

Brockway Machine Bottle Co. and Brockway Glass Co.¹

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From its opening in 1907, the Brockway Machine Bottle Co. was a product of the mechanized era. As the name implies, the company was formed to manufacture bottles by machine. Initially, of course, Brockway only made wide-mouth bottles by semiautomatic machines, but the plant installed narrow-mouth machines in the early 1920s. Brockway became one of the leading bottle producers in the U.S. and finally merged with the Owens-Illinois Glass Co. in 1988.

History

Brockway Machine Bottle Co., Brockwayville, Pennsylvania (1907-1925)

Twelve glass blowers from Olean, New York, incorporated the Brockway Machine Bottle Co. on June 20, 1907.² The group purchased the closed J.H. White plant at Brockwayville in July. The factory was originally the Brockwayville Glass Co., incorporated in 1897 to make bottles. White became the proprietor by 1899 and continued to make bottles at one continuous tank with six rings. The plant produced prescription and packers' ware by at least 1901, but, by 1904, the factory was called the Eagle Glass Works. Eagle sold later that year to the Pierce

¹ Although the Bottle Research Group conducted our initial study of Brockway logos in 2006 (Lockhart et al. 2006), that research has been rendered obsolete by the current study.

² Roller (1998) cited "Brockway's Moment of Fifty Years," Glenn A. Mengle, *The Glass Industry*, May 5, 1957, and *Moody's Industrial Manual*, 1983, Vol. 1, A-I, p. 2633 as his sources for the glass blowers coming from Olean. Brockway (1961) and Toulouse (1971:59-60), however, claimed that the factory was developed by "twelve experienced glassblowers from Hazel Atlas" specifically to use the Olean semi-automatic bottle machine. We have found no Hazel-Atlas plant at Olean, nor have we found any record that Hazel-Atlas used an Olean machine – so both cannot be correct. Both Hazel-Atlas and Olean Glass used semiautomatic machines before Brockway opened, so the men would have been familiar with the process in either case. Since Olean manufactured Vaseline jars (an early product of Brockway), that may establish a connection with Olean. Although we selected the Roller explanation, either could be valid.

Medical Co., but the firm was no longer listed in 1906 (Roller 1998). Pierce already owned a glass plant at Clayton, New Jersey (since at least 1897). Pierce apparently closed the Brockwayville factory when it opened its new plant at St. Marys, Pennsylvania, in 1905 (see the section on the Pierce Glass Co. for more information).

The Brockway Machine Bottle Co. began production on October 14, 1907, making Vaseline jars as its initial product (Brockway [1961]; Toulouse 1971:59-60). The Thomas Registers did not pick up the firm until 1912, then listed it as making ink, mucilage, and Vaseline bottles. The same listing continued until at least 1921 (Thomas Publishing Co. 1912:481; 1921:872). Unfortunately, the Thomas Registers did not always maintain current information, so this should be taken with caution. However, we have not found any Vaseline jars with manufacturer's marks prior to the 1960s. Since the early Brockway firm did not use a logo (see below), this at least partially supports the continued production of Vaseline jars by Brockway (although Vaseline almost certainly used more than one supplier by this time).

The Sanborn Fire Insurance Map picked up the factory very quickly. The 1909 map illustrated the plant but called it the Brockwayville Machine Bottle Co. The main building had a single continuous tank with two lehers, one on each side, extending north-south. The office was in a separate building as were the box factory, machine shop (almost certainly for mold production), and several other divisions. The plant ran day and night and had a watchman. It used gas for power and had gas lights and city water. The factory was located 3/4 mile southeast of the post office (Figure 1).

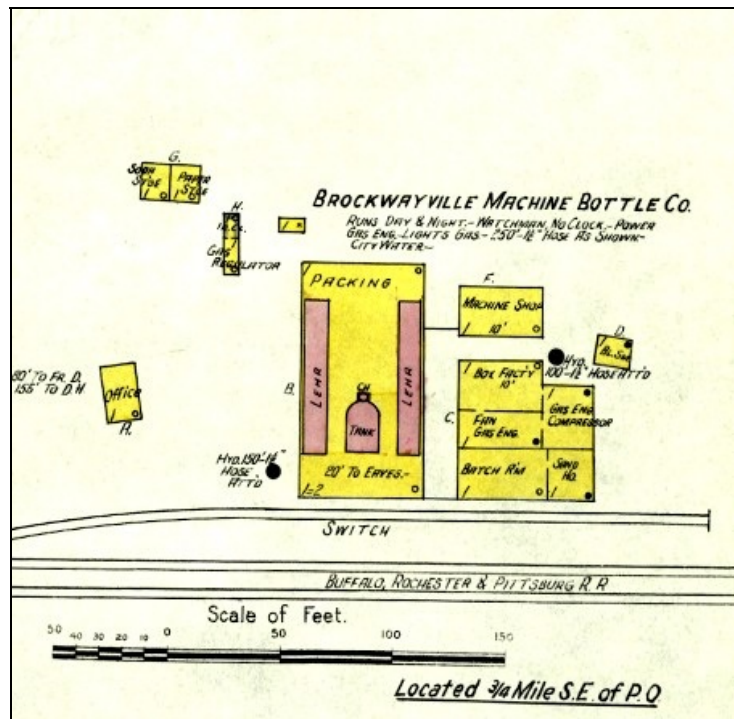


Figure 1 – 1909 Sanborn Map of Brockway (Trademarks and Manufacturers)

Commoner & Glass Worker (1907:5) noted that “the product will be machine-made ware exclusively, the latest and most modern appliances for turning out wide-mouth bottles, jars, etc., of every description having been installed.” In April 1910, Brockway used six machines to make ½ to 12-ounce bottles. That month, the primary product was ink bottles. Employees O.D. Hilliard and Charles H. Timberman were in the process of creating the company’s own machine (Meyer 1910:4).³ In 1913, the *Journal of Industrial and Engineering Chemistry* (1913:953) confirmed Brockway’s use of semiautomatic machines. At that time, the company made packers’ and preservers ware, along with ink, vaseline, blacking, glue and paste containers at one continuous tank with 10 rings.

At some point, employees of the firm devised a feeder for the machine that then came to be called the Brockway automatic machine. By 1914, the layout of the plant had changed. The main building still had a single tank and two lehrs, but the orientation was now east-west. The office and the building with the box factory were unchanged, but the machine shop had greatly expanded. Small warehouses dotted the landscape, and a new building housed the coal tipple and “gas producers.” In addition, a huge warehouse had been constructed to the east. The plant now had steam heat and electric lights (Figure 2).

