

## Chase Valley Glass Co.

Bill Lockhart, Beau Schriever, Carol Serr, and Bill Lindsey

When Dr. Enoch Chase opened his Chase Valley Glass Co. in 1880, he set into motion a series of at least five glass houses that produced beer bottles and other containers for over 40 years. Chase Valley Glass Co. almost immediately split in two as Chase Valley No. 1 and Chase Valley No. 2. Both firms were short-lived, reuniting in the reorganization that created the Wisconsin Glass Co. in 1881.

### Histories

#### Chase Valley Glass Co., Bayview (Milwaukee), Wisconsin (1880)

After Dr. Enoch Chase retired from his medical practice, he began experimenting with sand found near Milwaukee Harbor in 1879. The sand consisted of 60% silica, and Chase produced some colorless bottles in an experimental furnace. The *Milwaukee Sentinel* (March 22, 1880) announced that Chase had begun work on a glass plant – located on his farm at Bayview (now the southern part of Milwaukee) – on March 12. The works was near completion in May. The *Brick, Pottery, and Glass Journal* (1880:91) announced that “the Chase Glass-Works at Milwaukee, Wis., will be put in operation on September 1st [1880]” (Reilly 2009 [1997]).

The initial works consisted of two furnaces, located in separate buildings on the north side of Chase St. Joseph Slimm<sup>1</sup> returned from a recruiting trip to the East in late July with experienced glass workers, and at least one of the furnaces was in production prior to the formal opening on September 1, 1880. Although sources are very ambiguous about the original name, Chase may have called his company the Chase Co. as attested by some bottles embossed “C Co” (see below). The name was probably soon changed to the Chase Valley Glass Co., but the two plants were about to split (Reilly 2009 [1997]).

---

<sup>1</sup> Slimm also opened the Golden Glass Works (Colorado) in 1886.

## Containers and Marks

Chase used molds with at least two, possibly as many as four manufacturer's marks during this period. One of these marks has been found with three different mold numbers and a single letter, but it is possible that only a single mold was made for each of the other variations.

### C / MILW (1880)

Toulouse (1971:111) identified this as the first mark used by Chase in 1880. The "C:" was at the top of the base, with "MILW" in an inverted arch at the bottom. Herskovitz (1978:8) found seven of the C / MILW marks on beer bottle bases at Fort Bowie (1882-1894). They were accompanied by numbers 1-3. The C / MILW mark from the Tucson Urban Renewal Project was also shown in Ayres et al. (1980) accompanied by a 3. Since the plant was small and only open for a short period, the only numbers used may have been 1-3, although a base from Fort Stanton included a "K" in the center. Jones (1965:[34]) noted the mark as C Mil. (probably a typo) on a beer bottle base but had no idea of the maker. When the Bottle Research Group (BRG) visited the Tucson Urban Renewal (TUR) collection in 2006, we found several export beer bottles with the C / {number} / MILW marks (Figure 1). These were all amber in color with one-part applied finishes.



Figure 1 – C / MILW  
(Fort Laramie collection)

### C Co / MILW

This mark was only identified by Toulouse (1971:111) and Reilly (2009 [1997]). We have not seen an actual example of this logo, although this may be a reference to the C Co 2 / MILW logo.

### C.C.MILW

Kroll (1972:72) listed a single example of the C.C.MILW mark (possibly actually C.C. / MILW or C Co / MILW or C Co 2 MILW) on a rare Linginger & McElroy beer bottle. The brewers were in business "about 1880." Kroll (1972:3) also noted that "it is conceivable that the

initials could stand for Cream City Glass Co., but the bottles found seem to date with the Chase Valley period.”

### **C.V.G.CO. / + / MILW (1880)**

The C.V.G.CO. logo was reported by Ayres et al. (1980:unnumbered page), Reilly (2009 [1997]), Maas (2014), and we found an example in the Fort Laramie collection (Figures 2 & 3). The mark may have belonged to the earliest company and was used prior to the opening of plant No. 2 (although Reilly attributed the logo to the No. 2 factory). The plus sign is also unique in the Chase Valley series and was probably a mold maker’s “signature.” An eBay auction also included a photo of the mark without the plus sign. The mark was probably only used in 1880 – although the mold was likely used until it wore out.



