

Owens-Illinois Glass Co.

Part 1 – History

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The attitudes of the Owens-Illinois workers were summed up in a probably apocryphal story, where a new employee asked his boss, “Hank, don’t you have any sons-of-bitches in this company[?] I haven’t met a single one yet.” His boss replied, “We do have one back East—if he’s still with us. They don’t usually last very long” (Untitled anonymous OI history, OI papers).

Indeed, employee relations are one of the important chapters in the very complex history of Owens-Illinois. From 1929, when the Owens Bottle Co. merged with the Illinois Glass Co. to form the Owens-Illinois Glass Co., the firm has been one of the leaders of the glass industry – in innovation as well as growth. The timing, of course, could not have been worse – beginning the new business just as the Great Depression plunged the U.S. into an era of economic disaster – but the firm idled a large number of its factories and emerged from the period stronger than ever.

Owens-Illinois continued to buy smaller glass firms, often to obtain patents. However, it also bought some firms to acquire the ability to produce products it was contractually denied the ability to make on its own machines. For example, see the discussion below on the acquisition of the Berney-Bond Glass Co. to enter the milk bottle market in 1930. The firm built new plants, retooled old ones, entered new fields, such as glass blocks, TV picture tubes, and plastic – and generally changed to fit the needs of each decade. Over the years, the name changed from the Owens-Illinois Glass Co. reorganized as Owens-Illinois, Inc., Owens-Brockway, and finally, simply O-I. Through it all, Owens-Illinois has been the leader in the American glass industry and remains in that position in 2018.

Historical Overview

The following overview is based on Paquette (2010). Paquette, a former Owens-Illinois president, created an excellent detailed history of the firm, which we will follow – with additions

from the Owens Illinois papers – a series of documents, mostly unpublished, provided by Russ Hoenig and Phil Perry. For details about officers and sales fluctuations, see Paquette.

The Owens-Illinois Glass Co. began with the merger of two industry giants: the Illinois Glass Co. and the Owens Bottle Co. The Illinois Glass Co. was incorporated in March 1873 and began business in August. The company was successful and made virtually every type of bottle. By 1911, Illinois Glass had obtained the first of three Owens Automatic Bottle Machine licenses and made many other containers from semiautomatic machines. The firm expanded until the merger with Owens (see the section on the Illinois Glass Co. for a more complete history).

The Owens Bottle Co. (1911-1929) grew from a series of companies that began with the Toledo Glass Co. (1896-1903). The Toledo company was succeeded by both the Owens Bottle Machine Co. (1903-1911) that made and sold the Owens Automatic Bottle Machines and the Northwestern Ohio Bottle Co. (1904-1908), a company created to make bottles. In 1929, the firm merged with one of its major competitors, the Illinois Glass Co., to form the largest glass company in the industry.

The merger between the Owens Glass Co. and the Illinois Glass Co. – formally approved on April 17, 1929 – brought under the Owens umbrella the “largest individual bottle plant in the world,” with Bill Levis as president (Paquett 1994:70-71). With the merger, Owens-Illinois consolidated several plants controlled by the Owens Bottle Co. Owens had acquired the controlling stock of both the American Glass Co. and the Graham Glass Co. in 1916, but these two companies had operated under their former names until they officially became Owens-Illinois plants with the 1929 merger (Moody’s 1932:2209). Although most of the Owens-Illinois products were machine made, in 1930, the company still offered “miscellaneous hand blown bottles and specialties” (*American Glass Review* 1930:94). While the Owens-Illinois listing continued to offer hand-blown containers until at least 1944, it is likely most of those were perfume bottles.

The timing of the merger was inauspicious, however, coinciding with the stock market crash of 1929 and the beginning of the Great Depression. Sales dropped almost immediately after the formation of the new corporation, and Owens-Illinois was forced to close many of its factories, leaving several others idle. The continuation of Prohibition, begun nationally in 1920, limited the use of bottles for alcohol, previously a major market.

The new firm lost no time in filling the gaps left by the earlier concerns. One of the errors that the Owens Bottle Co. administrators had regretted was the granting of exclusive licenses to allow specific glass houses to make certain bottle types with the Owens machines. For example, when Owens endowed the Thatcher Mfg. Co. with the license for milk bottles, it effectively barred itself from producing bottles of that type. Owens Bottle had circumvented a similar problem with soda and beer bottles by purchasing the American Bottle Co. (capturing the use of its own Owens machines on soda and beer bottles) and the Graham Glass Co. (controlling the Graham soda bottle machines) as noted above.

Owens-Illinois followed the same tactics on January 30, 1930, when it acquired the Berney-Bond Glass Co. and again on November 25, 1931, upon the purchase of the Atlantic Bottle Co. – both major milk bottle manufacturers – allowing Owens-Illinois entry into the dairy container field, even though the Thatcher Mfg. Co. retained the exclusive license for the Owens machines on those products. Owens-Illinois instantly became a strong producer of milk bottles. For more information on Berney-Bond or Atlantic Bottle, see the sections on those firms. The name for the milk bottle production area changed frequently during the early years:

Table 1 – Owens-Illinois Milk Bottle Divisions Names*

Dates	Name
1930-early 1931	Berney-Bond Milk Bottle Division of Owens-Illinois Glass Co.
April-December 1931	Berney-Bond, Atlantic Bottles, Milk Bottle Division of Owens-Illinois
January 1932	Owens-Illinois Glass Co., Milk Bottle Division
January 1933	Onized Milk Bottles

* after Hoenig 2008a

On March 25, 1931, the firm formed the Owens-Illinois Glass Co., Ltd., a new corporation in California. The new organization purchased the Illinois Pacific Coast Co., the largest glass manufacturer on the West Coast on November 30 of the same year. The name of the West Coast operation was changed to the Owens-Illinois Pacific Coast Co. on April 23, 1932 (Paquette 1994:81-82). According to Paquette (1994:81), Owens-Illinois introduced Applied

Color Lettering (ACL) in 1931, although other sources place the date of the practical application at 1934. However, the 1937 Annual Report indicated that it was first used in milk bottle production (without noting the date) but had spread during 1937 into beverage and liquor bottle use. Owens-Illinois also began making its own cardboard shipping cartons in 1931.

Not all Owens-Illinois plants were unionized prior to 1933. The Glass Bottle Blowers Assn. was still fighting mechanization up to that time, and Owens-Illinois plants (and other union operations) worked three twelve-hour shifts, one off. After the Great Depression, however, the National Industrial Recovery Act (NIRA) of 1933 required a change to six six-hour shifts and a maximum weekly pay level, although Owens-Illinois anticipated the change and began the six-hour shifts in 1932. Since that lowered the workers' income, the unions lobbied for an increase, negotiating with Owens-Illinois for a move to four eight-hour shifts (with one off). The NIRA agreed, and the plan continues to be used in 2018.

The firm purchased the O'Neill Machine Co. in January 1933, passing several patents to Owens-Illinois; then, the Repeal of Prohibition allowed the reinstatement of alcohol in March 1933, and the bottling industry boomed. The manufacture of beer bottles spread across the glass industry and became a mainstay of Owens-Illinois from then on. The following year (May 1934), Owens-Illinois gained control of the Closure Service Co. at Toledo and began making its own bottle closures (Paquette 2010:54-56).

The 1934 Annual Report noted the change as well as the formation of the Ownized Clubs, voluntary groups promoting recreation, education, welfare, and safety – also instituted in 1932 (OI Papers). Employee relations continued to be an important segment of Owens-Illinois policy throughout the firm's history.

Owens-Illinois took over its original parent, the Libby Glass Co., on October 17, 1935, adding tableware to its growing inventory of products. In one area, tumbler production, uses overlapped with containers. In the early 1930s, a Canadian dairy came up with an idea to pack cottage cheese in a tumbler, so that the purchaser could wash the container after use and reuse it as a drinking glass. Libby picked up the process and continued to promote it into at least the 1950s – creating a kind of a bridge between the products of the two firms. Owens-Illinois added glass blocks to its inventory in August 1935, and they became an almost instant success (Paquette 2010:57, 59).

The 1936 stockholders' Annual Report noted that eleven factories were operating at full capacity "due to the unprecedented demand for glass containers." By that time, almost half of the total production of the firm was devoted to food, medicine, and toiletry bottles, although milk, liquor, beverage, and beer bottles were listed as "important lines." This was also the year that the firm entered the can business, purchasing Baltimore's Tin Decorating Co. and the Enterprise Can Co. at McKees Rocks, Pennsylvania, to form the Owens-Illinois Can Co. Another great 1936 achievement was the introduction of the Stubbie – the first non-returnable beer bottle (Paquette 2010:60-61).

The firm also instituted the Structural and Industrial Products Division (or Industrial and Structural Products Division) in 1936. The area included Fiberglass insulation, Fiberglass pipe covering, Insulux Glass Blocks, Dust-Stop Air Filters, Hemingray Glass Insulators, and Experimental Developments (and, eventually, television picture tubes). On January 1, 1937, Owens-Illinois created the Glass Container Division – Glass Container, Corrugated and Wood Package, and Closures (OI papers).

