

# THE DATING GAME: Tracking the Elusive Monogram Carl Conrad & Co., Olean Glass Works (Co.), and a Man Named O'Hara

By Bill Lockhart, Pete Schulz, David Whitten, Bill Lindsey and Carol Serr

It all started out innocently enough when David Whitten asked if anyone knew which company made bottles for C. Conrad & Co. In attempting to unravel the mystery, we discovered a monogram that was very similar to the one on the base of the Conrad bottles. However, the attempt to isolate the connection between the two monograms only deepened the enigma. Over a period of time, we have created and rejected several hypotheses before reaching an acceptable conclusion.

Although Carl Conrad was neither a brewer nor a bottler, he contracted with Anheuser-Busch, then the brewers of St Louis Lager Beer, to brew and bottle his beer for him. Conrad advertised his beer as “the Original Budweiser,” and there seems to be no doubt that his was the first use of that name on the American market. Although he was only in business for about six years, his use of embossed monograms on export beer bottles assured him a place in the history of manufacturer’s marks.

There is currently a dispute between Anheuser-Busch and Budejovicky Budvar of the Czech Republic about which company has the right to the name “Budweiser.” The name, itself, derives from a Czech town, Ceske Budejovice, or Budweis (in German). Although Anheuser-Busch claims rightful use of the name due to its import to the United States in 1876, Budejovicky Budvar maintains its right to the title because the name was used in Czechoslovakia for years prior to that. There is little doubt of the Anheuser-Busch claim (see below for a discussion of the date): Carl Conrad and his wife both confirmed that they transferred the name and rights to Anheuser-Busch as part of the January 15, 1883, bankruptcy (Plavchan 1976:72-73).<sup>1</sup> For more details about the case see Lee (2006).

## CC&Co monogram (1876-1882)

Let’s begin with an enigmatic reference. Toulouse (1971:117-118) illustrated the

simple initials “C C Co” and associated them with Carl Conrad & Co. He dated the alleged mark at 1876-1883. We have been unable to find a single bottle with this mark, and it appears that he probably intended to describe the CC&Co monogram, that is actually found on Conrad’s Budweiser bottles, from references sent to him. Toulouse apparently obtained his information from Thomas J. Carroll. Carroll wrote at least two letters to May Jones about the AB-connected manufacturer’s mark and about Carl Conrad’s involvement with Anheuser Busch (Jones 1963:[19-20]; 1964:[16]), and Toulouse was a part of Jones’ glass collectors’ network. Another letter with the same information about Conrad (and much more) was written in 1967 and published by Berge (1980:114-115).

Toulouse likely obtained his information from the 1967 letter, prior to its publication by Berge. Carroll wrote that “the letters CCCo appeared on the bottom of the bottle. This type of bottle was in use from 1878 to 1883” (Berge 1980:114). Jones (1964:[16]) quoted Carroll as stating the mark was “C.C.C & Co.” The mark is more correctly described as a CC&Co monogram.

Conrad did not actually manufacture containers but contracted with an established glass house (or various companies) to make each bottle embossed with his name on the side and his monogram on the base (as well as generic bottles with the monogram on the bases). All the examples that we have observed are export-style bottles. Toulouse’s beginning year, 1876, probably referred to the year Conrad returned from Germany (Toulouse said he went to Germany in “the mid-1870s”) and teamed up with Anheuser.

Although Carroll (Berge 1980:114; Jones 1964:[16]; 1968:13) noted that Conrad registered the Budweiser trademark (#6376) in 1878, three sources indicate that Toulouse was correct about the beginning

year. The *Oakland Tribune* (10/19/1876:3) advertised “Budweiser, Milwaukee, Culmbacher, Boca and Lager Beer” as being sold in California in late 1876. Of even greater importance is Conrad’s trademark application, itself. It actually included three trademarks: “Carl Conrad & Co.”; “CC&Co”; and “Budweiser,” although all were shown on paper labels [Figure 1]. The trademark was not registered by the Patent Office until 1878, but the application text specified that the trademarks had all been used since January 1876. Finally, Plavchan (1976:72) set the date at 1876. Plavchan’s history of Anheuser-Busch is one of the best.

The Toulouse end date for the mark is the date of Conrad’s insolvency; however, since Conrad declared bankruptcy on January 16, 1883 (*New York Times* 1/17/1883), it is unlikely that any bottles were made for him in 1883. A more likely end date would be 1882. The reason for the dissolution is worth some discussion.

Baxter (1998:4) hypothesized that Conrad was forced out of business because of the bottle shortage in the West. Beer and other bottled products were shipped long distances by wagon under difficult conditions. Because of this, the empty bottles became an important commodity. Miles (1986:78) confirmed this during an earlier period, when he noted that “teamsters could purchase a dozen bottles of liquor in Missouri for four dollars each, drink the contents along the way, and trade



Figure 1: Paper Neck Label with C. Conrad & Co. Monogram (eBay)

the empty bottles for six dollars worth of produce each in New Mexico.” Thus, virtually all bottles were reused. It is particularly true of the Southwest that a proliferation of bottles was directly tied to the arrival of the railroad (see Lockhart 2001 for a more complete discussion of this phenomenon).

For breweries to profit from container sales, it was important that most bottles be returned. Unfortunately for the original bottler, the bottles were often not returned to the owner (the brewery) but continued to be refilled by competitors at the point of sale. The railroads alleviated the problem to some extent, but there were still many remote areas where bottles continued to be valuable well into the late 1880s or even later. Baxter’s argument that Conrad may have lost so much money on bottles that he was forced into bankruptcy thus is plausible. Baxter’s hypothesis, however, fails to explain why other brewers remained in business under the same circumstances. A *New York Times* article (1/17/1883) noted that Conrad’s bankruptcy was due to over-extension, although bottle loss may still have played a part.

The *New York Times* (1/17/1883), however, offered an alternative explanation. According to the *Times*, the very success of Conrad’s venture led to its demise. Conrad had grown so fast that he “erected new buildings on Sixth Street, entered them, and established branch houses throughout the country.” Because “their branch houses were so scattered they found it impossible to get in collections as rapidly as they were needed.” Although “collections” probably referred to money, Baxter’s hypothesis may also have contributed to the overall problem. At the top of the list of Conrad’s principle creditors was Anheuser-Busch, although Adolphus Busch informed the paper that Conrad’s assets were expected to be sufficient to cover the debt. A meeting of the creditors on January 22, however,

showed that Conrad’s assets would actually be about \$140,000 short of meeting bankruptcy (*New York Times* 1/23/1883).