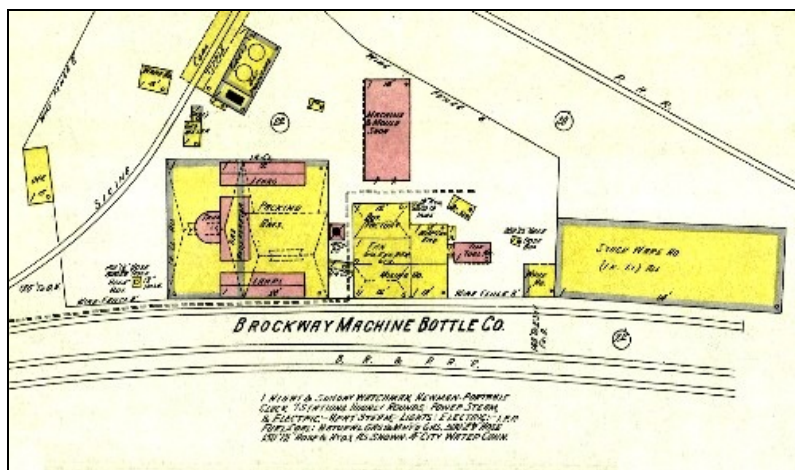


Figure 2 – 1914 Sanborn Map of Brockway (Trademarks and Manufacturers)

The company installed a Lynch-A machine in 1922 and soon followed with a Miller machine to give the company the capacity to also make narrow-mouthed bottles. (Toulouse 1971:59-60). Although the name of the firm remained the same, the town name changed to Brockway in 1925.

³ A patent search failed to find an entry for either employee connected with Brockway. Brockway received literally hundreds of patents, and a thorough search of those is beyond the scope of this study.

Brockway Machine Bottle Co., Brockway, Pennsylvania (1925-1933)

Aside from the town's name change, the glass firm remained the same. The company organized the Brockway Sales Co., a separate entity, in 1927. That year, the company made "crystal glass bottles," inks, mucilage, paste, creams, candy, mustard and prescription ware entirely by machine at two continuous tanks with 11 rings. The following year, the plant added "beverage ware" to the line, reflecting the firm's entrance into the narrow-mouth realm (*American Glass Review* 1927:127; 1928:128).

In 1929, Brockway made an agreement with the Monaca Glass Co., Monaca, Pennsylvania, to purchase and distribute Monaca's entire production. C.R. Underwood announced the sale of his interest in Monaca to Brockway on January 9, 1932. In April 1933, Brockway acquired the entire assets of Monaca and merged with the sales company to form the Brockway Glass Co. in August (Roller 1998). Earlier that year (February), Brockway announced in the *Glass Packer* (1933:119) its "unique 'monogram' service" (Figure 3). The article described the process:

The enamel is baked or fused into the glass and, becoming an integral part of the container, will not rub or scratch off; nor is it in the least affected by water or chemicals. The enamel may be applied in any color, and it retains its lustre during the entire life of the bottle.

This was the first use of what would become widely known to bottle collectors on soda bottles as the Applied Color Lettering (ACL) process (actually the name used by the Owens-Illinois Glass Co.) and on milk bottles as pyroglazing (the term used by the Thacher Mfg. Co.). The article noted that the process was only being offered initially for prescription ware, but the firm intended to add food bottles and perfume containers. What the article did *not* say was that 1933 technology was incapable of applying the enamel to curved surfaces. Its use on one curve (e.g., on cylindrical bottles) was perfected the next year, when it was used on soda and milk bottles.



Figure 3 – "Monogram" Service bottles (*Glass Packer* 1933:119)

While the process became the industry standard on sodas and milks, it was never popular with prescription bottles and only mildly successful in food (packer) bottles.

Brockway Glass Co., Brockway, Pennsylvania (1933-1982)

The reorganization that created the Brockway Glass Co. probably centered around the Monaca plant purchase. Aside from the addition of the Monaca plant and the new name, however, few things changed. Monaca's acquisition increased the number of tanks to three, but the products remained the same. The 1936 list only included the Brockway, Pennsylvania, plant⁴ but added "liquors and cosmetic ware" to the inventory – along with flint and amber beers the following year (*American Glass Review* 1933:90; 1936:87-88; 1937:81-82).

In 1939, Brockway began building Factory No. 2, also in the Brockway area. Actually located at Crenshaw, Pennsylvania, the plant began production in January 1941, operating one continuous tank that supplied 6 machines – 2 I.S. 4-section; 1 Lynch LA-00; 1 Lynch RS-00; 1 Lynch 10; and 1 Lynch R-00. By 1941, the products list included "flint and amber prescription and proprietary ware, vials, perfume and toilet bottles, food packers, beverage and water bottles, liquors, wines and beers," made at three continuous tanks with 19 machines (*American Glass Review* 1941:92, 168; Roller 1998).

Although we have discovered no historical corroboration, Brockway must have fared well during World War II, as the firm's major period of expansion began soon after the end of the conflict. Brockway acquired the former De Camp Consolidated Glass Casket Co. at Muskogee, Oklahoma, in May 1946 and either purchased or built a variety of new plants for the rest of its existence (see Table 1 for plants, locations, and dates).

On June 1, 1959, Brockway bought the Tygart Valley Glass Co. and operated the firm as a wholly owned subsidiary. In 1962, the two firms merged under the Brockway name (Roller 1998). According to Moody's (1962:179), the company made "glass and plastic containers including prescription ware, food jars and containers for chemicals, inks, pastes, mucilages, beverages, beer, liquor, toilet preparations, medicinal, health, industrial and household use."

⁴ This almost certainly indicates the closing or sale of the Monaca plant. By 1939, the factory at Crenshaw, Pennsylvania, was listed as "No. 2."

Brockway added six plants from Hazel Atlas in 1964. The firm next acquired the tableware division of Continental Can Co. in September 1972 but closed the tableware operations in April 1979 and sold it to the Anchor Hocking Corp. in May. The firm adopted a new name in 1982 (Moody's 1962:179; Roller 1998; Toulouse 1971:60-62).

