Charles Boldt Glass Co.

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The Charles Boldt Glass Co. grew out of the Muncie Glass Co. at Muncie, Indiana, in 1900. As part of the reorganization, Boldt built a new plant at Cincinnati, Ohio, that same year. As production grew at Cincinnati, the Muncie factory was used less until the corporation disposed of the Muncie operation at the beginning of 1909 (although Boldt retained at least some interest until at least 1911). Boldt acquired a license to make liquor bottles and flasks with the Owens Automatic Bottle Machine in 1910 and began production at the Cincinnati plant.

Boldt opened a second factory at Huntington, West Virginia, in 1914, but – due to increasing Prohibition in the U.S. – he sold the majority of his stock to the Owens Bottle Co. in 1919. Owens refurbished both plants and shifted manufacture to packers' ware and other bottle types. The Owens firm acquired the remaining stock on January 1, 1926, and closed the Cincinnati operation. The Huntington factory became Plant No. 2 of the Owens Bottle Co. and remained in production into the Owens-Illinois Glass Co. era beginning in 1929.

Histories

Muncie Glass Co., Muncie, Indiana (1888-1900)

On November15, 1888, Herman F. Immohr, Jacob Sheurer, and Charles Boldt incorporated to form the Muncie Glass Co. with a capitalization of \$25,000 (Figure 1). Boldt was only 20 years old, yet he served as the president of the organization. By 1892, the plant operated a single four-pot green-glass furnace and two 14-pot furnaces (likely flint). At the time of the May 14 report, the green furnace was exclusively producing Mason fruit jars (Clarke 1912:652; Roller 1999). The green glass furnace was housed in a separate building from the flint glass production area, and the latter structure was completely consumed by fire on September 7, 1892. The blaze was reported as "incendiary" – i.e., caused intentionally. The plant was rebuilt and was making a general line of flint bottles and prescription ware by 1895. About the middle of 1896, Boldt apparently acquired the Nelson Glass Co. and moved the Muncie operation to that location. A January 20, 1900, billhead shows that the firm made "Flint Bottles for the Drug, Liquor & Condiment Trades" (Roller 1999). However, a reorganization was in the wind.



Figure 1 – Charles Boldt (Clark 1913:653)

Charles Boldt Glass Co., Muncie, Indiana (1900-1908)

On March 3, 1900, the *Commoner & Glassworker* announced that Boldt would be reorganizing the Muncie Glass co. as the Charles Boldt Glass Co., in time for the next "blast." He opened the Cincinnati plant the same year (see below). At least initially, the Muncie plant produced flint glass (*Lima Times Democrat* 1900; Roller 1994:74; 1999). By 1901, the Muncie factory used 57 pots to make its products, but, by 1904, the factory had two continuous tanks with a total of 13 rings and made "a general line of bottles and packers' ware in flint" (*National Glass Budget* 1901:11; *American Glass Review* 1934:149 – Figure 2).

It is likely that machine production of wide-mouth ware began at the plant during 1905. On March 18, *China, Glass & Lamps* announced that the plant would <form>

MONTHLY STATEMENT

FOLIO

Figure 2 – 1904 billhead (Harvey Teal)

"resume with one tank only. Full production expected soon." However, on April 22, the *Commoner & Glassworker* stated that the Muncie factory was using five machines to make Mason fruit jars and a similar number of machines manufacturing "white liners" (i.e., milkglass discs to be held in place by metal screw bands) (Roller 1999).

Hand production existed alongside semiautomatic machines for several years in both plants. In 1905, Boldt reportedly decided to convert Muncie to an all-machine green-glass operation, and to devote it entirely to producing fruit jars, "press liners" and jar lids.¹ At the same time, fruit jar production was to be discontinued at Cincinnati. It is unclear how thoroughly the plans were carried out, but Boldt did use it as a rationale for switching the jurisdiction of the Muncie factory from the Bottle Blowers Association to the Flint Workers' Union. Two machines were in place, making 4 oz. and 24 oz. "cherry bottles." Also in 1905, machines (perhaps newly installed) were in use at Cincinnati.