The mark, however, may be more difficult to place than the cause of bankruptcy. May Jones (1964:n.p.; 1966:6; 1968:13) was the first to identify the monogram as belonging to C. Conrad & Co. She showed four very slight variations of the mark (mostly with accompanying letters and numbers), including one where the mark was surrounded by Xs. Ayres et al. (1980:10-11) followed Jones in identifying the mark as belonging to Conrad. Wilson (1981:114) showed beer bottle bases with this mark in connection with Ft. Union (1863-1891) but failed to identify the maker. Herskovitz (1978:11) stated that he found “69 bottles with the ‘CCCO’ monogram of Carl Conrad Company, a firm that produced and bottled beer for Anheuser.” Herskovitz recorded accompanying codes of A-L, “2 dots,” or a single numeral, “1.” We have now accumulated 14 photos of bottles with the CC&Co monogram including both those with the “ORIGINAL BUDWEISER/C. CONRAD & CO” embossing on one side and examples without body embossing.

Ayres et al. (1980:unnumbered pages) illustrated the CC&Co monogram in greater detail, including a serif on the upper termination of each “C” and a serif-like embellishment centered in the “C” curve. Baxter (1998:4) showed drawings of four variations of the bottles with at least two variations of the CC&Co monogram embossed on their bases. On one style, each “C” also had a serif. One bottle illustrated by Baxter is amber in color (all other reported Conrad Budweiser bottles – and ones we have observed – were aqua) with no embossing on the sides and no ampersand in the monogram. This is likely the OGCo monogram (see below). All OGCo monograms we have seen are faint and easy to misread.

Wilson (1981:3, 6) showed two bottles embossed with C. Conrad & Co. labels on the side and CC&Co embossed on the base. In addition, the bottles were embossed with D. O. C.<sup>2</sup> on the heels. We discovered an additional CC&Co-marked bottle, with the D. O. C. mark, in the TUR collection. The D. O. C. mark was used by D. O. Cunningham from 1880 to 1931 (see Lockhart et al. 2005 for revised dates for marks). Therefore, Cunningham made Conrad’s bottles within the last two years prior to Conrad’s bankruptcy.

Between eBay photos, bottles owned by group members, secondary sources, and bottles we have observed in collections, we have determined that the CC&Co monograms fall into two broad categories, each with sub-variations. The major variations center around the presence or absence of serifs on each “C” in the logo (Type I and Type II).

The sans serif marks (Type I) are subdivided according to the centering of the logo. One style has the logo centered on the base (Style A). These are further subdivided into logos with no accompanying numbers (Variation 1) and those above single-digit numbers (Variation 2). A sub-variation of Variation 1 has “D O C” embossed on the heel (see above). Style B has the logo positioned above the center of the base.

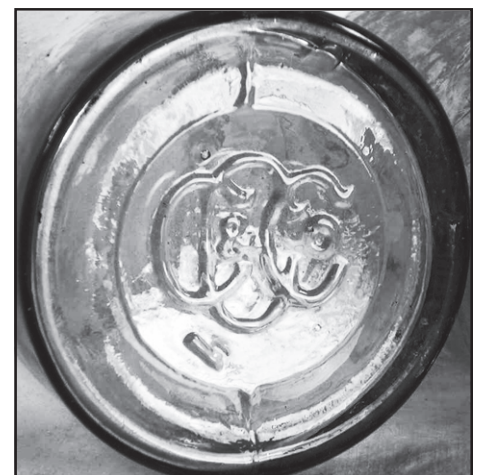
Serif logos (Type II) are also divided into two styles. Style A has a serif atop each “C”; Style B has serifs along with embellishments at the center of the “C” curve. Only one example of Style B is known, but Style A has several examples, each with a single letter below the logo (although a single example has no letter but has an embossed short line offset below the mark).



**Figure 2:** CC&Co Monogram, Type I, Style A (eBay)



**Figure 3:** CC&Co Monogram, Type I, Style B (eBay)



**Figure 4:** CC&Co Monogram, Type II, Style A (Lindsey)

## Type I – Sans Serif Logos

## Style A – Centered Logos [Figure 2]

Variation 1 – Logos with no accompanying numbers

Sub-Variation – “D O C” embossed on heel

Variation 2 – Single-digit numbers below the logos

Style B – Logos at top of post mold lines [Figure 3]

Type II – Serif Logos<sup>3</sup>

Style A – A single serif atop each “C” along with a single letter or number below the logo [Figure 4]

Style B – Serifs plus embellishments at the “C” curve (Figure 5, also see Figure 1)

We were unable to find any relationship between the various logo styles and whether or not the bottle was embossed on the side with “ORIGINAL BUDWEISER/C. CONRAD & CO.” [Figure 6]. Bottles with side embossing are found with both serif and sans serif logos. However, a possible sequence of manufacture may be created (although any of these could overlap):

ca. 1876-1878 logo on base; no side embossing; no heel mark

1878-1880 logo on base; CONRAD & C O / O R I G I N A L / BUDWEISER/PATENT No. 6376 on side; no heel mark

1880-1882 logo on base; CONRAD/BUDWEISER on side; DOC heel mark

According to the Anheuser-Busch sources, the company “acquired rights to bottle and sell Budweiser” in 1883, the year



Figure 5: CC&Co Monogram, Type II, Style B (TUR Collection)

Conrad declared bankruptcy (Anheuser-Busch 2003; Carroll in Berge 1980:114; Jones 1964:[16]). Carroll noted that Conrad “eventually became an employee of Anheuser-Busch Brewing Association” (Jones 1964:[16]), although he was unclear about the time period. Conrad did not actually assign the trademark to Anheuser-Busch until 1891, and the “CCCo (sic) insignia and the name C. Conrad & Co. remained on the [paper] label until around 1920” (Berge 1980:114). Ayres et al. (1980:11) followed the lead of Jones (1964:[17]) in dating the mark’s use from 1876 to 1891, evidently in the belief that Conrad continued using the mark after his bankruptcy. We have found no evidence to support the use of the embossed monogram after the 1883 bankruptcy and suggest that the researchers misread the Carroll information.