Table 1 – Brockway Glass Co. Factories*

No.	Location	Former Name	Dates**
1	Brockway, PA	Eagle Glass Works	1907-1988†
2	Crenshaw, PA	none	1941-1988
3	Muskogee, OK	De Camp Consolidated Glass Casket Co.	1946-1988
4	Lapel, IN	Sterling Glass Co.	1951-1988
5	Freehold, NJ	none	1956-1988
6	Parkersburg, WV	DeMuth Glass Co	1955-Mar 1984
7	Washington, PA	Tygart Valley Glass Co.	1959-Mar 1984
8	Rosemont, MN	none	1961-Nov 1984
9	Hyde Park, MA††	plastics plant	Sep 1960-?
9	Clarksburg, WV	unknown	1972-1979
10	Fittsburgh, MA††	Celuplastics	Aug 1960-?
	Nashua, NH	plastics plant	unknown
11	Washington, PA	Hazel-Atlas Glass Co.	1964-Dec 1979
12	Zanesville, OH	Hazel-Atlas Glass Co.	1964-1988
13	Montgomery, AL	Hazel-Atlas Glass Co.	1964-Nov 1989
14	Ada, OK	Hazel-Atlas Glass Co.	1964-1988
15	Oakland, CA	Hazel-Atlas Glass Co.	1964-1988
16	Pomona, CA	Hazel-Atlas Glass Co.	1964-Jan 1995
17	Danville, VA	none	1978-1988
17	Lancaster, NY	unknown	unknown

No.	Location	Former Name	Dates**
18	Washington, PA	unknown	unknown
20	Sloatsville, NY	unknown	ca. 1985 ‡

* Basic information came from Roller 1998, often confirmed by Brockway Glass Co. (1973). Russell Hoenig accessed Brockway company data in 2012 to fill in numerous gaps. When known, dates listed are dates when production began (e.g., Brockway purchased Lapel plant in 1950 but began production in 1951).

** All Brockway plants became Owens-Brockway in 1988.

† Plant closed by Owens-Brockway in October 2000

†† These plastics plants were never listed in the Brockway records by number, but they were placed between Plants No. 8 and 11. The plants were called the “Blown Plastic Bottle Division of Brockway Glass.”

‡ This plant was listed in Perrine (1985); it was probably not a glass plant. There may have been two other non-glass factories (No. 18 and No. 19).

Brockway, Inc., various locations (1982-1988)

Owens-Brockway, Inc., various locations (1988-present)

The company changed its name to Brockway, Inc. on April 28, 1982, and Owens-Illinois merged with Brockway, Inc., in 1988, renaming the combined giant Owens-Brockway (Carnegie Library 2005; Owens-Illinois 2001). In 1985, the combined plants used 134 machines, making “applicator bottles, household chemical, cosmetics, drug, perfume, baby food, one-way & returnable beer, one-way & returnable beverage, coffee, food, juice, liquor, packers ware, preserve jars, wine special shapes: oblong, oval, private mold” (Perrine 1985:13-14).

Containers and Marks

Brockway provided a challenge for researchers by using two different sets of variables with its marks – all based on the letter “B.” The firm appears to have first used a “B” with two serfs, followed by a “B” with three serifs – back to a “B” with two serifs and finally a sans serif “B.” Second, the ads originally show “B” with no circle, later changing to a Circle-B logo.

All Brockway bottles and jars were made by machine, although prior to 1922, this would only have included wide-mouth containers. The installation of a Lynch machine in 1922 opened up the field of narrow-mouth ware. This may have spurred the use of the initial logo three years

later, or there may have been some reorganization of the firm concurrent with the changing of the town name to Brockway in 1925.

According to Lehner (1978:96), Plant No. 12 in Zanesville made “containers in flint, amber, and blue for perfume, coffee, beverages such as beer, liquor, water bottles, wine bottles, and food glass containers.” Unfortunately, we have not found product lists for other individual plants.

B (1925-ca. 1934)

Peterson (1968:48) was the first to associate this mark with Brockway and dated it as beginning in 1925 based on trademark data. Giarde (1980:19) also included a simple “B” as a mark of Brockway “possibly around 1925” and was almost certainly echoing Peterson. Peterson’s “B” had serifs, but that reflects the style of font he chose for his book. Giarde showed the mark as “B” with no serifs. Peterson was correct. Brockway received Trademark No. 254,051 for a serif-B mark (two serifs) with no circle on March 12, 1929, and claimed that the first use of the logo was on January 1, 1925.

Toulouse (1971:61) noted, “If Brockway used any identification before 1925 it is not known.” Giarde (1980:19) echoed that sentiment, stating, “The company dates from 1907 but the mark used up to the mid-20’s proved illusive.” They are apparently correct. As noted above, the adoption of the mark occurred about the same time as the reorganization that changed the name of the town – which may or may not have been its cause.

Ads from Brockway in the *Glass Packer* confuse the issue. Although Toulouse (see below) claimed that the Circle-B mark was used by 1925, ads as late as December 1934 show wide-mouth bottles and jars with a “B” (no circle) embossed on the bases. A July 1933 ad from *Brewery Age*, shows the mark in large enough relief to see a three-serif “B” on the bases of some soda and beer bottles. The earliest ad we have found that noted a mark (July 1931) stated that “the ‘B’ trade mark always identifies a Brockway-made container.” By June 1934, Brockway ads showed a logo with a circle around a three-serif B (*Brewery Age* 1933:6; *Glass Packer* 1931:316; 1934a:405; 1934b:749).

It is thus probable that the “B” with no circle was used between 1925 and 1934, but the presence, absence, and number of serifs is much less clear. The use and number of serifs in the ads – at least those we have had access to – are inconsistent. For example, a 1932 ad featured a three-serif B as the logo but showed a sans serif B as a basemark on an actual bottle (Glass Packer 1932:17 – Figure 4). Because Brockway had not yet expanded during this period, these marks are much less common and more difficult to track empirically.

To add further confusion, the two-serif “B” is identical with the one used by the Charles Boldt Co. from 1900 to ca. 1910 on mouth-blown liquor bottles and flasks and from 1910 to 1919 on similar bottles made by Owens automatic machines. However, there was about a six-year separation in time between the use of the two marks. Two things should make the difference obvious. First, Boldt marks should be found on bottles that are mouth blown or made with Owens machines – including the distinctive Owens basal scar. Second, Brockway liquor bottles should only have been made after the period when the circle was added, and all Brockway liquor bottles made between 1934 and 1964 should be embossed with the post-Prohibition Federal warning on the shoulder.