Although Owens-Illinois and the Corning Glass Co. had signed an agreement about fiberglass production in 1935, it was not until October 28, 1938, that the two firms formed a new corporation – the Owens-Corning Fibreglass Corp. Along with other members of the industry, Bill Levis (Owens-Illinois president) was called before the Temporary National Economic Committee in December to testify about the state of glass-making machines in the U.S. Between Owens-Illinois – owning patents for suction machines – and the Hartford-Empire Co. – gob-feeder machines – the two firms controlled 97% of glass machines in the U.S. – a possible violation of the antitrust acts. Although the October 8, 1942, judgment went against the defendants, an appeal delayed the final verdict until January 8, 1945, when the initial decision was upheld. Although Owens-Illinois was not fined, it faced \$2.9 million in court costs and was restrained from price controls, unfair licensing practices, controlling the practices of competitors, etc. (Paquette 2010:61-62, 65).

An intriguing entry in the 1938 Annual Report provided a preview of the development of the Duraglas process to follow two years later: "Improvements in glass quality and advancements in the technique of forming it have made possible a broad-scale reduction in weight of many types of bottles, while still maintaining adequate strength and satisfactory performance." In late 1938 or early 1939 (probably January 1939), Owens-Illinois created the Closures and Plastics

(C&P) Division, removing closures from the Glass Container Division and probably discontinuing or strongly reducing the manufacture of metal closures on prescription and medicinal bottles.

Although development had begun a few years previously, Owens-Illinois selected the name *Duraglas* (always in cursive) for Durable Glass in 1940 as a trademark for its glass formulas that created an enduring, break-resistant glass for use in bottle and jar manufacture (OI papers; Paquette 2010:67). The firm stopped embossing the term on bottles in 1964, when it developed the DURAGLAS treatment (always noted – and trademarked – in capitals). DURAGLAS was a surface treatment rather than a coating, forming a permanent seal that would withstand the caustic cleaners use on returnable bottles (OI papers). This newer designation was never embossed on bottles.

During World War II, Owens-Illinois faced war-related shortages and restrictions, but countered those by devoting a small percentage of its operations to government contracts to support the war effort as well as supplying the new “1-Way” lightweight beer bottles for use in supplying beer to U.S. troops in Europe and Asia. Near the end of the war, the firm sold the Owens-Illinois Can Co. to the Continental Can Co. for \$7.5 million (Paquette 2010:67-68).

On December 3, 1941, Owens-Illinois instituted a retirement plan for its employees. A sum of 5.25% of each employee’s income would be withheld and invested in a group fund to provide retirement for women at age 60 and men at age 65. Although the amount was unclear, Owens-Illinois would also contribute to the fund. Maximum retirement income was set at \$10,000 per year, and 99% of all employees signed up for the plan (Annual Report 1942).

The 1942 Annual Report stated that

All available facilities of the Company’s Central Mold Shops at Alton, Illinois, and Fairmont, West Virginia, and of the Machine Parts Manufacturing Department at Alton are being utilized on war work [i.e., World War II]. Plans have been completed to extend war work to all other machine and mold repair shops of the Company.

Owens-Illinois also created a War Contracts Dept. in 1942 to negotiate more plans to aid in war production. The 1943 Annual Report listed many of the military products made by the various factories, including small ammunition dies, punches, and gauges, aircraft parts, torpedo tube assemblies, 30-caliber ammunition boxes, 50-caliber metallic belt links, mortar shells, gasoline containers, bomb tails, carbine magazines, and other items. The Report added that “other articles were made whose nature for the present must be kept confidential.”

In 1944 and 1945, Owens-Illinois made soda and beer bottles specifically for export to Armed Service personnel overseas, as well as medical containers, stemware, and tumblers (Annual Report 1945). Abe Martin, for many years the labor relations director for Owens-Illinois, told the story of a meeting at the Spencer Hotel in Marion, Indiana, during the 1940s. He related how, after dinner, “Bill Levis just gave us hell.” Levis regaled the group, saying

We’re in this business to make money . . . Here’s a table here, not a goddamn catsup bottle on it. . . . Catsup goes in bottles. If you don’t like catsup . . . damn it, order some anyway and spill some on your plate. I don’t see anything but Scotch whiskey. We make our money out of bourbon whiskey.

Jim Colbert, a top-ranked salesman, called Martin later and invited him to a bar. Colbert asked, “Abe, what are you going to drink.” Martin told the bartender, “Bring me a bourbon and catsup” (Untitled anonymous OI history, OI papers).

Owens-Illinois bought the Kimble Glass Co. on July 1, 1946, opening up the field of chemical and laboratory glass (see the section on Plant No. 13 below for details). The big news in 1950 was the resignation of Bill Levis as Chief Executive Officer and president of the board of directors, replaced by J. Preston Levis. Prior to his retirement, Bill had been the president of the corporation since its inception in 1929. In 1951, Owens-Illinois purchased Sameric, Inc., a small firm, expanding the firm’s field of plastics (Paquette 2010:77, 82).

The firm changed its name from the Owens-Illinois Glass Co. to Owens-Illinois, Inc., in 1954 and commemorated the event by adopting a new logo – an “I” surrounded by an elongated “O” (see the section on the Owens-Illinois marks and codes for more details). The 1950s also saw the company’s expansion overseas, with new operations in Cuba, Panama, Venezuela, and Columbia (Paquette 2010:87-89).

The 1950s and 1960s also ushered in the great plastics boom. Milk bottle production had already suffered from the introduction of waxed-paper cartons during the 1930s, but the end of home delivery and the surge toward milk sales in grocery stores introduced plastic milk bottles to the consumer, and glass milk bottle sales decreased dramatically. The Clorox Co., traditionally the user of heavy amber gallon-sized glass jugs was receiving complaints about broken bottles creating a hazard in grocery store aisles, so the firm complained to Owens-Illinois, its largest supplier. Owens-Illinois began making plastic containers to avoid losing such a high-volume customer (Paquette 2010:90-92).

On January 1, 1962, Owens-Illinois split off a new Plastics Division from the Closure and Plastics Division – recognizing the permanent container shift to plastics – and merged the Kimble Glass Co. with the Libby Glass Division to form the Technical Products Division. To complete the redistribution system, the firm eliminated the Closure and Pacific Coast Divisions, splitting the Glass Container Division into an Atlantic Region, a Central Region, a Pacific Region, and Closure Operations at Toledo (Paquette 2010:104-105).

Although it began much earlier, Owens-Illinois equipped its new factories during the 1960s with Individual Section (IS) machines, also called flow machines. Originally, IS machines were four or five sections. As they added six to eight sections, the IS machines became distinctly faster than the Owens machines. Owens-Illinois had been gradually shifting to IS machines both intentionally – by adding new machines to existing plants as well as in ones built by Owens-Illinois – and incidentally – by using existing machine in glass houses purchased by the firm.

In 1964, Owens-Illinois began making “spiral-wound” containers with alternate layers of paper, foil, and plastic. Throughout the rest of the 1960s, most growth and changes were concerned with packaging and other non-glass issues, and the firm developed a plastic jacket for glass bottles (Plasti-Shield) in late 1971 to provide cushioning and insulation for bottles made of thinner glass – an instant success (Paquette 2010:110-128). Owens-Illinois had always been on the hunt for ways to improve production and analyze data. These included annual output goals to improve production by 2-3% through innovation – leading to a 130% increase in a decade. One way that was achieved was in reducing short-run items and allowing the competition to gain that business. Near the beginning of the 1970s, for example, Owens-Illinois offered more than 2,800 items, but the firm was making less than 800 by the end of the decade.

During the 1980s, several states – notably in the New England area – passed resolutions that became known as “bottle bills.” These typically required a deposit for the purchase of *any* beverage container, whether glass, plastic, aluminum, or other material. Intended as a measure to curb the wanton casual discard (littering) of cans and bottles, these bills had unintended consequences for the glass container industry. After a history stretching back to at least the 1840s (the earliest returnable bottles we have found), returnable glass bottles were virtually completely eliminated by these measures, since, essentially, *all* beverage bottles had to be returned. As a result, Owens-Illinois closed a number of its factories during the 1980s and early 1990s. As of this writing (2018), ten states continue such requirements: California, Connecticut, Hawaii, Iowa, Maine, Massachusetts, Michigan, New York, Oregon, and Vermont. Note that four of the five New England states have such laws.

