

Cunningham Family Glass Holdings

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

With Contributions by Jay Hawkins and David Whitten

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The Cunningham family owned, either completely or in part, six successive glass companies, all in Pittsburgh and all in the same location – as well as one other, operated by Dominick O. Cunningham. Most of these were survived by distinctive marks on bottles and/or fruit jars. For a biographical sketch of Dominick O. Cunningham, see Creswick (1987:281). Note that Hawkins (2009) is the best researched account of the Cunningham families to date. In cases of disputed dates, we have usually followed Hawkins.

Company Histories

The Early Factory (1845?-1849)

David Cunningham was listed as a glass manufacturer in the 1847 Pittsburgh city directory, with his brothers, Wilson and Robert, as glass blowers. This may indicate that David originated the plant in 1847 or even earlier. Hawkins (2009:145) noted that the “operations were initiated with a small glassworks on Twenty-Sixth Street in Birmingham with \$6,000 of capital.” The plant had an eight-pot furnace. The factory was ostensibly called the Pittsburgh City Glass Works and apparently remained in business until 1849. Some earlier researchers posited a firm of Cunningham & Jackson that was in business from 1845 to 1849. Although the existence of the company has been debunked, the references *may* have been an indication that David Cunningham’s plant began in 1845 (see the Discussion and Conclusions section for more information).

Cunningham & Co. (ca. 1849-1865)

In 1849, brothers Wilson and David Cunningham, along with George Duncan¹ formed Cunningham & Co. An 1892 Cunninghams & Co. ad (Putnam 1965) noted that the firm was “established 1849,” indicating that the Cunningham family considered 1849 the initial date of their ongoing operations at the Pittsburgh City Glass Works. Although some sources recorded the firm as W. Cunningham & Co., David Cunningham was listed as the owner of the earlier firm in 1847 and was the more likely senior partner. It may be significant that there was *no* “W. Cunningham & Co.” logo recorded in any of the literature – nor have we discovered such a mark.

The company advertised black bottles by 1850, the year that production probably began. Robert Cunningham bought into the company in 1854. Dominick Ihmsen was one of the partners by 1856. It is possible that Ihmsen joined the firm due to a depression during this period, when the company may have experienced financial difficulties.² The plant operated two furnaces with a total of 15 pots (Hawkins 2009:146-147; Innes 1976:37; Knittle 1924:344; McKearin & McKearin 1941:605; McKearin & Wilson 1978:156; Toulouse 1971:119; Van Rensselaer 1969:181). David Cunningham died in 1864, and Duncan withdrew from the firm in 1865 (Atlantic Publishing & Engraving Co 1898:189; Jordan 1914:818; Hawkins 2009:148).

Deed records for the Duncan family paint an interesting picture. On August 11, 1849, Wilson Cunningham, George Duncan, David Cunningham and Dominick Johnson, all of the Borough of Birmingham, paid \$3,150 to John and Rebecca Brown for the purchase of nine lots “bounded on Mary Street, Wayne or Brown Street, Virgin Alley.” Dominick Johnson may be the mysterious figure in a glass company called Cunningham & Johnson that was mentioned by McKearin & McKearin (1941:607). Subsequent research has failed to discover such a firm (see the Discussion and Conclusions section). Alternatively, Johnson could actually have been

¹ Aside from his connection in the glass firm, we have found no relationship between Duncan and the Cunningham family.

² According to Welker and Welker (1985:44), Duncan withdrew from the company in 1857. Creswick (1987:264), however, claimed the firm was called Cunningham & Duncan from 1852 to 1865, with Duncan’s involvement ending at that point. Neither of these agree with other sources.

Dominick Ihmsen. Note in the deed records below that Ihmsen was involved in the group by at least 1854, rather than 1856 stated by the other sources.

On his own, Duncan paid \$100 on June 1, 1849, for a lot “laid out by ‘Birmingham Glass Co.’, bounded on Wilkins Street.” The notation did not record whether the glass house had built on the property or whether this lot, too, became part of the Pittsburgh City Glass Works.

A final deed was enacted on May 6, 1854. This time, Wilson Cunningham, George Duncan, Dominick Ihmsen and David Cunningham purchased “7 contiguous lots” – again from John Brown – for \$4,500. The lots were “bounded on north by Jane Street, on west by Brown Street, on south by an alley, and on east by Lot No.50.” These had formerly belonged to Lewis Harcum, Andrew Hercum, Samuel Hercum, Joseph Hercum, and Hiram Hurcum, who had “erected one brick glass manufactory and other buildings” on the property. This certainly expanded the business. It is notable that Robert Cunningham was missing from this list; secondary sources noted that Robert bought into the firm in 1854 – although that could have been later in the year.

Cunninghams & Ihmsen (1865-1878)

When Duncan left the firm in 1865,³ selling his share to Dominick O. Cunningham – son of Wilson Cunningham – the company became Cunningham & Ihmsen (Hawkins 2009:147; McKearin & McKearin 1941:605; McKearin & Wilson 1978:156). By 1872, the plants included a dozen buildings and took up three city blocks. The plants were between Twenty-Sixth and Twenty-Seventh Streets and Mary and Jane Streets. Another segment was between Twenty-Fifth and Twenty-Sixth Streets and Harcums Alley and Mary Street. Also, in 1872, the plants made huge quantities of soda bottles and fruit jars along with wine bottles, druggists’ ware, and demijohns (Hawkins 2009:147-148; Roller 1998:23).

³ Roller (1983:99) and Hawkins (2009:147) placed the date when Cunninghams & Ihmsen began at 1866. Hawkins noted that his information was based on the city directories. However, the earlier sources (e.g., Atlantic Publishing & Engraving Co. 1898:189 and Jordan 1914:819) as well as Toulouse (1971:118, 132) and Creswick (1987:264) suggested 1865. Although the McKearins (1941:605) provided a date of 1857 – which was repeated by McKearin & Wilson (1978:156), there are more independent sources placing the date at 1865.

In May 1871, Mark W. Watson, John McM. King, and John H. McKelvey, operators of Wm. McCully & Co., sued Cunninghams & Ihmsen over infringement of the December 14, 1869, Holcomb patent (No. 97,920). Cunninghams & Ihmsen admitted that the firm

made and manufactured fruit jars, in all essential features or construction and combination like the fruit jar patented to Daniel Irving Holcomb, including the metallic cap and the mode of applying it to the jar (except that they have a groove instead of a flat surface for the reception of the India rubber ring), as claimed in said patent, but they deny that said Holcomb originated the invention described in the patent” (Public Resources, Inc. 2014).

The patent was for a grooved-ring finish with a rubber ring in the groove and a thin metal cap with flanges that fit into the groove and pressed against the ring. The cap was held in place by a wire fastener. The court determined that the Holcomb patent “constitutes and an essential and valuable part, embodies and new and original invention, and is entitled to protection against infringement.” The court further noted that “a decree will accordingly be entered and for an injunction and an account” although the report failed to record the specifics (Public Resources, Inc. 2014; Roller 1997; 1998:23). We can clearly assume that the Cunninghams & Ihmsen plant was forbidden to continue manufacture of the jars.

There is some ambiguity as to whether the name should be Cunninghams or Cunningham. The name appeared in both forms. Toulouse (1971:132) suggested that use of the singular would have been earlier than the plural. Jay Hawkins’ reply to our query about the singulars and plurals of Cunningham was that the name was Cunningham & Ihmsen in every city directory listing except one – 1870 – when it was Cunninghams & Ihmsen. He also listed the firm in the singular form in his book (Hawkins 2009:144, 147). However, when the name was embossed on bottles, it appeared mostly in the plural variant.

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. The Pittsburgh City Glass Works, under Cunningham and Ihmsen, advertised beer bottles during early 1878. Apparently, only a single plant made bottles, while the rest of the production consisted of window glass. By this time, whiskey flasks and cylinder whiskey bottles were the

factory's main output, although the plant also made beer and soda bottles, fruit jars, demijohns, and wine bottles (Hawkins 2009:148). When Dominick Cunningham purchased Dominick Ihmsen's share of the firm, no later than July 1878, the name was changed to Cunningham & Co. (Hawkins 2009:148; McKearin & Wilson 1978:156; Toulouse 1971:120, 132). For a thorough discussion of the Ihmsen glass operations, see Lockhart et al. (2005a), Hawkins (2009:272-284), and/or the Ihmsen section of the "T" volume.

Cunningham & Co. (1878 to 1882)

Upon Ihmsen's retirement from the partnership in 1878, the firm became Cunningham & Co. The company built a new furnace at the bottle house in 1879. On April 15, a fire – started when the cupola of the window-glass plant collapsed – destroyed the factory. Fortunately, no one was hurt, and the plant was rebuilt. In 1880, Dominick Cunningham started his own company (see below). Soon after – 1882 – the name Cunningham & Co. was changed to Cunninghams & Co. (Hawkins 200:149; Welker and Welker 1985:44). The period between 1878 and 1886 seems to have been a time when the plants reduced the variety of production. Export beer bottles seem to have disappeared (see Appendix A), and Roller (1998:24) noted a lack of fruit jars during these segments of the firm.

Cunninghams & Co. (1882 to 1886)

The new name did not lead to any historically recorded changes. The company remained a bottle and window glass producer. When Wilson died in 1885, Robert retained the green glass (bottle) factory, and Dominick inherited two window glass plants. The next year, the firm became a limited partnership (Hawkins 2009:150). The Pittsburgh City Glassworks, under Cunninghams & Co., advertised beer bottles from at least the beginning of 1883 to the end of 1886, with a change to "limited" in the name in 1886 (Wilson & Caperton 1994:70).

Cunninghams & Co., Ltd. (1886 to ca. 1902)

Robert and Dominick formed a limited partnership in 1886, but Robert withdrew later that year. Dominick now had full control of Cunninghams & Co., Ltd., as well as his own factory (discussed below). By at least 1887, the firm specialized in beer bottles. One factory

burned completely in 1895, although it was rebuilt. During this period, the bottle plant operated a single furnace with eight pots (Ayres et al. 1980:12; Hawkins 2009:151; McKearin & Wilson 1978:156; Roller 1997; Toulouse 1971:99, 120-121).

An 1890 ad showed that the plant made a diverse product line that included soda, beer, ginger ale, porter and ale bottles, along with bottles for champagne, Apollinaris Water, brandy, hock wine, claret, and schnapps. By 1892, the ads bragged that the firm had “made arrangements with Bottle Seal Co., of Baltimore, MD, to use their stopper [i.e., Baltimore Loop Seal].” The plant continued to use a single furnace with eight pots (Hawkins 2009:154; Roller 1997). Empirical data derived from Wisconsin soft drink bottles, however, suggests that the change to a limited partnership was not reflected on bottle marks until about 1892 (see discussion of C&Co and C&Co LIM marks below). This may reflect the use of molds until they wore out. The name was once again changed ca. 1902.

Cunninghams & Co. (ca. 1902 to 1907)

The company ceased being a limited partnership ca. 1902, although the reasons for the change have not been discovered. The older firm (Ltd.) was listed in the city directory in 1901, and Cunninghams & Co. (no Ltd.) appeared in the 1903 edition. However, a June 1902 glass factory directory still listed the firm as “Ltd.” (Roller 1997; 1998:25-26). Roller (1997:26) further noted that “about this time, Cunninghams & Co., Ltd. was reported to be an affiliate of D.O. Cunningham Glass Co. The exact date and conditions of this affiliation are not known.” In 1904, the plant operated two continuous tanks with 16 rings, making beer bottles and was listed as incorporated (*American Glass Review* 1934:165). The last listing for the firm was in 1907, when it apparently merged with D.O. Cunningham, and the company was only listed as a window glass producer during that period.⁴ Von Mechow (2014), however, stated that the limited partnership reorganized in 1900 as a corporation.