## Discussion and Summary

The CC&Co monogram is clearly associated with Carl Conrad and his company that procured (but did not manufacture) bottles for beer actually produced by Anheuser-Busch. Bottles embossed with the Conrad name and logo may have been made as early



Figure 6: Original Budweiser Bottle (Lindsey)

as 1876 when Conrad first began producing Budweiser. Since the CC&Co monogram is also found on bases of o t h e r w i s e u n e m b o s s e d e x p o r t b e e r b o t t l e s, t h e b o t t l e s m a y h a v e b e e n u s e d p r i o r t o t h o s e e m b o s s e d w i t h B u d w e i s e r. I n a l l p r o b a b i l i t y, m a n u f a c t u r e o f t h e b o t t l e s w i t h t h e e m b o s s e d m o n o g r a m s t o p p e d a b r u p t l y a t t h e e n d o f 1882 t o c o i n c i d e w i t h C o n r a d ’ s b a n k r u p t c y i n J a n u a r y 1883. A l l b o t t l e s w i t h t h e C C & C o m o n o g r a m t h a t w e h a v e

examined or found on the internet were topped by applied finishes, dating them most likely to the 1873-1896 period (See Lockhart 2006b).

## The OGCo Monogram

Wilson (1981:114) also showed a monogram that was very similar to the one from Carl Conrad & Co and was also found on beer bottle bases. This mark had a “tail” on the lower part of the initial “C” to form a “G”; the ends of the central “C” had been joined to form an “O”; and the ampersand (&) was removed [Figure 7]. Visually, the marks are very similar, almost identical to a casual glance. Both marks were also embossed less distinctly than was common on the simpler letter marks of the time period (ca. 1875-1891). A final similarity was the inclusion of small Xs surrounding the Conrad logo (Wilson 1981:114) and a similar scattering of Xs on an OGCo-monogrammed bottle OGCo Monogram recorded in the database for the San Elizario bottle pit (Lockhart & Olszewski 1994).<sup>4</sup>

The mark with Xs was also recorded by Jones (1968:28). She observed it on both bottle and jars and noted the color of the containers as “clear azure blue.” The mark is identical to the one identified by Toulouse (1971:400) as belonging to the Olean Glass Co. of Olean, New York, although the date ranges do not match (see below). The CC&Co monogram was shown by Wilson (1981:114) on “blue” (light blue or aqua) bases with letters below the logo or with no accompaniment. The OGCo logo was presented by Wilson (1981:114-115) on amber bases with four Xs around the logo, two Xs above it, or numbers above the monogram [see Figure 8].



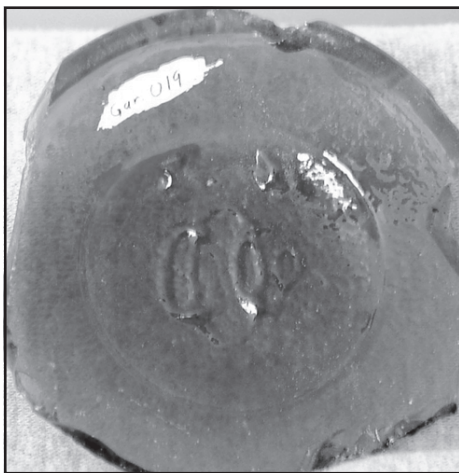
Figure 7: OGCo Monogram (TUR Collection)

In the discussion about the Conrad monogram (above), we noted several variations. Upon careful examination, all of the examples show several distinct differences between the Conrad and OGCo monograms. The Conrad marks have consistently wider letters. This is most noticeable in the central “C” of the Conrad mark in comparison to the much narrower “O” in the center of the OGCo logo. None of the five photographic examples of the OGCo monogram have serifs. A final notable difference is in the placement of “o” in “Co.” In all OGCo marks, the lowercase “o” is between the two terminations in the gap of the “C.” However, in all but two cases, the Conrad logo has the “o” distinctly inside the final “C.” The exceptions are both Type I, Style A, Variation 2 (see above).

Although the designs are very similar, dating remains confused. Conrad’s known years in business are from January 1878 to January 1883. Olean did not begin business until 1883 (see below) and remained open until 1913. This indicates that the monograms were not contemporary, although the earlier monogram may have inspired the later one.

To further confuse the issue, there was a second Olean Glass Co. from 1929 to 1935. Toulouse (1971:400) identified the OGCo monogram as belonging to the second company and dated it at “circa 1929 to 1942.” These dates are belied by the presence of bases with the monogram at Fort Union (1862-1891) and the San Elizario excavation (ca. 1880-1887).<sup>5</sup> According to Ayres et al. (1980:31-32), the monogram, should be dated 1887 to 1915, an assessment probably based on manufacturing techniques.

The OGCo monogram was also shown



**Figure 8:** OGCo Monogram with “x” Marks  
(San Elizario Collection)

on the base of a groove ring wax sealer fruit jar by Creswick (1995:165). It matches the one found on beer bottles [Figure 9], and the time period for this type of jar fits the known timeframe for the company. She identified the maker as the Olean Glass Co. (Works) and dated it 1887-1915.<sup>6</sup>

### Summary

To summarize our look at the OGCo mark, it was in use much earlier than the dates (1929-1942) given by Toulouse (1971:400). The mark was almost certainly used before the 1890s as shown by its presence at Fort Union and San Elizario (probably used before 1886). Bottles with the OGCo monogram from both San Elizario and the TUR collection at Tucson, Arizona, have two-part, applied finishes. Applied finishes on export beer bottles are now known to have been used between 1873 and ca. 1896 (Lockhart 2006b).

The comparisons and contrasts also need to be reviewed. The major differences are that the CC&Co-marked bottles are uniformly a light blue (or aqua)<sup>7</sup> in color, while the OGCo-monogrammed ones were recorded in both blue and amber. Serifs are present on some CC&Co bottles and absent on OGCo examples. The “o” in “Co” is inside the “C” on the CC&Co mark but is between the tips of the “C” in the OGCo mark.

However, the monograms look remarkably similar, especially without close examination. They are both formed from elongated, thinly, embossed letters, and both are found on blue or aqua bottles. Each is sometimes accompanied by small “Xs” above or surrounding the logo. Both the similarities and differences may be coincidental or may be significant, but neither is conclusive.



**Figure 9:** OGCo Monogram on Fruit Jar Base  
(Creswick 1995:165)

### The Olean Glass Company (Works)

In an attempt to synthesize these disjointed facts, we wrote the Olean Historical and Preservation Society, Olean, New York. The query was undertaken by Eileen M. Smith who “spent hours and hours ... at the local library” looking through Olean newspapers. Her results were enlightening. [Note that everything not cited in the follow section came from Smith.]

