11-766 (a total of 72 different styles according to the Illinois Glass Co. count) are found in the 1908 catalog (essentially an extension of the 1906 list). All use the double-number system (e.g., 355, 477, etc.). Some of these are in the Hutchinson pattern, and some have crown finishes. As in 1903, most Hutchinson-style bottles are "finished for Hutchinson Stopper, Baltimore Seal or Cork and Wire." Crowns are primarily in the 300 series and up (322, 333, etc.). A note at the top of the pages states that "all sodas are made in green glass, unless otherwise ordered." Ouart sizes of both Hutchinson and Crown sodas followed a "9" series pattern (e.g., 9, 19, 29, etc.) from 9 to 139. The numbering system remained the same in the 1911 catalog (Putnam 1965), although all references to cork and wire finishes had ceased. The catalog numbers had completely changed by 1920, along with the elimination of Hutchinsonstyle bottles.

These data suggest two possible solutions to debates within the bottle research community. First, '01, '02, and '03, all marks reported by researchers in conjunction with either double-numeral marks or a "1" plus double digits, were undoubted used by the Illinois Glass Co., and, based on the 1903 catalog, are probably the earliest currently known date codes. Similar bottles have also been reported in -02 and .02 variations.

The El Paso bottle marked 322.02, however, questions the validity of the suffix numbers as date codes. Woodlawn Bottling Co., the bottler using both containers with the .02 suffix, began business as the Martin R. Sweeney Bottling Works from 1905 to 1908. It did not become Woodlawn (the name embossed on both bottles) until 1909. Thus the company was not in business in 1902. It is important to note that this exception questions the hypothesis but does not disprove it. There are numerous instances where glass makers reused old molds, often at much later dates. In fact, the embossing of the codes is identical on both bottles (including a slight dip in the second "2" - indicating that both bottles were made in the same mold with different circular plate molds inserted. Unless other exceptions are found, it remains likely that the '01, '02, '03 series actually indicates the year the bottle was made.

The second debate has centered around vertically-elongated finishes on Hutchinson-style bottles. These longer

finishes appear more like the older "blob tops" made for wired-down corks than the more "squat" finishes for the Hutchinson stoppers. According to Ron Fowler, three possible solutions have been offered by Hutchinson collectors: 1) The longer finishes are just Hutchinson variations; 2) the finishes are for corks and should not be classified as Hutchinsons; and 3) that these are "transition" bottles. Since both types of finishes are offered in the 1903 Illinois Glass catalog, these cannot be "transition" bottles - the Hutchinson finish was invented in 1879, 24 years previously, too long to have been in transition. The catalog also eliminates the longer finishes as variations of the Hutchinson top - it clearly identifies them as "Cork and Wire" finishes. Thus, these bottles are actually intended for corks and should not be classified as Hutchinson finishes. It should be noted that the elongated finishes for the cork and wire arrangement are not the same as the elongated version of the "funnel top" Hutchinson variation described by Elliott and Gould (1988:36). The finishes described by Elliott and Gould were certainly intended for Hutchinson stoppers.

Numbers in an Elongated Diamond

In our first column on the Illinois Glass Co. marks, we dated the marks that used 2-, 3-, or four-digit numbers embossed inside diamonds on bottle bases as having begun about 1911. This dating is questioned, however, by a bottle illustrated in Clint (1976:132). The bottle is a whiskey



Figure 10: Number-in-Diamond Mark [Clint 1976:132]

quart from Colorado with an applied finish (therefore pre-machine). The base is embossed with 105 in a diamond, and Clint dated the bottle ca. 1900 [Figure 10]. A look in the 1903 Illinois Glass Co. catalog showed no liquor bottle with number 105. Liquor bottles of various sizes that are as identical with the Clint illustration as two drawings are likely to be are numbered 106, 107, 108, and 109. Other styles of bottle are numbered 100, 101, and 103. Since number 106 is the quart-sized bottle and 108 is the fifth, we submit that Clint likely misread the number on his bottle. However, the listing in the 1903 catalog combined with Clint's date estimate makes it possible that the numbers-within-a-diamond marks were in use as early as the turn of the century.

Miller (1999:51) also illustrated a bottle that questions our beginning date for the mark. He showed a bottle from Julius Goldbaum, a Tucson liquor dealer marked on the base with 115 in a diamond. He dated the bottle 1899-1904. In a personal correspondence, Miller stated that actual last listing for Goldbaum in the liquor business was 1903. The number and drawing match the tall seal brandy bottle (Mould No. 115) in the 1903 Illinois Glass Co. catalog. Although the bottle was usually available in colorless form (as is the Miller bottle), it could "be furnished in GREEN or AMBER Glass on order, at special net prices. No. 115 is plate mold. We can furnish lettered bottles at a small additional cost for a plate on first order." Prior to this, we had only found examples of the mark on machine-made bottles. This moves the beginning date for the mark to ca. 1900.

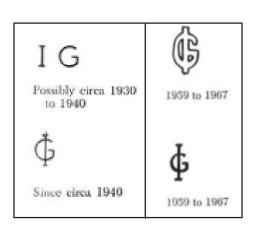


Figure 11: (L) Imperial Glass Co. Marks
[Toulouse 1971:258]
Figure 12: (R) Iroquois Glass Co. Marks

[Toulouse 1971:260]

A. H. Heisey & Co.

Although not a bottle manufacturer, A. H. Heisey & Co. used a mark that is occasionally confused with the Diamond I logo used by the Illinois Glass Co. Located in Newark, Ohio, Heisey began construction of its plant in 1895 and initiated production in April 1896. The company developed and began using the Diamond H trademark in late 1900 and copyrighted the mark in 1901. Although Heisey claimed it used the mark on all of its glass products from that point until the plant ceased production in 1957, there are some pieces known to have been made by Heisey that do not bear the Diamond H. Paper labels bearing the logo were probably affixed to the individual glass objects when they were new. Heisey sold its entire stock, mold, and business to the Imperial Glass Corp. in 1958 (Bredehoft & Bredehoft 2001:10-11).