⁴ Toulouse listed the final date for the firm at 1907 in one place and 1909 in another. Jay Hawkins checked the city directories and found that 1907 was the last listing for the company. The 1909 date was another Toulouse typo.

D.O. Cunningham (1880-1897)

Dominick Cunningham left the firm controlled by his father and uncles to start his own company, making bottles and window glass, in 1880. Construction of the plant was on Twenty-Second St. between Jane and Mary began on July 9, 1880, and the factory was in production in October using an eight-pot furnace. The bottle plant was called the Jane Street Bottle Works. In February 1886, the bottle factory burned, but it was quickly rebuilt. This early segment of the company has been recorded as both D.O. Cunningham and D.O. Cunningham & Co. With the 1897 incorporation, the name changed (Ayres et al. 1980:13; Hawkins 2009:156-157; Knittle 1924:344; McKearin & Wilson 1978:156-157; Roller 1997; Toulouse 1971:120, 163-164).

The plant made a variety of containers. In 1888, the plant made beer bottles, soda bottles, and Mason jars at a single eight-pot furnace. During this period, beer bottles were apparently the main item of production. Cunningham advertised beer bottles in the *Western Brewer* by at least 1881 and continued his ads until November 1887. He originally only advertised as the Jane Street Glass Works but added the Pittsburgh City Glass Works to his ads in 1886, shortly before Cunninghams & Co. ceased advertising beer bottles (Wilson & Caperton 1994:70). By 1891, the primary focus had shifted to fruit jars, probably Mason jars – to the tune of 200 gross per day. However, the plant still made grooved-ring fruit jars with Stone's patent through at least 1896 (Roller 1998:25). See Appendix C for a discussion of Stone's patent jars.

D.O. Cunningham Glass Co. (1897-1958)

The company incorporated as the D.O. Cunningham Glass Co. in November 1897 with a capital of \$300,000. That year, the D.O. Cunningham Glass Co. had 8-pots in operation making green bottles, and that number remained steady through 1898 (*National Glass Budget* 1897a:7; 1897b:4; 1898:7; Roller 1997). Cunningham leased the old McCully plant on W. Carson St. in December 1898, significantly boosting his production. The firm installed a continuous tank for the first time in 1900. After moving in with his son, Howard V. Cunningham in 1910 or 1911, Dominick died on March 26 of the latter year. Howard then became the president of the corporation, and the company remained in business until 1958 (Ayres et al. 1980:13; Hawkins 2008; Knittle 1924:344; McKearin & Wilson 1978:156-157; *National Glass Budget* 1909:7; Toulouse 1971:120, 163-164).

The 1904 Glass Factory Year Book (*American Glass Review* 1934:165) noted that the plant had two continuous tanks and made beer and soda bottles. From 1905 to 1918, the Thomas Registers (1905-1906:104; 1918:811) only listed D.O. Cunningham & Co. as making “green” glass. The factory used four continuous tanks with 24 rings to make “beer and mineral water” bottles in 1913 (*Journal of Industrial and Engineering Chemistry* 1913:953). The big question is: When did the firm install semiautomatic machines?

Our research (e.g., Lockhart 2006:21) shows that most soda bottle manufacturers adopted some form of semiautomatic machine during the 1910-1914 period. It is therefore likely that Cunningham adopted machines about that time. Roller (1998:26) noted that “glass trade journals” reported that Cunningham was introducing four additional machines on March 17, 1917, making a total of eight machines in use. Hawkins (2009:158) noted that the company used O’Neill machines to exclusively produce soda bottles by 1920.

In 1927, the firm was listed as D.O. Cunningham Glass Co., and it made “flint and green beverages and waters” in two continuous tanks with six rings. The entry was modified to read “4 machines” in 1928, and the number of rings was eliminated. Even though Cunningham ceased actual glass production in 1931 (see below), the listing remained the same until 1936, when referral to machines was dropped. By 1940, the term “not operating” was included (*American Glass Review* 1927:132; 1928:133; 1936:89; 1940:93).

There is some dispute about the final disposition of the company. Toulouse (1971:163-164) claimed the firm closed in 1937. Creswick (1987:264) repeated the Toulouse date. McKearin & Wilson (1978:157), however, stated that the company was taken over by All-Pak in 1931. Ayres and his associates (1980:14) stated that the company remained listed in Pittsburgh city directories until 1959. Hawkins (2009:158), however, noted that the last listing was in 1938.

At least some of this confusion was clarified by the All-Pak website (2005):

All-Pak, Inc. was established in 1958 through the combination of Cunningham Glass Company and Allied Can and Container Company. Cunningham Glass Company was a manufacturer of glass containers from 1849 to 1931. In 1931, Cunningham ceased manufacturing and established themselves as a distributor for

Owens-Illinois Glass company. To achieve success as a glass container distributor, it was essential to develop competencies for all types of customers. An extensive inventory of containers of various sizes, shapes, and colors was built and maintained. In addition, the company competitively shipped full truckloads of containers directly from the manufacturing plant.

Containers and Marks

Plavchan (1969:75) noted the following from Anheuser Busch records:

Prior to 1886 the main source[s] of beer bottles for the Anheuser-Busch Brewing Association were four glass works: the Mississippi Glass Co. and the Lindell Glass Co. of St. Louis; the Pittsburgh City Glass Co. of Pittsburgh, Pennsylvania; and the DeSteiger [*sic*] Glass Co. of LaSalle, Illinois.

Mississippi Glass (1873) and Lindell Glass (1874) were both formed primarily to provide beer bottles for Anheuser-Busch. However, the “Pittsburgh City Glass Co.” could only have referred to Cunningham & Ihmsen. The firm probably began production of export beer bottles by 1876, possibly a bit earlier. They were thus major producers of export beer bottles between 1876 and 1878.

Farnsworth & Walthall (2011:72) traced the use of round plates on bottles used in Illinois. They noted that Patent No. 79,162, received by Lancaster Thomas on June 23, 1868, was for the adaptation of plates to round bottles, although actual use by glass plants did not begin until the mid-1870s (Figure 1). The authors also noted that Cunningham & Ihmsen was one of the earliest

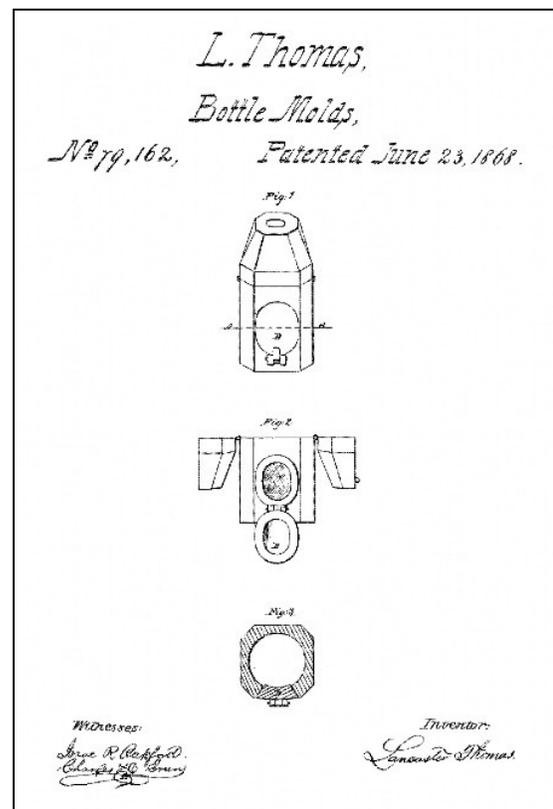


Figure 1 – Thomas 1868 patent

glass houses to use this technology in the state. They illustrated and discussed three champagne beer bottles – each with a round plate – used by firms that could only have been open during the late 1870s, each with the “C&I” logo embossed on the base. In addition, Farnsworth & Walthall included a champagne beer bottle and a Saratoga-style mineral water bottle, each with the embossed information in a round plate on the front, and each had the C&Co logo on each base (Farnsworth & Walthall 2011:60, 159, 282, 441, 489, 521).

Creswick (1987:153) listed Cunninghams & Ihmsen as a maker of Mason jars (from the Pittsburgh city directory), although she did not note their mark on any actual jars. As mentioned above, a Cunninghams & Co. ad from June 1892 listed soda, ginger ale, beer, Apollinaris, porter, ale, brandy, Hock wine, claret, and Schnapps bottles. The ad further advised, “Have made arrangements with Bottle Seal Co., of Baltimore, Md., for making any of the above bottles for the use of the Seal Stopper [also known as the Baltimore Loop stopper]. Bottles supplied with Patent Stoppers, attached ready for use, for Beer and Soda.”

Hawkins (2014:7) discussed cylinder whiskey bottles and noted that he knew of four variants made by Cunninghams & Ihmsen. Three of these used the entire company name, while the fourth was embossed “C AND I.” It may be significant that early ads reported by Hawkins (2009:152-153) only mentioned druggists’ glassware and flat glass. It was not until the 1870 Cunninghams & Ihmsen ad that the firm listed “wine, brandy and soda water bottles, flasks, demijohns, &c.” Export beer bottles were not made until 1873, so the numerous examples of that type of bottle with logos from Cunningham & Ihmsen and Cunningham & Co. were probably not produced until 1876 or even later.

P.C.G.CO. (1852-1865)

Creswick (1987:172) noted this mark (with full punctuation) on a grooved-ring wax sealer fruit jar that was otherwise unmarked. Normally, these initials are connected to the Pacific Coast Glass Co. (1925-1930). However, she noted that the company would have been quite late to have made this type of jar. Alternatively, she assigned the mark to the Pittsburgh City Glass Works, 1852-1865. Although we have included this entry, we find no reason to agree with Creswick. Despite the apparent age discrepancy, containers with the P.C.G.CO. logo were probably all made by the Pacific Coast Glass Co.

Cunningham & Co. (ca. 1849-1865)

Although there are some references to W. Cunningham & Co., all of the names on fruit jars with iron pontil scars were “CUNNINGHAM & Co.” – with no preceding “W.” and no plural of Cunningham. It is virtually certain that all the containers from this earlier firm were embossed with the singular “CUNNINGHAM.”



Figure 2 – Pontiled base (North American Glass)

CUNNINGHAM & Co. – bare iron pontil (ca. 1849-early 1860s)



Figure 3 – Cunningham jar (North American Glass)

An early fruit jar was embossed on the base “CUNNINGHAM & Co. PITTSBURGH” in a Rickett’s mold around a concave center (Figures 2 & 3). In cross-section, the Rickett’s mold was sloped inward toward the center of the base, similar to the whiskey bottles made during the ca. 1820-1850 period. See the section on A&DH Chambers in the “A” volume for a drawing of the whiskey bottle base styles. Each jar had curved shoulders and a comparatively thin neck, with a squared, single-ring finish (Figure 4). Roller (1983:98; 2011:153) said the closure was “uncertain, probably a waxed cork.” A photo from North American Glass shows that he was at least partially correct (Figure



Figure 4 – Jar finish (North American Glass)



Figure 5 – Waxed cork (North American Glass)

5). The fairly thin cork was covered by a wax-like substance. Roller dated these ca. 1850s and said they were “probably the first jars in the Cunningham line.” Creswick (1987:39) illustrated the jar and had the same basic information. She noted the maker as W. Cunningham & Co., 1849-1864 (Figure 6).

