

Wisconsin Glass Co.

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Although only open for five years (1881-1886), the Wisconsin Glass Co. was responsible for a remarkable range of variation in its manufacturer's marks, mostly embossed on beer bottle bases. Although the firm made a large variety of bottles and jars, most of them were unmarked with by far the majority of logos placed on export beer bottles.

History

Wisconsin Glass Co., Milwaukee, Wisconsin (1881-1886)

The Wisconsin Glass Co. grew out of the two Chase Valley companies. Reilly (2004 [1997]) stated in his discussion of Chase Valley No. 2 that

both organizations finished out the rest of 1880 and part of 1881 before [Dr. Chase] reorganized them. . . . For unknown reasons, Dr. Chase decided to sell Company No. 1 as well as his interest in Company No. 2. On August 16 (1881), after only one season of operation, the two companies were combined into a single operation called the Wisconsin Glass Company.”¹

Thus, the renamed corporation began with two separate plants, although the actual corporate records never mentioned Plant No. 1. On August 7, 1881, the board met to increase the capital stock to \$64,000. The firm increased the capital again to \$100,000 on October 4, 1883, along with a final upgrade to \$150,000 on August 10, 1885 (Incorporation Records). The company appeared to be the epitome of success.

¹ According to the corporation records, the name was changed from the Chase Valley Glass Co. No. 2 to the Wisconsin Glass Co. on August 2, 1881. Dr. Chase's name was no longer part of the documents, and he was replaced as president by Guido Pfister (Incorporation Records).

The firm made table glassware, fruit jars, prescriptions, beers, beer cider, ink bottles, pocket flasks, and carboys in amber, dark (black), green, and blue colors – as well as window glass. The *American Glass Worker* (1886:2) noted in January 1886 that “the Wisconsin Glass Company of Milwaukee, Wis., has set pots and lit up its furnace after having been idle since June 30, 1884.” Ayres et al. (1980:41) reported that only window glass was listed in 1886, so they suggested that no bottles were made after 1885.

Kupferschmidt & Kupferschmidt (2003:26), however, quoted an article in the *Milwaukee Sentinel* (4/11/1886), stating that Wisconsin was “primarily an American green-bottle concern,” and that the glass was “principally blown into bottles of every variety and shape, beer bottles for the brewers predominating.” The reporter further observed, “Bottle glass varies in tint from the dark green, almost black, to the semi-transparent claret bottles to clear and transparent qualities.” Despite the article, the company closed later in the year. In 1888, the factory was reopened as the Cream City Glass Co. specifically to make beer bottles (Ayres et al. 1980:41; Noyes 1962:5; Reilly 2004 [1997]; Toulouse 1971:541-542).

Wilson and Caperton (1994:70) recorded all beer bottle advertising in *The Western Brewer* between 1883 and 1890 as well as samples from issues between 1878 and 1882. Ads in the journal support the end of bottle sales in 1885. Wisconsin Glass advertised from January 1883 to October 1885. Due to costs, excessive diversity, and a series of strikes, the company closed in 1886 after less than five years in business (Ayres et al. 1980:41; Maas n.d.; Noyes 1962:5; Reilly 2004 [1997]; Toulouse 1971:541-542).

As an interesting postscript, Vatter (1955:92) noted that investors wanted to re-open the plant in 1933 but were blocked by a group of powerful large glass concerns that included the Harford-Empire Co.:

When a group of investors, former glass container producers, attempted to rebuild and equip . . . the Northern Glass Works. . . after several years of idleness due to prohibition, it petitioned the Glass Container Association for assistance and was told that “if there was a new glass works starting in Milwaukee[,] the Owens-Illinois Company would start it, as they now have thirty shut-down obsolete factories, and surely would not see anyone else get started in this rich territory.

Containers and Marks

In 1883, a spokesman for the company told the *Milwaukee Sentinel*, “We ship all over the Northwest and sell a great many in Milwaukee to the manufacturers of bottled beer.” Noyes (1962:5) noted that a “contemporary” Milwaukee city directory noted that products of the Wisconsin Glass Co. “included table glassware, fruit jars, prescription, beer, cider, and ink bottles, pocket flasks, carboys and even window panes.” Colors included “amber, dark, or green. Blue glass, once thought by some enthusiasts to possess extraordinary beneficent and curative powers on plant and animal – including human – life and growth, was also available.”

An 1885 ad (Maas n.d.) illustrated several products including “bulb neck qt.” and champagne quart beer bottles, Mason’s and Standard fruit jars, Apolinaris bottles, Hutchinson and blob-top soda bottles – as well as noting several other types of jars and bottles (Figure 1). However, the primary wares with a manufacturer’s mark seem to have been beer bottles.



Figure 1 – 1885 ad (Maas n.d.)