Figure 2 – C.V.G.CO.  
(Maas 2014)



Figure 3 – C.V.G.CO. / +  
/ MILW (Fort Laramie  
collection)

Kroll (1972:39, 58, 66, 109) listed four Wisconsin beer bottles marked C.V.G.Co. Although all four breweries were in business for long periods, each could have used bottles made in 1880. Kroll noted one of these bottles as “rare” and the other three as “very rare.” The rarity designations support the idea that bottles marked C.V.G.Co. were only made in 1880. Bottles made only during a single year could be expected to be found more rarely than those made for a longer time span.

### **Chase Valley Glass Co. No. 1, Bayview (Milwaukee), Wisconsin (1880-1881)**

On July 28, 1880, Dr. Chase formed a corporation to operate the larger of the two glass houses, while he retained full ownership of the smaller one. This smaller unit became the Chase Valley Glass Co., No. 1, and its single furnace and four pots was capable of producing 4,500 bottles per day. The plant used sand shipped in by rail from Greenfield, Wisconsin. The grand opening on September 1 drew large crowds, with blowers spending much of their time creating knickknacks, such as canes, soup ladles, and other glass items. Although Chase had plans for a third factory, it was never built. Two of Chase’s sons – Clarence and Clifford Chase – worked at

the No. 1 unit along with eight blowers and 30 other men The *Milwaukee Sentinel* described the unit as “experimental” (Reilly 2009 [1997]).

Chase apparently used a furnace at No. 1 that was designed by a Mr. Johnson. In a dispute over royalties, he closed the smaller plant down temporarily in November 1880. Chase installed newer equipment, and the plant was back in operation by December. Factory No. 1 remained under Chase’s independent control until the reorganization that created the Wisconsin Glass Co. on August 2, 1881 (Maas 2014; Reilly 2009 [1997]).

### **Containers and Marks**

Unlike the earlier plant, Chase Valley Glass Co. No. 1 only left a single known mark. According to Maas (2014), “The most common bottles from factory 1 are coffin flasks that are usually found in aqua and light shades of green and olive green. These flasks tend to be very crude, including the mold markings.”

#### **C.V.N° 1 / MILW (1880-1881)**

Export beer bottles embossed on their bases with “C.V.N° 1 / MILW” have been reported in small numbers by Ayres et al. (1980), Jones (1966:7; 1968:15), Lockhart and Olszewski (1994), and Wilson (1981:115). Although Wilson drew his example on a large post bottom, all others were reported in a small post (Figure 4). In each example, the “o” in “No” was in superscript but was not underlined. Mold numbers in our sample ranged between 5 and 9 (with a dot in front of the “9” like a decimal point).



Figure 4 – C.V.N° 1 (eBay)

It is interesting that the lowest number in the sample is 5; the company may have continued the numbering system from the original factory (1–3). In any event, the mark should be dated between 1880 and 1881. Flasks with the Chase Valley No. 1 logo may only have been used locally. Although Maas reported these as common, we have only seen export beer bottles with the mark outside of the Milwaukee area – “exported” to the west by the breweries.

## Chase Valley Glass Co. No. 2, Bayview (Milwaukee), Wisconsin (1880-1881)

Chase sold the larger plant to the Chase Valley Glass Co., which incorporated on July 28, 1880. All the secondary sources use a date of August 2 for the incorporation, but the actual incorporation records (written in long hand on legal-size paper) date the signing of the charter on July 28 (Figure 5) and the filing date at August 14. The incorporators stated the purpose of the business as “making and manufacturing glass and glassware of all kinds and selling, trading and dealing and shipping the same.” The official name of the firm was the Chase Valley Glass Company No. 2 of Milwaukee. The principals began with a capital of \$24,000, and the document was signed by Dr. Enoch Chase, Charles Julius Meyer, and Guido Pfister (Incorporation Records).

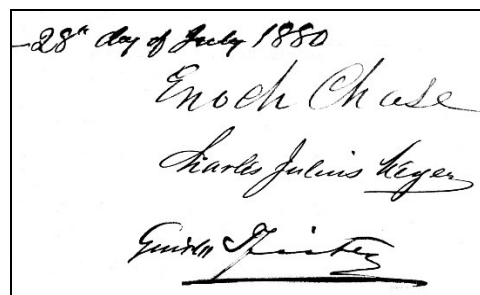
The image shows a rectangular box containing three handwritten signatures in cursive. At the top left, the date "28<sup>th</sup> day of July 1880" is written. Below the date, the signatures are stacked vertically: "Enoch Chase" at the top, "Charles Julius Meyer" in the middle, and "Guido Pfister" at the bottom. The signatures are written in dark ink on a light background.