CUNNINGHAM & Co. – no pontil scar (ca. 1864-1865)

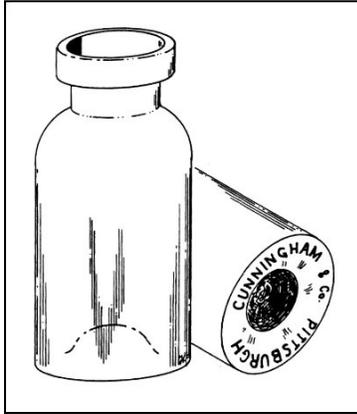


Figure 6 – Cunningham jar (Creswick 1937:39)



Figure 8 – Jar finish (North American Glass)

Roller (1983:99; 2011:153) briefly noted the very similar follow-up jar that lacked the pontil scar. These jars had several notable differences from the earlier ones (Figure 7). Moving from the top down, the finish had a rounded ring added to the top (Figure 8). At least two of these jars were sealed by a piece of cloth tied around the neck, covered at the mouth with melted wax (Figure 9). The base was embossed “CUNNINGHAM & Co. PITTSBURGH PA” in a Rickett’s mold (Figure 10). The shape in cross-section was also different. The Rickett’s mold was now flat rather than slanted, although the center was still convex. This matched the shape of whiskey bottles made from ca. 1850-1870 – as shown in the section on A&DH Chambers. Creswick (1987:39) illustrated the jar and dated it ca. 1849-1864 (Figure 11).



Figure 7 – Non-pontil jar (North American Glass)



Figure 9 – Cloth & wax seal (North American Glass)



Figure 10 – Non-pontil base (North American Glass)

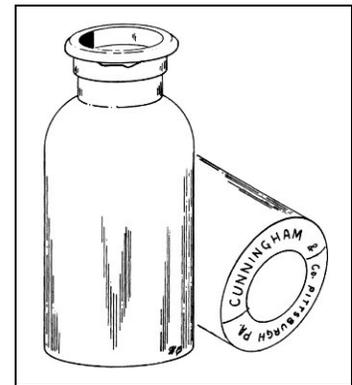


Figure 11 – Non-pontil jar (Creswick 1937:39)

CUNNINGHAM'S & Co. PITTSBURGH PA (ca. 1864-1865)

Roller (1983:99) described this jar as “aqua tooled lip closure uncertain, probably a cork.” He dated the jars ca. 1857-1865. Creswick (1987:39) also described the same jar but did not illustrate it. We were unable to find an example.

MANUFACTURED BY CUNNINGHAMS & Co. (ca. 1849-early 1860s)

Another type of fruit jar manufactured by Cunningham & Co. was embossed “A. STONE & C^o (slight arch) / PHILAD^A / MANUFACTURED BY / CUNNINGHAMS & Co / PITTSBURGH PA. (all horizontal)” – with two dots under the “o” in “C^o” and under the “A” in “PHILAD^A.” There were three jar types, some with pontil scars, some without, and three different finish types. See Appendix C (this section) for a discussion of the A. Stone & Co. jars.

Cunninghams & Ihmsen (1865-1878)

Cunninghams & Ihmsen (see discussion about name in Discussion and Conclusions section) was in business from 1865 to 1878. The firm made a large variety of whiskey flasks and bottles, beer and soda bottles, other bottles, and fruit jars that were marked with several types of logos. Hawkins (2009:156) noted that the Cunningham glass houses produced THE RESERVOIR, QUEEN, A. STONE, THE HERO, and THE HEROINE fruit jars. Although Hawkins was speaking of the firms generically, only Cunninghams & Ihmsen actually produced these jars – with the exception of jars for A. Stone, which were also made by the earliest Cunningham & Co.

CUNNINGHAMS & IHMSEN (1865-1878)

Whiskey Flasks (ca. 1865-1867)

McKearin & Wilson (1978:157) dated one flask with the full company name 1857-1867. Hawkins (2009:148) illustrated the same whiskey flask, embossed “CUNNINGHAMS & IHMSEN (arch) / GLASSMAKERS / PITTSBURGH (both horizontal)” on the front (Figures 12 & 13).

Cylinder Whiskey Bottles (ca. 1870-1878)



Figure 12 – Cunninghams & Ihmsen flask (Jay Hawkins)

Hawkins (2009:146-147) illustrated the base of a cylinder whiskey bottle embossed “CUMMINGHAMS & IHMSEN PITTS. PA.” in a circle on a Rickett’s mold base (Figure 14). The photo appears to show the whiskey base style that we dated ca. 1870-1880 (see the section on A&DH Chambers in the “A” volume for the cylinder whisky bottle

base study). The bottles could have been made during the entire life of the company but were likely produced during the ca. 1870-1878 period.



Figure 13 – Cunninghams & Ihmsen flask (eBay)

Fruit Jars (1865-1878)

One of the earliest fruit jars made by Cunninghams & Ihmsen had the same type of finish as the non-pontil jars made by the earlier Cunningham & Co. Both Roller (1983:99;



Figure 14 – Cylinder whiskey base (Jay Hawkins, eBay)

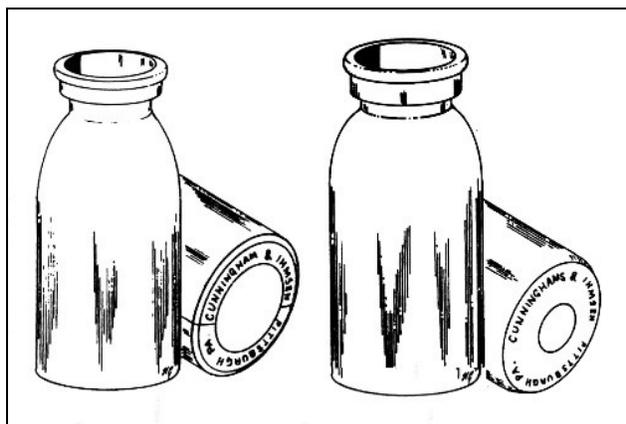


Figure 15 – Cork-sealed jars (Creswick 1937:39-40)

2011:154) and Creswick (1987:39-40) agreed that these were embossed “CUNNINGHAM & IHMSEN PITTSBURGH, PA” in a circle around the base or with the plural (Figure 15). This *may* indicate that the company went by the singular for a year or so prior to adopting the plural name.



Figure 16 – Wax-sealer jar (North American Glass)

Grooved-ring wax sealers were also embossed “CUNNINGHAMS & IHMSEN PITTSBURGH PA” in a circle around the outside of the base with

“PATD / 1868” horizontally in the center – and a version without the patent date (Roller 1983:99; 2011:155; Toulouse 1969:84-85).

Roller also noted a lid that accompanied the PATD 1868 jar that was embossed “C&I” (Figures 16-19). He dated the jars and lid from the 1860s to 1876. Toulouse dated the jar style at 1868-1879 – his dates for the company.



Figure 17 – Jar base (North American Glass)



Figure 18 – Metal lid (North American Glass)

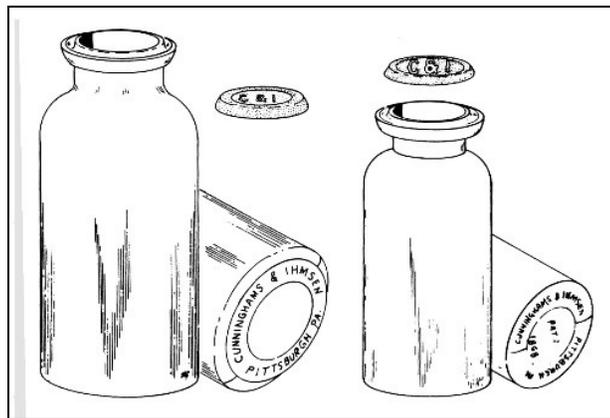


Figure 19 – Wax-sealers (Creswick 1937:39-40)

Roller (1983:99; 2011:155) told an interesting story about Cunninghams & Ihmsen fruit jars. In discussing those marked PATD 1868, he stated:

What the 1868 patent date referred to is not known; but, in 1871, Wm. McCully & Co. sued Cunninghams & Ihmsen for infringing their Holcomb “Dictator Jar” patent rights. . . . In the court records, Cunninghams & Ihmsen stated that they had made fruit jars, starting August 1, 1868, that were very similar to the Dictator

jars, only with a groove rather than a flat sealing surface. No mention was made of any specific patent for their jars, and perhaps they used the term “PATD” without the legal right to do so.

See below for a discussion of other fruit jar types.

C&I (1865-1878)

This mark is shown or noted in Innes (1976:218); Jones (1966:7; 1968:14), Herskovitz (1978:8), Knittle (1927:441), McKearin and Wilson (1978:583), Toulouse (1971:132), Van Rensselaer (1969:32), Kroll (1972:3), Wilson (1981:114), Hawkins (2009:148), and Lockhart et al. (2012). It was found on beer and soda bottle bases, prescription bottles, bitters bottles, fruit jars, and on flasks.

Whiskey Flasks (ca. 1865-1868)



Figure 20 – C&I Flask (McKearin & Wilson 1978:583)

McKearin & Wilson (1978:157, 583) illustrated an eagle flask with the initials “C&I” immediately below the eagle (Figures 20 & 21). They dated the flask 1857-1867. Hawkins (2009:148) also illustrated an example. Since the firm was not using the name Cunninghams & Ihmsen until 1865, the bottle was likely made during the first two or three years – ca. 1865-1868.



Figure 21 – Closeup of flask (Jay Hawkins)

Beer Bottles (ca. 1876-1878)

The mark would have been on export beer bottles from ca. 1876 to 1878, possibly a bit earlier. The mark was embossed horizontally across the center of beer bases or on the heel (Figure 22), sometimes accompanied by a number. Kroll (1972:30, 50, 52, 67, 73, 75, 76, 98)



Figure 22 – C&I heelmark (eBay)

noted eight C&I marks on Wisconsin beer bottles. His aggregate date ranges for the breweries involved (he did not attempt to date individual bottles) suggested a use period from the early 1870s to the early 1880s. Farnsworth & Walthall (2011:640) illustrated early beer bottles with the mark (Figures 23 & 24)



Figure 24 – C&I beer base (Farnsworth & Walthall 2011:640)

Wilson (1981) did not show the C&I mark among the numerous export beer bottles he examined at Fort Union, New Mexico, and Fort Laramie, Wyoming, and Herskovitz (1978:8) only noted five bottles with the mark at Fort Bowie, Arizona (Figure 25). However, the Bottle Research Group discovered an even dozen beer bottles with the mark at Fort Riley, Kansas. This seemingly unusual distribution is simply explained – for two reasons. As originally discussed by Wilson (1981:3), enlisted personnel were forbidden to drink alcohol any stronger than beer on military posts in 1881. Prior to that date, the more remote the location of the fort, the less likely the shipment of beer. Whiskey was not only more economically sensible, it took less of it to reach the same high as beer. As a result, less bottles or kegs needed to be shipped for the same volume of people; therefore, there was less risk of breakage in shipment. Thus, remote locations – like Fort Union – did not import beer until the 1881 decree.

The second reason is tied to the railroads. Prior to the building of the transcontinental railroads, the only shipping alternative was the horse-drawn wagon. Fort Bowie was on a major trade route from California (and area receiving beer shipments via ship), so it received some



Figure 23 – Early beer bottle (Farnsworth & Walthall 2011:640)



Figure 25 – C&I export beer base (National Park Service Western Archeological and Conservation Center)

beer prior to 1881, and Fort Riley was connected to the east by rail much earlier and was comparatively close to St. Louis, one of the major beer hubs even with wagon transportation.

Even though the period of beer bottle production was very short, Cunninghams & Ihmsen must have been a major early beer bottle manufacturer. The factory sold bottles to Anheuser-Busch in St. Louis; it shipped 1600 gross of beer bottles (230,400 containers) to the brewery in November 1877 alone (Innes 1976:230; *Crockery & Glass Journal* 1877:15). Anheuser Busch bought bottles from only four companies prior to 1886, when Busch entered the bottle manufacturing field. One company was the Pittsburgh City Glass Co. (Cunninghams & Ihmsen).