Reilly (2004 [1997]) noted that placing mold marks on bottle bases

became a common practice of the Wisconsin Glass Company, probably for quality control purposes. Some of the marked bottles were probably produced in later years by the Wisconsin Glass Company, as it was a common practice for glass companies to continue using old molds, sometimes without reworking them.

Most of the marks probably had periods after all abbreviations originally. Often the marks either deteriorated or were the result of a weak strike, making the periods invisible. The marks are most commonly found on quart (26-ounce) export beer bottle bases, although they are occasionally embossed on Hutchinson bottles, blob-top soda bottles, or other beer bottle styles, in both “quart” and “pint” sizes – as well as at least one pickle bottle. We have never found the mark on any other style of bottle.

We have discovered a total of eight variations of the logos used by the Wisconsin Glass Co. and have divided them into two groups according to two factories that probably remained in use during the 1881-1886 period. For more discussion about the division, see the Discussion and Conclusions section below.

Plant No. 1 (Figure 2)

1. “WIS G Co” (horiz)
2. “WIS G CO” (arch) / letter (center) / MIL (inverted arch) – letters: A-P
3. “WIS G CO” (arch) / letter or number (center) / ”MILW” (inverted arch) – numbers: 4-27; letters: A-S [poss. subvariation with lower-case “o” in “Co”]² [“MILW” usually inverted arch but some horizontal] [beer, Hutchinson, blob-top soda]
4. “W.G.Co.” (arch) / letter (center) / ”MILW” (inverted arch) – letters: P-V [also see WGCo section]



Figure 2 – Plant No. 1 marks (eBay; Ft. Stanton; Maas)

Notes: We have found more examples of Variation 3 than the other three combined. *If* our small sample is representative, Variation 3 was used longer than the others. The other variations may have been made by different mold companies, and Variation 4 may have only been used in 1886, the final year of operation.

Plant No. 2 (Figures 3 & 4)

1. “WIS GLASS C^o” (lettering around inside edge of post mold with two-digit number in center) – numbers: 18-40

² Unfortunately, Herskovitz included neither drawings nor photos of the marks. Thus, we cannot be certain of this mark. Although Wilson included drawings, we have discovered minor discrepancies in some of them. Thus, these, too, are placed in the “possible” category until we actually see either a photograph or an actual bottle with the mark.

2. “WIS GLASS Co” / ”MIL” (lettering around inside edge of post mold marks with MIL in center; period under the “o” in “Co”)
3. “WIS GLASS Co” (arch) / number (center) / “MILW” (inverted arch) – numbers: 11-19 [beer, pickle]³
4. “WIS GLASS Co” “MILW” around heel of Hutchinson bottle

Notes: Although we have an even smaller sample from Plant No. 2, Variation 1 dominated our small sample, suggesting that it was used longer (or at least more often). The next two variations may have been made by other mold makers. Variation 4 was probably placed on the heel because there was a bottler’s mark on the base, although that was not mentioned in the eBay sale.



Figure 3 – Plant No. 2 marks (Ft. Stanton)

The sources for identification of these marks require a bit of discussion. The Wisconsin Antique Bottle Galleries website is a collector’s webpage that shows several selected photos of bottles and bases. The eBay auctions provided only photos used in the identification. Clint (1976) is one of the best illustrated collectors’ publications available. Clint conducted a massive investigation into Colorado bottles and provided remarkable detail including drawings of the actual configuration of the marks, identification of the finishes, and dating of the individual bottles.



Figure 4 – Heelmark (eBay)

The remaining sources were archaeological. The earliest (Herskovitz 1978) only listed the marks in tabular form with no drawings or photos. Although he included accompanying numbers or letters, we cannot be certain about variation or configuration of the marks. Fort Bowie, Arizona (the site for Herskovitz’ information) was occupied from 1862 to 1894. Wilson (1981) provided drawings of all the beer bottle bases he recorded at Fort Union, New Mexico.

³ Some of these had no number in the center.

Unfortunately, he used a template and identical fonts for each bottle, so, while we have a look at configuration, detailed variation is lost. Fort Union was occupied from 1863 to 1891. Although Lockhart and Olszweski (1994) originally dated the San Elizario, Texas, beer bottle pit at a greater range, a 2005 re-evaluation placed the pit's deposition at the 1880-1886 period. Lockhart re-examined and photographed the collection in 2005 as well as retaining the original drawings.

The Ayres group (1980) examined beer bottles from the Tucson Urban Renewal (TUR) collection. The project was huge and conducted over a ten-year period, and the various excavations covered different time periods. Despite the large collection of 454 beer bottles, the excavators only found three Wisconsin Glass Co. bottles. The Bottle Research Group examined the TUR collection in March 2006 and recorded the associated finish types (as well as photographing diagnostic the bases).