B in a circle (Circle-B) (1933-ca. 2000)

Jones (1965:[22]; 1966:15) first identified the Circle-B mark as belonging to Brockway, although she did not suggest any dates. She included Circle B marks with and without serifs on the “B.” Toulouse (1971:61-62) noted that in 1925, Brockway “first used the ‘B’ in a circle, that was copyrighted in 1928.” We question the veracity of this claim. Toulouse probably confused this with the 1929 trademark registration of “B” (no circle) noted above. Although paper and

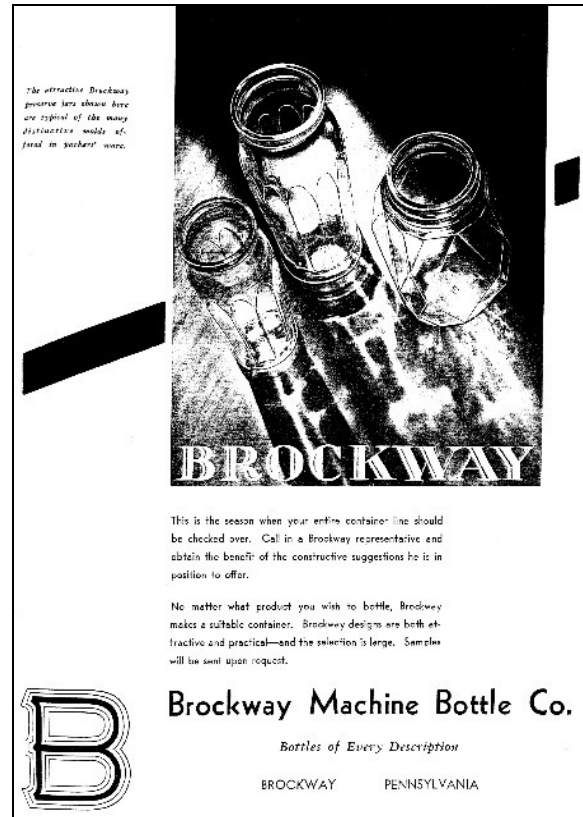


Figure 4 – Brockway ad (Glass Packer 1932:17)

ACL labels on bottles were copyrighted by a few companies, the copyright practice is virtually unknown with a manufacturer's mark.⁵

It is also instructive to note that the appearance of the Circle-B mark is concurrent with the reorganization that changed the name of the firm to the Brockway Glass Co. With most glass houses, a change of logo is related to some other change in the factory or operating company (e.g., reorganization, moving the plant, building a new plant, new ownership, etc.). The Brockway changes seem to follow this pattern.

Toulouse (1971:62) was careful to note that two other companies also used the Circle B mark, but the Armstrong Cork Co. only used the mark on corks, and the Baker Chemical Co. embossed the mark on shoulders of their bottles. Giarde (1980:19) and Peterson (1968:48) also claimed the mark as used by Brockway beginning in 1925.⁶ We have also seen a Circle-B logo embossed on the bases of some colorless picnic flasks that were identical to others marked with a Circle-A logo. These were mouth blown and were unlikely to have been associated with Brockway. Their presence remains a mystery.

By June 1934, Brockway ads showed a logo with a circle around a three-serif B. Within the circle was "LOOK FOR THE [B in the center] ON THE BOTTOM."⁷ By December, the ads read, "If it hasn't a [Circle-B], on the bottom it isn't a BROCKWAY" (Figure 5). However, by

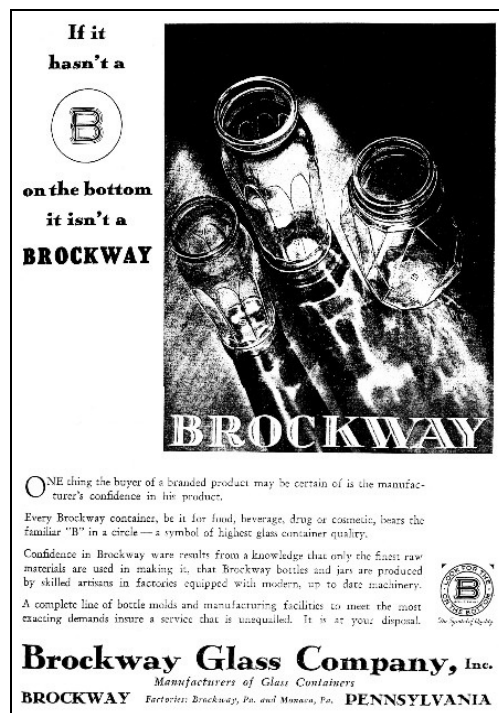


Figure 5 – Brockway ad (*Glass Packer* 1934:749)

⁵ There are a few notable exceptions to this – especially the hobble-skirt Coca-Cola bottles.

⁶ Peterson treated "B, B in circle, or B in three concentric circles" as first used on the same date, 1925.

⁷ There is a gap in our ad collection from January 1932 to June 1934. Interestingly, the ad retained the older 1932 photo, showing a "B" basemark with no circle.

at least 1935, dated liquor flasks were embossed with very distinct two-serif, Circle-B logos (Figure 6). By the March 1936 ad (extending to 1954), bottles were shown with a distinct circle around a two-serif B on the base (*Glass Packer* 1934a:405; 1934b:749; 1936:148; *Brewer's Digest* 1954a – Figure 7).



Figure 6 – Liquor base, 1941 – 2 serif B



Figure 7 – Circle-B logo, 2 serif B (*Brewer's Digest* 1954:23)

Unfortunately, none of the sources (except Jones) showed or discussed the serifs. However, Scholes (1941:129) showed a three-serif, Circle-B mark as used by the company in 1941, as did Berge (1980:83) in a chart from 1964 (Figure 8). The three-serif mark was also illustrated by the Midwest Antique Fruit Jar & Bottle Club in 1973 (Figure 9). Thus, the three-serif B-



Figure 8 – Circle-B logo, 3 serif B

in-a-circle mark was advertised by Brockway from at least 1941 to 1973, even though the use of that logo does not fit the empirical evidence. Brockway ads are not much help (see “B” section above). A December 1934 ad (*Glass Packer* – see above) suggested that the Circle-B began use by 1934. Ads from that point into 1965 showed Circle B marks with *two* serifs (Figure 10).

Brockway 1973 Plant Code Numbers (usually found to left of logo on base)

1	- Brockway, PA
2	- Cressshaw, PA
3	- Minskogee, OK
4	- Lapel, IN
5	- Freehold, NJ
6	- Parkersburg, WV
7	- Washington, PA
8	- Rosemount, MN
11	- Washington, PA
12	- Zanesville, OH
13	- Montgomery, AL
14	- Ada, OK
15	- Oakland, CA
16	- Pomona, CA

Standard Bottom Plate Lettering

Early Glassmaking Machines Used by Brockway

- c. 1907 - Olean Machine (not patented)
- c. 1910 - Brockway Machine
- 1922 - Lynch B Machine (for narrow-neck ware)
- 1925 - Lynch A Machine (for narrow-neck ware), and Miller Machine (probably used on jars)

Sources Used:

Undated Brockway Glass Co., Inc. Technical Notes
Glass Factory Directory, 1973.