The Muncie plant began the year (1905) with three machines, had four at mid-year (one producing milk bottles, two for whisky flasks and one – a new "Johnny Bull" – for "brandy-fives"), and finished the year with five machines. At the beginning of the year, 30 glassblowers were also employed. We have found no further record of fruit jar production – on machines or otherwise (*Commoner and Glassworker* 1908b; Mayer 1908a; 1908b; *National Glass Budget* 1905a; 1905b; 1905c; 1906; 1912c). It is clear, however, that the major production center had shifted to Cincinnati. The Thomas Registers listed the Muncie plant as "Br. Cincinnati" or "Branch of Cincinnati, Ohio" from 1905 to 1909 (Thomas Publishing Co. 1905:103; 1907:158; 1909:199).

The factory burned in early January 1907 but was quickly rebuilt and continued to operate through the end of 1908, when Boldt turned the factory over to the newly-established Muncie Glass Co., run by "Muncie people." Prior to transfer, the five machines at Muncie were moved to Cincinnati, along with the men who ran them. This should have left the Muncie factory as a hand shop, but reference to a "machine tank" makes this uncertain. The plant specialized in prescription ware. Though it reportedly had been "sold" to the new company, union sources asserted that Muncie Glass was merely a holding company for Boldt² (Boldt 1909; *Commoner and Glassworker* 1908a; 1909; Mayer 1909; Roller 1994:75; 1999).

¹ Press liners were the flat glass (often milk glass) disks that were held in place by zinc (or later steel) threaded bands to form the lids on some jars.

² As noted above, the 1909 Thomas Register still listed the Muncie factory as a "Branch of Cincinnati, Ohio." Sometimes, the Registers did not catch changes until two or more years had passed, so this is *not* a reliable indicator. The Muncie plant was no longer listed in the next Register – not issued until 1912.

When the factory was again destroyed by fire at 8:00 AM on January 6, 1910, Charles Boldt was listed as the owner. Five hundred employees, many of them women, were thrown out of work by the blaze that caused an estimated loss of \$65,000, although the insurance would only cover \$52,000. The plant was rebuilt, and that fall it was making "milk bottles, flasks, packers and a general line of machine ware" on five machines.³ Nonetheless, the company was dissolved in December (*Fort Wayne Sentinel* 1910; Mayer 1910b; Roller 1994:75; von Mechow 2014).

In a document from the "Charles Boldt Company," the "Muncie Factory," was listed under "various departments" of the Charles Boldt Co., in the "Gain for Eleven Months," suggesting that Boldt retained some sort of interest at Muncie. A second report from the same year listed "Muncie Factory, Mach. & Fixtures" valued at \$34,118.13 (Charles Boldt Co. 1911a; 1911b). We have discovered no further reports of the Muncie operation. Boldt probably disposed of the property in 1912, but it is unlikely that any sort of production resumed after December 1910.

Charles Boldt Glass Co., Cincinnati, Ohio (1900-1906)

In 1900, Boldt built a new factory at Cincinnati. Production included a "general line" of bottles, but the emphasis seems to have been on packers' ware and liquor bottles. One of the first items of business at the new Cincinnati plant was a large order of catsup bottles-reputedly "enough to make a thousand carloads of finished goods." While the Muncie plant made flint glass, Cincinnati manufactured both flint and amber products (*Lima Times Democrat* 1900; Roller 1994:74).



Figure 3 – 1905 billhead (Harvey Teal)

³ Since by this time the Cincinnati plant was busily converting to Owens machines, it is possible that these were the same five semiautomatics that had been moved from Muncie to Cincinnati at the end of 1908.

Although the Cincinnati factory was not listed in 1901, the plant used ten pots the following year. However, by 1904, production had grown immensely. The Cincinnati factory had three continuous tanks with 22 rings, producing "liquor ware, flasks and packers' ware" (*National Glass Budget* 1902:11; *American Glass Review* 1934:149, 161). As noted above, machine production had begun at both factories by 1905, although some hand processes certainly continued (Figure 3).

Charles Boldt Co., Cincinnati, Ohio (1906-1919)

The June 1, 1906, edition of *Wine and Spirit Bulletin* carried the following message from Charles Boldt:

We beg to announce a change in our corporation name, effective May 1st, from the Charles Boldt Glass Co. to "The Charles Boldt Company," and an increase in capital stock to \$500,000, fully paid up. The change in name was made on account of the company's diversified interests, such as operating box factories, corrugated paper works, lithographing plant and a bottle cap factory, besides glass works.