On March 24, 1987, a new set of investors purchased Owens-Illinois, leaving the name as Owens-Illinois, Inc. The new management sold the Plastic Beverage Operations to Constar, Inc., for \$4.5 million on May 14 – as well as selling several overseas units. Owens-Illinois bought Brockway, Inc., in 1988, creating the Owens-Brockway Division. With the purchase, the firm once more had a plastic division producing bottles (Paquette 2010:168-170, 174; O-I 2005).¹

After four-and-a-half years under private ownership, Owens-Illinois became a public corporation on October 15, 1991, and the firm purchased Consumers Packaging, one of the major Canadian glass companies for \$230 million in October 2001 (Paquette 2010:188, 202). The trade name of the firm became O-I in 2007. During the late 2000s (2008-2009), the Canadian government shifted the responsibility for glass recycling to the individual glass producers. As a result, Owens-Illinois closed many of its Canadian glass plants during that period to avoid having to install the extensive recycling units. The firm remains a major glass production center in 2018.

Individual Plants

This section is organized by plant number – in numerical order. Several of these plants had formerly belonged to the two founding companies – the Owens Bottle Co. and the Illinois

¹ Paquette (2010:174) placed the date of finalization at April 12, 1988.

Glass Co. – and became part of the Owens-Illinois system with the merger. See the sections on both of these ancestral firms for more details. Aside from basic earlier dates, we will not discuss the prior histories of any of the Owens-Illinois acquisitions unless an individual factory was *not* dealt with in other sections of this Encyclopedia.

Very early in its history, Owens-Illinois – already one of the giants of the trade – began growing, buying up smaller firms and occasional larger ones. In 20 cases, the plant number was reused, and the same number was used for three factories in three instances. As noted above, these will all be presented by plant number rather than in chronological order – and the first use of an individual factory number will precede the later ones.

According to the Twenty-Second Annual Report of Owens-Illinois, one Toledo plant was idle in 1929 and was dismantled by the end of the year. Similarly, Owens-Illinois closed the factories at Loogootee, Indiana (not sold until July 1, 1944), and Minotola, New Jersey (sold January 1, 1933), without using them – although Minotola continued to be listed on the Annual Reports until 1932.

Dating these plants can be tricky. In the case of plants that were already in production, the beginning date in parentheses as part of the heading reflects when the factory became part of the Owens-Illinois conglomerate. If Owens-Illinois built the plant, the beginning date indicates when the factory began manufacture – rather than the beginning of construction. In a few instances, a second beginning date appears in brackets, e.g., (1997 [2001]-2003). In this case, Owens-Illinois owned the plant in partnership with another firm in 1997 (Consumers Products, Inc., in this example), but the factory did not become a full part of Owens-Illinois – and receive a plant number (34 in this example) – until 2003.

We have included a *very* abbreviated history of these locations prior to joining Owens-Illinois with references to the section where a more complete history may be found. If Owens-Illinois built the plant, the beginning date will reflect the year when the factory began production rather than when construction began or was completed – although all of that information will be included in the text if it were available in our sources.

End dates will reflect the year the factory ceased production or was idled rather than when it was closed or razed – although the additional information will be included in the text if we

have it. We have included all of the original plant numbers, even if a factory never entered production. In those cases, the parenthetical dating section in the heading will only contain a single date – reflecting when the plant became part of Owens-Illinois

Plant No. 1, Toledo, Ohio (1929-ca. 1936)

The Owens Bottle-Machine Co. opened what became Plant No. 1 on Libbey St. in Toledo as an experimental factory for the continued development of the Owens Automatic Bottle Machines (Figure 1).² Here, Owens-Illinois made the first production bottles for the

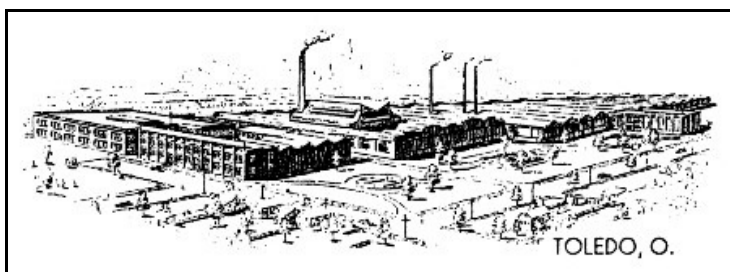


Figure 1 – Toledo plant

American Bottle Co. and for occasional other license holders – until the laborious installations of the machines could be completed at each home location. The firm transferred the experimental operation to the No. 4 factory – Westlake plant – in 1913, but Owens Bottle closed the Westlake unit in 1915 (see the Owens Bottle Co. section for more background).

With the 1929 merger, the Toledo unit became the Owens-Illinois Plant No. 1. At some point prior to 1936, Plant No. 1 shifted to the production of metal closures. This change probably occurred in 1913, when the Westlake factory took on the experimental position for the Owens Bottle Mfg. Co. (see the Owens Bottle Co. section for more information). In 1937, production concentrated on plastic caps rather than metal ones, and the plant finally closed in 1950.

Plant No. 2, Huntington, West Virginia (1929-1993)

The Charles Boldt Glass Co. built the plant at Huntington, West Virginia, in 1913, primarily producing liquor bottles and flasks as well as some other bottles and jars (Figure 2). In 1919, the Owens Bottle Co. purchased the factory, designating it as Plant No. 2 by ca. 1921. The

² All plant drawings came from the ca. 1930-1934 Owens-Illinois catalog.

unit became Plant No. 2 of Owens-Illinois with the 1929 merger. See the sections on the Charles Boldt Co. and the Owens Bottle Co. for more information. After several improvements (including the installation of additional IS machines), Owens-Illinois operated the factory until 1993 (Casto 2017).



Figure 2 – Huntington plant

Plant No. NA2, Kalama, Washington (2015-present)

Because of an increase in Oregon wine production, the Cameron family began building a glass factory at 2310 N Hendrickson Dr., Kalama, Washington, in 2007, beginning production the following year. However, a furnace leak in January 2009 dumped over 125 tons of 2,500-degree molten glass into the basement containment area – although 325 tons solidified inside the furnace. The glass – 12 feet deep in places – had to be removed with jackhammers, and the process became so expensive that the Camerons declared bankruptcy in 2009 (Tims 2013).

At the March 2010 foreclosure sale, the Medley Capital of New York purchased the property, and, after a \$20 million renovation, reopened the factory in July. Jerry Lemieux, the CEO of Medley wanted to rename the plant the Phoenix Glass Co., after the mythological bird, rising from its own ashes – but the name had been trademarked by another firm. After some research on other ash-rising birds, he selected the Bennu Glass Co. after the Egyptian Bennu bird that similarly reincarnated – choosing that one among many because it was easy to pronounce (Tims 2013). The *Daily News* announced on February 16, 2015, that the Owens-Illinois Glass Co. had purchased the plant, and it remains in operation, making wine and 22-ounce beer bottles in 2018 (Luck 2015). Note that the mark for this plant also includes the “NA” initials (North America) – i.e., “NA2.”

Plant No. 3, Fairmont, West Virginia (1929-1982)

The Owens Bottle-Machine Co. created the Owens West Virginia Bottle Co. in 1909 and built the plant at Fairmont, West Virginia, that year, granting it a license for making grape juice bottles – formally opening the factory in 1910 (Figure 3). During the final quarter of 1911,

Owens consolidated the plant into the Owens Bottle Machine Co. as Factory No. 3, making liquor, grape juice, and catsup bottles. By 1916, the list included preserves and miscellaneous containers (see the section on the Owens Bottle Co. for more information).

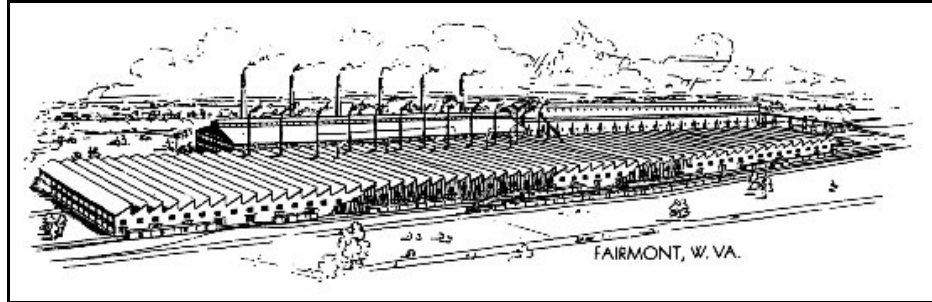


Figure 3 – Fairmont plant

The unit became the Owens-Illinois Plant No. 3 in 1929. The 1941 Annual Report noted that the “sixth furnace . . . which had been idle for several years, was rebuilt and placed in operation in January, 1942.” In 1978, Owens-Illinois began phasing out operations at Fairmont, finally closing the factory in March 1982 (West Virginia Encyclopedia 2018).

Plant No. 3, Muskogee, Oklahoma (1988-present)

The plant began as the DeCamp Consolidated Glass Casket Co., Muskogee, Oklahoma. Although many glass houses used the term “casket” to refer to glass containers, this one actually indicated a burial casket or coffin. James W. DeCamp applied for his first patent for a glass casket (coffin) on October 11, 1913, and received Patent No. 1,123,856 for a “Glass Casket” on January 5, 1915. He continued patenting caskets until at least 1922. His first patent was not assigned, but he assigned one-fourth of the rights to the 1917 patent to Charles E. DeCamp and another quarter to John P. Miller. This suggests that the three were in business by that time.