Samuel W. Pancoast an experienced glassworker from Millville, New Jersey, formed a corporation and built the Olean Glass Works in 1883.<sup>8</sup> The factory shut down after less than a year but was operational again a year later (1884). This, too, was short lived, and the plant remained idle until 1887. Unlike the earlier incarnations, this plant survived and continued to grow into the early 1890s. In 1893, the plant opened a new “eight-ring continuous tank” bringing the total plant capacity to 19 rings (Anonymous 1908). Fire destroyed the factory in 1894, causing a reorganization of the company.

The company incorporated in November 1894 (New York Times 11/25/1894; 1903 company letterhead) with Samuel W. Pancoast as president and members of his family as most of the principal investors. According to Smith’s research, the plant was rebuilt by 1897, although the completion could have occurred sooner. According to the *Era Blue Book* (Anonymous 1900), the firm was known as the Olean Glass Co. by 1900 and was making bottles. The 1903 letterhead listed “prescription ware, flasks, wines, beers, minerals, sodas. etc.” in “crystal, amber, and blue” colors. It showed factories in both Olean, New York, and Port Allegany, Pennsylvania.

By 1905, a company in Olean (probably Olean Glass Co. – see above) had installed “seven machines, making vaselines, inks, shoe polish and pint and half pint milks” (Anonymous 1912:1). These were some of the early semiautomatics. Unfortunately, we have not found the exact date for the installations. This was one of only five factories in the United States to make milk bottles by machine in 1905. Olean was also listed as making milk jars in the 1907-1908 and 1909 Thomas Registers (1907-1908:799; 1909:1101).

In 1907, Olean made “Prescription; Beer; Wine; Soda; Brandy; Packers’; [and] Preservers’” ware, along with fruit jars. At the same time, Acme made “Prescription;

Beer; Soda; Wine; [and] Brandy” bottles (Thomas Register 1907-1908:159, 799). In 1909 a factory in Olean (probably Olean Glass Co.)<sup>9</sup> operated 13 semiautomatic machines making “vaselines, inks, etc.” (Hayes 1909:1).

In 1913, the Acme Glass Co., a relative newcomer to Olean, New York, bought the Olean Glass Co. An article on machine manufacture in 1913 noted that the Acme Glass Co., Olean, New York, made “prescription, beer, liquor and water (i.e., soda)” bottles, vials and flasks. The same article noted Olean Glass Co. plants in Olean and Port Allegany, Pennsylvania. The Olean plants made a general line of bottles by both mouth-blown and semiautomatic machine technologies (Anonymous 1913:953). Acme apparently continued to run the Olean plant under the Olean name for a while, possibly until all existing contracts were filled. The Olean listing continued in the Thomas Register until 1915 (1915:578).

Acme built a new plant in 1927, but it was sold at auction two years later (1929) to local interests who renamed the plant the Olean Glass Co. The Olean announcement “assured a continuance of the same prompt service and the high quality packers’ ware [that customers] have been receiving in the past” (Olean Glass Co. 1929:430). Thatcher Glass Co. purchased the capital stock of Olean in 1935, although it announced that the Olean plant would continue to manufacture “containers for beer carbonated beverages, cider, foodstuffs, oils, polishes, proprietary medicines and vinegars” (Anonymous 1935:574). This opened up an entirely new venue for Thatcher. However, the Olean plant seems to have retained its own identity until Thatcher acquired complete ownership in 1943 (Anonymous 1944).

Toulouse (1971:400-402) was fairly accurate in his history of Olean Glass Co. (Works). He identified the original company as in business from 1887 to 1915, and the second company in operation from 1929 to 1942. However, he identified two marks, the OGCo monogram and an OG monogram as being used by the second company and O G W as being used by the first.

### Summary

The first Olean Glass Works was in business intermittently from 1883 to 1913, although the time period for the use of “works” and “company” is unclear.

However, few bottles were made prior to 1887. The second Olean Glass Co. operated from 1929 to 1943, although it was effectively controlled by Thatcher after 1935.

### OLEAN

According to Teal and Wallace (2005:96, 109, 149), the name Olean was embossed on the heel of a Jo Jo pint bottle from the South Carolina Dispensary. They identified the company as the Olean Glass Co.

### OG Monogram

Jones (1965:[22]) first identified this mark in print as belonging to Olean; however, she failed to add any dates. Toulouse (1969:229) dated a Mason jar with an OG monogram embossed on one side ca. 1929-1939. In his second book, Toulouse (1971:400) accurately identified the OG monogram as being used by the second Olean company, and dated the mark from 1929 to 1942. Creswick (1987:154) noted that the “trademark patent #271,692 was issued on June 17, 1930, to the Olean Glass Co., Inc. Olean, N.Y.” The text of the trademark registration indicates that the mark was first used on October 1, 1929, and consisted of the monogram in a circle [Figure 10]. Giarde (1980:75) showed the mark both by itself and in a circle, although he followed Toulouse’s dates. We have seen an example of the circle mark on a motor oil bottle from the 1930s and on a Wilken Whiskey bottle [Figure 11].

Although Thatcher gained control of Olean in 1935, the plant continued to operate independently as demonstrated by a 1938 Olean ad (*Glass Packer*, November 1938). Because Olean continued to operate as its own entity until 1943, the Toulouse date of 1942 for the last use of the Olean monogram is likely correct or very close. Scholes (1941:129) also showed this mark as being used by Olean in 1941.

### O G

Toulouse (1969:229) noted this mark on



Figure 10 (L): OG Monogram

(Patent Office Drawing)

Figure 11 (R): OG Monogram (Serr)

the base of a fruit jar with a Lightning closure that he dated ca. 1900. We have found no other reference to an O G mark. The mark could have been an OC from the Oneida Community (see below).

### OGCo Monogram

The OGCo monogram was used during the late 19<sup>th</sup> century, and, if it were used by Olean, it might date from as early as 1883 (see Figures 7 and 8). It is found on fruit jars and beer bottles that were made during that period (see discussion above). However, there are problems with the Olean identification. According to Smith’s newspaper research, the plant made a general line of bottles by 1892. However, the name was always recorded in the early days as Olean Glass Works. Local newspapers referred to the company by both names (Co. and Works) in the 1890s, and the name had changed to the Olean Glass Co. by 1900. However, this does not tell the full story. Early records for the company are scarce. Many companies in the 19<sup>th</sup> century had different names for factory and the owner. Based on the use of both names during the 1890s, it is possible (even likely) that the Olean Glass Co. owned the Olean Glass Works.