According to the Cincinnati city directories, the firm changed its name from the Charles Boldt Glass Co. to the Charles Boldt Co. at some point between late 1905 and early 1906. The name change appeared in the 1906 directory.

In 1907, turn molds were being used for glass from the amber tank at Cincinnati, presumably on cylindrical liquor bottles. The following year, the plant was running full, employing 16 blownware shops on one tank, and 20 machine shops on the other two tanks, with "packers, flasks, etc." as the products (*Commoner and Glassworker* 1907; 1908c; Mayer 1908a; 1908b; *National Glass Budget* 1905a; 1905b; 1905c; 1906; 1912c).

"Disposal" of the Muncie plant in 1909 left the Cincinnati operation with 16 hand shops, as well as 32 machine shops on 16 machines. Other than at least one Johnny Bull machine, however, we do not know what kinds of apparatus were in use. But, that soon changed. In the fall of 1909, Boldt acquired the right to manufacture liquor bottles on the Owens automatic machine. By the following February, two Owens machines were in place, a 10-arm machine that was turning out half-pints, and a six-arm machine making pints.⁴ By October, four machines were in place, with expectation of three more by year's end, and all the hand blowers had been eliminated (Boldt 1909; *National Glass Budget* 1909; 1910a; 1910b; Mayer 1910a).

The success of this conversion led to a period of expansion. In 1911, the Cincinnati plant was enlarged to accommodate more Owens machines. The new facility was intended to double the output capacity – being modeled after the Owens Co. plant at Fairmont, West Virginia (*National Glass Budget* 1911a; 1911b; Six 1993:29; Toulouse 1971:91). The "Cincinnati, Louisville & Muncie Balance Sheet" (Charles Boldt Co. 1911b), listed as assets:

East End Factory, Mach. & Fixt Factory No. 5, Carter St. Owens Machine Equipment Muncie Factory, Mach. & Fixtures

The East End plant, valued at \$249,817.19, was certainly the main Cincinnati plant. The Owens Machine Equipment was valued at \$151,873.76. Along with the "Glass Factory," there was also a "Box Factory, Corrugated Department, and Litho. Department" – probably all located in Cincinnati (Charles Boldt Co. 1911a; 1911b). In 1912, Boldt was the president of the corporation, and Michael J. Owens, inventor of the automatic machine, was the vice president (Clarke 1912:655).

Boldt built (or enlarged) Factory No. 5, at Carter St. sometime after May 1913. *Engineering News* (1913:47) noted that "the Charles Boldt Co., manufacturer, Cincinnati, has taken out a permit to erect a three-story factory and warehouse at Davis Lane and Carter St.

⁴ Scoville (1948:106) and Miller and McNichol (2002:7) reported that the contract with the Owens Bottle Machine Co. was signed on June 10, 1910, giving Boldt one of only two licenses for manufacture of whiskey containers on the Owens machine – although actual manufacture began the following year. Contemporary sources, however, indicate that Boldt had already been in production for at least five months by the reported license date. The Illinois Glass Co. received the second license, but the Owens firm retained the rights for its own manufacture of whiskey bottles. Thus, all three glass houses made liquor bottles with Owens scars on their bases from ca. 1910 until the start of Prohibition.

Estimated cost \$18,000." The 1911 listing either only represented the property alone (despite the "Factory" designation), or referred to a smaller plant that was replaced by the larger factory in 1913. In mid-July, one of the Cincinnati plants suffered a fire that caused \$25,000 worth of damage, but the unit was rebuilt (von Mechow 2014).

The factory number listed for Carter St. is even more perplexing. Assuming that the original Muncie plant was No. 1, with the former Nelson Glass Co. factory as No. 2, the Cincinnati "East End Factory" is logically No. 3. Unless there was a second plant at the East End location, this only leaves the "Louisville Branch" (see below) as No. 4.