James W. DeCamp, F.H. Butehorn, and Hilbert B. Mattheson incorporated the DeCamp Consolidated Glass Casket Co. on May 18, 1922, with a capital of \$25,000 (*Glass Worker* 1922:7). A 1936 lawsuit noted that the firm was in business prior to February 2, 1920 (confirming the probable 1917 opening date suggested above), at which time it issued bonds or notes secured by a first mortgage. DeCamp took over the Midwest Glass Casket Co., with factories at Muskogee and Okmulgee, Oklahoma, on November 16, 1923. The firm was in business until at least 1936, when a judgement was rendered against DeCamp – although this may have been the blow that crushed the firm (Justia 2018).

The Brockway Glass Co. acquired the former De Camp plant at Muskogee, Oklahoma, in May 1946 – although there was no indication that the Okmulgee factory was part of the transfer. When Owens-Illinois purchased the Brockway shares on February 29, 1988, it acquired the Muskogee plant as part of the deal. The factory remains in business in 2018.

Plant No. 4, Clarksburg, West Virginia (1929)

The Owens Eastern Bottle Co. opened in 1912 and received an Owens license to make prescription, proprietary, and druggists' ware on June 11 (Figure 4). Although the Owens Bottle Machine Co. owned the majority of the firm's stock from the beginning, it bought out the other shareholders in December 1914,

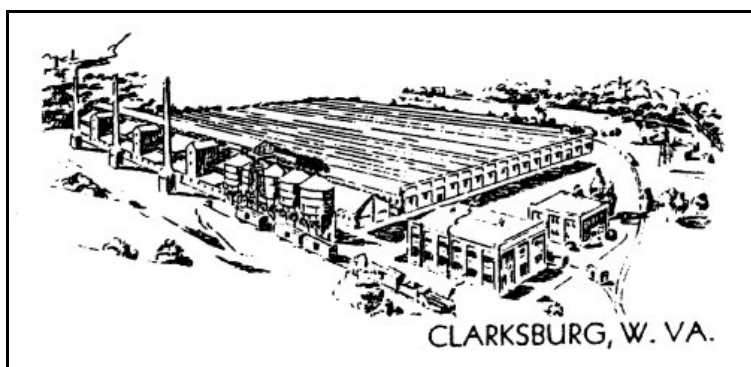


Figure 4 – Clarksburg plant

dissolving the older firm and making it Plant No. 4 of the Owens Bottle Machine Co. The plant was idle in 1923 but remained the property of Owens Bottle. See the section on the Owens Bottle Co. for more information. When Owens Bottle and Illinois Glass created Owens-Illinois in 1929, the new firm left the factory idle, finally closing the operation in 1943.

Plant No. 4, Brockport, New York (1963-1985)

The Village of Brockport (2018) reported that “in 1961, Owens-Illinois built a 350,000 sq. ft. state-of-the-art glass factory that employed 700 workers at its peak. . . . Owens-Illinois closed [the Brockport unit] in 1985 and its plant was demolished.” The Ward A. Canaday Center (University of Toledo 2016) listed two files of interest, entitled “Brockport plant construction, March 1962” and “Brockport plant construction, 1963.” Coupled with the above information, this suggests that construction began in 1961, but that production did not commence until 1963.

New York enacted its “bottle bill” – requiring a deposit of five cents for each purchase of a beverage container – on June 15, 1982, effective July 1 of the following year. As noted in the

general history (above), the measure effectively destroyed the returnable bottle industry. After two years of decreasing orders, Owens-Illinois closed the plant in 1985.

Plant No. 5, Cincinnati, Ohio (1929)

In 1900, the Charles Boldt Glass Co. built a factory at Cincinnati, Ohio, to make liquor bottles and flasks, obtaining the Owens license for that commodity on July 10, 1910. When the Owens Bottle Co. purchased the plant in 1919 – on the eve of Prohibition – it converted the unit to produce a general line of bottles. The plant became Factory No. 5 of the Owens Bottle Co. and retained the same number after the 1929 merger. Owens-Illinois immediately closed the doors, allowing the unit to remain idle until it sold the property on February 1, 1933 (OI Papers).

Plant No. 5, Charlotte, Michigan (1963-2010)

Owens-Illinois began construction of its Charlotte, Michigan, plant on October 12, 1962, starting production the following year, making food and beverage containers (University of Toledo 2016). Originally operating eight IS machines, the plant added four additional machines by 1966 to serve Stroh's, Carling, Gerber, Feigenson Bros. (Faygo), Brown-Forman, and the liquor and food industries.

On February 2, 2010, *Glass Online* noted that Owens-Illinois had

announced that its manufacturing plant in Charlotte, which employs 137 people, will close on 1 May 2010, due to a decline in demand among food container customers, spokeswoman Stephanie Johnston said. The plant, located at 500 Packard Highway, and in the area since 1963, manufactures glass containers for consumer products.

The *Pittsburgh Post-Gazette* for June 13, 2010, mentioned in a discussion of the closing of the Clarion plant (see below) that “under the initiative, Owens-Illinois also closed a 140-worker plant in Charlotte, Mich., on May 1.”

Not mentioned in the articles was the effect of Michigan’s “bottle bill.” The legislature enacted the Michigan Beverage Container Act on November 2, 1976, allowing beverage firms almost two years to use up their existing supplies of returnable bottles before the measure was implemented on December 3, 1978. According to our Owens-Illinois sources, the factory idled four machines within two months of the bill’s passage plus another two a year later – only running the plant at half capacity. By 2010, business had dropped to the point where Owens-Illinois closed the operation.

Plant No. 6, Charleston, West Virginia (1929-1964)

The Owens Bottle-Machine Co. began construction of Plant No. 6 at Charleston, West Virginia, in 1917, beginning production the next year on pharmaceutical and proprietary medicine bottles along with milk bottles for the Thatcher Mfg. Co. – adding other bottle types later (Figure 5). The unit retained the No. 6 designation in the 1929 merger.

The plant was idle for about a year in 1932. An April 20, 1933, press release noted that “the Charleston, W.Va. plant, which has been idle for the past year, has been reopened and is

now manufacturing beer bottles” – although the 1934 Annual Report noted that the bulk of production for that year was liquor bottles (OI papers). Bumgardner (2006:77) claimed that the plant closed in 1964 – confirmed by the February 13, 1964, *Charleston Daily Mail*.

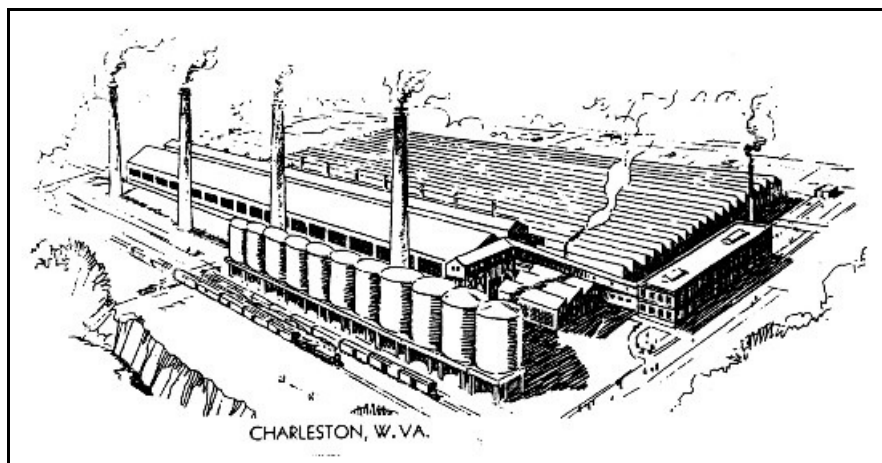


Figure 5 – Charleston plant

Plant No. 6, Winston-Salem, North Carolina (1979-present)

Located at 9698 Old U.S. Hwy 52, Lexington, North Carolina, the plant is in the community of Midway, so called because it is halfway between Winston-Salem and Lexington.

The factory bears a Lexington address, even though Owens-Illinois used the Winston-Salem identification. A U.S. Environmental Protection Agency publication, dated June 1979, listed the plant at Winston-Salem, North Carolina, but gave no details. Our Owens-Illinois sources noted that the firm built the factory to serve a new Miller brewery, opened in 1978 at Eden, North Carolina, as well as other local beer manufacturers. The Owens-Illinois plant remains open in 2018, although MillerCoors closed the Eden factory in September 2015.