Toulouse (1971:400), however, was correct that a very similar mark was used by the second Olean company. We have observed a pint whiskey flask embossed on the base with the OGCo monogram in a circle. The mark is somewhat indistinct, but it appears to be a bit different from the older monogram and is much smaller. This new logo is not only surrounded by a circle, it also seems to have lost the “o” in “Co.” The flask bears the “FEDERAL LAW FORBIDS THE RESALE OR RE-USE OF THIS BOTTLE” warning (required between 1933 and 1964) and was machine made. The bottle, therefore, must have been made during the second Olean period, 1929 to 1942.

### O. G. CO. I.

We have an example of the O. G. CO. I. mark on the heel of a Hutchinson-style bottle [Figure 12]. The container had what Elliott and Gould (1988:35) identified as

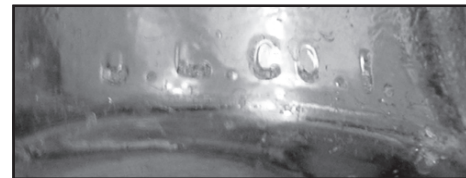


Figure 12: O G Co I Heelmark (Lockhart)

the “classic Hutchinson top” used by 1890. Thus, we can tentatively date the bottle as being made after 1890.

The Olean Glass Works/Co. was in business during three time periods – 1883-1884; 1887-1894; and 1894-1913 – with the term “Company” used more frequently in extant literature toward the final incarnation. A Hutchinson-finished bottle with the “classic” top could have been made during either of the latter two periods when the company was in business (see Elliott & Gould 1988:35-36 for a discussion of the “classic” finish). Because the company’s incorporation was in 1894, the mark should be dated between 1894 and 1913.

### O G W

Although Toulouse (1971:400) attributed the O G W mark to the Olean Glass Works, Tim Higgins, a long-time collector from California, assigned the mark to the Oakland Glass Works, Oakland, California [Figure 13]. The company was in business for about one year in the early 1880s, and the mark was embossed on the bases of whiskey bottles in fifth, pint, and half pint (union oval) sizes as well as various pharmaceutical shapes, square bitters-style bottles, and demijohns. The colors of the bottles vary, and all have applied finishes except for the half-pint flasks, which have tooled finishes. The only embossing on any of the bottles is the manufacturing marks on the bases. It is possible, of course, that the mark was used by both companies, but the consistency of the known bottles bearing the O G W mark – and that most, if not all, have been found in the far West – suggests that it was only used by the Oakland Glass Works. Bottles found east of the Mississippi, however, may indicate that both companies used the mark. More empirical study needs to be done.

### The Oneida Community

#### OC Monogram

The OG monogram could easily be mistaken for the OC monogram used by the



Figure 13: OGW Mark (Lindsey)

Oneida Community. Founded in 1838, in Putney, Vermont, the Oneida Community was an early experiment in communal living and industry. The group moved to Oneida, New York, in 1847 but later dissolved the community, reorganizing in 1881 as a corporation, formed to sell the farm products that had become well known in its earlier days. The community remained in business until at least 1912 but was absent from listings in 1915 (Caniff 2005:8).

Oneida packaged its products in jars embossed with an OC monogram and occasionally just the initials O C [Figure 14]. At least some of the jars were made by the Putnam Glass Co. and had the PUTNAM mark on their bases. At some point, the community began using paper labels that incorporated a slightly different OC monogram (Caniff 2005:8). Creswick (1995:165) also showed the O C mark on an “old style Lightning seal” fruit jar.

#### The Other “Os”

Because the identity of the OGCo monogram’s user is not positively known, we must seek other possible candidates. Only a very few glass company initials fit the OGCo logo, and most may be eliminated quickly due to dates in business or types of glass manufactured. The short list below is as comprehensive as the sources allow.

#### Ohio Glass Co. (or Works), Bellaire, Ohio (at least 1877-at least 1879)

The Ohio Glass Co. or Works (also called the Cassell after its owner) was leased to the Bellaire Goblet Co. in 1879.



Figure 14: Oneida Jars with OG Marks (Creswick 1995:165)

The plant was also listed as making lamp chimneys, lamp globes, and lampware in 1877 (Lehner 1978:21). We currently know nothing else about this plant.

#### Ohio Glass Co., Pittsburgh, Pennsylvania (1802-1804)

The type of glass manufactured by this company is unknown (McKearin & McKearin 1941:587; Toulouse 1971:402); however, the early dates for the company eliminate it as a possible user of the OGCo mark.

#### Omro Glass Co., Omro, Wisconsin

The Omro Glass Co. planned to build a plant in Omro in December 1852. There is no evidence that the plant was actually built, although materials were gathered. A factory was actually built in Omro in 1870 and operated until 1876. The plant produced window glass (Reilly 2005).

#### Ontario Glass Co. (1899-1903)

According to Creswick (1995:272), the Ontario Glass Co., Kingsville, Ontario, Canada, was in business from 1899 to 1903. Although she did not specifically state the type of glass made, the company almost certainly made fruit jars.

#### Oriel Glass Co. (1897-1899+)

The Oriel Glass Co. was listed in the St. Louis, Missouri, city directories from 1897 to 1899 and was possibly in business later. The factory was probably small as it had the minimum listing (not bold, not complex, no accompanying ad).

#### Osage Glass Co., Independence, Kansas (1905-1911)

Paquette (2002:55) briefly mentioned the company but gave no details. Julie Gosnell, Museum Coordinator for the Independence Historical Museum, Independence, Kansas, researched the company at our request and provided a brief history. On November 25, 1905, the Osage Glass Co. produced its first run of glass. The plant manufactured window glass. The firm was last listed in 1911 and may have been purchased by the National Sash and Door Co. The company was never known to have made bottles nor to have used a manufacturer’s mark.

#### The O’Hara Glass Operations O’Hara and Craig (1796-1804)

James O’Hara and Isaac Craig became partners in 1796<sup>10</sup> to form a glass

manufacturing company in Pittsburgh, Pennsylvania. The plant made window glass, clock faces, tableware, flasks, pickling jars and other hollow ware in the first coal-fired glass operation in the U.S. Craig moved west and dissolved the partnership in 1804 (Innes 1976:8-11, 18, 28; Knittle 1927:6, 209-215; Van Rensselaer 1969:172-174). The factory was leased by Eichbaum, Wendt & Co. from 1798 to 1800, when O'Hara & Craig resumed operations (Welker & Welker 1985:40).