By 1913, a total of 14 machines were in place, making "liquor ware of all kinds" in flint, green, and amber glass at nine continuous tanks (Hayes 1913; *Journal of Industrial and Engineering Chemistry* 1913:953; 1914:864).⁵ This expansion, however, fell afoul of the growing Prohibition movement. Boldt's license to use the Owens automatics applied only to liquor ware, and this market soon went into decline as increasing numbers of state and local governments banned alcohol consumption. By 1915, the company was still credited with 14 machines, but ten of them were idle. In November 1916, the Cincinnati plant had five 6-arm Owens machines and six 10-arm machines; the plant still made liquor ware (Palmer 1917:213). With the specter of Prohibition looming on the horizon, however, change was coming.

Charles Boldt Glass Co., Cincinnati, Ohio (1919-1926)

With the advent of national Prohibition in 1919, the investment in these machines – with the restrictive license – became almost worthless, and the Cincinnati plant reportedly closed. At this point, the Owens Bottle Co. purchased the majority of the Boldt stock (51%), thus acquiring control of the company.⁶ This led to installation of new equipment at both Cincinnati and

⁵ References to Boldt's 14 Owens machines all refer to the "Charles Boldt Co., Cincinnati," leaving the impression that they were all located at that plant, but as the Huntington plant was never listed in these tallies, this is not certain.

⁶ Walbridge (1920:111) noted that as part of this deal, Boldt joined the Owens board of directors. The addition of Boldt to the Owens management was seen as helping to establish the company "in the foremost rank of the world's bottle manufacturers." This was evidently one of the developments that inspired the change in corporate name to the "Owens Bottle Co."

Huntington (see below), and a shift from liquor ware to a varied line of narrow and semi-wide mouth bottles (*Glass Worker* 1925; Hammer 1925; Hayes 1915; Toulouse 1971:91).⁷ On October 19, 1919, Owens had reorganized the firm as the Chas. Boldt Glass Co., with a capital of \$3,300,000 (von Mechow 2014).

On November 19, 1922, Boldt offered to sell the Owens company his remaining stock, but the actual transfer was delayed. According to the *Charleston Daily Mail* (1925), Boldt and the Owens firm reached an agreement on December 11, 1925, but the actual sale of the stock would not take place until January 1, 1926. At that point, Owens Bottle took over the Boldt plants entirely, consolidating them with the Owens operation. The Huntington plant became Owens Factory No. 2, and the Cincinnati factory became No. 5. Although Huntington continued in operation as an Owens plant, the Cincinnati factory was listed in Owens-Illinois records as idel until it vanished from the records (sold? dismantled?) after 1933 (*Charleston Gazette* 1925; Moody's Industrials 1928:1388; Owens Bottle Co. 1920; 1925; Owens-Illinois 2008).⁸ Also see the Owens Bottle Co. section for more information.

Charles Boldt Glass Co., Louisville, Kentucky (1902-1906) Charles Boldt Co., Louisville, Kentucky (1906-1918)

The Louisville city directories listed the Chas. Boldt Co., managed by Fred J. Drexler, at 231 W. Main. The list included the plant from 1902 to 1920, although Howard Holmes took over as manager in 1911, until he was replaced by Charles L.F. Kalkhof in 1918 (von Mechow 2014). We have not discovered any other information on this location.

⁷ Scoville (1948:112) reported that after the 1919 stock purchase, the Charles Boldt Glass Co. was renamed the Charles Boldt Glass Manufacturing Co., but we have not seen this revised name used in any contemporary sources.

⁸ Owens-Illinois listed five factories (Clarksburg, WV, Cincinnati, OH, Evansville, IN, Hazelhurst, PA, and Brackinridge, PA) as idle in 1930 and closed each of them within a few years. Company records noted that plants were idle due to the reduced sales caused by the Great Depression.

Charles Boldt Co., Huntington, West Virginia (1914-1919)

In December 1913, Boldt "secured a 10-acre site at Huntington, W. Va. and will erect a glass factory, estimated to cost about \$600,000" (*Steam* 1913:172). The Huntington plant opened in 1914, but what it produced and how are not presently clear. Initially, the factory operated two Owens machines at three furnaces (Vanham 2010). In November 1916, the Huntington factory used three 6-arm machines and eight 10-arm machines, still making liquor ware – despite the looming of Prohibition (Palmer 1917:213).