The confusion in the marks arises from the tremendous variation in the letter "I" in the Illinois Glass Co. marks. Embossed marks include a dot instead of an "I," sans serif"I," serif"I," and an "I" with extended serifs. The Heisey "H" is within a vertically-extended diamond, whereas the "I" from Illinois Glass is in a horizontallyextended diamond. In at least two cases, the Illinois Glass engraver extended the serifs on the "I" to such an extent that if the trademark is turned 90 degrees, it is an almost exact duplicate of the Heisev Diamond H. However, since Heisey never made bottles (except for cocktail shakers and fancy bar bottles), if the mark is found on pharmaceutical bottles (as it is in both examples we have seen), it can only be the Diamond I mark of the Illinois Glass Co.

Similar Marks and Similar Company Initials

Imperial Glass Co. (1901-1984), Belaire, Ohio, used an IG logo that was very different from the IGCo monograms used by Illinois Glass [Figure 11]. Imperial made tableware along with headlight lenses, gas and electric shades, and jelly glasses (Welker & Welker 1985:63) but never produced bottles. Iroquois Glass Industries, Ltd. (later Iroquois Glass Ltd.), Candaic, Quebec, Canada, used a similar monogram (without the curved ends of the I - Figure 12) from 1959 to 1967 (Peterson 1968:49; Toulouse 1971:260). The Independent Glass Co., Pittsburgh, Pennsylvania, made jars from 1881 to 1889 but never bottles. No specific mark is

known for the company (Creswick 1995:90, 268; Roller 1983:162). Another Independent Glass Co. operated from LaVale, Maryland. The company probably made tableware, but the mark it used (if any) is unknown (Cumberland Glass 2004).

Three apparently unrelated companies were named the Indiana Glass Co. One was in Indiana, Pennsylvania, and apparently made tableware from 1892 to 1893. Located in Dunkirk, Indiana, the second made pressed and blown tableware from at least 1907 until 2002. The third company was in Middletown, Indiana, and made containers including bottles, flasks, and fruit jars during the 1890s (Roller 1994:17; Welker & Welker 1985:64; Whitten 2005). I have found no marks for any of the three but have included them because the initials are IGCo. Finally, the Industrial Glass Co., Bradenton, Florida, began business sometime prior to 1982 and remained in business until sometime after 1996. The company marked its products with a large "I" - but we have found no other information about it (Emhart 1982:74; 1996:48; 2005; Powell 1990).

Conclusion

Research on bottle marks will never be complete. In fact, publishing information is one of the best ways to generate new information. Harvey Teal, for example, wrote us (both personally and through *Bottles and Extras*) to provide new information about the IGCo-in-a-diamond mark. We also almost constantly, it seems, discover a new source, new bottles, or other new data that reveal an earlier date, a new mark, or a new interpretation of a date code. In addition, discussing marks among our group and with others constantly generates new ideas. Thus, we expect to be updating our findings for the rest of our lives.

Acknowledgments

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dirty towel in his hands.

"I dug something you might be interested in," the friend told Jerry.

"What?"

"Well, let me show you," replied the friend, and then unwrapped a dirtencrusted, bone-shaped bottle made of pottery, with the word "poison" and skull and crossbones.

"How much do you want for it?"

"Would \$15 be too much?"

"No, that would be fine," said Jerry, who related that he almost broke his arm getting his wallet out of his pocket.

Jerry's bone-shaped bottle is about 4 ½ inch tall, has a top opening about ¼ inch in diameter, and stands levelly on four little molded feet approximately 1 ½ inch wide, which show wear on the bottom. The dump from which it was dug was in Lexington, North Carolina, which is the county seat of Davidson County, and was incorporated in 1827. Judging from the other bottles found there, the dump appeared to date to the 1895-1900 period.

Jerry's friend said he'd dug two more pieces of other bone-shaped poison bottles at the same time, but threw them away. At Jerry's insistence, the friend returned to the dump a week later, but was unable to locate the pieces.

Jerry's bone-shaped pottery bottle was displayed at the 2004 FOHBC EXPO in Memphis, Tennessee.

The mystery deepens! In 1985, FOHBC member Joan Cabaniss personally saw a bone-shaped pottery bottle at the show in York, Pennsylvania. The person who had it thought it was a whiskey nipper rather than a poison bottle and refused to sell it, but he did allow Joan to take a photograph. From the photograph, which this author has seen, the bottle appears very similar to Jerry's bottle.

So, what do we know? There are at least three bone-shaped bottles in existence, all similar in appearance and all composed of fired clay. We can assume that at least one or two others were made, based on the evidence found at the Lexington, North



Pottery boneshaped bottle seen at the Baltimore show in 1985. The owner believed it to be a nipper. Carolina dump. All three of the known pottery bottles strongly resemble the design patented in 1893, although not identical. There also is a credible rumor suggesting that one bone-shaped bottle may exist in cobalt glass, and the possibility (more speculative) that there may be other boneshaped bottles in clear and/or amber glass. And what are they? Prototypes? Saleman's samples given or sent to potential customers? Models submitted to the United States Patent Office, or to glass manufacturers who decided not to license the design? Whiskey nippers? No one knows for sure. As I said at the beginning of this article, the bone poison bottles certainly are a mystery.

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