Plant No. 7, Alton, Illinois (1929-1983)

William Elliott Smith and Edward Levis incorporated the Illinois Glass Co. on August 28, 1873, at Alton, Illinois, purchasing a small glass factory that had failed three times previously (Figure 6). Although neither man had experience with glass manufacture, the firm succeeded from the very beginning. The business expanded and grew, buying other glass houses and acquiring Owens licenses for large ware, liquor, and prescription bottles, installing its first Owens machines in 1910. Illinois Glass merged with the Owens Bottle Co. in 1929. For more information, see the section on the Illinois Glass Co. or Lockhart et al. 2005a.

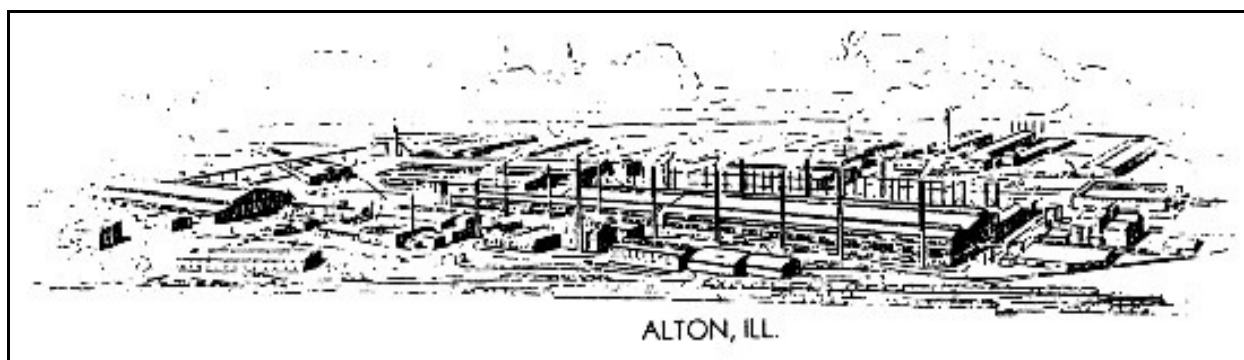


Figure 6 – Alton plant

The plant grew to have ten furnaces in three buildings, the largest glass factory in the world by 1970. Owens-Illinois closed the Alton plant on October 19, 1983, citing lack of business because of competition from plastic containers. Clark Properties and Clayco Construction Co. purchased the property in 2000, cleaning up the area and renovating two warehouses still standing. At some point, workers installed a small monument to the plant (Mills 2017; Weller 2017). According to our sources at Owens-Illinois, the plant “was a massive operation almost always out of control from a management perspective.”

Plant No. 8, Glassboro, New Jersey (1929-1936)

The Owens Bottle Co. attained full control of the Whitney Glass Works at Glassboro, New Jersey, in 1917, closing the plant and building a new one nearby (Figure 7). The new one opened as Plant No. 8 in 1918, retaining that number after the 1929 merger. Owens-Illinois altered the factory to produce closures in 1936, so it did not make glass after that point. In

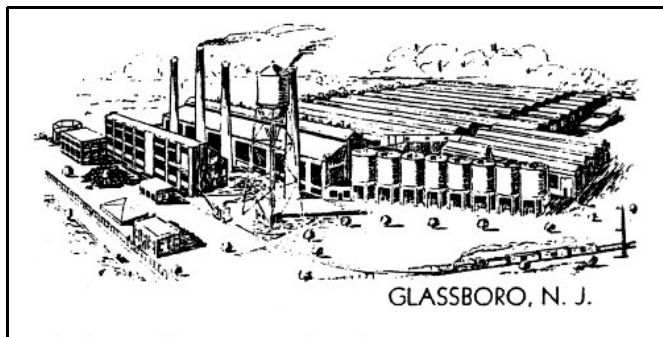


Figure 7 – Glassboro plant

January 1937, the firm closed the Toledo Closure plant and moved the bottle cap and closure equipment to Glassboro, then transferred Glassboro to the Closures & Plastics Division January 1, 1939 (OI Papers 1956; Annual Report 1937). This ended the factory's life as a glass plant.

Plant No. 8, New Orleans (1961-1984)

We have discovered amazingly little information on the factory. According to the Canaday records, the New Orleans plant produced its first bottle on June 16, 1961 (University of Toledo 2016). The factory used IS machines to produce liquor and spice bottles. Data from our Owens-Illinois contacts indicates that the location was not a good choice – with repeated flooding and electrical problems. They placed the closing of the plant at 1984.

Plant No. 8, Lapel, Indiana (1988-present)

When Owens-Illinois acquired the Brockway Glass Co., on February 29, 1988, the Lapel, Indiana, plant was part of the acquisition. Located at 2461 S. Brookside Rd., the factory remains in production in 2018.

Plant No. 9, Streator, Illinois (1930-present)

The Streator Bottle & Glass Co. opened in 1881 at Streator, Illinois, becoming a major beer bottle production center immediately, although the plant also made other bottle types (Figure 8). The firm became part of the merger that formed the American Bottle Co. in 1905 and

remained part of that combine until the Owens Bottle Co. acquired a majority interest in 1916 – although Owens allowed the plant to retain its own identity until the merger that created Owens-Illinois,

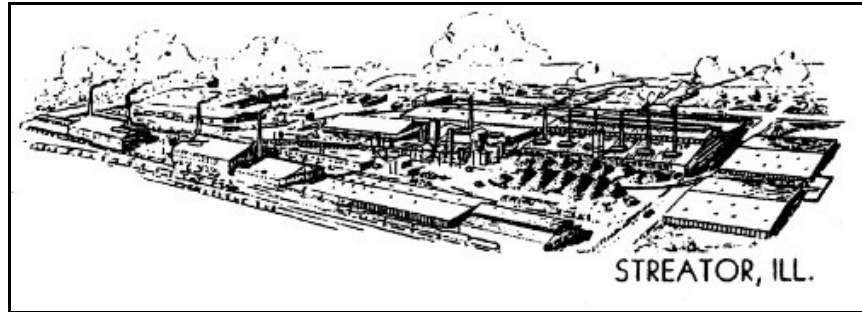


Figure 8 – Streator plant

when the unit became Plant No. 9. Along with the Newark, Ohio, plant (see next entry), Streator maintained its American Bottle Co. identity through 1930 – probably to allow the high volume plant to fill existing orders. For more information on the earlier firms, see the sections on the Streator Bottle & Glass Co. and the Owens Bottle Co.

Both before and after the 1929 merger, Streator primarily produced soda and beer bottles. There were actually two factories at Streator, but the “Lower Works . . . had not been operated for several years” – so it was dismantled in 1929 – although the Upper Works remained in production (Twenty-Second Annual Report 1929 – OI Papers). The firm began construction of a new factory at Streator in 1936, but the plant was not complete and in production until the following year, operating 33 machines (Annual Reports 1936, 1937). In November, 1979, Streator permanently idled its 20 Owens machines. From a management perspective, the plant was too large and was always out of control. The factory remains in production at 901 N Shabbona St. in 2018, although it only operates four of its original 13 IS machines.

Plant No. 10, Newark, Ohio (1930)

This factory at Newark, Ohio, began as Shields, King & Co. in 1871, becoming the Newark Star Glass Works in 1880 (Figure 9). The owner, Edward H. Everett, incorporated the firm as the Edward H. Everett Co.

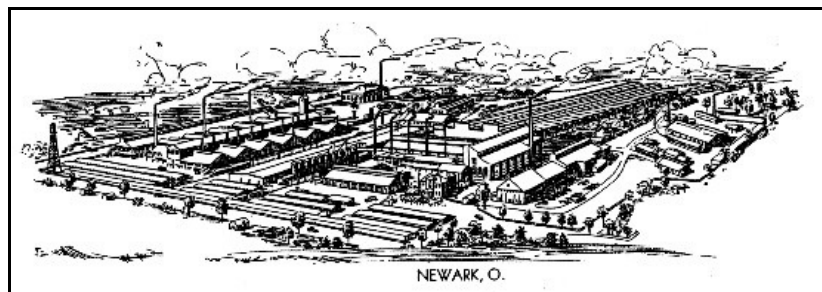


Figure 9 – Newark plant

in 1885, and it was the major factory when a merger created the Ohio Glass Co. in 1904. The

plant was also the flagship factory when Ohio Glass became the American Bottle Co. the next year. Like the Streator plant discussed above, the Owens Bottle Co. became the major stockholder in 1916 and allowed the Newark plant to continue to operate as the American Bottle Co. until 1929, when it became Factory 10 of Owens-Illinois.

According to the Annual Reports, Owens-Illinois shut down the Newark plant on July 1, 1930, transferring its production to the Fairmont factory – but added the following year that it had “been maintained in good condition, ready for operation on short notice if beer is legalized” (OI Papers). However, the factory remained idle until 1934, when it was retooled to produce “glass wool” (fiberglass) for air filters and insulating material. Owens-Illinois sold the plant to Owens-Corning on October 31, 1938 (OI Papers 1934, 1956).