In the TUR collection, all export beer bottles with C&I marks on their bases had two-part finishes with sharp lower rings. This fits within the date ranges established for this technique. Two-part finishes on export beer bottles were intended for use with wired-down corks. Historic and empirical data explored by Lindsey (2014) and Lockhart (2008) suggest that lower rings of the finishes with sharp edges (whether in wedge or flared forms) were generally used on earlier bottles. Empirical evidence, from Fort Stanton, New Mexico, and the Tucson Urban Renewal (TUR) project suggests that sharp-edged lower rings were being actively phased out by ca. 1880, although some were still made (e.g., Carl Conrad bottles) as late as 1882. Although there is no firm date for the initial use of two-part finishes with rounded lower rings, they were probably not used until the late 1870s and continued to in use until much later (at least ca. 1915). All two-part finishes with sharp-edged lower rings were applied to the end of the neck. Applied finishes were the industry standard for export beer bottles until at least 1896. Tooled finishes began to be used on some embossed beer bottles by ca. 1890 but were uncommon until after ca. 1896. They completely dominated the industry by ca. 1900.

The export beer bottle was invented in 1873, and Cunninghams & Ihmsen was probably one of the early producers, likely by 1876, possibly earlier. Since Anheuser-Busch developed the export beer trade to the U.S. West, the likely progression of bottle suppliers was Lindell Glass Co. and Mississippi Glass Co. – both from St. Louis, hometown of Anheuser-Busch – in 1874, Cunninghams & Ihmsen ca. 1876, and the De Steiger Glass Co. in 1878. By 1880, numerous glass houses joined in the production of export beer bottles. Thus, Cunninghams & Ihmsen likely only made export beer bottles for its last two years of operation – ca. 1876-1878, possibly beginning a year earlier.

Soda Bottles (ca. 1865-1878)



Figure 26 – 1860-1870 soda bottle (Farnsworth & Walthall 2011:532)

Peters (1996:9) dated the C&I mark 1865-1879, following the Toulouse years. However, on numerous pages throughout his book (a total of more than 20 listings), he consistently dated the C&I mark to the 1870s on individual bottles. A few of the companies that used bottles marked C&I were in business in the 1860s, however, so the bottles could have been used during the earlier period. Peters' work provides solid evidence for the marks' being used throughout the 1870s. Farnsworth & Walthall (2011:2011:60, 159, 282, 441, 489, 521, 532) noted several soda bottles with the C&I logo, all dated prior to 1880 (Figures 26 & 27).



Figure 27 – C&I soda base (Farnsworth & Walthall 2011:532)

Fruit Jars

The mark is also found on the bases of grooved-ring wax sealer fruit jars, although Creswick (1987:39, 184) was the only source to list and illustrate the jars (Figure 28). These were almost certainly sealed with cupped steel caps that were also embossed "C&I" (see Figure 18). Although Roller (1983:99) illustrated the cap, he did not note the jar. Also see THE RESERVIOR under "Other Fruit Jars" below.

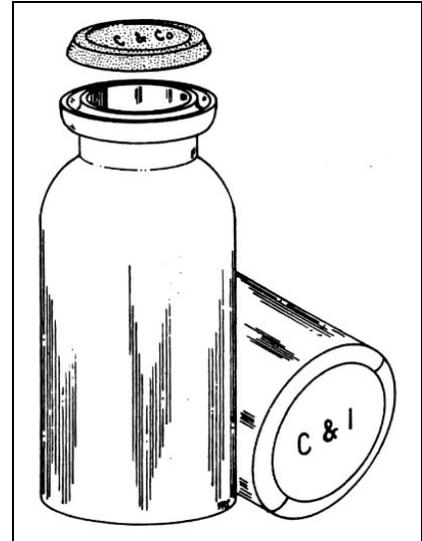


Figure 28 – C&I wax sealer (Creswick 1937:39)

Prescription and Bitters Bottles

Griffenhagen and Bogard (1999:123) agreed on the general time period, giving 1867-1879 dates (from Toulouse), and added that the mark appeared on medicinal bottles used by C.F.

Goodman, Omaha, Nebraska, and Charles Schlitz, Milwaukee. According to Fike (1987:164), Goodman was a wholesale and retail drug dealer from “at least 1874” until his death on January 11, 1895. Although Fike noted the use of C&I to mark Goodman’s bottles, he did not add any specific date range for the involvement. Ring (1980:127) also listed the C&I mark on Goodman’s Celebrated Mountain Herb Bitters and German Wine Bitters bottles.

C.AND.I (ca. 1875-1878)

Hawkins (2009:148) illustrated the “C.AND.I” logo on the base of a cylinder whiskey bottle (Figure 29). Note that the second period really *was* between “AND” and “I” on the base. This appears to be a unique logo, and it was probably only used on a single bottle. The mold maker likely misunderstood the directions – or had a bad day. The type of base suggests that the bottle was made late in the sequence, possibly 1875-1878.



Figure 29 – C AND I mark (Jay Hawkins)

CIP (ca. 1867-1869)

Cunninghams & Ihmsen made a jar embossed “THE / HERO / INE” on the body, apparently on contract from the Hero Glass Works, from ca. 1867 to 1869, possibly into the 1870s. Most of these were embossed CUNNINGHAMS & IHMSEN or CUNNINGHAM & IHMSEN on the bases. However, one variation had a basal embossing of “CIP PATD NOV 26 1867.” The patent was issued to Salmon B. Rowley, one of the owners of the Hero Glass Works, for the style of the jar (Creswick 1987:84; Roller 1983:155, 432; Toulouse 1969:152). The “CI” in “CIP” may have been a reference to Cunninghams & Ihmsen, with the “P” probably indicating Pittsburgh. The mark is not known from any other bottle or jar and was probably another example of a mold maker’s bad day.

Other Fruit Jars

Cunninghams & Ihmsen produced several fruit jars apparently on contract for other firms. These included THE HERO, THE HEROINE, THE RESERVOIR, and QUEEN jars. As

noted above, Cunninghams & Ihmsen also made jars for A. Stone & Co. – see Appendix C for a study of the A. Stone jars.

THE HERO



Figure 30 – C&I Hero (North American Glass)

Patents for the Hero were owned by the Hero Glass Works. The jars were embossed “THE / HERO” on the front, and the ones made by the Cunninghams were embossed “CUNNINGHAMS & IHMSEN PITTSBURGH PA.” on the base (Figure 30). Photos from North American Glass show that the bases of these jars were made in “key” molds, where a half-moon shape on base of one mold half fit into a



Figure 31 – Hero base (North American Glass)

corresponding slot on the other half (Figure 31). These were likely made on contract from the Hero Glass Works (Roller 1983:154;

2011:238). Cunninghams & Ihmsen advertised the Hero jars at least as early as March 20, 1868. The July 8, 1869, ad called Cunninghams & Ihmsen “sole mfrs. of the celebrated Hero Fruit Jar. The firm added Mason’s Porcelain Lined jars in place of the Hero on July 20, 1876 (Roller 1997; 1998:23).

THE HERO / INE

Toulouse (1969:152) first noted this jar and dated it ca. 1869-1875. He stated that the jar “must have been made on license from Hero since it bears the Hero patent date.” Roller (1983:155), however, told the rest of the story:

[Salmon B.] Rowley sued Thomas Houghton in September 1868 for infringement of his THE HEROINE trademark. Rowley stated that he had been making THE HERO jars from the start, but when he ‘improved the pattern of the jar, . . . he ceased making the original style of the jar, and made the new kind only calling it indifferently ‘The Hero’ and ‘The Heroine.’ Houghton had started to make the

jars with “INE” in very faint letters to make them look like THE HERO jars at first glance. Rowley won the suit, and a year later bought the Houghton Glass Works, renaming it the Hero Glass Works.

Roller drew the embossing as “THE / HERO / INE” with the last three letters in smaller size (Figure 32). Creswick (1987:84) illustrated the jar and noted three basal variations, connected with the Cunninghams: 1) “CUNNINGHAMS & IHMSEN PITTSBURGH, PA.”; 2) “CUNNINGHAM & IHMSEN PITTSBURGH, PA. NOV 26 1867” (probably in the center); and 3) CIP PATD NOV 26 1867.” Roller (2011:239) only showed the jar as being made ca. 1867-1868 and illustrated one base as being embossed “CUNNINGHAMS & IHMSEN PITTSBURGH, PA.” around the outside of the base.



Figure 32 – Hero-ine (North American Glass)

THE QUEEN

Creswick (1987:181) listed Cunninghams & Ihmsen as one of the manufacturers of the variation of “THE QUEEN” that was encircled by the 1858 and 1868 patent dates (see the section on the Clyde Glass Co. in the “C” volume). She failed to explain the reason for her choice, and neither of the Roller volumes included Cunninghams & Ihmsen as makers of the jars.

However, Roller (1998:23) illustrated an ad from the 1871 Pittsburgh City Directory for “THE HERO” and “THE QUEEN” (Figure 33). The jar shown was not the one encircled by the patent dates as shown by Creswick. The jar was advertised until 1876, but Roller (1997; 1998:23) did not mention the Queen again.



Figure 33 – 1871 Cunninghams & Ihmsen ad (Roller 1998:23)

THE RESERVOIR

The logo also appeared on a fruit jar embossed “THE RESERVOIR” that was sealed by an internal stopper. Two lugs were embossed inside the throat to engage the stopper’s corresponding projections. Ella G. Haller received Patent No. 136,240 for this type of jar/stopper combination on February 25, 1873. The jar was therefore made between 1873 and 1879. The stopper was embossed “M^{RS}. E.G. HALLER PATD. FEB.25.73.” with a dot under the superscript “R” and “S.” Roller (1986:305; 2011:448) suggested a range of 1873-1874 for this jar. He noted that “the hollow stopper was a reservoir for hot syrup that would fill the empty space formed at the top of the jar as the contents shrunk in cooling.” The “C&I” logo was embossed on the bases of some jars. Creswick (1987:184) illustrated the jar and dated it 1873-1876 (Figure 34).

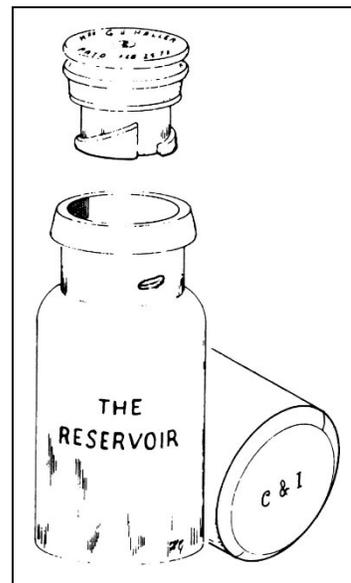


Figure 34 – The Reservoir
(Creswick 1937:184)

The Haller patent is very interesting in both the timing and location. William L. Haller joined with A.R. Samuel to form Haller & Samuel in 1862 as dealers in fruit. By the next year, the pair was selling fruit jars, and the two remained in business until 1865. One of the jars they sold was called the “Haller’s Patent.” John M. Cooper and William L. Haller received Patent No. 29,544 for an “Improvement in Self-Sealing Fruit Cans” on August 7, 1860. Haller gave his residence as Carlisle, Pennsylvania, and he assigned his share of the patent to Cooper – although he apparently recovered the rights from Cooper soon after. The jar was always known as the Haller jar.

On February 5, 1867, Haller received Patent No. 61,827 for an “Improvement in Fruit Jars,” and he received an additional patent (No. 98,586) on January 4, 1870, for another fruit jar closure. A.R. Samuel initially sold the Haller jars and the Ladies Choice made for Haller’s 1867 patent. Haller’s patents were also used on Star Jars, made and sold by Samuel until 1875 – although the Haller lids were probably only used until about 1870. Haller was employed by Samuel in 1869, but we have not traced his life beyond that point. See the section on A.R. Samuel in the A volume for more information on Haller’s involvement.