Figure 9 – Brockway 1973 codes (Midwest Antique Fruit Jar & Bottle Club)



Figure 10 – Circle-B logo, 2 serif B (eBay)

Brockway used the Circle B mark with no serifs by at least 1979 as illustrated by Whitten (2013) on a beer bottle base (Figure 11) as well as a 1982 listing by Emhart (1982:74). Whitten (2013) also showed beer bottle bases with date codes for 1983 and 1986. We have a base with no serifs and a “50” code,

but it was not a returnable bottle, so the code is likely not a date code (Figure 12). Powell (1990) showed a Circle-B with no serifs as used in 1990 by Owens-Brockway (formed in 1988). Owens-Brockway continued to use both the sans-serif, Circle-B mark and the Owens-Illinois, Oval-I mark until at least 1996 (Emhart 1996). Sometime after 1996, the company discontinued the circle B mark (see Emhart 2005). The old Owens-Illinois mark is the current company logo.



Figure 11 – Beer bottle base (Whitten 2013)



Figure 12 – Circle-B logo, no serifs

Whitten’s beer bottle bases followed the typical pattern that were probably mandated by either law or the container industry during the 1970s and 1980s. Using a compass analogy, these had the sans serif, circle-B logo at the north, with the date code to the east, cavity or mold number to the south, and the plant number to the west.

B in triple circles

This mark is only mentioned in Peterson (1968:48) and Giarde (1980:19), although Giarde almost certainly echoed Peterson. Unfortunately, neither author specified whether the “B” included extended serifs; such extensions would almost certainly identify the mark as belonging to Brockway. Both identified the mark as beginning in 1925. We have not yet observed such a mark and doubt its existence. Peterson may have confused a post bottom mold seam and/or a machine scar with intentional embossed circles. Giarde would not have made that error, but he almost certainly used the Peterson information.

Brockway in upwardly-slanted cursive (ca. 1925-ca. 1982)

Jones (1965:[22]) identified this as a Brockway mark but did not add dates. Scholes (1941:129) included the cursive Brockway mark as being used in 1941, and it was still listed for the company as late as 1964 (Berge 1980:83). However, only the Circle-B logo (with two serifs) was shown by Hanlon (1971:6-17), and the cursive logo was also missing from the 1973 Midwest Antique Fruit Jar & Bottle Club display.

Fruit Jars

For a relatively short period, Brockway made fruit jars. These were confined to three types, all of which were relatively short lived.

Sur-Grip Mason Jars (1932-1933)



Figure 13 – Sur-Grip Mason Jar (ebay)

Toulouse (1969:59) discussed a jar embossed “Brockway (upwardly slanted underlined cursive) / SUR-GRIP / MASON (both horizontal)” with a “Mason beaded neck seal.” He dated the jars “circa 1932-33 only” and noted a design patent and implied that it was connected with the Sur-Grip Mason (Figure 13). On July 25, 1932, Glenn Arthur Mengle, of

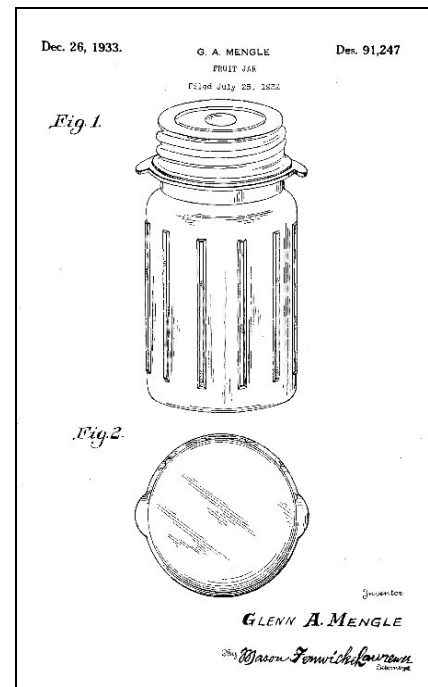


Figure 14 – Mengle 1933 patent

Brockway, Pennsylvania, filed an application for a patent for a “Design for a Fruit Jar” and received Design Patent No. 91,247 on December 26, 1933 (Figure 14). The patent drawing shows a round jar with a series of evenly spaced embossed vertical ribs around the body. Almost concurrently, the Brockway Sales Co. registered Trademark No. 328,594 for “SUR-GRIP” on July 7, 1932, with first use claimed as April 1, 1932 (Creswick 1987b:155; Roller 1998).



Figure 15 – Sur-Grip Mason Jar (Creswick 1987b:33)

Creswick (1987b:33), Leybourne (2008:90), and Roller (2011:115) all included both round and square jars with the grippers, embossed “Brockway (upwardly slanted underlined cursive) / SUR-GRIP / SQUARE / MASON (all horizontal)” on the square variation (Figure 15).

The underlined “Brockway” was slanted at a much steeper angle on both of the Sur-Grip jars than on the other jars or the prescription bottles (see below). The bases were embossed “DESIGN PATENT APPLIED FOR” in an almost complete circle around the post-bottom of the base, with a single numeral just below the center (Figure 16).



Figure 16 – Sur-Grip jar base (eBay)

Brockway published a leaflet entitled “Admiring Sur-Grip Advantages Home Canning Methods and Processing SUR-GRIP Mason Fruit Jars” ca. 1932. The leaflet mentioned “Crystal Clear Flint Glass jars equipped with best Porcelain Lined Caps” along with “Sur-Grip Mason jars with porcelain-lined *aluminum* caps” (emphasis in Roller 1998).

Although Mengle worked for Brockway, there was no notation on the patent document that he had assigned the patent to the firm; however, he must have done so at some point. On April 27, 1933, the Brockway Glass Co. sold the Mengle fruit jar gripper patent rights, molds, and equipment to the Ball Brothers. R.L. Warren, president of Brockway, signed the document for his firm, and William H. Ball signed as the secretary for the Ball Brothers.⁸ Also included in the sale was the name “Vacu-Seal” used by Brockway on lids and cartons since December 1932. Since Brockway sold the rights for the design to the Ball Brothers on April 27, 1933, Caniff (2006:6) noted that the jars were probably only made by Brockway for about one year.