Figure 5 – Corporate signatures, July 28, 1880 (Articles of Association)

Chase held the controlling interest in the firm and was the president, with Pfister as vice president, and Joseph Slimm as plant superintendent. The factory began production on September 1 with a single, 8-pot, coal-fired furnace, manned by 16 blowers and 35 other employees. This larger factory made a general line of bottles and fruit jars (including Mason jars) – as well as window glass – in blue, amber, and several types of green, although beer bottles were the best seller for both plants, supplying most of Milwaukee. An advertising point was the ability of the factory’s export beer bottles to stand the high level of pressure produced by the pasteurization process. Paper labels on Chase Valley beer bottles show that they were used by Best, Blatz, and Schlitz. Despite the emphasis on beer containers, the plant seems to have made virtually no soda bottles (Kroll 1972:2; Kupferschmidt & Kupferschmidt 2003:24; Noyes 1962:2-3; Reilly 2009 [1997]; Toulouse 1971:111-112).

Workers kept the furnace burning 24 hours each day, although they only made bottles during the daylight hours. Blowers worked in pairs and were paid by the piece. An average blower made \$6 or \$7 for his daily labor, a high rate for that era. With furnaces operating at 2,600 degrees, the *Sentinel* described the workers as “wet as drowned rats.” Capacity for the furnace was 8,000 bottles per day or 50,000 gross each year. Sand for the No. 2 plant came from the east shore of Lake Michigan (Reilly 2009[1997]).

According to Noyes (1962:4), “After twelve months of operation, the Chase Valley Glass Company No. 2 underwent reorganization. The firm name was now the Wisconsin Glass Company.” On August 2, 1881, the company officially changed names and increased the capital stock from the original \$24,000 to \$30,000. The new document was signed by Guido Phister, president, and Charles J. Meyer, secretary (Incorporation Records).

### **Bottles and Marks**

According to Maas (2014), Chase No. 2 made “several varieties of whiskey flasks, household bottles and druggist bottles. There are very few soda or mineral water bottles known – Hutchinson style and a quart blob soda styles.” At least three variations of the mark exist, possibly two more. Each logo had the top segment embossed on the base in an arch, while the lower part (MILW) was in the shape of an inverted arch.

It is very likely that the vast majority of products lacked any identifying marks. By 1880, most manufacturers of export beer bottles used some form of company logo on bottle bases. However, the same firms often left other containers types unmarked. It is possible that the brewers who “exported” their beers to the U.S. West and to other countries required manufacturer’s marks on their containers.

### **C.V.C<sup>o</sup>N<sup>o</sup>2 / MILW (1880-1881)**

Only a single example of this logo appeared in Wilson (1981:115) on the base of an amber beer bottle. Herskovitz (1978:8), however, found 25 bases with these marks (although he noted the variation as C<sup>o</sup>) with the numbers 1-8 (including a backwards 7) and a single letter, T. Lockhart and Olszewski found 10 amber beer bases with this embossing, although all contained a superscript “o” in “Co” with no underline. On one base, the “o” was underscored with a dot. In all cases, the “o” in “No” was an underlined superscript. The marks were accompanied by numbers 4-8 in the center of the bases.



Figure 6 – C.V.C<sup>o</sup>N<sup>o</sup>2 basemark (Maas 2014)



Figure 7 – CV export beer bottle (eBay)

Ayres et al. (1980:unnumbered page) also showed this mark with a superscript “o” in “Co” and numbers 3-8. Jones (1966:7; 1968:15) showed the mark with a capital “O” in “CO” and a normally-placed “o” in “No.” This is probably a case of recording error rather than a legitimate variation. Other bases from the Tucson Urban Renewal Project, eBay, Fort Stanton, and Fort Laramie extend the total numbers from 1 to 8 (Figures 6-8). All variations of the mark should be dated 1880-1881. The Maas photo shows detail of the “C<sup>o</sup>” – which usually had two dots below it, although one example appears to have an underline and another appears to have no underline or dots.



Figure 8 – Detail of finish (eBay)



Figure 9 – C.V.N<sup>o</sup>2 basemark (Maas 2014)

The single-digit numbers were probably mold codes, and they likely showed that the factory only ordered eight molds for export beer bottles during the single year the plant was in operation. It is likely that several of these were ordered at once, although some may represent a second order. The examples we have photographed (1, 2, 3, 5, 6), all show similarity in font, font size, and configuration of the logo. The “2” in “No. 2” is in an unusual style that is similar on all bases.