Although the reports are conflicting, Owens-Illinois built a new experimental plant at Newark by at least 1937. The 1937 Annual Report recalled that “the first automatic bottle blowing machine was put into operation at the Newark plant of the then Ohio Bottle Company, 32 years ago” and added that the “first Fiberglass machine was assembled and operated on the exact spot that the bottle machine occupied – an area within the confines of the new laboratory building.” Owens-Illinois installed and tested the new fiberglass machine at Newark to avoid upsetting union members and normal production elsewhere. The firm wanted to make sure the machine was fully tested before the union became involved. This was a period of intense unionization.

Plant No. 10, Atlanta, Georgia (1957-2018)

Owens-Illinois had plans for a factory at Atlanta as early as May 13, 1944, but we found no records discussing why the plans were scuttled. The firm built a warehouse in the city in 1953 and finally installed a plant in 1957 (OI records).

On May 16, 2018, Owens-Illinois announced the planned closing of the Atlanta factory – 3107 Sylvan Rd – on July 18. The firm announced that it intended “to facilitate the closure in a respectful manner for the approximately 250 people impacted at the Atlanta plant” and that the “required capital outlay for the Atlanta operations and continued decline of beer in the domestic market influenced the decision to close the plant” (OI 2018).

Plant No. 11, Evansville, Indiana (1929-1930)

On September 1, 1912, the Graham brothers purchased the former Citizens Glass Co. factory at Evansville, Indiana, the fourth and final acquisition of their glass house family. The location became the Graham headquarters by 1914, but the Owens Bottle Machine Co. took control of the firm in 1916 and continued to operate the company under the Graham name. With the 1929 merger, of course, it became part of Owens-Illinois, still manufacturing soda bottles. For more information, see the section on the Graham Glass Co.

Owens-Illinois idled the Evansville plant at the end of 1930 (Figure 10), but the 1931 Annual Report noted that the plant had “been maintained in good condition, ready for operation on short notice if beer is legalized” (OI Papers). Owens-Illinois sold the plant to Servel, Inc., in September 1939 – after remaining idle since 1930 (OI Papers 1956).



Figure 10 – Evansville plant

Plant No. 11, North Bergen, New Jersey (1963-1982)

Construction of the factory began in 1962 (*Oil City Derrick* 3/1/1962), although the plant did not begin production until the following year. In mid-December 1981, the plant at North Bergen instituted a new recycling system where

reclaimed bottles are dumped into a hopper at one end of a long line of crushers and conveyor belts. A magnet removes all ferrous caps and, after the glass is crushed further, a vacuum system and vibrating screen remove all light aluminum material, plastic and paper labels. What comes out the other side of the huge machine is called cullet. (DePalma 1981).

Owens-Illinois closed the factory in 1982, less than a year after the initiation of this new recycling process. According to our Owens-Illinois sources, the company closed the plant for two unusual reasons:

Property value and taxes had sky rocketed, and urban sprawl had surrounded the plant. It became so congested that it was hard to get truck drivers to bring raw materials in and finished good out. The plant could not keep up customer commitments. It also had never ending labor issues.

The firm sold the property in April 1983 for \$9,200,000 (Casemine 2017).

Plant No. 11, Freehold, New Jersey (1988-1991)

The Brockway Glass Co. opened the Freehold plant in 1956, and it was part of the package, when Owens-Illinois bought Brockway on February 29, 1988, forming Owens-Brockway. On June 5, 1991, the *Asbury Park Press* cited furnace problems as the reason for the plant's closure. Brockway had allocated \$20,000 to repair or replace the furnace, but Owens-Illinois apparently felt the money was better used elsewhere.

Plant No. 12, Gas City, Indiana (1929-1982)

In 1900, the Illinois Glass Co. joined with Adelbert M. Foster and Thomas Sheldon to form the Thompson Glass Co. at Gas City, Indiana – with Illinois Glass acquiring full control in 1913 (see the section on the Illinois Glass Co. for more information). The plant

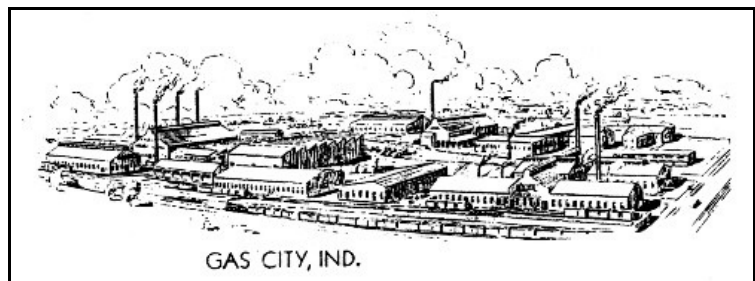


Figure 11 – Gas City plant

became part of Owens-Illinois with the 1929 merger (Figure 11), and the firm added a new furnace to the operation in 1933, for a total of five continuous tanks (OI Papers 1933). In January 1937, Gas City became a bottle cap and closure operation, although it also continued to produce bottles until the factory closed in 1982 (Annual Report 1937).

Plant No. 12, Zanesville, Ohio (1988-present)

When the Hazel-Atlas Glass Co. acquired the dominant interest in the Kearns-Gorsuch Glass Co. at Zanesville, Ohio, in 1920, the firm only had a single factory in the town. Three

years later (1923), the company built a second plant and operated the two locations up to and after Kearns-Gorsuch merged completely into Hazel-Atlas in 1937, losing its individual identity. Hazel-Atlas closed Factory No. 1 in 1958, although No. 2 became Plant No. 12 of Hazel-Atlas. For more information on Kearns-Gorsuch and the development of both factories (including a much earlier history of Plant No. 1) see the section on the Kearns Glass Companies of Zanesville.

As noted above, the Zanesville factory was Plant No. 12 of the Hazel-Atlas Glass Co., when the Brockway Glass Co. purchased Hazel-Atlas in 1964. With the formation of Owens-Brockway on February 29, 1988, the Zanesville plant became part of the giant enterprise. The factory remains in business as of 2018 at 1700 State St.

Plant No. 13, Chicago Heights, Illinois (1929-1939)

The Illinois Glass Co. partnered with the Thompson Glass Co. (jointly owned by Illinois Glass and Thomas Sheldon) to form the Chicago Heights Bottle Co. in 1912, specifically for the production of milk and prescription bottles. When Illinois Glass purchased Sheldon's half of Thompson Glass, it acquired full control of the Chicago Heights factory as well. For more information see the sections on the Illinois Glass Co. and the Chicago Heights Bottle Co.

With the 1929 merger, the factory became Plant No. 13 of the Owens-Illinois Glass Co. (Figure 12). Although other Owens-Illinois plants operated only fully automatic machines, the Chicago Heights plant maintained "two small hand units to service the perfume and novelty fields" according to the 1936 Annual Report.



Figure 12 – Chicago Heights plant

An Owens-Illinois press release, dated October 19, 1939, announced that the firm had sold the Chicago Heights plant to the Kimble Glass Co. (an Illinois corporation) on September 1 of that year (OI Papers). Owens-Illinois then re-purchased the factory on July 1, 1946, and transferred it to the Kimble Glass Co. (now a Delaware corporation – apparently wholly owned by Owens-Illinois). Owens-Illinois then transferred the plant to the Kimble Glass Division on

February 28, 1947, and again transferred it to the Kimble Glass Co. (now an Ohio corporation) on June 1, 1952 (OI papers 1956). When Owens-Illinois acquired the Kimble factories in 1949, Chicago Heights returned as Plant No. 33. For more information, see the section on Kimble.

The 1946 Annual Report noted that the Kimble Glass Co. had factories at Chicago Heights, Illinois, Coshohocken, Pennsylvania, Indianapolis and Warsaw, Indiana, and Pleasantville and Camden, New Jersey. Only the plant at Chicago Heights returned as a bottle unit, and we have not discovered the disposition of the other locations. By this time, the plant had almost entirely ceased production of laboratory glass and was concentrating of television tubes, eventually specializing in Kaylo fiberglass insulation and structural glass blocks. Gerresheimer Glass, Inc., acquired the assets of Kimble Glass in April 2, 2007, and continues to operate the factory in 2018. See the Kimble Glass section for a slightly different perspective.

Plant No. 13, Montgomery, Alabama (1988-1991)

The Hazel-Atlas Glass Co. opened this Montgomery factory in 1948, and operated it until the Brockway Glass Co. acquired the plant in 1965. The Montgomery plant became a unit of Owens-Brockway with the February 29, 1988 merger. Due to Montgomery's close proximity to Atlanta, Owens-Illinois closed the former Brockway plant in 1991. For more information on the earlier history, see the sections on Hazel-Atlas and Brockway.

Plant No. 14, Bridgeton, New Jersey (1929-1984)

The Illinois Glass Co. purchased the Cumberland Glass Mfg. Co. at Bridgeton, New Jersey, in 1920, and the plant was assigned No. 14 with Owens-Illinois in the 1929 merger (Figure 13). See the Illinois Glass Co. section for more information. In December 1981, the Bridgeton factory joined the North Bergen plant in instituting a new recycling program for turning recycled glass bottles into cullet. See the section on North Bergen (Plant No. 11) for more details.