⁸ Toulouse (1969:53) mentioned the sale in 1933 but did not reveal details. Roller (1998) noted that a photocopy of original documents was at the Minnetrista Cultural Center Archives and also cited a Glenn A. Mengle letter to Julian H. Toulouse, September 27, 1966.

Jiffy-Seal (probably 1933)

The Brockway Jiffy-Seal jar was not listed by the earlier researchers. The jar was embossed “Brockway (upwardly slanted underlined cursive) / JIFFY SEAL (horizontal).” According to Leybourne (2008:90), the base was embossed “Design Patent Applied For B,” with “BAIL HERE” on the neck. The Roller researchers (2011:115), however, noted that “DESIGN PATENT APPLIED FOR” was embossed around the outside edge of the base with “38 10” in the center. According to McCann (2014:133), “Only one jar has been reported. This important jar represents a couple of firsts. It is the first wire bail jar to have been reported with ribbed grippers. It is the first Brockway jar to have been reported that is not a Mason jar.”

It is interesting to note that Leybourne included a “B” on the base, but the later Roller writers did not. The Roller researchers concluded that the jar was made ca. 1932-1933 presumably because of “six grippers around the jar” in the pint size. Assuming that is correct, the “38” would not be a date code. However, the later CLEAR-VU jars appear to have been dated coded, while the earlier SUR-GRIP jars were not. While both the 1932-1933 and 1938 dates are possible, we lean toward the earlier manufacture – especially if a “B” were actually on the jar (see B section above).

The base embossing “PATENT APPLIED FOR” may hold the key. The base probably referred to the patent for the grippers. Assuming this is correct, the Jiffy jar was almost certainly made shortly before Brockway sold the Mengle patent to the Ball Brothers. The jar was therefore likely made in 1932.

Clear-Vu Mason Jars (1943-late 1940s)

Toulouse (1969:59) described these jars as machine made, with a “Mason beaded neck seal” and dated the jars from 1925 to 1936 (noting that 1936 was the year the jar was discontinued). The jars were embossed “Brockway (upwardly slanted cursive) / CLEAR-VU (upwardly slanted) / MASON (horizontal)” on the front (Figure 17). The base had no marking, but he noted a second variation with “B” in a circle embossed on the base that was made in the “last years of production.”

Roller (1983:75-76) also discussed the same jars. However, he dated the “CLEAR-VU MASON” as “c. 1940s.” He noted that Brockway registered the CLEAR-VU trademark (No. 409,199) on September 19, 1944, with a claim that the mark was used since May 23, 1943. Creswick (1987b:33, 155) agreed with the circa 1940s date and noted the Circle-B logo on the base (Figure 18). Leybourne (2008:90), too, only noted the jars with Circle-B basemarks.

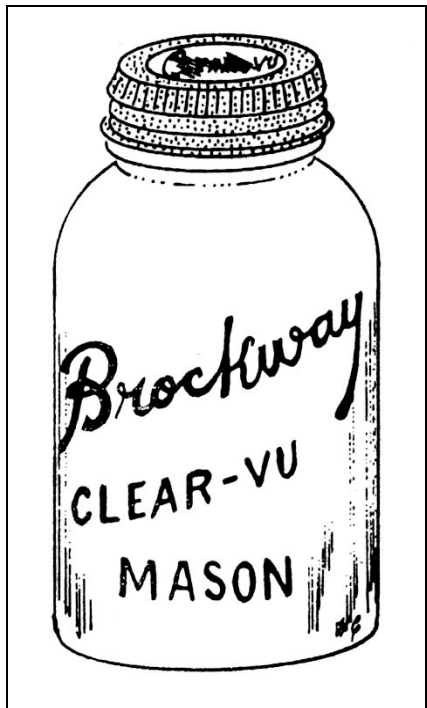


Figure 18 – Clear-Vu jar (Creswick 1987b:33)

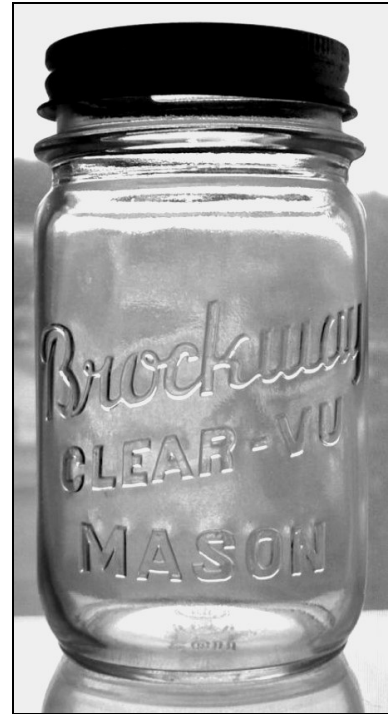


Figure 17 – Clear-Vu jar (eBay)

Caniff (in Roller 2011:114) added that “CLEAR-VU” was used on both round and square jars. The square jars, however, are much scarcer. These were probably not made until ca.

1945. How late the jars were made remains unknown, but they were probably discontinued prior to ca. 1950. A square jar noted by Roller (2011:114) was embossed on the stippled base with “series number / **B** in a circle dot **48** / mold number” (bolding in original document). We have a photo of a circular Clear-Vu jar base embossed “3 / Circle-B (2 serifs) 44 / 1104” and another with the second “4” in “44” drilled out and replaced by a “5” (see Figure 10) Rather than a mold code, the longer number may be a model number or catalog code. Assuming that the two-digit codes indicated manufacturing dates, Brockway made round jars by at least 1944 (and, almost certainly, a year earlier to match the trademark registration) and the square jars at least as late as 1948.

The jars used at least four lid variations (after Roller 2011:114):

1. CLEAR-VU (glass)
2. CLEAR-VU (glass – stippling around outer edges)

3. Brockway (underlined cursive) / VAC-A-LOC / MASON (black letters) on gold-lacquered metal lid
4. Brockway (underlined cursive) / MASON (black letters) on gold-lacquered metal lid

Both Creswick (1987b:155) and Roller (1998; 2011:114) noted that Trademark No. 307,553 was issued to the Brockway Sales Co. for “VAC-A-LOC” for bottle closures on October 31, 1933, with first use claimed as April 29, 1933.⁹

Prescription Bottles (1941-ca. 1964 – possibly 1982)

The cursive “Brockway” was also used on the bases of pharmacy bottles that we have observed, including but not limited to the Sani-Glas bottles discussed below. The Sani-Glas dates probably apply to all prescription bottles with the cursive logo.