The significance of Haller's story reverts to the patent registered by Mrs. Ella D. Haller of Carlisle, Pennsylvania. The coincidence between the last name and a residence at Carlisle is too close to ignore. It is virtually certain that Ella was the wife of William. It also seems to be too coincidental that *she* was also an inventor of a jar closure. Although we will probably never have the full story, it is likely that William Haller wanted to make sure that A.R. Samuel (or a later employer) did not claim the patent. Although Ella may have been a very capable woman, William had the history of inventing jar closures. However, Ella's 1873 patent was very different from William's 1970 patent or any of his earlier ones. Alternatively, William may have died, leaving Ella with a marketable invention.

Cunningham & Co. (1878-1882)

When Dominick Ihmsen left Cunningham & Ihmsen in 1878, the firm became Cunningham & Co. until the next reorganization in 1882, when the company added the plural – Cunninghams – to the name. Like its predecessor, the firm used both full names and logos to mark a variety of products. According to Roller (1998:24), “During this period [1878-1886], no mention was made of the manufacture of fruit jars.”

CUNNINGHAM & CO. (1878-1882)

Whiskey Flasks (1878-1882)

McKearin & Wilson (1978:157-158, 579, 581) discussed and illustrated two flasks embossed “CUNNINGHAM & CO.” on the front. One was an American eagle flask with “CUNNINGHAM (with downwardly curved letters at beginning and end) / & Co (horizontal) / PITTSBURGH (with upwardly curved letters at beginning and end) in an oval below the eagle. Another American Eagle flask had almost the same embossing – CUNNINGHAM (arch) / & Co (horizontal) / PITTSBURGH (inverted arch) in the oval (Figure 35). They dated both flasks 1875-1886



Figure 35 – Cunningham & Co. flasks (McKearin & Wilson 1978:579, 581)

Cylinder Whiskey Bottles (ca. 1880-1882)

Hawkins (2009:147) illustrated a cylinder whiskey bottle embossed “CUNNINGHAM & CO. PITTSBURGH” around the outside in a Rickett’s mold (Figure 36). Although it is difficult to discern from the photo, this appears to be an indented or sunken base, the type used between ca. 1880 and 1890. The bottle was probably made during the ca. 1880-1882 period.



Figure 36 – Cunningham & Co. whiskey base (Jay Hawkins)

Fruit Jars

Toulouse (1969:85) noted a wax-sealer jar embossed on the base “CUNNINGHAM & Co” and dated the jar style as “after 1879.” Creswick (1987:39) illustrated and discussed a wax sealer embossed “CUNNINGHAMS & Co. (arch) / PITTSBURGH, PA (inverted arch)” on the base and dated the jar ca. 1880s. Neither Roller edition included these jars. With the Toulouse reputation for typographic errors, it is likely that Creswick was correct, and the jars were made during the next rendition of the company. As noted above, Roller (1998:24) stated that he found no mention of fruit jars in the literature during this period.

C&Co or C&CO (1878-ca. 1886 and ca. 1902-1907)

The “C&Co” logo could have been used during three periods: 1878-1882, 1882-1886 and ca. 1902-1907. It is possible that Cunninghams and Co. developed the logo ca. 1882, and it was *not* used during this 1878-1882 Cunningham & Co. period. See Appendix A for a discussion. It is clear from dating of bitters bottles below that the “C&Co” mark was used by Cunningham & Co. on such bottles by at least late 1879. The logo may have been used on other bottles as well. Although we have moved most of this discussion to the later two Cunninghams & Co. periods, a more conservative dater may want to include the 1878-1882 period.

Bitters Bottles

The C&Co mark also appeared on bitters bottles. Van Rensselaer (1921:8) added a “Doyle’s Hop Bitters 1872” to the list of types of bottles marked with C&Co., and these have

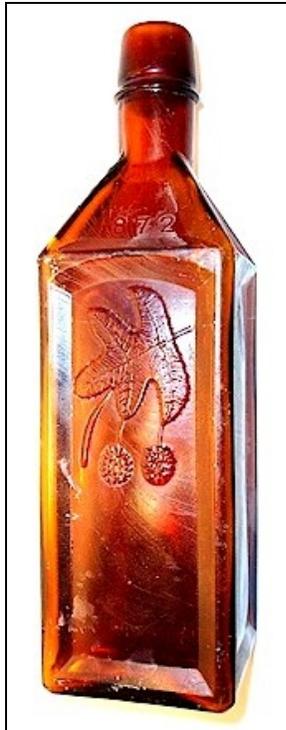


Figure 37 – Doyle’s Hop Bitters (eBay)

been offered on eBay (Figures 37 & 38). According to Ring (1980:168), the 1872 date embossed on the shoulder of the bottle indicates the year that J.D. Doyle received the patent for the formula. Doyle assigned the patent (No. 128,373) to Asa T. Soule, who made the medicine at least into the 1880s. Ring illustrated 21 variations of the hop-leaf-and-berries symbol that were embossed on the bottles. Fike (1887:33) stated that Soule assumed the proprietorship in 1874, and the last directory listing was 1881.

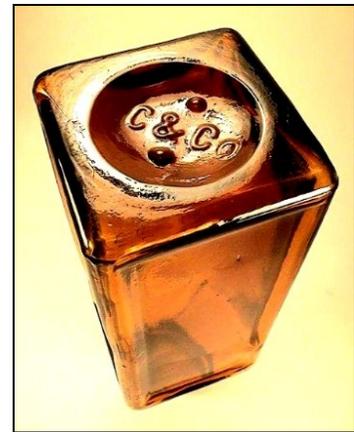


Figure 38 – Doyle’s base (eBay)

Ring (1980:80) also listed the “C&Co” mark on bottles of Berliner Bitters (Figures 39). The bottles were embossed “A. Bauer & Co.” along the heel. Ring described the bottle

as “round, amber . . . bulging long neck, nearly a lady’s leg, Rare Horseshoe disc on shoulder for label.” The *Cincinnati Enquirer* advertised Berliner Bitters on November 6, 1880, and ads continued to at least December 28, 1895, in the *Oakland Tribune*.

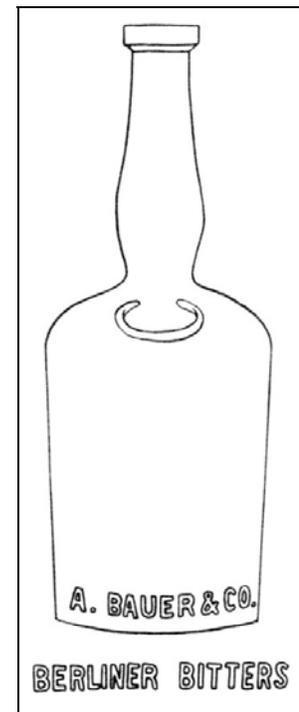


Figure 39 – Berliner Bitters (Ring 1980:80)

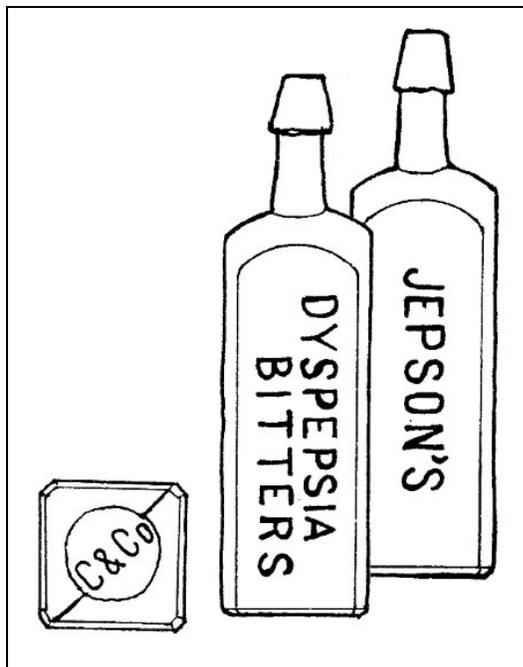


Figure 40 – Jepson’s Dyspepsia Bitters (Preble 1987:278)

Ring (1980:270) noted that Jepson’s Dyspepsia Bitters also bore the “C&Co” logo (Figure 40). According to Preble (1987:278), Edwin C. and Eugene O. Jepson formed a partnership with W.W.

Montelius and opened a business at the corner of Colfax and Broadway at Denver, Colorado, in 1880. They bottled Jepson’s Dyspepsia Bitters but were only listed in business one year. Vickers (1880:533-534) added that Montelius sold his music business in the fall of 1879 to join the Jepson brothers in the bitters business, and the *Rocky Mountain News* (Denver) mentioned Eugene as a manufacturer of bitters on September 10, 1879 – probably the date the business opened.. Since Eugene Jepson was a well-known tenor who performed on stage, music was probably the connection between Montelius and the Jepsons. Eugene moved to New York, performing regularly until at least 1894 (*Brooklyn Daily Eagle* 5/5/1894).

C (1878-1882)

[Much of this section is reprinted from Lockhart et al. 2012]

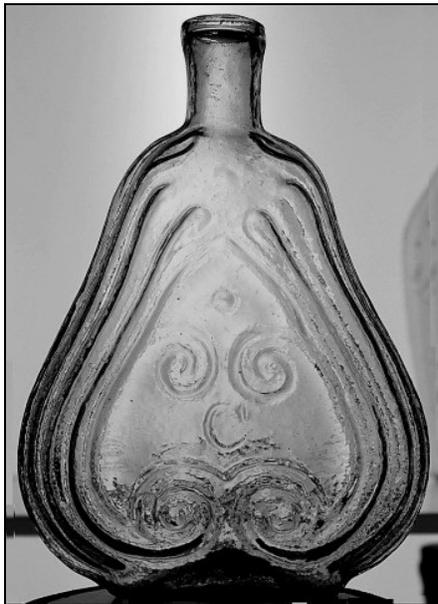


Figure 41 – “C” flask (Jay Hawkins)

Knittle (1927:441) earlier identified this lone initial as “probably Cummingham.” According to Toulouse (1971:99), it may have been used by Cunninghams & Co. from 1879 to 1909, although he admitted that the mark had “not been documented.” He noted the logo on “general line ware.” Hawkins (2009:146) illustrated an aqua flask marked with a single serif “C” in the center of the front (Figures 41 & 42).

He captioned the photo “‘C’ attributed to Cunningham & Co. on the side of a scroll historical flask.” McKearin & Wilson (1978:623) had earlier partly illustrated the flask, noting the “letter ‘e’ in lower space.” This was a typo for the serif “C” – as correctly illustrated by the pair at the bottom of the page (Figure 43). They had no guess as to the maker or date range.

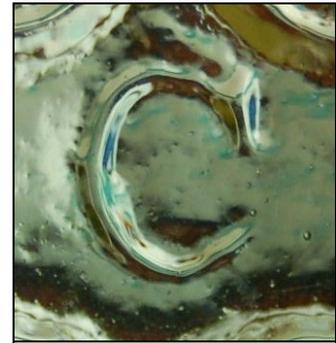


Figure 42 – Closeup “C” (Jay Hawkins)

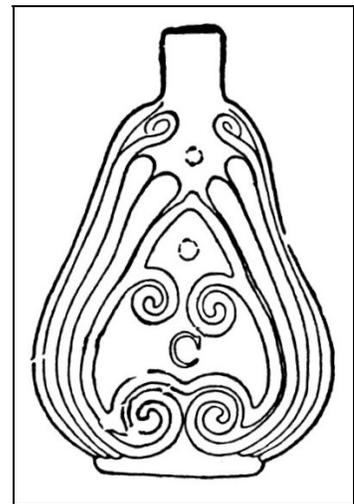


Figure 43 – “C” flask (McKearin & Wilson 1978:623)



Figure 44 – serif C base (Lockhart et al. 2012:20)

When the Bottle Research Group examined the bottle collection from the hospital privy at Fort Laramie, Wyoming, we discovered several colorless round and oval bottles that probably held chemicals or medicines of some sort. Each of these was embossed with a single large

“C” on the base. Most of the letters had a distinct serif at the top of the “C” and an embellishment in the center of the curve, while a few were sans serif (Figures 44 & 45).