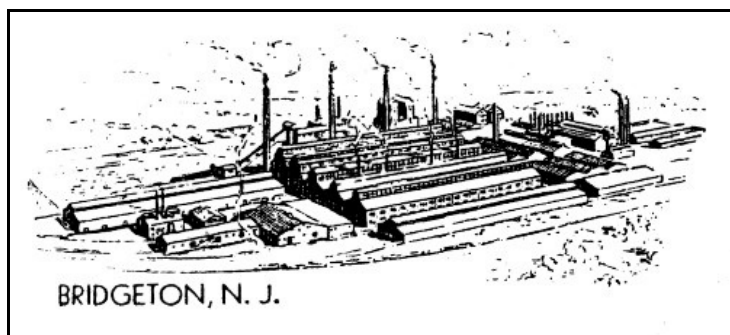


Figure 13 – Bridgeton plant

Owens-Illinois closed the factory in 1984 because the “bottle bills” in surrounding states had dramatically reduced the sale of returnable glass bottles. The plant also made plastishield bottles, but when the demand for those diminished, there was no longer sufficient business to warrant the factory’s survival.

Plant No. 15, Okmulgee, Oklahoma (1929)

The Graham family operated the Southern Indiana Glass Works from 1907 to 1912, opening the Okmulgee plant in 1910. The factory remained part of the firm with the reorganization that formed the Graham Glass Co. in 1912 and became Plant No. 15 of Owens-Illinois with the purchase of the Graham holdings in 1929 (Figure 14). The Owens-Illinois Annual Reports noted that the Okmulgee factory was idle from the 1929 merger until the firm sold the plant in August 1939 (OI Papers 1929-1939).



Figure 14 – Okmulgee plant

Plant No. 15, Waco, Texas (1944-present)

The 1940 Annual Report noted that construction had begun on the Waco factory to serve the Southwest. However, a shortage of materials because of World War II delayed progress, and the plant was not completed until the end of 1943. The factory did not begin production until January of the following year – with a formal opening on February 22. The plant inaugurated its second furnace on May 4, 1945 (Annual Reports 1943, 1945).

From the beginning, the Waco plant was intended to supply soda and beer bottles to Texas and the surrounding states, but the product line gradually shifted almost entirely to beer bottles by at least October 2, 2015, when Owens-Illinois announced a new joint venture with Constellation Brands, Inc., at Nava, Mexico. The Nava factory provided beer bottles for Mexican brands exported to the U.S. As part of the agreement, the Waco plant supplied the entire output of one furnace to Constellation’s Nava brewery (OI 2014). The plant remains open at 5200 Beverly Dr. in 2018.

Plant No. 16, Minotola, New Jersey (1929-1933)

The George Jonas Glass Co. opened ca. 1894 at Minotola, New Jersey, and became the Minotola Glass Co. in 1911. The Illinois Glass Co. purchased the plant and operated it until the 1929 merger, then Owens-Illinois closed the plant and sold it in 1933 (Annual Reports 1930-1932). For more information about the older firm, see the section on the Cape May Glass Co.

Plant No. 16, Lakeland, Florida (1965-2000)

Owens-Illinois opened the Lakeland plant in 1965. On October 5, 2000, Owens-Brockway announced the impending closure of the Lakeland factory by the end of the year, citing competition from aluminum and plastic bottles as the reason for the shutdown. The plant's primary customer had been the Anheuser-Busch brewery at Jacksonville, Florida, but the Anheuser-Busch contract terminated at the end of 2000, when the brewery planned to initiate its own glass business at Houston. The Lakeland factory had employed 190 people (Packaging Network 2000).

Plant No. 17, Clarion, Pennsylvania (1930-2010)

The Berney-Bond Glass Co. began in 1904 with a merger between two older firms, the Berney Glass Co. and the Bond Glass Co. In 1912, the company acquired the former Pearl Glass Co. at Clarion, Pennsylvania, and began installing automatic machinery the following year (Figure 15). For more on the older firm, see the Berney-Bond section. On January 1, 1930, Owens-Illinois purchased the Berney-Bond plants including the one at Clarion. When Owens-Illinois bought the natural gas holdings from Berney-Bond in 1932, the name was retired, although BB48 molds continued in sporadic use until the early 1960s (Hoenig 2008a).

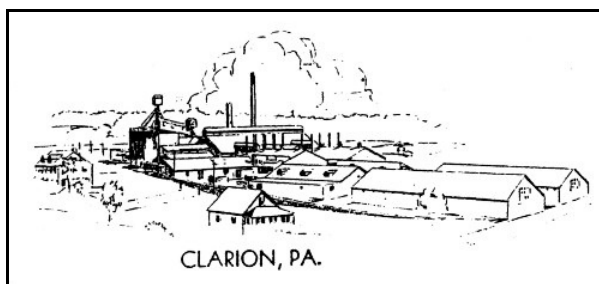


Figure 15 – Clarion plant

The last five milk bottle machines were removed from the Clarion plant on April 8, 1944, because the demand for milk bottles was low. These were replaced by two Lynch machines that produced liquor bottles and five Miller machines to make wide-mouth bottles. The Millers

manufactured food bottles, “Economy” fruit jars, and Handi-Square milk bottles. One of the MB machines was reinstalled in 1945, when milk bottle demand increased, but half the plant shut down in 1947-1948 because milk cartons were introduced, and bottle demand plummeted (Hoenig 2008a; 2008b).

From 1949 through the early 1980s, the plant made food, juice, and Avon bottles. A slight shift in production in the 1980s removed Avon bottles and added chemical containers. From the 1990s on, the factory made prescription, chemical, juice, beer, and liquor bottles (Hoenig 2008a).

On January 27, 2010, Owens-Illinois announced its intention to close the doors of the Clarion plant on July 1 after 105 years of operation. The town expressed its displeasure of the closing, complaining that 420 workers would lose jobs. The *Pittsburgh Post-Gazette* (6/13/2010) noted that an Owens-Illinois representative explained that the Clarion unit was “one of the company’s most expensive facilities to operate due to its obsolete infrastructure.” In addition, adhering to Pennsylvania’s stricter air pollution policies in such an old plant would not have been cost effective.

Plant No. 18, Columbus, Ohio (1930-1947)

See the section on Plant No. 17 for a history of Berney-Bond, the owner of the plant prior to the January 1, 1930, sale to Owens-Illinois. Berney-Bond purchased the former Winslow Glass Co. on May 1, 1927, and operated it until the sale to Owens-Illinois (Figure 16). See the section on Berney-Bond for a more complete discussion of the history and bottles of the earlier firms at this location.

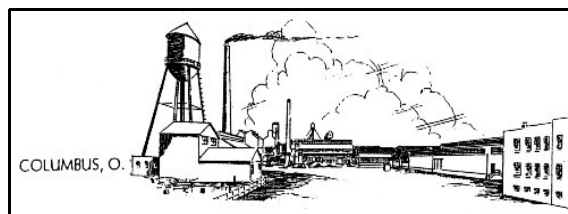


Figure 16 – Columbus plant

In 1933, Owens-Illinois built a new furnace, making the operation a two-tank factory. Because sales declined at the end of World War II, Owens-Illinois idled the factory during 1947 but converted it to the production to “television bulbs” (i.e., picture tubes) and other parts (Annual Report 1947, 1949; OI Papers 1933).

Owens-Illinois formed a joint venture – OI-NEG TV Products Inc. – with Nippon Electric Glass, a Japanese firm, in 1988. On May 11, 1994, Owens-Illinois announced that it had agreed to sell its share in the venture to Nippon Electric for \$100 million. Owens-Illinois thus bowed out of the TV parts business to concentrate more heavily on glass containers (UPI 1993).

Plant No. 18, Brockway, Pennsylvania (1988-present)

The Brockwayville Machine Bottle Co. incorporated on June 20, 1907, to purchase the J.H. White plant at Brockwayville (originally founded as the Brockwayville Glass Co. in 1897). The town changed its name to Brockway in 1925, and the glass house altered its moniker to conform, reorganizing as the Brockway Glass Co. in 1933. Although the firm grew, adding more locations, Brockway remained the headquarters. In 1982, the company again changed its name – this time to Brockway, Inc.

When Owens-Illinois acquired the Brockway Glass Co. on February 29, 1988 – becoming Owens-Brockway – the Brockway plant was part of the deal. The factory remains open in 2018. Immediately after the merger, the company idled the plant and transferred the business to Clarion. Eventually, however, Owens-Illinois rebuilt the factory to produce green glass beer bottles for a long term supply contract with Rolling Rock. The plant remains in operation in 2018.