Charles Boldt Glass Co., Huntington, West Virginia (1919-1929)

As noted above, the Owens Bottle Co. purchased the bulk of Boldt's stock in 1919, changing the name to the Charles Boldt Glass Co. Owens refurbished the plant and installed new equipment to change production from liquor containers to such varied stock as "canning jars, soft drink bottles, milk jugs, baby food jars and bottles, medicine bottles, and special bottles, such as those used by the Avon company for their colognes" (Campbell 2005:6).

On the night of June 30, 1925, fire completely destroyed eight buildings of the Huntington factory. The following day, the *Tyrone Daily Herald* noted that "Fire warehouses, a power plant, a box factory and a stable were completely gutted. The main building of the factory, however, escaped serious damage." The firm estimated the loss at \$500,000, although rebuilding began almost immediately (von Mechow 2014).

As noted above, Boldt offered his remaining stock to Owens on November 19, 1922, and sold it on January 1, 1926. The Huntington plant became Owens Factory No. 2, and the Cincinnati factory closed in 1933 after being idle for three years. The Huntington operation continued as Plant No. 2 of the Owens-Illinois Glass Co. in 1929 (*Charleston Gazette* 1925; Moody's Industrials 1928:1388; Owens Bottle Co. 1920; 1925; Owens-Illinois 2008). See the Owens Bottle Co. section for more information.

Patents Associated with Boldt

Robert H. Levis 1897 Patent

At the Tucson Urban Renewal (TUR) collection (Tucson, Arizon), the Bottle Research Group recorded a liquor bottle with 14 scalloped panels at the heel and shoulder areas, with a blank section between for a paper label. The base was embossed "DESIGN PATENTED (arch) / B (serifs) / NOV.



Figure 5 – Levis 1897 patent

 30^{TH} 1897 (inverted arch)."

The bottle was blown into a mold, and the

manufacturer's mark is certainly one used by the Charles Boldt Co. (Figure 4).

Robert H. Levis applied for a patent for a "Design for a Bottle" on September 20, 1897, and received Design Patent No. 27,906 on November 30 of the same year (Figure 5). The patent drawing showed 16 scallops, but the bottle is certainly the same as the

one in the TUR collection. What is surprising is that Levis was the president of the Illinois Glass Co., one of Boldt's leading competitors. We have no explanation for this occurrence.



Figure 6 - Schilling 1904 patent

Frank Schilling 1904

On September 6, 1904, Frank Schilling applied for a patent for a "Design for a Bottle" and received Design Patent No. 37,171 on October 11 of that year. Schilling's patent drawing



Figure 4 – Base with design patent (Tucson Urban Renewal collection)

showed a flask with a two-part finish (often described as collar and ring) and two flat side panels that each terminated in a pointed, flame-shaped apex. Although we have not yet seen an example, Schilling assigned the patent to the Charles Boldt Glass Co., so flasks of this type were probably made by the firm and should bear the patent date (Figure 6).

Charles Boldt 1909



Figure 8 – Patent date on Boldt jug (eBay)



Figure 10 – Boldt cruet with 1909 patent (eBay)'

Charles Boldt applied for a "Design for a Bottle" on March 6, 1909. He received Design Patent No. 39,921 on April 20, 1909. The patent drawing showed a cylindrical jug with no handle (Figure 7). Boldt made numerous jugs to this patent, but he embossed the bases "BOLDT (slight arch) / DESIGN PAT'D / MAR. 6-1909 / 15 (all horizontal). The final number was the mold designation, and that varied (Figure 8). Although many of these were made with a circular handle, these were obviously produced to the April 20 patent (Figure 9). The patent base was even used for a cruet (Figure



Figure 7 - Boldt 1909 patent



Figure 9 – Circle handle Boldt jug (eBay)

10). We have not discovered why Boldt used the application date instead of the patent date.

Containers and Marks

B with two serifs (1900-1919)

Charles Boldt used the simple serif-B logo from the opening of the factory in 1900 to the Owens sale in 1919. However, the logo extended through three different manufacturing cycles. Initially, Boldt was a hand shop, but, in 1905, the plants adopted both wide-mouth and narrow-mouth machines. The Muncie factory used a "Johnny Bull" or United machine from England to make brandy bottles from



Figure 11 - Serif-B on mouth-blown flask

1905, almost certainly until the entrance of the Owens machines in 1911. At that point, all production shifted to the Owens devices.