Sani-Glas (cursive) (1941-present)

Brockway ads from the *American Druggist* (1941:6) show pharmacy bottles with screw caps and Sani-Glas (cursive) below a cross-in-circle logo embossed at the heel (Figure 19). The ads bragged, “At no extra cost, Brockway Sani-Glas R bottles give you every quality feature of other bottles—plus new and exclusive factory - sanitizing under bacteria - killing Sterilamps.” Griffenhagen and Bogard (1999:98) confirmed the 1941 introduction date for the Sani-Glas process and noted that the bottles were topped with “pearl white moulded caps.”

The Brockway Glass Co., Inc., first applied for a trademark for Sani-Glas, noting that “the suffix ‘Glas’ [was] disclaimed ‘apart from the mark,’” on April 18, 1941. The application was denied

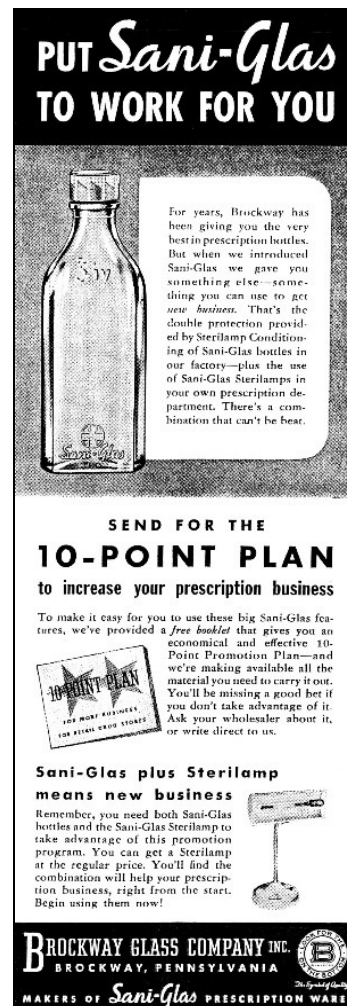


Figure 19 – Sani-Glas ad (*American Druggist* 1941:6)

⁹ McCann (2014:133) used “VAC-O-LOC” and the Roller group (2011:114) used both spellings. However, Roller (1998) used “VAC-A-LOC” in his notes, and Creswick (1987b:155) illustrated the trademark with the central “A” instead of “O.”

because the logo was “confusingly similar” to “Sanitop” – a trademark registered to Anthony F. McDonnell on April 5, 1910. McDonnell renewed the trademark, although the renewal date was not recorded. In addition, the mark could be confused with “toilet-san” – a logo also used on similar containers. Finally, the term “glas” was deemed to be “descriptive.” Although McDonnell stated that he had not used the trademark in 20 years, he still did not claim it as abandoned (Legal, Inc. 2010).



Figure 20 – Cursive “Brockway” on base (eBay)

The Brockway Glass Co. once again filed with the Patent Office for the same Sani-Glas logo – Registration No. 442,441; Serial No. 71,512,960 – on November 21, 1946. The record did not state date of first use, although it was certainly 1941. Although we have not discovered the details, the Patent Office apparently denied the trademark again. It is clear, however, that Brockway continued to use the logo. Brockway, Inc. later filed for the trademark on July 2, 1958, and received Serial No. CA246,300 on

February 2, 1960. The trademark is currently owned by Owens-Brockway.

The mark was certainly used on actual bottles as offered by eBay sellers. Made in both amber and colorless glass, these containers are half-oval on one side, and flat on the other, with chamfered corners on the flat side. Each corner panel may be embossed with graduations (ounces on the left – cubic centimeters on the right), although a variation was offered without graduations. The bottles consistently included the cursive Brockway logo on the bases and “SANI-GLAS” below a Circle-Cross symbol embossed on the heel of the flat side (Figures 20 & 21). The bottles were made with continuous-thread finishes or reinforced prescription finishes (for corks).



Figure 21 – Sani-Glas and circle-cross logo (eBay)

The cursive Brockway logo was still illustrated in 1964 (Berge 1980:83), but it was not shown on the list from 1971 (Hanlon 1971:6-17). The only significant change during that period was the acquisition of the Hazel-Atlas plants in 1964. New molds were almost certainly embossed with the Circle-B logo.

However, a bottle contributed by Bill Barrett had *both* the cursive logo *and* the Circle-B mark embossed on the base – along with a 76 date code. Unless the bottle was a fluke, this suggests that the cursive logo continued in use until at least 1976. The “7” is offset above the “6,” and the “6” – possibly both numbers – show evidence of having been altered on the mold.

Assuming that the base is *not* an aberration, this suggests that the cursive Brockway may have continued in use – in conjunction with the Circle-B logo – until the merger that created Owens-Brockway in 1982.

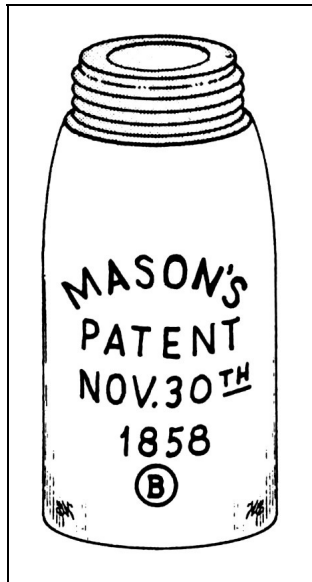


Figure 22 – Mason shoulder-seal jar with Circle-B logo (Creswick 1987a:234)

One e-Bay seller noted that the base of a Sani-Glas bottle was only embossed with the Circle-B logo. This suggests that the Sani-Glass bottles dropped the cursive signature, probably in 1982, and only used the Circle-B logo. The Circle-B likely continued to be used on Sani-Glas bottles until ca. 2000, when Owens-Brockway dropped the mark.

Sani-Glas graduated flint glass oval bottles continued to be advertised on the internet until at least 2011.

These were still be made by Owens-Brockway and were almost certainly embossed with the Oval-I logo.

Mason Shoulder-Seal Jars

Creswick (1987a:234) illustrated and described a shoulder-seal Mason jar with “ground lip” (i.e., mouth blown), embossed “MASON’S (slight arch) / PATENT / NOV. 30TH / 1858 / {Circle-B logo} (all horizontal)” (Figure 22). Although Creswick did not attempt to identify a maker – nor have we any idea – the manufacturing process was far too early to have been used by Brockway (Figure 23). These jars *may* have been made by the glass house that manufactured the picnic flask noted above.