### C.V.N<sup>o</sup>2 / MILW

Maas (2014) included a photo of this mark on his webpage (Figures 9-11), and we have seen an example on eBay. These may have



Figure 10 – CV champagne beer bottle (Maas 2014)



Figure 11 – Detail of finish (eBay)

been the earliest bottles produced at the No. 2 factory because the logo only appears on export beer bottles with a small post bottom.

**CCO2 / MILW**

This mark is found on the base of a grooved-ring wax-sealer fruit jar with CCO2 in an arch at the top of the base, and MILW in an inverted arch at the bottom of the base (Maas 2014 – Figure 12). Creswick (1987:27) dated the mark 1880-1882 – although 1881 is the correct end date (Figure 13). Maas (2014) also recorded this variation of the logo on packer bottles (Figure 14). Note the very unusual rendition of the “2” on both the wax-sealer and packer bases.



Figure 12 – C Co 2 on jar base (Maas 2014)

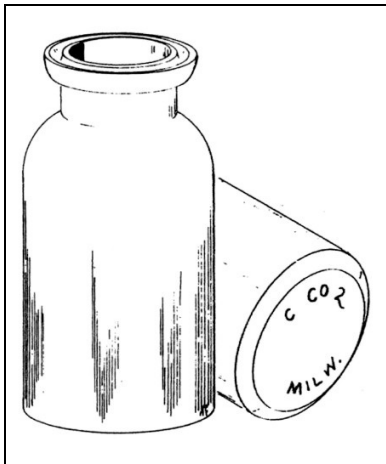


Figure 13 – Wax Sealer Fruit Jar (Creswick 1987:27)

He identified the maker as the Chase Valley Glass Co., Factory No. 2 and dated the mark from 1880 to 1881. This may be a mis-recording of the “CCO2” logo discussed above.

**C.V.G.Co. / No 2 / MILW**

Both Reilly (2004 [1997]) and Maas (2014) reported this mark, and Maas included a photo of an example (Figure 15). This logo may have



Figure 14 – C Co 2 on packer base (Maas 2014)



been one of the C.V.G.Co. molds used by the original firm prior to splitting into the two companies (see above). The “No. 2” may have been embossed in the center after the switch.

### Discussion and Conclusions

The three most common marks for these companies are C / MILW, CVNo1, and CVCoNo.2. Some of the rarer marks listed above certainly exist, although others may be recording errors. Any bottles with variations on the above marks may safely be dated between 1880 and 1881.



Figure 15 – CVGCo / No 2 (Maas 2014)

### Sources

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.

Creswick, Alice

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

Herskovitz, Robert M.

1978 *Fort Bowie Material Culture*. University of Arizona Press, Tucson.

Incorporation Records

1904-1914 Incorporation Records, Wisconsin Historical Society, Madison, Wisconsin.

Jones, May

1965 *The Bottle Trail, Volume 5*. Nara Vista, New Mexico.

1966 *The Bottle Trail, Volume 6*. Nara Vista, New Mexico.

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

Kroll, Wayne, L.

1972 *Wisconsin Breweries and Their Bottles*. Privately Published, Jefferson, Wisconsin.

Kupferschmidt, Donna and Marty Kupferschmidt

2003 "Glass Bottle Manufacturing in Milwaukee." *Bottles and More* 1(9):24-28.

Lockhart, Bill and Wanda Olszewski

1994 "Excavation and Analysis of a Nineteenth Century Bottle Pit in San Elizario, Texas." *The Artifact* 32(1):29-49. [B, D, EP, H,]

Maas, Peter

2014 "Antique 'Wisconsin Glass' Bottle Gallery." Mr.Bottles.com.

<http://www.mrbottles.com/galleryWisconsinGlass.asp>

Noyes, Edward

1962 "The Glass Bottle Industry of Milwaukee, A Sketch." *Historical Messenger* 18(3):2-7.

Peters, Roger

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

*Brick, Pottery, and Glass Journal*

1880 "Trade Notes." *Brick, Pottery, and Glass Journal* 7(9):91-93.

Reilly, Michael R.

2004 "The Wisconsin Glass Industry."

[http://www.chiptin.com/antiquibles/glass\\_bottles.htm](http://www.chiptin.com/antiquibles/glass_bottles.htm) [taken from *The Milwaukee Antique Bottle & Advertising Club: The Cream City Courier - A Special 25th Anniversary Issue*, compiled & edited by Michael R. Reilly, privately published, 1997.]

Toulouse, Julian Harrison

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

Wilson, Rex

1981 *Bottles on the Western Frontier*. University of Arizona Press, Tucson.

Last updated 5/7/2014