Lockhart was invited to visit Fort Stanton, New Mexico, in late 2005 and examined the surface glass from two beer dumps, each with several loci. Lockhart and his wife, Wanda Wakkinen, recorded significant bottle marks at that time and returned in April 2006 for a closer look at one of the sites. The site added to our list of accompanying numbers/letters for four variations of the Wisconsin bottles.

All examined bottles had applied finishes. Since investigations at Fort Stanton and subsequent studies suggest that applied finishes were used on beer bottles until at least 1896, it is virtually certain that all Wisconsin Glass Co. marks will be found on bottles with applied rather than tooled finishes. Current evidence suggests that applied finishes were the industry standard until ca. 1896 *for export beer bottles*, and that tooled finishes were probably not used prior to that date.⁴ There may have been an overlap period from ca. 1896 to 1900. Although data from the 1896-1900 period are scanty, it is almost certain that tooled finishes were the standard by 1900.

We only found Variation 2 (Plant No. 2) at a single locus of Beer Bottle Dump Site #1 at Fort Stanton. That locus was the earliest of the dumping episodes that took place between 1881

⁴ Tooled finishes were used to produce smaller bottles much earlier.

and 1886. Since other Wisconsin Glass Co. marks were found on later loci at the site, this placement suggests that the “WIS GLASS CO / MIL” mark may have been the earliest or one of the earliest in the sequence.

In addition, Peters (1996:134) showed “WIS G CO MILW” embossed on the front heel of a soft drink bottle. He also showed a base (same page) with the same configuration as Variation 2 (Plant No. 1) but with no accompanying letter. All of the other examples we have examined came from beer bottles. Heel marks apparently were used occasionally on sodas but rarely (possibly never) used on beer bottles. A single bottle has been reported on eBay with “WIS. G. CO. MILW” embossed on the back heel. Kroll (1972:49, 116) listed two Wisconsin beer bottles marked “W.G.Co. As is often the case with breweries, both breweries were in business too long for their ranges to help date the mark.

Discussion and Conclusions

Several factors helped us to determine how to classify these logos and how to create a relative dating scheme. The list of variations (above) places the marks in the probable order of use, although placing more absolute dates on them is not possible with currently available methods.

Classifying the Marks

There are three ways to approach classification of the Wisconsin Glass Co. marks. First, and most intuitive, is by configuration of lettering. This breaks the marks into three groups: 1) W.G.Co.; 2) WIS G Co; and 3) WIS GLASS Co. This would suggest three different time periods or possibly three divisions for other reasons. The time periods possibility suggests the second classification system.

Second is by complexity. When we first began the study of Wisconsin bottles, we looked only at unidirectional complexity – starting with the simple and becoming more complex. From that view, marks began in simple form (i.e., “W.G.Co.”) and developed into complexity (“WIS G Co” to “WIS GLASS Co”). However, it is equally possible that the marks developed in the

opposite direction (i.e., complex to simple) or even that there is no relationship to complexity at all. As noted above, we abandoned this approach in favor of the next one listed below.

Third is by historical distinction. As noted above, the original two factories (Chase Valley No. 1 and Chase Valley No. 2) remained in operation with the inauguration of the Wisconsin Glass Co. If two plants remained open – and used distinctive marks – then there should be a pattern within the seemingly complex configuration set of mark variation presented above.

Finally, there is a division by manufacturing technique. Post bottoms on the bottles fall into two distinct patterns: 1) small posts; and 2) large posts. Although we have found no direct historical reference to the change in technique, empirical evidence suggests that smaller posts were generally used during the early period (ca. 1874-1882), although there are some exceptions that were made later. The reverse, however, is not correct. Larger posts were used throughout the period of the 26 ounce “quart” beer bottles with non-crown finishes (early 1870s-ca. 1915).

Combining these assumptions and data, we find an interesting picture. Ignoring the single mark of only “W.G.Co.” for the moment, our dichotomous plant assumption neatly divides into three “WIS G Co” marks for one plant (called Plant No. 1 for convenience) and three “WIS GLASS Co” marks for the other (Plant No. 2) (not counting the heelmark as a separate variation). If we then combine “W.G.Co.” with “WIS G Co,” we have a neat dichotomy for the marks.

Conclusion

Because the Wisconsin Glass Co. consisted of two factories, it is most likely that the wide variety of marks were plant specific. Although it is impossible to determine which plant used which marks, the variations nonetheless fit into a dichotomous pattern, each with four variations that fit into a relative pattern. However, all of this is of little help with tightening date ranges. Because the firm was only in business from August 1881 to ca. August 1886 – almost exactly five years – any mold used by the firm could have remained in use during the entire period. Any of the earlier, smaller baseplate molds *could* have continued in use or have been returned to use during the final years of the operation. It is possible that Variation 4 (Plant No.

1) was used only during the final year – but that does not create a very serious reduction in range.

Acknowledgments

We would like to thank Wanda Wakkinen for her tireless proofreading.

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Last updated 8/30/2020