Figure 23 – Mason shoulder-seal jar with Circle-B logo (eBay)

Temperglas (ca. 1950s-1970s)

By at least 1951, probably earlier, Brockway was embossing “Temperglas” on the bases or heels of returnable and some other bottles (e.g., *Brewers Digest* 1954b:17 – Figure 24). This was almost certainly Brockway’s answer to the Duraglas process developed by Owens-Illinois in 1940 to make bottles tougher and more break resistant (Figure 25). We have been unable to locate any explanation of the process or to document a date range.

Codes

A chart posted by the Midwest Antique Fruit Jar & Bottle Club (1973) showed a drawing of the numbers



Figure 25 – Temperglas basemark (eBay)

on Brockway bases (see Figure 9). The three-serif, Circle-B logo was in the center with a plant number to the left, date code to the right, mold number above, and cavity number below.¹⁰ The pattern was not universally followed and probably developed gradually. We have a jar with the three-serif B mark but only the cavity number (3) below the logo and another with a sans-serif B mark, 2 to the left, 50 to the right (possibly a 1950 date code), and M – 88 below. A Clear-Vu jar offered on eBay was embossed “3 / Circle-B 44 / 1104” (see Figure 10). These and many other examples were made earlier and only follow part of the 1973 pattern.



Figure 24 – Temperglas on bottle in ad (*Brewer’s Digest* 1954:17)

on Brockway bases (see Figure 9). The three-serif, Circle-B logo was in the center with a plant number to the left, date code to the right, mold number above, and cavity number below.¹⁰ The pattern was not universally followed and probably developed gradually. We have a jar with the three-serif B mark but only the cavity number (3) below the logo and another with a sans-serif B mark, 2 to the left, 50 to the right (possibly a 1950 date code), and M – 88 below. A Clear-Vu jar offered on eBay was embossed “3 / Circle-B 44 /

¹⁰ Some molds on automatic machinery (obviously including those used by Brockway) contained more than one cavity (hollow space in which to blow the bottle). The cavity number was useful for quality control.

Brockway rarely used two-digit date codes until at least the 1940s. Our earliest example has a “44” code – almost certainly indicating 1944. It is almost certain that the firm used date codes – as required by federal law – on liquor bottles beginning in 1934 and beer bottles about that same time, certainly by 1940. Pre-1940 beer and liquor date codes, however, consisted only of a single digit (e.g., 6 = 1936) to the right of the Circle-B logo. The codes also may have been used on fruit jars during the early 1940s (possibly late 1930s – see the fruit jar section above). However, it may not have been until the 1960s or even later that date codes became the norm on all glass products.

Discussion and Conclusions

The history of Brockway is fairly well understood. The marks on the bottles and the dates they were used are relatively clear, although there is a bit of confusion still surrounding the three-serif, Circle-B logo. It seems fairly certain that the company used no marks to distinguish its bottles prior to 1925 – concurrent with the name change of the town from Brockwayville to Brockway. It is also clear that all bottles with Brockway marks were machine made.

Brockway probably used a B mark with two serifs from 1925 until ca. 1933 (see Table 2). The adoption of the Circle-B mark (probably with three serifs) appears to be concurrent with the federal requirement for specific coding on liquor bottle bases. Although this is only speculation, the federal government may have rejected the letter “B” alone as an unacceptable logo, possibly in fear that it would be confused by the earlier Two-Serif-B logo used on liquor containers by the Charles Boldt Co. Rather than using two logos (B and Circle-B), Brockway may have adjusted entirely to the Circle-B mark. Conversely, Owens-Illinois almost certainly acquired the rights to the serif-B logo used by Boldt. Their ownership of the brand may have prohibited its use by Brockway.

Dating the Circle-B mark, however, is more difficult. There are undoubtedly three variations: Circle B with two serifs; Circle B with three serifs, and Circle B sans serifs. As shown in Table 2, the two-serif logo was used first, with the three-serif mark possibly used concurrently for a few years. The three-serif mark was apparently only used for a very short period, always in a circle. When the three-serif B was discontinued, Brockway resumed the use of the two-serif logo – in a circle.

Table 2 – Brockway “B” Logos

Logo	Serifs	Bottle Type	Date Range
B, no circle	2	All	1925-ca.1933
Circle-B	3	All	ca. 1933-1935?*
Circle-B	2	All	1935-ca. 1980
Circle-B	0	All	ca. 1980-ca. 1996
Brockway (cursive)	n/a	Sur-Grip Mason Jars	1932-1933
Brockway (cursive)	n/a	Clear-Vu Mason Jars	1943-late 1940s
Brockway (cursive)	n/a	Medicinal Bottles**	1941-ca. 1964
Brockway (cursive) + Circle-B	2	Medicinal Bottles**	ca. 1964-1982
Circle-B	2	Medicinal Bottles**	1982-ca. 2000
Oval-I	n/a	Medicinal Bottles**	ca. 2000-present
Temperglas†	n/a	Mostly Returnable Bottles	ca. 1950-ca. 1970s

* Industry sources showed the three-serif Circle-B mark in 1941 and 1964, and a Brockway chart showed it in 1973; however, we have not seen the mark on a dated container. In our searching, the three-serif Circle-B marks are rare. They may have been used concurrently with the two-serif B, then phased out after a year or so – despite the ads.

** This especially includes bottles embossed on the heels with a circle-and-cross logo above “SANI-GLAS.”

† This was a glass strengthening system, probably inspired by the Owens-Illinois Duraglas process (1940).

Eventually, Brockway simplified the logo to a sans serif B, still in a circle, continuing to use the mark into the era when the firm merged with Owens-Illinois to form Owens-Brockway. By ca. 2000, the Circle-B mark was eliminated, leaving all products identified with an OI logo.

We explored the possibility that Brockway used all three “B” types (as well as the Triple-Circle-B mark) on different types of containers, but the data did not support that hypothesis. We also examined the idea that the different logos could have been used by different Brockway factories. Again, however, we found no data to support such a hypothesis.

It was, however, fruitful to examine the Brockway (cursive) logo according to container type. The mark was used in different formats on various container types (at least three different fruit jars as well as pharmaceutical bottles). The results were reported in the text above and on Table 2.

While not evident in the report above, this has been a difficult series of logos to date. Although the various data cited in the body of the text now paint a relatively precise picture, the lack of date codes on many of the bottles made testing various hypotheses difficult. The secondary literature was usually confusing and contradictory, and the Brockway ads often did not match the actual observed logos on bottles and jars. It has been an enjoyable chase!

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