Mouth-Blown Bottles (1900-ca. 1909)



Figure 12 - Flask with Serif-B

At this point, we have only found the logo on liquor bottles and flasks, although Boldt made other containers during this period. Berge (1980:91, 146) illustrated two examples of the mark found in Utah.



Figure 13 – Detail of finish

The first was a half-pint bottle topped by an early style of continuous-thread finish with a two-serif "B" embossed on the base beside an upside-down 16. Although Berge was careful with his illustrations and showed other Owens scars, none is visible on this bottle. Interestingly, we also have a flask with a "16" – although ours is embossed sideways in relation to the "B" logo (Figures 11-13). Berge also illustrated another, round, colorless relish bottle base embossed B / 504D. As noted in the patent

section, we have also seen a mouth-blown liquor bottle with the

"B" mark along with the 1897 Levis patent date (see Figure 4).

United Machine Bottles (1905-1910)

It is probable that Boldt increased his machine production of liquor ware as much as possible after 1905. The Ashley patents – the foundation for the United or Johnny Bull machine – used an upside down parison mold with no baseplate. Since the baseplate in the parison stage creates the machine scar (on other than Owens machines), the base scar is absent on Ashley machines. However, the post bottom on the blow (final stage) mold left a distinct, circular, centered basemark (Figure 14). Thus, to determine that a bottle was made by a Boldt United machine, one should look for:



Figure 14 – Serif-B base from United machine (Tom Kelly Bottle House)

- 1. The two-serif B in the center of the base (at least on our two examples)
- 2. A post-bottom seam that is circular and centered
- 3. A horizontal seam at the base of the bottle (i.e., post bottom)

Owens Machine Bottles (1910-1919 on liquor bottles)

The Serif-B mark may be found on the heels or bases of liquor flasks or on both (Lockhart 2000:58-60, 69 – Figure 15).⁹ The mark is also frequently found on cylinder whiskey bottles, especially in the quart size. Although the mark may be found on other containers (see below), liquor bottles were Boldt's only production item on Owens machines, and Boldt was the only B-initialed company licensed to make such bottles on Owens machines prior to Prohibition.



Figure 15 – Serif-B on heel and base – Owens machine

⁹ There was a "B" mark – with similar or identical serifs – used by the Brockway Machine Bottle Co. beginning in 1925. Brockway adopted the Circle-B logo about 1934 and ceased using the Serif-B mark without a circle. Any alcohol bottles made by Brockway would therefore have the Federal warning and the Circle-B mark, so there is little risk of mistaking a Brockway bottle for one made by Boldt (Lockhart et al. 2006).

Owens Machine Bottles (1919-1925 on non-liquor bottles)



Figure 16 – Catsup bottle base (eBay)



Figure 18 – Cruet base (eBay)

Machine-made containers with the B mark may be dated from 1910 (the beginning of Owens machine production at Boldt) to 1919 when the Cincinnati factory closed, and whiskey bottle production generally ceased because of Prohibition.¹⁰ The mark continued to be used after 1919 on catsup and cruet bottles and probably other types (Figures 16-19). When the Owens Bottle Co. completely absorbed the Boldt enterprise on January 1, 1926, the Boldt serif-B was almost certainly discontinued.



Figure 19 - Cruet (eBay)



Figure 17 – Serif-B catsup bottle (eBay)

There was also some violation of the law by both bottle makers and bootleggers. The Latchford-Marble Glass Co., for example, was caught making beer bottles for use by an American ring (*Los Angeles Times* 11/11/1926; 12/17/1926). Also see Latchford-Marble section.

¹⁰ Although some legal whiskey production continued for medicinal purposes, the vast majority of legal liquor production ceased. A 1920 Illinois Glass Co. catalog still illustrated and offered a variety of liquor bottles. A copy in the possession of one of the authors was sent to a potential customer in Durango, Mexico – indicating a possible external market where alcohol was still legal. The first Owens-Illinois Glass Co. catalog, issued in December 1930 also illustrated and described liquor bottles.