Figure 45 – sans serif C base (Lockhart et al. 2012:20)

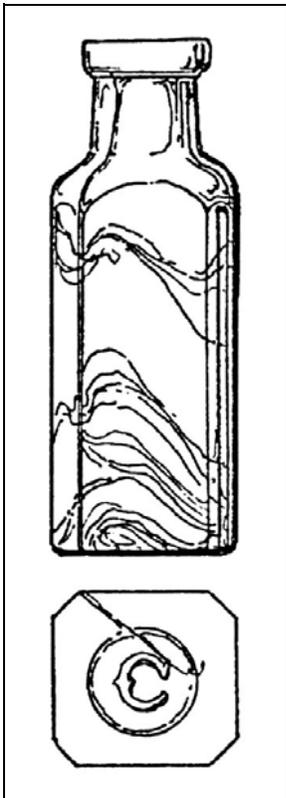


Figure 47 – “C” base (Wilson & Caperton 1994:84)

We also encountered a single coffin flask with the serif and embellishment (Figures 46). Each of these had tooled prescription finishes and cup-bottom bases. Most bottles with these initials were found in Level 4 (with one in Level 5 and three in Level 3). The average was Level 3.75 for a probable date range of 1878-1887. (Lockhart et al. 2012:14, 19).



Figure 46 – “C” flask (Lockhart et al. 2012:14)

Wilson and Caperton (1994:61, 76, 84) reported the excavation of Fort Selden, New Mexico, and included a description and illustration of a square bottle with a “patent lip” that contained a black residue, possibly shoe polish. The base was embossed with a “C” surrounded by a circle (Figure 47). The “C” had a serif at the top termination and an embellishment at the left center; their drawing was virtually identical to the marks in the Fort Riley collection. They also noted a similar “C” on a shoo-fly flask. Fort Selden was first opened in 1867 but closed a decade later. The fort reopened in 1880, about the time the railroad arrived at nearby Las Cruces, and most glass artifacts probably date from this period. The main detachment was withdrawn in 1888, and

the post was completely closed in 1891. Unfortunately, Wilson and Caperton did not provide individual provenience dating. Another serif-C base was excavated at the Tucson and resides at the Tucson Urban Renewal collection (Figure 48).

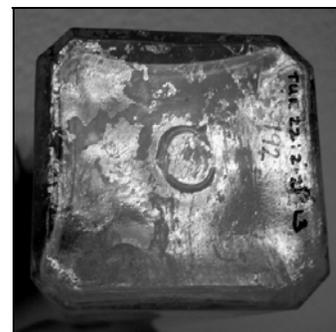


Figure 48 – Serif C (Tucson Urban Renewal collection)

We have only discovered three glass houses – whose names began with the letter “C” – large enough to have produced bottles on a national scale, were open during the ca. 1878-1887 period, and made packer, medicinal, and chemical bottles:

Clyde Glass Works, Clyde, New York (1827-1886; 1895-1912) – bottles; known for fruit jars
Cohansey Glass Mfg. Co., Bridgeton, New Jersey (1870-1901) – all types of bottles
Cunningham & Co. (1878 to 1882) or Cunninghams & Co., Pittsburgh (1882 to 1886) – all bottle types, including packers

Neither Clyde nor Cohansey was known to have used any type of logo consistently, although both embossed the factory name on fruit jars. Clyde may have used a CGW logo on some flasks, and Cohansey used a “C.G.CO.” mark on soda bottles. Although both Knittle and Toulouse undoubtedly guessed at many of their mark identifications (often incorrectly!), they were probably accurate this time. The Cunningham family had used logos to identify its products since at least the mid-1860s (Lockhart et al. 2012:19-21). The lone “C” was probably used by Cunningham & Co. during the 1878-1882 period.

Colorless Glass?

All of the containers embossed with the serif (and sans serif) “C” logo were made of colorless glass. Unfortunately, the connection between flint glass and the Cunninghams is tenuous. We would expect window glass to have been colorless by the late 1870s. Certainly the bulk of medicinal bottles were made of flint glass by that time. Since all the Cunningham firms made window glass, the plants should have had the capacity by this time. Possibly, the window glass factories made bottles marked with a “C” logo. The first Cunningham listing for flint glass in Roller (1997) was in 1891. Of course, this does not preclude the possibility of earlier use of colorless glass.

Cunninghams & Co. (1882-1886)

The firm became Cummings & Co. (note plural) in 1882 and continued to use that designation until 1886. Empirical evidence, however, strongly suggests that the “C&Co” logo (see below) was used until ca. 1892 before “LIM” was added. The factory likely used the older molds until they wore out. As noted above, Roller (1998:24) could not find any mention of fruit jar production during this period. The fruit jar described below may have been produced very late in the tenure of this firm.

CUNNINGHAMS & CO. (1882-1886)

Whiskey Flasks (1882-1886)



Figure 49 –
Cunninghams & Co.
flask (McKearin &
Wilson 1978:587)

McKearin & Wilson (1978:158, 587) illustrated and described a flask that was more elaborate than the earlier two (see above), with an eagle above the U.S. flag in an elaborately embossed setting on one side. The other side was embossed with a forest scene with an Indian shooting a bird with a bow and arrow above “CUNNINGHAMS & Co (arch) / PITTSBURGH, PA (horizontal)” with a design in between (Figures 49 & 50). The authors dated all three containers 1875-1886. Since the firm was not Cunninghams & Co. until 1882, that is a better beginning date.



Figure 50 – Closeup of name (Jay Hawkins)

Fruit Jars

Creswick (1987:39) illustrated and discussed a wax sealer embossed “CUNNINGHAMS & Co. (arch) / PITTSBURGH, PA (inverted arch)” on the base and dated the jar ca. 1880s (Figure 51). Neither Roller edition included these jars.

C&Co or C&CO (1882-1886)

Although this logo could have been used by Cunningham & Co. during the 1878-1882 period, we have hypothesized that the mark was used during two periods: 1882-1886 and ca. 1902-1907). In between, the firm was called Cunninghams & Co., Limited, and it used the “C&CoLIM” logo discussed below. Although Cunninghams & Co. added Lim. to its 1886 directory listing, empirical evidence (see discussion below) suggests that “C&Co” continued to be used until ca. 1892. Hawkins (personal correspondence) suggested that the glass workers probably used the existing molds (with C&Co.) until they wore out rather than retooling to add the LIM. Although overlaps like this almost certainly happened, we have elected to follow the dates indicated by the change in company names in our heading.

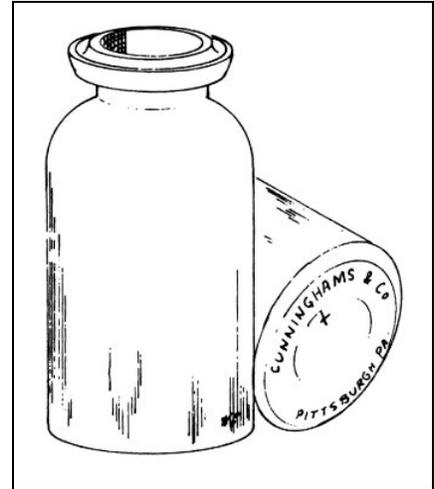


Figure 51 – Wax sealer with Cunninghams & Co. (Creswick 1937:39)

Export Beer Bottles



Figure 52 – C&Co beer base

This mark was embossed horizontally across the center of export-style beer bottle bases (Figures 52 & 53). The mark was noted by Ayres et al. (1980:); Jones (1966:7; 1968:14), Knittle (1927:441), Toulouse (1971:119), and Hawkins (2009:149), although it was surprisingly missing from

Wilson (1981). Herskovitz (1978:8) noted a slight variation to the mark: C&Co, although he only observed one example. Lockhart & Olszewski (1994:39) found 27 beer bottle bases with the C&Co mark at San Elizario, Texas, on a site now dated 1880-ca. 1886.



Figure 53 – C&Co beer finish (eBay)

We had in our possession an example of the mark on an amber, export beer bottle with an applied finish, and we examined export beer bottles with the logo, found in the Tucson Urban Renewal collection that all had applied, one- or two-part finishes. Coupled with the information from Clint (below), we know that C&Co marks appeared on bottles with both applied and tooled finishes. Any found with tooled finishes were likely made during the late part of the date range and were probably not export beer bottles.

In the TUR collection, we found a single bottle with the C&Co mark that had a finish with a sharp lower ring. Most of the finishes were two part, but the lower ring was rounded. This fits neatly into the observed sequence of manufacturing techniques for finishes on export beer bottles (Lockhart 2007). We would expect the sharp lower rings only on beer bottles made during the earliest years of the Cunninghams & Co. production (see discussion in C & I marks section above).

Other Beer and Soda Bottles

The “C&Co” logo was embossed on the bases and heels of soft drink bottles and champagne beer bottles (Figures 54). Fletcher (1994:228, 319) also listed the mark in connection with Kansas soda bottles. Kroll (1972:91) noted a single example of the mark on a Wisconsin beer bottle, and the brewery was in business from 1885 to at least 1972.



Figure 54 – C&Co heelmark

Peters (1996:9) dated the C&Co marks 1879 to ca. 1891 based on empirical data from some 10 Wisconsin soft drink bottles bearing the mark. The bottles were dated by local historical data to supply the date range. Clint (1976:124), too, only showed a single example of the mark on the back heel of a Hutchinson bottle with an applied finish that he dated ca. 1880.

Other Bottles

Although completely unrelated, a C&Co mark was also used by Colgate & Co. on toiletry bottles in the early 1900s (Griffenhagen & Bogard 1999:122), although it would never be mistaken for a Cunningham mark (Figure 55). Another oddity was a base embossed “C&Co /



Figure 55 – Colgate’s C&Co logo (eBay)

BOSTON” (Figure 56). Unfortunately, we did not record the bottle type. We have found no connection between Colgate & Co. and Boston, nor between Cunningham & Co. and Boston, so the bottle base remains a mystery.

C.&C.



Figure 56 – C&Co Boston (Tucson Urban Renewal collection)

Hawkins (2009:156) listed this mark on a fruit jar. It was likely an engraver’s error sometime during the 1882-1886 period.

Cunningham & Co., Lim. (1886-ca. 1902)

After the death of Wilson Cunningham, the firm became a limited partnership. During the first year, however, Robert Cunningham withdrew, and Dominick retained the “Limited” even though he was now sole owner. The factory apparently specialized in beer and soda bottles during this period, although the plant made at least one fruit jar.

C&Co LIM (ca. 1892-1907)

Export Beer Bottles (1892-ca. 1900)

The “C&CoLIM” basemark was typically embossed horizontally across the bases of export beer bottles, although a single eBay auction included a slightly out-of-focus photo of a base marked “C&Co / LIM.” This is the only case we have found with the “LIM” below the “C&Co.” Each base had a one- or two- digit number. The vast majority had the number below the logo (Figure 57), but a few of the earlier numbers were above it (Figure 58).



Figure 57 – C&CoLIM beer base (Fort Stanton)

The logo was reported on beer bottles by Ayres et al. (1980:), Herskovitz (1978:8), Berge (1980:141), Wilson & Caperton (1994:56), Hawkins (2009:149), and Lockhart (2011:8, 10). Herskovitz noted 40 examples with numbers from 0 through 13 below the mark, but Wilson & Caperton only found two (8 & 11). Berge (1980:141) illustrated an example of the mark, although he had no idea who made the bottle.



Figure 58 – C&CoLIM beer base (Fort Bowie)

Kroll (1972:3, 75, 125) listed the mark as “manufacturer unknown” and noted two instances of the mark’s appearance on Wisconsin beer bottles. In both cases, the breweries were in business from the mid-1800s to at least 1972, so the dates were unhelpful in specifying a range for the mark. The only examples of beer bottles we have observed (in the Tucson Urban Renewal collection) had applied, one-part finishes. It is possible that the company only made the 26-ounce “quart,” export beer bottles into the early 1890s.