### **Pittsburgh Glass Works**

With Craig's departure, O'Hara became sole owner of the Pittsburgh Glass Works. Between 1804 and 1810, O'Hara made jars, flasks, porter and claret bottles and produced "glass for chemical experiments" by 1809 (Innes 1976:88, 206). O'Hara died in December 1819, and Frederick R. Lorenz leased the firm and finally bought the operation in 1825. A series of other owners managed the factory into the late 19<sup>th</sup> century (McKearin and Wilson 1978:62-64). The firm may have also been referred to as either the O'Hara Glass Works or the O'Hara Glass Co. or both, but O'Hara was certainly not an official name.

### **O'Hara Glass Works and O'Hara Glass Co.**

Sources give two accounts of the founding and timeline for the O'Hara Glass Co., a completely separate company from the factory operated by James O'Hara (discussed above). McKearin and McKearin (1941:606) and Creswick (1995:280) noted that James B. Lyon & Co. established the O'Hara Glass Works in Pittsburgh, Pennsylvania, in 1848. The firm made flint glass tableware in pressed, blown, cut, and engraved forms.

However, an ad from the 1888 Pittsburgh city directory gave a different history of the company. According to this version, the factory grew out of the old Hay & McCully plant, established in 1829 and operated by a series of owners. By 1849, Wallace, Lyon & Co. had gained control, with James B. Lyon & Co. not operating the firm until 1852 (Creswick 1995:285; Hawkins 2004; Welker and Welker 1985:97).<sup>11</sup>

Regardless of the early history, Lyon "incorporated" the business in 1875 as the O'Hara Glass Co. and became the corporation's president.<sup>12</sup> The firm exhibited at the Pittsburgh Industrial

Exposition in 1875 displaying pressed glass (Innes 1976:51, 71; McKearin and McKearin 1941:606).<sup>13</sup> Along with its award-winning tableware, the plant made high quality table bottles, including toilet bottles of amber glass, bitters bottles, and water bottles (Creswick 1995:280; Innes 1976:67, 433, 486). The O'Hara Glass Co. became Factory L of the United States Glass Co., a conglomerate of 18 glass producers, on July 1, 1891. U.S. Glass sold the O'Hara plant to Park Bros. & Co. in 1893 (Carnival Glass 2004; Welker & Welker 1985:98).

### **Discussion**

The original company operated by James O'Hara was in business too early to have made the OGCo or Conrad bottles. The O'Hara Glass Co., operated by James B. Lyon, however, had initials to fit the OGCo monogram and was open during the correct time period to have made both the Conrad bottles and those embossed with the OGCo logo. However, there is no indication that the company ever made beer bottles of any sort, nor any other form of "common" container. All of the O'Hara products were noted for high quality. At this point, we have been unable to establish a connection between O'Hara and Lyon or any reason why Lyon chose the name.

### **Other Pittsburgh Glass Companies with "O" for a First Initial**

#### **O'Hara & Robinson**

The company was only listed in 1866 and 1867. Michael O'Hara and J. H. Robinson owned the Iron City Glass Works. The factory made "Black & Green Glassware, Window Glass, Druggists' Ware, Bottles, Flasks, Demijohns, &c." The advertisement noted that the company paid "particular attention to Private Moulds." The firm was probably an outgrowth of O'Hara, Schulze & Co., listed at the same address in 1865. Unfortunately, there are no later listings for the firm (Hawkins 2004).

#### **O'Leary, Mulvany & Co., O'Leary, Beck & Co., and O'Leary Bros. & Co.**

O'Leary, Mulvany & Co. operated the Birmingham Flint Glass Co. from ca. 1832 to 1845. Little more is known about the company, although we can deduce that they made colorless glass products. O'Leary, Beck & Co., manufacturers of window glass, began operations about 1880 but were listed as O'Leary Bros. by 1882. In 1885,

the firm was O'Leary Bros. & Co., and the business was last listed in 1893 (Hawkins 2004).

### **Oriental Glass Co.**

The Oriental Glass Co. made glass tableware from 1891 to 1918 (Hawkins 2004).

### **Mold Makers and "Signatures"**

During the 19<sup>th</sup> century, very few glass houses made their own molds. Glass company histories show that it is unusual to find a glass plant with its own mold-making capacity during that period. 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 "signature" on baseplates they made. 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. We suggest that a likely candidate is the "x" marks found on baseplates of some amber and aqua beer bottles from the ca. 1875-1890 period.

A possible mold maker's signature consisted of small Xs in conjunction with two different monograms. The CC&Co monogram found on the bases of Carl Conrad's Budweiser bottles were occasionally accompanied by one or more Xs around the outer edges of the base. May Jones (1964:n.p.; 1966:6; 1968:13) showed the Conrad logo surrounded with four, more-or-less-evenly-spaced Xs. An OGCo monogram was also accompanied by similar Xs, including patterns of two Xs above or four Xs surrounding the logo. In addition to the accompanying Xs, both monograms are remarkably similar.

### **A Possible Explanation**

A Midwestern mold-cutting company employed an engraver who cut baseplates for glass houses. He may have specialized in creating or cutting monograms. Around 1876, this engraver produced a plate (or series of plates) for Carl Conrad using the CC&Co monogram, "signing" his work with small Xs. The number of Xs on a plate might indicate the number of those plates he had made. We will never know for sure

At some point, another engraver made some of the plates without the Xs. The glass house making the bottles may have changed mold-cutting companies; the foreman may have given the task to another worker; or the original engraver may have terminated his employment. The use of the Xs vanished. It is also possible that the time periods involved were reversed – the X signatures may have been on the later bottles.

Around 1883, the engraver received another task of creating a monogram for the Olean Glass Co., the management company that owned the Olean Glass Works. Olean may even have requested an OGW monogram but conceded that the OGCo monogram was superior in style. Again, we will never know for sure. However, the monogram was applied to Olean plates, both with and without the distinctive “signature.” Since the first Olean was only producing from 1883 to 1884 and again in 1887, the bottles are scarce. The second Olean Glass Co. resurrected the monogram, just slightly altered, for use on its bottles during the 1894-1913 or the 1927-1935 period.

As a bit of a side venture, we can also speculate on which company made the original Conrad bottles. We know that some of the bottles were made by Dominec O. Cunningham between 1880 and 1882 (from the D O C manufacturer’s marks on the heels – see Wilson 1981). One reason why Cunningham might have been chosen is because his father’s company may have made the first bottles. Cunninghams & Co. may not have marked all of the bottles made by the company.

While the above account is certainly based on speculation, we submit that it is the most parsimonious possibility that anyone has currently produced. Future research needs to center around finding more Conrad bottles and, if possible, more with the OGCo monogram. A larger sample may provide further insights.