BOLDT (ca. 1905-1908 – Fruit Jars) (1910-1919 – Liquor Jugs)

Mason Jars (1905-ca. 1908)



Figure 20 – Boldt Mason Jar (eBay)

the shoulder.

According to Toulouse (1971:91-92), this mark may be found on at least two types of fruit jars (both machine made) manufactured between 1900 and 1927. He gave no explanation why he chose 1927 as a closing date. In his earlier book, Toulouse (1969:48-49) noted that the "BOLDT MASON" was made between 1900 and 1915, and the "BOLDT MASON JAR" was made between 1912 and 1927. Unfortunately, he gave no explanation for his choice of dates, and both are almost certainly incorrect. Both jars had the name embossed on



Figure 21 – Boldt Mason Jar variation (eBay)



Roller (1983:70; 2011:108) noted the BOLDT MASON JAR as well as a variation that had "embossing seriffed and arched downward" (Figures 20 & 21) He dated both jars ca. 1905 but added the following information:

Figure 22 – Boldt Mason Jars (Creswick 1987:30)

A 1905 letter by the Charles Boldt Glass Glass (*sic*) Co. headed "Muncie, Indiana," announced that they would begin making MASON FRUIT JARS on April 1st. Whether these jars were made in other years, and at Boldt's Cincinnati, Ohio, plant is not known.

Creswick (1987:30) also showed two BOLDT MASON jars (Figure 22). One was embossed "MASON," but the other – the inverted-arch variation – read "MASOM," an

engraver's error. She dated the jars "circa 1905 or later" and listed three companies (Muncie Glass Co., Charles Boldt Glass Co. and Charles Boldt Glass Manufacturing Co.) as possible makers. She noted that the jars had a "smooth lip" – i.e., that they were machine made. Leybourne (2008:85) called the inverted arch variation the "smiling Boldt" jar and added that the smiling Boldt came in regular and error (i.e., MASOM) subvariations. No one after Toulouse included a variation without the word "JAR."

Two factors are relevant to establishing a date for this fruit jar mark. First, all sources agreed that each of these variations was machine made. Second, in 1905, fruit jar production was shifted entirely to the Muncie plant that operated under Boldt only through 1908. At the same time, Boldt adopted bottle and jar machines, but we can find no evidence for any Boldt jar manufacture after that date. However, the jars are relatively common, so they were probably made from 1905 to ca. 1908. We have had no reports of any glass inserts with the Boldt name.



Figure 23 – Boldt basemark (eBay)



Figure 24 – Jug with Boldt mark (eBay)

Liquor Jugs



Figure 25 – Detail of finish (eBay)

The word "BOLDT" was also embossed on the bases of liquor jugs. All such marks that we have seen were found on bases of colorless jugs, usually in one-gallon size, made on Owens machines – with very obvious feathering on the scars. The mark was typically horizontal in the center of the base, surrounded by a feathered Owens scar (Figure 23). Most of these jugs has double ring holes on the sides of the finish for ease in carrying (Figures 24 & 25). Bases that were also embossed "DESIGN PAT'D / MAR. 6-1909" had "BOLDT" in a slight arch (see Figure 8). These had a single ring at the

finish (Figure 9). Because of the Owens scars, these jugs should be dated 1910-1919.

The C.B.CO. logo appeared on at least two different Boldt containers as well as one that was unrelated to the firm.

Liquor Jugs



Figure 27 – Jug with heelmark (eBay)

Feldhaus (1987:33-34) listed a

colorless, one-gallon liquor jug (without handle "eyes"), with a C.B.CO. logo. The jug was made for A.M. Smith, a Minneapolis, Minnesota, liquor dealer and was embossed with his name and address. Smith was in business from 1888 to 1910. A similar amethyst jug from the "DANVILLE DIST. CO. INC.," Danville, Virginia, is embossed "C.B.CO.PAT." on the heel and has a serif-B, along with an Owens scar, on the base (Figure 26 & 27). This combination of the C.B.CO. mark, the serif B, and the Owens scar distinctly ties "C.B.CO." to the Charles Boldt Co. These appear to be less common than other Boldt logos on liquor bottles. They may only have been made during the first two or three years after Boldt received the Owens machine

license – 1910-ca. 1913.

