

Brockway Machine Bottle Co. and Brockway Glass Co.

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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, 1907.¹ The *New York Times* reported on June 21, 1907, that the Brockway Machine Bottle Company had incorporated the previous day (June 20) at Olean, New York, with a capital of \$34,000. The directors of the cooperative were J.B. Marsden, H.C. Adams, and A.A. McFadden, all living at Olean. As of July 22, 1910, the *Brockway Record* listed F.B. McGurn as president, Herbert C. Adams as vice president, A.A. McFadden as treasurer and manager, and David R. Cox as secretary.

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

¹ Roller (1998) cited strong 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. Roller was correct, but the other two had part of the story as well. Although all of the men arrived from Olean, at least two of the had prior training from Hazel-Atlas.

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 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 lehrs, 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).

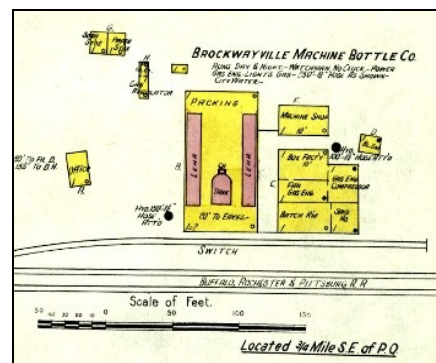


Figure 1 – 1907 Sanborn Map of Brockway

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).² 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.

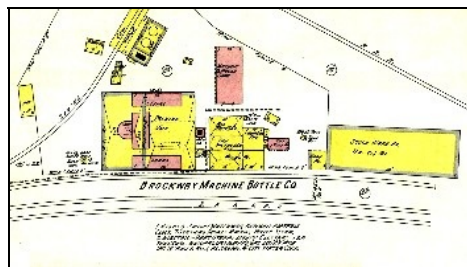


Figure 2 – 1914 Sanborn Map of Brockway

Small warehouses dotted the landscape, and a new building housed the coal tipples 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).

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.

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).

² 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.

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:

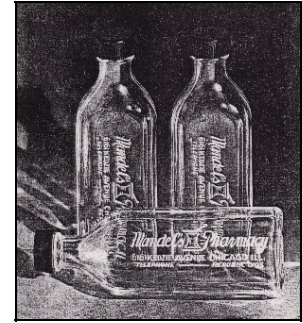


Figure 3 – "Monogram"
Service bottles (*Glass Packer*
1933:119)

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. 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)

A merger of the Brockway Machine Bottle Co. and the Brockway Sales Co. at the annual meeting held July 29, 1933, created the Brockway Glass Co., effective August 1. R.L. Warren was president with J.W. Harding as vice president in charge of production, G.W. Mengle as vice president in charge of sales, G.W. Britton as treasurer, F.W. Marshall as secretary, and J.B. Belton as assistant secretary and treasurer (*Brockway Record* 8/4/1933). 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, plant³ 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.”

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).

³ This almost certainly indicates the closing or sale of the Monaca plant. By 1939, the factory at Crenshaw, Pennsylvania, was listed as “No. 2.”

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	1956-1991
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
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. (Carnegie Library 2005). 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). Owens-Illinois merged with Brockway, Inc., in 1988, creating the Owens-Brockway Glass Containers, Inc. (Owens-Illinois 2001). Although the exact naming is unclear, both the names Owens-Brockway and Owens-Illinois remained in used until at least 2007, when the main firm became simply O-I. Owens-Illinois closed most of the Brockway plants over the next few years after the merger, although the main one at Brockway remains in operation as Owens-Brockway in 2023.

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 showed “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 only would 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 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 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.



Figure 4 – Brockway B (*Glass Packer* 1932)

Although the plain “B” first was used by 1925, the earliest ad we have found that noted a mark (July 1931) stated that “the ‘B’ trade mark always identifies a Brockway-made container” (Figure 4). 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. Because Brockway had not yet expanded during this period, these marks are much less common and more difficult to track empirically. The only example of a “B” with no circle that we have seen had a three-serif B (Figure 5).

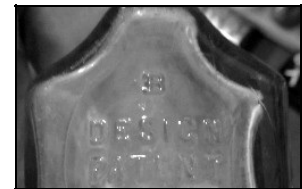


Figure 5 – 3-serif B, no circle (eBay)

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

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 1925.⁴ 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.