## Discussion and Conclusions

### Identification of the Monograms

There is virtually no question that the CC&Co monogram was used by Carl Conrad & Co., probably from ca. 1876 to 1882. Evidence indicates that Conrad was a jobber only, supplying bottles to Anheuser Busch but not actually manufacturing them. The evidence that Conrad continued to supply any bottles after 1882 or that

Anheuser Busch used the CC&Co mark (other than a different mark on the paper labels until 1920) or embossed the Conrad name on bottles after that date is too weak to justify its inclusion in the date range for either the monogram or Conrad’s involvement. Beginning in 1880, however, at the inception of the company, D. O. Cunningham made the Conrad bottles (as evidenced by the D. O. C. mark on the bottles’ heels) and continued until Conrad’s bankruptcy in January 1883. This sets the unknown period for the manufacturer of Conrad’s bottles at ca. 1876-1879.

The user of the OGCo monogram, while less certain, can nonetheless be identified. With one exception, firms with “OGCo” initials may be eliminated. Although the O’Hara Glass Co. (1875-1890) *could* have used the mark on beer bottles made for Conrad between 1876 and 1879, the making of beer bottles does not fit the ambiance of the company. Under James B. Lyons, the O’Hara Glass Co. made “high-end,” top-quality glassware. The few bottles made by the firm were intended for home use rather than common consumption.

The earlier firms operating the Pittsburgh Glass Works (James O’Hara’s former firms) would provide an even stronger probability for a beer bottle manufacturer, but there is no evidence that any company that operated the plant formally used the O’Hara Glass Co. name. It is also certain that neither the Ohio Glass Co., Oriental Glass Co., nor the Osage Glass Co. could have made the beer bottles found at either San Elizario or Fort Union. The former was in business too early; the latter two made only window glass or tableware.

There remains only the Olean Glass Co. (or Works). As discussed above, the plant could easily have been known as both “Company” and “Works” from the beginning. The factory made common bottles and was later known to have made beer bottles. The initials fit, and the plant was in business during the right time period: 1883-1884 and 1887-early 1890s. Further, a later incarnation of the company also used a similar monogram.

Even the scarcity of export beer bottles marked with the OGCo monogram fits into the pattern of the Olean Glass Co. These bottles are all generic export-style beer bottles, and they are scarce on recorded sites. The factory was only open for about

two years the first time and for only about five years the second time. Compared with firms like the Mississippi Glass Co. or the Lindell Glass Co., that turned out hundreds of thousands of beer bottles year after year, the output from Olean, especially during the first opening, would be expected to be small.

### Explaining the Similarities

While circumstantial evidence cannot be deemed as conclusive, it should not be ignored. Circumstantial evidence shows strong similarities between the two monograms, CC&Co (found on bases of Conrad & Co. beer bottles as well as otherwise-unmarked beer bottles) and OGCo (found on otherwise-unmarked beer bottles). Point in favor of the similarities are:

1. Both monograms are superficially similar in shape and form. This includes very thin lines to form the letters, common on fruit jars but unusual on beer bottles.
2. Both are found on bottles described as “blue” (although OGCo marks are more commonly found on amber bottles).
3. On some (but not all) bottles, each type of monogram is partially or completely surrounded by small “x” marks. Thus far, we have not found similar “x” markings accompanying *any* other mark.

The two significant differences between the two monograms are that: 1) serifs are present on *some* CC&Co bottles and absent on OGCo examples; and 2) the “o” in “Co” is inside the “C” on the CC&Co mark but is between the tips of the “C” (or just outside) in the OGCo mark.

### Photos

Most of the Photos were taken from collections of members or former members of the Bottle Research Group (BRG), in this case, Bill Lockhart, Bill Lindsey and Carol Serr. Trademark information (including the drawing from the registration) was provided by Pete Schulz. Two photos were also taken from eBay auctions. The Tucson Urban Renewal (TUR) collection is housed at the Arizona State Museum. The BRG examined the 140-box collection in March 2006, and Bill Lindsey photographed many of the marks – including two used here. The San Elizario collection was excavated by Bill Lockhart and Wanda Olszewski in



1993 and is housed at the University of Texas at El Paso. Our gratitude to Douglas M. Leybourne, Jr., for allowing us to reproduce drawings from *The Fruit Jar Works, Vol. 1*, by Alice M. Creswick.

#### Resources:

Anheuser Busch

2003 "Anheuser Busch Companies." <http://www.anheuser-busch.com/>

Anonymous

1900 *The Era Blue Book: A Universal Price List and Directory of Manufacturers for Drug Trade Buyers*. D. O. Haynes & Co., New York.

Anonymous

1908 "Old Memories Revived." *Commoner & Glass Worker* 26(20):3.

Anonymous

1912 "Changes Wrought in 7 Years." *National Glass Budget* November 30.

Anonymous

1913 "The Present Status of the Glass Bottle and Hollow Ware Industries in the United States." *Journal of Industrial and Engineering Chemistry* 5(11):951-954.

Anonymous

1935 "Thatcher Purchases Olean Glass Co." *Glass Packer* 14(9):574.

Anonymous

1944 "Purely Gossip." *Wall Street Journal* May 17, 1944.

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.

Baxter, Frank

1998 "C. Conrad's Original Budweiser, the Anheuser Busch Assn. and the Colorado Experience of 1880-1884." *Bottles and Extras* 9(5):3-4.

Berge, Dale L.

1980 *Simpson Springs Station: Historical Archaeology in Western Utah*. Cultural Resource Series No. 6. Bureau of Land Management, Utah.

Caniff, Tom

2005 "Fruit Jar Rambles: Oneida Jars." *Antique Bottle & Glass Collector* 22(7):6-9.

Carnival Glass 101

2004 *Carnival Glass 101: US Glass*. <http://www.carnivalheaven.com/carnivalglass101/id118.htm>

Creswick, Alice

1987 *The Fruit Jar Works, Volume II, Listing Jars Made Circa 1900 to Modern*. Privately printed, Grand Rapids, Michigan.

1995 *The Fruit Jar Works, Vol. I, Listing Jars Made Circa 1820 to 1920's*. Douglas M. Leybourne, N. Muskegon, Michigan.

Elliott, Rex. R. and Stephen C. Gould

1988 *Hawaiian Bottles of Long Ago*. Hawaiian Service, Inc., Honolulu.

Grace, Roger M.