Milk Bottles



Figure 28 - C.B.CO. basemark

The Dairy Antique site claimed that "C.B.CO." was used by the Charles Boldt Co. on milk bottles. Lockhart (2014:148) discussed a milk bottle embossed "C.B.CO" in an ejection scar on the base that was used by the El Paso Dairy Co., El Paso, Texas (Figures 28 & 29). Bottles of that specific style could only have



Figure 29 – C.B.CO. milk bottle



Figure 26 – C.B.CO. PAT. heelmark (eBay)

been used at El Paso during the ca. 1906 to 1913 time period. We found a third example in an antique store in Colorado. This one had "C.B.CO." embossed on the heel. Our final example, also with a heelmark, was in the Tucson Urban Renewal collection (Figure 30). The Muncie factory made milk bottles by machine from 1905 to 1910, setting a solid range for this mark on milk bottles.



Figure 30 – Milk bottle heelmark (Tucson Urban Renewal collection)

English Whiskey



Figure 31 – C.B.CO. basemark – England (Tucson Urban Renewal collection)

Toulouse (1971:116-117) showed this mark "found on a whiskey or wine bottle made in a three-part mold." Although he could not identify the company, he dated the mark "circa 1870 to 1880." We have observed an aqua whiskey bottle, made in a threepiece mold, with a downwardly tapered body. We recorded the finish as an "added English ring." The base was embossed "1 / 26 / CB \bullet C^o / N (all

centered on the base)." The dot is what we call a combination dot and cross with the cross extending at the cardinal points. We found a similar mark in the Tucson Urban Renewal collection, marked " $\frac{1}{2}$ / CB • C^o / N." This mark, too, was on a 3-piece mold cylinder whiskey bottle with an applied finish (Figures 31 & 32).

Although the Muncie plant made aqua bottles – including some liquor ware – during the early years of the 20th century, these English whiskey bottles are a shade of light green with a touch of olive that is unknown on bottles produced in the U.S. His only colors were amber and flint – thus, these could not have been Boldt products at any time.



Figure 32 – English liquor bottle (Tucson Urban Renewal collection)

Although we have not discovered the name of the English glass house, many British factories

used a single letter to identify their location. An "N" for example could indicate Newcastle-Under-Lyme. Currently, however, the name and location remain a mystery.

CHAS. BOLDT CO. CIN. O (1906-1910)



Figure 33 – Wide-mouth bottle (David Whitten)

This mark was embossed very low on the heel of a large, wide-mouth bottle in the David Whitten collection as well as examples on eBay (Figures 33-35). On heel was embossed "CHAS. BOLDT CO. CIN. O." with "PAT. APPLD FOR" on the other. .Each bottle had a round ejection scar on the base indicating a manufacture by a press-and-blow machine. Because the word "GLASS" was missing from the name, the



Figure 34 – CHAS. BOLDT CO. heelmark (David Whitten)



Figure 35 – PAT. APPLD. FOR heelmark (David Whitten)

mark could not have been used prior to May 1, 1906, when Boldt dropped the word from the company title. However, the claim that the patent had been applied for indicates a manufacture prior to Boldt's 1909 patent. Since the application was filed on April 9, 1909, and was recieved on March 6 of that year, the mold was probably made in 1909 – although it was likely used for a few years until it wore out.

TIP TOP (ca. 1904)

The TIP TOP trademark (No. 43,383) was registered to Boldt on September 20, 1904, the company specifying that it had been in use since August 1 of that year. Although it was reportedly embossed on bottles, the class of ware was not noted, and we have seen no examples.

Discussion and Conclusion

In both its earliest and latest stages, Boldt produced a variety of bottles. In the early years of the company, the plants also made fruit jars, milk bottles, and packers' ware, although these were probably discontinued by 1910. From the time Boldt received Owens machines (1910), he mostly made whiskey flasks and bottles. His primary mark on liquor products was a "B" with two serifs extending to the left. He used variations of his company name (BOLDT, CHAS.BOLDT.CO., etc.) on larger containers (e.g., half-gallon and gallon jugs) and fruit jars. The C.B.CO. mark was occasionally used on large containers and milk bottles. but should not be confused with British C.B.Co. marks.

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