Figure 6 – Circle-B (*Glass Packer* 1934)

By June 1934, Brockway ads showed a logo with a circle around a three-serif B (see below for a discussion about serifs). Within the circle was “LOOK FOR THE [B in the center] ON THE BOTTOM.” By December, the ads read, “If it hasn’t a [Circle-B], on the bottom it isn’t a BROCKWAY” (Figure 6). However, by at least 1935, dated liquor flasks were embossed

⁴ Peterson treated “B, B in circle, or B in three concentric circles” as first used on the same date, 1925.

with very distinct two-serif, Circle-B logos (Figure 7). 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 – Liquor base, 1941 – 2 serif B

Serif Dating

Various sources showed the B logos in three variations – no serif, two serifs, or three serifs. Although our samples of both bases and advertisements were small, we were able reach some pretty solid conclusions about the timing of the serifs. It was clear, however, that empirical evidence did *not* match the ads or the industry sources.



Figure 9 – Circle-B logo, no serifs

The 1929 trademark document illustrated a “B” with two serifs, claiming a first use in January of 1925. Advertisements showed the double-serif logo within the 1936-1954 period, and our sample of bottle bases had two serifs by 1941, continuing until at least 1961 (Figure 8). Although a sans serif B showed in a 1933 ad, that was the only example from that early. Our base samples for sans serif ranged from 1969 to 1983 (Figure 9). Although industry sources (Scholes 1941; Berge (from Owens-Illinois) 1964) and the Midwest Antique Fruit Jar & Bottle Club in (1973) all showed the three-serif mark, that was almost certainly based on the printed logo, such as was found in the ads. We found only two distinct three-serif marks on actual bottles plus one other that *may* have had truncated serifs (Figure 10 and see Figure 5).



Figure 8 – Circle-B logo, 2 serif B (eBay)



Figure 10 – Circle-B logo, 3 serif B

There is a gap in our data during a crucial dating period. We have a two-serif B in 1961 and sans serif B in 1969. Two Brockway changes could have stimulated the switch. In 1962, the Tygart Valley Glass Co. merged with Brockway, losing its T-in-an-Inverted-Triangle mark in the process. Then, in 1969, Brockway acquired six factories from the Hazel-Atlas Glass Co. Since

either acquisition could have precipitated the switch, we have arbitrarily chosen ca. 1964 as the date. Tables 2 and 3 provides a chronology for both the circle variations and the differences in serifs.

Table 2 – Logo Chronologies

Date Range	Logo
1925-ca. 1934	B along (no circle)
1933-ca. 2000	Circle-B
unknown – poss. 1930s	Triple-Circle-B
2-Serif B	1925-ca. 1964
Sans-Serif B	ca. 1964-ca. 2000
3-Serif B	poss. 1930s

Table 3 – Brockway “B” Logos

Logo	Bottle Type	Date Range
Brockway (cursive)	Sur-Grip Mason Jars	1932-1933
Brockway (cursive)	Clear-Vu Mason Jars	1943-late 1940s
Brockway (cursive)	Medicinal Bottles*	1941-ca. 1964
Brockway (cursive) + Circle-B	Medicinal Bottles*	ca. 1964-1982
Brownie (with B in a circle)	Beer Bottles	1939-mid-1940s
Temperglas**	Mostly Returnable Bottles	ca. 1950-ca. 1970s

* 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).

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. For more information, see the study on Charles Boldt in the C section.

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. Martin Richey provided us with our only Triple-Circle-B logo on a round amber base – a distinctly two-serif B (Figure 11). Unfortunately, the bottle had been destroyed, so Richey had only a photo of the base. The bottle had a machine scar, strongly suggesting Brockway as the manufacturer, but the dating remains unclear.



Figure 11 – Triple-Circle-B (Martin Richey)

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. See Table 3 at the end of this section for a chronology of relevant logos.

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)

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 12). On July 25, 1932, Glenn Arthur Mengle, of 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 13).

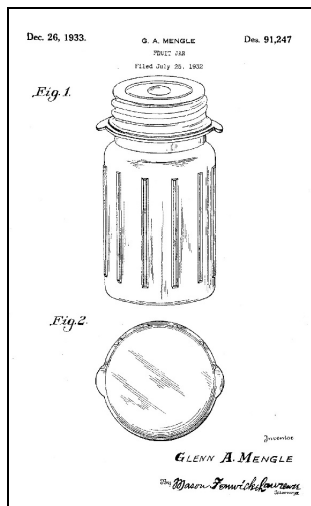


Figure 13 – Mengle 1933 patent

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).

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 14). 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 (see Figure 12).



Figure 12 – Sur-Grip Mason Jar (ebay)



Figure 14 – Sur-Grip Mason Jar (Creswick 1987b:33)

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.⁵ 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.

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

⁵ 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.

made shortly before Brockway sold the Mingle 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 15). 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.”



Figure 15 – Clear-Vu jar (Creswick 1987b:33); eBay)

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. Leybourne (2008:90), too, only noted the jars with Circle-B basemarks.

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 – 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 8) 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, 1933.⁶

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 16). 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.”