2005 "Reminiscing: Schlitz, Miller and Others Made Beers They Called 'Budweiser.'" *Metropolitan News-Enterprise* <http://www.metnews.com/articles/2005/remiscing072805.htm>

Hawkins, Jay

2004 Untitled glass manufacturer information sheet from Pittsburgh, Pennsylvania, taken from city directories. Copy in author's possession.

Hayes, President (president of the Glass Bottle Blowers' Association of the United States and Canada)

1909 "Hayes on Bottle Machines." *National Glass Budget* 25(11):1.

Herskovitz, Robert M.

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

Jones, May

1963 *The Bottle Trail, Volume 3*. Nara Vista, New Mexico.

1964 *The Bottle Trail, Volume 4*. Nara Vista, New Mexico.

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

1966 *The Bottle Trail, Volume 6*. Nara Vista, New Mexico. [MM, S,]

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

Jones, Olive and Catherine Sullivan

1989 *The Parks Canada Glass Glossary for the Description of Containers, Tableware, Flat Glass, and Closures*. Parks Canada, Ottawa.

Knittle, Rhea Mansfield

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

Lee, James R.

2006 "TED Case Studies: Who Owns The Name Budweiser?" The Trade & Environment Database <http://www.american.edu/TED/budweis.htm>

Lehner, Lois

1978 *Ohio Pottery and Glass Marks and Manufacturers*. Wallace-Homestead Books Co., Des Moines, Iowa.

Lindsey, Bill

2004 "Historic Glass Bottle Information & Identification Website." <http://webpages.charter.net/blindsey8952/blm/index.htm>

Lockhart, Bill

2001 "Glass Line Dating." *The Artifact* 39:40-62.

2006a "The Color Purple: Dating Solarized Amethyst Glass Containers." *Historical Archaeology* 40(2):37-48. (In press)

2006b "The Bottles of Fort Stanton." In Fort Stanton report; in press.

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.

Lockhart, Bill, David Whitten, Bill Lindsey, Jay Hawkins, and Carol Serr

2005 "The Dating Game: Cunningham Family Glass Holdings." *Bottles and Extras* 16(3):14-20.

McKearin, Helen and George McKearin

1941 *American Glass*. Crown

- Publishers, New York.
- McKearin, Helen and Kenneth M. Wilson  
1978 *American Bottles & Flasks and Their Ancestry*. Crown Publishers, New York.
- Miles, Bob  
1986 Early Roads to El Paso. *Password* 31(2):75-83, 92.
- Olean Glass Co.  
1929 "Olean Glass Company Inc. Announces." *Glass Packer* 2(11):430.
- Paquette, Jack K.  
2002 *Blowpipes: Northwest Ohio Glassmaking in the Gas Boom of the 1880s*. Xlibris Corp., n. p.
- Reilly, Michael R.  
2005 "The Wisconsin Glass Industry." [http://www.chiptin.com/antiquibles/glass\\_bottles.htm](http://www.chiptin.com/antiquibles/glass_bottles.htm)
- Scholes, Samuel R.  
1941 *Handbook of the Glass Industry*. Ogdon-Watney, New York.
- Teal, Harvey S. and Rita Foster Wallace  
2005 *The South Carolina Dispensary & Embossed S.C. Whiskey Bottles & Jugs, 1865-1915*. Privately Published, Columbia, South Carolina.
- Thomas Register of American Manufacturers  
1907-1908 *Thomas' Register of American Manufacturers and First Hands in all Lines: The Buyers Guide*. Thomas Publishing Co., New York.
- 1909 *Thomas' Register of American Manufacturers and First Hands in All Lines: A Classified Reference Book for Buyer and Sellers*. Thomas Publishing, New York.
- 1915 *Thomas' Register of American Manufacturers and First Hands in All Lines: A Classified Reference Book for Buyer and Sellers*. Thomas Publishing, New York.
- Toulouse, Julian Harrison  
1969 *Fruit Jars*. Thomas Nelson & Sons, Camden, New Jersey.
- 1971 *Bottle Makers and Their Marks*. Thomas Nelson, New York.
- Van Rensselaer  
1969 *Early American Bottles and Flasks*. Rev. Ed. J. Edmund Edwards, Stratford, Conn.
- Welker, John and Elizabeth Welker  
1985 *Pressed Glass in America: Encyclopedia of the First Hundred Years, 1825-1925*. Antique Acres Press, Ivyland, Pennsylvania.
- Wilson, Rex  
1981 *Bottles on the Western Frontier*. University of Arizona Press, Tucson.
- Endnotes**  
<sup>1</sup> To add to the complication, Victor H. Sturm registered a California trademark for "Budweiser Lager Beer" in 1878.  
<sup>2</sup> Note that the D. O. C. mark was used both with and without punctuation. We have therefore not tried to be consistent in our use of punctuation with the mark.  
<sup>3</sup> Baxter (1998:4) illustrated an example of the CC&Co logo with serifs at the *bottom* of each "C." Although the possibility for this example exists, we have yet to see one.  
<sup>4</sup> The description of the mark was not in the report. Information was taken directly from the inventory of the artifacts.  
<sup>5</sup> These dates are a revision of the 1994 San Elizario report and are based on a better knowledge of the dates of the marks found at the site than were then available to the authors.  
<sup>6</sup> Unfortunately, virtually all collectors (and some archaeologists) do not explain why they established a certain date range for marks, styles, etc. We include these dates in the name of thoroughness – not because we agree with them.  
<sup>7</sup> This distinction (light blue as a separate color from aqua) is used by some researchers and ignored by others. It is probably not an important distinction because both indicate the presence of iron and other impurities in the sand used to make the glass (see Lockhart 2006a for a more in-depth discussion).  
<sup>8</sup> The 1883 date is confirmed by a 1903 letterhead from the company that stated it was "organized 1883" (George L. Miller collection).  
<sup>9</sup> The only other glass plant in town, the Acme Glass Co., did not begin using machines until 1920 (Toulouse 1971:35-37).  
<sup>10</sup> Innes (1976:8) dated the start of the plant at 1797.  
<sup>11</sup> It is interesting that Creswick presents both arguments in different sections of her book.  
<sup>12</sup> This was actually a limited partnership. The directories titled the company O'Hara Flint Glass Co., Lmd [Limited], successor to James B. Lyon & Co. The factory, itself, may have been renamed as the O'Hara Flint Glass Works (or just O'Hara Glass Works) as early as 1852 (Welker & Welker 1985:97).  
<sup>13</sup> Innes (1975:51) stated that the O'Hara factory "joined the U.S. Glass Company in 1891 as Factory L."