Figure 59 – C&CoLIM 11 (Wilson & Caperton 1994:65)

An unusual set of marks on an amber export beer bottle was C&CoLIM / 11 embossed on the base with a D.O.C. heelmark (Wilson & Caperton 1994:56). This blending of the Cunninghams & Co. with D.O. Cunningham indicates a sharing of molds. It may be that Cunninghams & Co. was short a mold or two to complete an order and sent someone



Figure 60 – C&CoLIM 12 (Fort Stanton)

down the street to borrow a couple of molds from the other plant. Since Dominick O. Cunningham owned both businesses by this time, such sharing was probably common.

Two molds, “C&CO.LIM / 11” and “C&CO.LIM / 12” were used to make a significant number of bottles (Figure 59). The numbers were quite distinctive. Each “1” was back-slanted with serifs at the top, and the “2” had a distinctive curve on the bottom line (Figure 60). Bottles made with both molds were found at Fort Bowie (BRG observation), Fort Selden (Wilson & Caperton 1994:65), and Fort Stanton (Lockhart 2008).

Soda Bottles

Peters (1996:9) dated the mark's use on soft drink bottles from ca. 1892 to 1907, based on a small sample (1996:32, 198) of Wisconsin bottles. Clint (1976:175) illustrated a single example of a Hutchinson bottle marked C&Co LIM No. 5 on the back heel. The container had a tooled finish, and he dated it 1905-1910. The C&Co LIM mark was apparently used from 1886 to ca. 1905 or later. Even though the company dropped the "Limited" in 1902 and became incorporated, the workers probably continued to use bottles marked "LIM" until the supply was exhausted.

CUNNINGHAMS & CO. LIM. PITTSBURGH, PA. (1886-1900)

Roller (1983:99) discussed a grooved-ring wax sealer fruit jar embossed "CUNNINGHAMS & CO. LIM. (arch) / PITTSBURGH, PA. (inverted arch) on the base and dated it "c. late-1890s to early 1900s." Creswick (1987:40) illustrated the same jar but dated it ca. 1879 (Figure 61). Creswick was certainly too early. The bottle was made during the 1886-1900 period. As noted below, D.O. Cunningham discontinued fruit jars by 1900, so his other plant likely did the same. The firm also used metal caps embossed "C&CoLIM" (Figure 62).

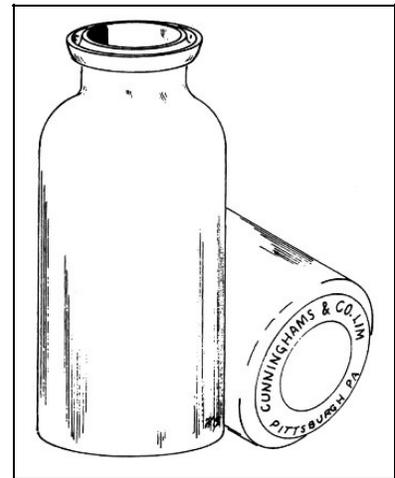


Figure 61 – CUNNINGHAMS & Co LIM jar (Creswick 1987:40)

Cunningham & Co. (ca. 1900-1907)



Figure 62 – C&Co LIM lid (North American Glass)

Although this final version of the firm probably did not make bottles later than 1905 or 1906, it apparently used the "C&Co" logo. Empirical studies by both Clint (1976:175) and Peters (1996:9, 32, 198) suggest that the LIM added to the mark was used until the end of the company.

C&Co or C&CO (1900-ca. 1905?)

Hawkins discovered an export beer bottle from the Loyalhanna Brewing Co. (Pittsburgh) that was marked “C&Co” (no LIM). The company started business in 1901. Miller (1999:19, 119) illustrated a single Hutchinson-finished bottle embossed “C&Co 4” on the back heel. He dated the bottle ca. 1900.



Figure 63 – Indian Botanic (eBay)



Figure 64 – Balsam and Foley’s (eBay)

Three different medicinal bottles offered at eBay auctions support the use of the “C&Co” mark during the 1900-1905 or 1906 period.



Figure 65 – C&Co logo (eBay)

The logo was embossed on the base of an aqua bottle for Indian Botanic Balsam. The face of the bottle was embossed “INDIAN / BOTANIC” with “BALSAM” on one side panel and “J. FOLEY’S” on the other (Figures 63-65). John Foley registered the label for the balsam (No. 2,865) on June 14, 1875. The label included

a landscape in the foreground of which one at each side are the figures of two Indians upon the bank of a stream. The one at the left is kneeling upon a rock under a tree and leveling his gun at a deer standing upon an island in the midst of the stream. The Indian to the right has in his right hand a bow and in his left a bundle of herbs representing the source from which the balsam is prepared. On the farther bank of the stream is a thick forest. Over the border of this picture the sun is seen rising and in his divergent rays is the word FOLEY’S. Just under the out are the words INDIAN BOTANIC BALSAM (*Commissioners of Patents Journal* 1875:2666).



Figure 66 – Dr. Bosanko's Pile Remedy (eBay)

Fike (1987:59) cited city directories listing (John B.) Foley & Co., Chicago, for the first time in 1890. Foley was at 110 Randolph in 1891. Vent marks on the bottles (4 on the base; 4 on each side; 1 on the shoulder), however, suggest a manufacture of the bottles during the early 20th century.



Figure 67 – Dr. Bosanko's base (eBay)

Another eBay auction offered a bottle for Dr. Bosanko's Pile Remedy that was solarized to an amethyst color (Figures 66 & 67). Manganese dioxide was used as a decolorant to produce colorless glass during the ca. 1880-1920 period. This bottle, therefore, was originally colorless. The base was embossed with "C&Co" including the ampersand with an extended "tail" that has been seen on other Cunningham products. The base was double-stamped, a process discussed in the American Glass Co. section of the "A" volume. The process was most common on bottles from the 1890s to ca. 1914.

The Bosanko Medicine Co., Piqua, Ohio, registered the label for Dr Bosanko's Pile Remedy (No. 4,215) on September 9, 1884. By the 1890s, the firm had moved to 128 S. Sixth St., Philadelphia. Bosanko sold all rights to the Pile Remedy, along with Dr Gunn's Improved Liver Pills and Dr Gunn's Blood and Nerve Tonic to the Dr Chase Co., also a Philadelphia concern, in March 1913 (*Exclusive Distributor* 1913:6; Fike 1987:205; *Typographical Journal* 1903:361; U.S. Patent Office 1885:363).



Figure 68 – A. Renkert bottle (eBay)

One other aqua container with a "C&Co" basemark was a pharmacy bottle. It was embossed "A. RENKERT" at the top of the side plate, with "MEMPHIS" on one side panel, and "DRUGGIST" on the other (Figure 68). Renkert was in business from the 1860s to 1910, although this bottle was likely used between ca 1890 and 1910 (Memphis Diggers 2014).

Dominick O. Cunningham (1880-1931)

Dominick O. Cunningham began his own glass business in 1880 and soon acquired full control over Cunninghams & Co. In his own plant, he only used the “DOC” or “D.O.C.” logo.

DOC (1880-1931)

“DOC” (or “D.O.C.”) was the only logo used by Dominick O. Cunningham during his entire 51-year tenure in business (1880-1931). His factory specialized in beer and soda bottles, although the plant made some fruit jars.

Export Beer Bottles



Figure 69 – Double-stamp DOC (eBay)

Although Dominick Cunningham made export beer bottles during the 1882-ca. 1896 period (and possibly later), at some point, probably during Prohibition, the firm ceased beer bottle production and never resumed. In 1927, the factory made “flint and green beverages and waters” (*American Glass*



Figure 70 – DOC basemark (National Park Service Western Archeological and Conservation Center)

Review 1927:132). Some of the basemarks on mouth-blown bottles had double-stamps (Figure 69). We discussed this technique at length in the American Bottle Co. section of the “A” volume. The double-stamp was mostly used on bottles between ca. 1895 and ca. 1914, although it may have been used earlier on fruit jars. As with other glass houses, most Cunningham bottles did *not* have double-stamps (Figure 70).

The mark of Dominick O. Cunningham was embossed horizontally across the center of export-style beer bottle bases. The mark was shown in Ayres et al (1980), Herskovitz (1978:8), Jones (1966:7, 16; 1968:16), Toulouse (1971:163), Wilson (1981:115), Wilson & Caperton (1994:65), and Lockhart (2011:10). Herskovitz (1978:8) noted 49 examples accompanied by

embossed numbers (2-23) and letters (A, G, and S). See the section on C&CoLIM above for a discussion of the distribution of DOC logos at Fort Stanton.

Cunningham made some of the later beer bottles for Carl Conrad's Budweiser (prior to Conrad's January 1883 bankruptcy and subsequent sale of the label to Anheuser Busch – see Wilson 1981:3, 6 for examples). These were embossed with the CC&Co monogram on the base and "DOC" on the heel. These Conrad bottles all had sharp lower rings on the two-part finishes (see C&I mark for a discussion of the importance of this distinction). Thus, we know that Dominec Cunningham made beer bottles during his first two years in business. The only example we have observed with D.O.C. on the base of an export beer bottle had an applied, one-part finish. See the Carl Conrad section for more information.

Although this needs further testing, it appears that D. O. Cunningham did not make many beer bottles during the early years that the company was in business. Only the Conrad bottles have both the DOC mark and applied, two-part finishes with sharp lower rings. Other beer bottles produced by D. O. Cunningham were apparently made later and have either one-part or crown finishes. At Fort Stanton's Beer Bottle Dump #1, for example, no bases with the DOC mark were found on loci from the early 1880s. However, large quantities of bases with the mark were found on sites that dated between 1889 and the early 1890s. This needs to be tested in more locations and with larger samples.

Soda Bottles

McKearin & Wilson (1978:157) noted D.O.C. on the bases of soft drink bottles (Figures 71 & 72) dating from ca. 1900. By 1885, Cunningham advertised "mineral, ginger-ale, and beer bottles" in the city directory (Toulouse 1971:163). The firm also made bottles for Poland Water from "1906 until its closing" (McKearin & Wilson 1978:157).



Figure 71 – DOC on Coke bottle (eBay)



Figure 72 – DOC basemark (eBay)

Six examples of DOC marks on bottles were found in the Dictionary of Embossed Beers (Mobley 2004). Five had the mark on the heel (Figure 73), and four of those had numbers to the right (2, 102, 210, and 307). All had either blob or Baltimore loop finishes. The final bottle was embossed “DOC / 8” on

the base. Clint (1976:137) showed a single example with a heelmark followed by 106. The bottle had a tooled finish, and he dated it 1893 to 1894. Numerous heelmarked bottles have been offered on eBay, although a few had basemarks or heelmarks with no numbers.

We drew a sample of DOC-marked bottles from eBay and rechecked Mobley (2006). Several eBay bottles were machine made, and all had the same pattern of numbers x (or xx)- x (e.g., 56-2, 7-6, 20-1, 35-5). A similar pattern – also on machine-made bottles – was xxx x (e.g., 220 3 – Figure 74). This was probably just a variation in engraving rather than a distinctive difference.

All of Mobley’s bottles were mouth blown, and they followed two patterns. The least (five examples) had both DOC and a one- or two-digit number on the base – and three of those were only marked “DOC” and “X.” The more common mark was DOC followed by a 1- to 4-digit number on the back heel. Two bottles with #206 were identical, except for color, although two others (#389) were just slightly different in shape, but that may have been caused by hand manufacturing techniques. Another two were from the same brewery and the same style, but one had the capacity and the other did not (#1203 and #1247). A Hutchinson bottle offered on eBay was embossed on the heel with D.O.C.71. The bottle had an applied finish. All this suggests that the numbers on hand-made bottles may be catalog or model numbers.