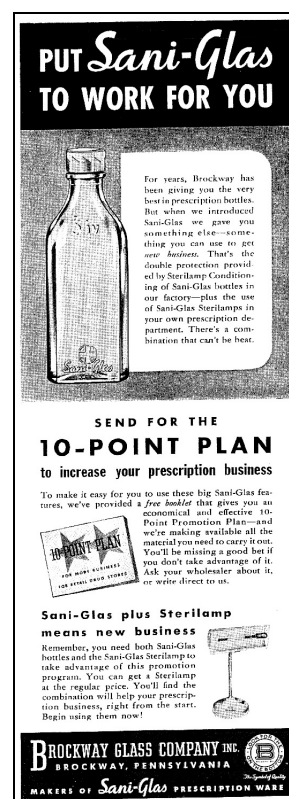


Figure 16 – Sani-Glas ad
(*American Druggist* 1941:6)

⁶ 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.”

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 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).

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 Cross-in-a-Circle symbol almost always (always?) appeared with the Sani-Glas logo. The logo received Trademark No. 390,466 on September 23, 1944, the same date as the one for Sani-Glas, and the symbol was Republished on August 16, 1949. As in the case of Sani-Glas, Brockway claimed a first use on January 27, 1941. In both cases, “the trade-mark is applied or affixed to the goods by molding the trade-mark into the surface of the bottle.”

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 17 & 18). The bottles were made with continuous-thread finishes or reinforced prescription finishes (for corks).



Figure 17 – Cursive “Brockway” on base (eBay)

The cursive Brockway logo still was 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.



Figure 18 – Sani-Glas and circle-cross logo (eBay)

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 (Figure 19). 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.



Figure 19 – Cursive “Brockway” & Circle-B (Bill Barrett)

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.

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 of Owens-Illinois.

BROCKWAY – Block Letters (ca. 1920s-1940s)

Robert Chidester reported a small amber jar embossed “BROCKWAY” – *not* in cursive – horizontally across the base (Figure 20). We have not recorded this mark before, and it appeared in a 1920s-1940s context in an excavated cistern. A benefactor sent me the exact jar

photographed by Chidester⁷ Both jars had continuous-thread finishes with metal screw lids. The sides were lightly stippled, and the bases were embossed “4 / BROCKWAY / 564.”

Brownie (1939-mid-1940s)

Whitten (2023) listed a trademark we had not discovered in our original study: “Brownie” (B in a circle, followed by “rownie” in cursive) on the bases of “No Deposit / No Return” amber beer bottles.



Figure 21 – Brownie (eBay)

Whitten’s example was embossed “44 / Brownie / • / 2” (Figure 21). Our study on non-returnable beer bottles showed Brownie on the Packie style that was made between ca. 1939 and ca. 1949. Indeed, Brockway received Trademark No. 381,448 for Brownie (cursive with the B in a circle) on September 24, 1940, with a first use claimed just 21 months earlier on January 1, 1939.



Figure 20 – BROCKWAY

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. These jars *may* have been made by the glass house that manufactured the picnic flasks noted above.



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

⁷ Unfortunately, we lost the name of the kind person.

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 23). 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 24). 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 on Brockway bases (Figure 25). 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.⁸ 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 15). These and many other examples were made earlier and only follow part of the 1973 pattern.



Figure 23 – Temperglas on bottle in ad (*Brewer's Digest* 1954:17)



Figure 24 – Temperglas basemark (eBay)

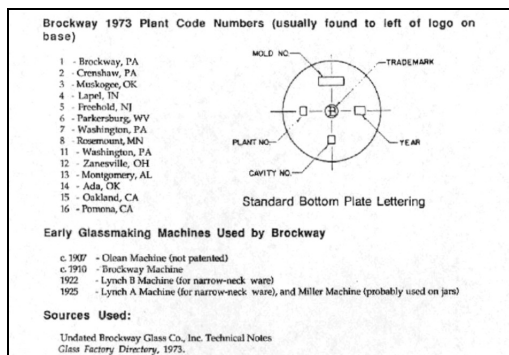


Figure 25 – Code Chart (Midwest Antique Fruit Jar & Bottle Club 1973)

⁸ 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 used two-digit date codes on liquor containers – as required by federal law at least as early as 1934 (see Figure 7). These bases mostly followed the federal guidelines with the distillery code first (e.g., D-18 or D18), although several examples lacked the “D” (e.g., see Figure 7). The glass factory code followed, in Brockway’s case number “14.” The final code was the date code, two digits in all Brockway examples we have seen.

The federal government also required date codes on beer bottles beginning in 1944. Our earliest example had a “41” code (1941). Pre-1940 beer and liquor date codes *may have* consisted only of a single digit (e.g., 6 = 1936) to the right of the Circle-B logo – although we may not have yet found an example of a 1930s beer bottle. 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 no circle from 1925 until ca. 1933 (see Table 2). The adoption of the Circle-B mark 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.

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 3.

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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