Figure 73 – DOC heelmark (Bill Porter collection)



Figure 74 – DOC heelmark (Charles Head collection)

All DOC beer bottles at Fort Stanton (large sample) were made no later than 1896, and they were almost all found in the later loci, so they were probably not made much before 1890. All of them had applied finishes, and all were marked DOC or D.O.C. on the base with a one- or two-digit number either above or below the logo. The above data suggest three different marking periods:

1. DOC / x or xx on base (mouth-blown) – all on beer or export beer bottles – probably pre-1896
2. DOC x to xxxx on heel (mouth-blown) – beer or soda bottles – ca. 1896-ca. 1920s; Coca-Cola bottles and possibly some others had this pattern as basemarks.
3. DOC x (or xx or xxx) - x on heel (machine-made) – only soda bottles – ca. 1914-1931; These occasionally had a space instead of a hyphen.

Fruit Jars

Roller (1998:25) cited the January 14, 1888, *Commoner & Glassworker* that D.O. Cunningham was making beer and mineral water bottles, along with Mason jars at an 8-pot furnace. In 1891, the firm primarily produced fruit jars at the rate of 200 gross per day and were shipping them as fast as they could be packed. By 1892, the firm advertised Mason jars along with wax-sealers. Roller cited the *National Glass Budget* of June 1, 1898, Cunningham had received 27 [railroad] carloads of fruit jars made by “a non-union factory in Red Key, Indiana.” Cunningham could buy jars from the non-union glass house more cheaply than his own factory could make them. By January 6, 1900, the plant discontinued making fruit jars to concentrate on beer and soda bottle production.



Figure 75 – DOC wax sealer (eBay)

Cunningham made a single style of grooved-ring, wax-sealer fruit jar, probably early in his company history. An eBay auction offered an example embossed “D.O.C.” horizontally across the base with an upside-down “1” above the logo (Figures 75 & 76).



Figure 76 – Wax sealer base (eBay)

Toulouse (1969:93) noted that the “DOC” mark was on the “side” of wax-sealer fruit jars and dated the jars “circa 1882.” Roller (1983:104; 2011:164) listed the jar and dated it ca. 1882 to 1900. He cited an ad from *China, Glass & Lamps* on May 13,

1896, from Cunningham for “STANDARD, Stone’s Patent or groove ring” jars but stated that the January 6, 1900, *Commoner & Glassworker* advised that Cunningham had ceased making fruit jars. Creswick (1987:46) showed a grooved-ring, wax-sealer fruit jar with D.O.C. in a slight arch at the top of the base (Figure 77), but we have not discovered an example of that variation.

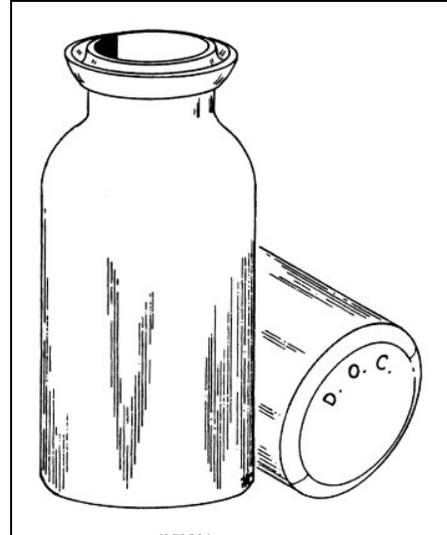


Figure 77 – DOC wax sealer (Creswick 1987:46)

Flasks



Figure 78 – Shoe-fly flask (eBay)

An eBay auction depicted a single shoe-fly flask embossed “D.O.C. / X” on the base (Figures 78 & 79). The bottle was a blue-aqua color with a two-part, tooled “brandy” finish. Unfortunately, this could have been made at virtually any time during the D.O. Cunningham tenure, although it was probably not produced later than the 1920s.



Figure 79 – Flask base (eBay)

Fletcher’s Vege Tonic

Cunningham made at least one square, amber bitters-style bottle, embossed “FLETCHER’S VEGE TONIC” on the front (to be



Figure 80 – DOC Vege Tonic base

read with the finish facing left) and “DOC” on the base (Figures 80 & 81). These bottles are at least scarce, possibly rare, suggesting that they were only produced for a short period. The basal initials are double-stamped.

The tonic was prepared by Mihalovitch, Fletcher & Co., Cincinnati, Ohio. The firm’s documents note a founding in 1874, but that may have been an ancestral company. Pre-pro.com (2014) suggests that the firm was in business from 1883 to 1918, with name changes to the Mihalovitch-Fletcher Co. in 1904, and the Mihalovitch Co. in 1910. The vege tonic was not listed on letterheads in 1890 or 1907.

However, a billhead on Worthpoint, dated March 14, 1890, listed Fletcher’s Vege Tonic along with Fletcher's Bitters, Fletcher's Ginger Tonic, Fletcher's Peppermint & Ginger Essence, and seven other brand names, plus a variety of unnamed whiskies, brandies, and wines. The crudeness of the bottle and finish type suggest that the container was probably made early, possibly soon after the firm entered business in 1883. This Fletcher was apparently not connected with Charles Fletcher of Fletcher’s Castoria.

D.C.CO.I.

This mark was recorded by Tod Von Meechow on the reverse heel of a Hutchinson soda bottle. Von Meechow dated the mark 1897-1931, noting that Cunningham incorporated in 1897. An eBay auction offered a Hutchinson soda or beer bottle embossed “D.G.CO.” – followed by a two-digit number. It is likely that von Mechow’s example only had the numeral “1.”



Figure 81 – Fletcher’s Vege Tonic

BOC



Figure 82 – BOC bottle
(David Whitten)

David Whitten discovered a yellow-amber champagne beer bottle embossed “PAT / BOC / 85” on the base (Figures 82 & 83). The Baltimore Loop finish appears to have been applied. We believe that this was an engraver’s error for “DOC.” Possibly the mold maker was hungover and carved a “B” instead of a “D” in the initials. We have certainly discovered other incorrectly embossed letters. Whitten (2014), however, noted that the logo it had “been proposed by some researchers that this mark is merely a mold-cutting error for ‘D.O.C.’ . . . I am doubtful and believe that this does stand for an obscure glass company (or some type of bottling or brewing firm?) with those corresponding initials.” We have searched the bottle literature for several years and have yet to find a single glass house with B.O.C. initials. Although Whitten could be correct, we feel that the engraver’s error hypothesis is the simplest – and most likely – explanation.



Figure 83 – BOC beer base
(David Whitten)

Discussion and Conclusion

Two firms that we included in our 2005 article on the Cunningham family apparently did not exist. Although our reasoning is slightly different in each case, we have included some of the discussion below.

Cunningham & Jackson (1845-1849)

Although Knittle (1927:344) claimed that Wilson Cunningham and George Whitten Jackson joined together to make window glass and green bottles, Palmer (2007:1) discovered that she was in error. Jackson’s business was pork packing, and his partner was Robert W.

Cunningham, not Wilson. Robert was not a member of the bottle-making Cunninghams. Thus, our entry for “Wilson Cunningham and George Whitten Jackson” in Lockhart (2005b) – our original publication on the Cunningham family holdings – was incorrect and has been removed from this publication.

Cunningham & Johnson (1849-1867)

We discussed this plant in the 2005 article, but we have found little actual evidence of its existence. McKearin & McKearin (1941:607) noted that about 1857 the Brown St. plant was operated by Cunningham & Johnson. The plant did not return to control by the Cunninghams (Cunninghams & Co.) until 1886. Since this plant was *not* listed or discussed by Hawkins (2009:146-156), it was probably confused with the original Cunningham & Co. by early researchers. As noted in the text above, Dominick Johnson was one of the early partners in Cunningham & Co., so his name was likely confused in the firm name by some researchers. We have been unable to find any primary source for this firm.

What’s in a Name?

One of the most confusing (and confused) aspects of the study of the Cunningham holdings was the absence or presence of the plural – Cunninghams. Hawkins (2009:145-148) followed the city directories – which, indeed, set the pattern that we, too, have followed in all but one of the company histories. The jars, however, tell a different story. At least one jar – attributed to the initial company that is the most certain of all to have had the singular name – was embossed “CUNNINGHAM’S & Co.” – although all others that we have attributed to the first firm – pontil scarred or not – used the singular.

The second firm was listed every time but one in the city directories as Cunningham & Ihmsen (singular). However, every single photo of a jar or bottle with the full company name for the second firm showed the name as “CUNNINGHAMS & IHMSEN.” Both Creswick (1987:39) and Toulouse 1969:84) included a single example each of the singular name. All other source material used the plural. Roller (1997) listed eight ads from the company, seven of which used the plural compared to one with the singular. Two government references called the firm Cunninghams & Ihmsen. The name also makes sense because there were three

Cunninghams in the firm and one Ihmsen. We have therefore accepted the plural for this incarnation of the company.

Hawkins (2009:145-148) listed the next two firms as Cunningham & Co. (1878-1882) and Cunninghams & Co. (1882-1886) – again based on city directory listings. We have only found two flasks – listed by McKearin & Wilson (1987:575, 581) and one cylinder whiskey bottle embossed with the singular of Cunningham & Co. However, the same sources only list one of each (along with a single fruit jar) embossed with the plural name. By this time, the use of the C&Co initials had become prevalent. We have no advertisements for this period nor any other valid source material. The few listings from Roller (1997) were 1880 or later. Five of the six used the plural. The change makes no sense whatsoever. During the entire period (1878-1886), the company was composed of Wilson, Robert, and Dominick Cunningham. Was Wilson THE Cunningham from 1878 to 1882, with the other two as “& Co.?” Did Wilson loosen the reins enough in his old age to allow the others add the plural in 1882?

Almost all listings for Cunninghams & Co., Ltd., used the plural, but virtually all after 1901 used the singular. Unfortunately, virtually no bottles during these two periods used the full company name. Since only initials were used by both companies, however, the presence or absence of the plural is academic rather than practical.

The conclusion of this brief look at names strongly supports the singular – Cunningham & Co. – for the first firm and plural – Cunninghams & Ihmsen for the second one. After that, the tiny bit of existing evidence seems to support Hawkins’ idea that the third company was called Cunningham & Co., with more evidence that the fourth was Cunninghams & Co. There seems no question the Cunninghams & Co., Ltd., used the plural or that the final reorganization followed the singular format.

In Addition . . .

The discussions about the marks and dating above are generally clear and self-explanatory and need not be reviewed here. Three other salient discussions and/or hypotheses are presented below in the three Appendixes.

Future research should concentrate on finding local sources, references, and/or larger samples of bottles from the 1878-1882 period. Our hypothesis about the use of “C” basemarks during that time period, for example, is logically sound but lacks any solid evidence. In addition, larger samples of bottles with “C&Co” and “C&CoLIM” in datable contexts are needed to further support (or deny) the extension of “C&Co” logos to ca. 1892 – well into the “LIM” period and the extension of “C&CoLIM” to the end of the firm. Finally, more historical references for the final two periods should prove both useful and interesting.

Acknowledgments

We are deeply indebted to Jay Hawkins. His information from Pittsburgh city directories – as well as his book – has been invaluable. Frequently, this data has meant the difference between guessing about tenuous dates and having more solid figures to report. Our gratitude also goes to Douglas M. Leybourne, Jr., for allowing us to copy and use drawings from *The Fruit Jar Works*. Thanks also to Greg Spurgeon for permission to use the fabulous photos from North American Glass. In addition, our gratitude to Ken Farnsworth for providing high-resolution photos from his 2011 book with John Walthall. We are also indebted to eBay and the thousands of sellers for inadvertently presenting such a great venue for usable photographs and informatio.

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