Plant No. 19, Hazelhurst, Pennsylvania (1930)

The Bond Glass Co. built a factory at Hazelhurst, Pennsylvania, in 1902 to produce prescription bottles and other druggists' ware. When the Berney Glass Co. merged with Bond in 1904 to form the Berney-Bond Glass Co., the Hazelhurst plant became part of the new firm (Figure 17). Under the change, the factory began making grape juice, catsup, and beer bottles until it burned in 1917. Upon rebuilding that year, Berney-Bond installed machinery to make beer and ammonia bottles, losing the beer trade with the onset of Prohibition in 1920.

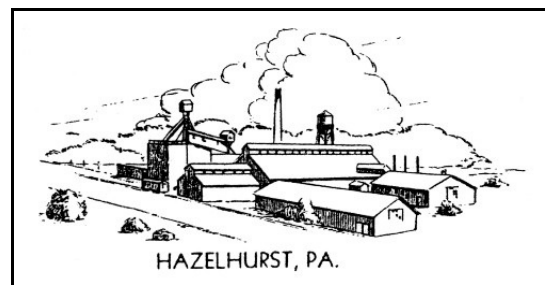


Figure 17 – Hazelhurst plant

As Berney-Bond shifted to milk bottle production, the Hazelhurst plant gradually moved in the same direction, although the firm idled the factory in 1928. This plant remained mostly idle from the Owens-Illinois purchase of the Berney-Bond Glass Co. in 1930 and was sold in early 1931, although it made a few bottles during that period (OI papers). According to our Owens-Illinois contacts, the building was a very old wooden structure. For more information on Berney-Bond see that section.

Plant No. 19, Crenshaw, Pennsylvania (1988-present)

The Brockway Glass Co. built the Crenshaw factory in 1939, and it began production of a general line of bottles in January of 1941. The plant continued the general line until it became a part of the purchase that created Owens-Brockway on February 29, 1988. The plant remains open in 2018.³ For more information, see the section on the Brockway Glass Co.

Plant No. 20, Brackinridge, Pennsylvania (1930-1931)

The Fidelity Glass Co. built the plant at Brackinridge in 1912, but sold it to the Atlantic Bottle Co. in 1923. Prior to that time, Atlantic was a jobber in milk bottles, but the firm purchased the factory when Fidelity began having financial issues. For more on Atlantic, see the Atlantic Bottle Co. section.

On November 1, 1930, Owens-Illinois purchased the Atlantic Bottle Co. as part of its move (including the Berney-Bond Glass Co.) to enter the milk bottle arena (Twenty-Third Annual Report 1930 – OI Papers) (Figure 18). The firm idled the Brackinridge plant in August 1931 and sold the factory in 1941 – almost exactly a decade later (Annual Report 1941).

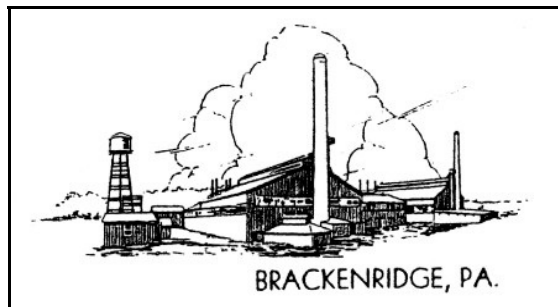


Figure 18 – Brackinridge plant

³ One of the authors visited this plant in 2006, given a tour by Russ Hoenig, one of our Owens-Illinois informants. It was quite a treat watching bottles being made by Individual Section Machines.

Plant No. 20, Oakland, California (1937-2018)

Construction of the Oakland plant began in 1936 and the unit opened in 1937 (Annual Report 1936; OI papers). The June 15, 1947, *Onewser* reported that “ten years ago this coming Sunday, on June 15, 1937, machine B-1 made the first container in the factory’s history, a 32-ounce amber Clorox bottle.” The 1936 Annual Report noted that the use of Insulux glass blocks was “notable in their construction” (of both the Oakland and Los Angeles plants).

Hay (2001) noted that the plant had “relocated from San Francisco,” suggesting that machinery and personnel migrated across the bay to the new location. The timing is certainly correct (see the discussion of the San Francisco plant below). Writing for *Wine Business Monthly*, he suggested that wine bottles were the primary product of the Oakland factory by 2001 and called the plant “one of the country’s largest glass container manufacturing facilities.” Although we have found no announcement of the closing, a Google search reported the Owens-Illinois plant at 3600 Alameda Ave. as “permanently closed.”

Plant No. 21, San Francisco, California (1932-1937)

The San Francisco Glass Works opened sometime between 1861 and 1863. In 1876, Carlton, Newman & Co. – the current owners – purchased the Pacific Glass Works and called the combined operation the San Francisco & Pacific Glass Works, producing a variety of bottles. The firm built a new plant at the corner of 7th and Townsend Streets. Edward Abramson and Adam Heunisch purchased a two-fifths share of the firm in 1898, obtaining the remainder the following year and renaming the business the Adamson-Heunisch Glass Co. The firm built a new plant at 15th and Folsom in late 1899, replacing the older unit. This factory was the direct ancestor of Owens-Illinois Plant No. 21. With the purchase of the former Illinois-Pacific plants, Owens-Illinois acquired two factories at San Francisco. While we have found no direct evidence to link Factory No. 21 to the former Illinois-Pacific plant, Illinois-Pacific dominated Pacific Coast Glass Works in the merger, so it seems likely that the former Illinois-Pacific factory (15th & Folsom) would receive the lower number. The pair merged with the Illinois Glass Co. in 1902 to form the Illinois-Pacific Glass Co. – with Heunisch as president of the new corporation. For more information on these early firms, see the sections on the San Francisco Glass Works and the Great Holt Glass Myth.

In 1903, Illinois-Pacific expanded, opening a second factory in Los Angeles. The San Francisco plant made a variety of bottles and jars during its entire existence, periodically adding new tanks and machinery, while expanding the factory. The firm reorganized in 1926 as the Illinois-Pacific Glass Corp. This period was shorter, leading to a merger between Illinois-Pacific and the Pacific Coast Glass Co. in 1930 to form the Illinois-Pacific Coast Co. – now operating two factories at Los Angeles and two at San Francisco, one in each location from the two parent companies. For more information on these California firms, see the section on Illinois-Pacific or Lockhart et al. 2005b.

Owens-Illinois incorporated the Owens-Illinois Pacific Coast Co. on April 23, 1932. On June 1, the Owens-Illinois Pacific Coast Co. (a wholly owned subsidiary of the Owens-Illinois Glass Co.) purchased the entire stock of the Illinois-Pacific Coast Co., including its two factories at San Francisco and two plants at Los Angeles (OI Papers 1932). By 1936, Owens-Illinois began construction of a new plant at Oakland to replace both San Francisco factories and closed them both in 1937, when the Oakland unit began production.

Plant No. 21, Portland, Oregon (1956-present)

Owens-Illinois built Factory No. 21 at Portland, Oregon, in 1956. The original engineering drawings show this plant to be the new Factory No. 19, but the west coast division balked at this number as all of their factories had always been numbers in the 20s – so the home office capitulated and assigned the plant No. 21. In 1938, Portland built the Bonneville dam on the Columbia river to supply electric power to the Northwest. Since the dam's electric production exceeded the local demand, the area was looking for industries that could use large amounts of cheap electricity.

Owens-Illinois had experience with electric glass melting furnaces and worked out a deal to build the Portland glass plant. However, as electric power costs became uncompetitive, the plant idled the electric furnace. Prior to that time, the factory had used eight flow (IS) machines to produce beer bottles and various other types. With the idling of the four electric machines, the plant's capacity was reduced by 50%. In 2018, the unit remains open at 9710 NE Glass Plant Rd.

Plant No. 22, San Francisco, California (1932-1937)

This was likely the former factory of the Pacific Coast Glass Works. After they had sold their former San Francisco & Pacific Glass Co. to Abramson-Heunisch in 1898-1899, George Newman and Carlton Davis opened a new glass plant – the Pacific Coast Glass Works – at San Francisco in 1902. Initially making prescriptions, medicine bottles, and packers, the plant eventually produced a larger variety of containers. The plant adopted machines ca. 1912 and continued to expand, until the firm incorporated as the Pacific Coast Glass Co. in 1924.

Pacific Coast purchased the West Coast Glass Co. of Los Angeles (see Plant No. 23 below) in February of 1930, but merged with the Illinois-Pacific Glass Co. in September to form the Illinois-Pacific Coast Co. The factory was located at Seventh and Irwin (*Onewser 1947:1*). As noted above, Owens-Illinois acquired the Coast Co. in 1932 and reincorporated as the Owens-Illinois Pacific Coast Co. The plant made milk bottles and other containers until Owens-Illinois closed the unit in 1937 as soon as the Oakland factory began production. See the sections on the Pacific Coast Glass Works and the Illinois-Pacific firms for more information.

Plant No. 22, Tracy, California (1962-present)

Owens-Illinois built this plant in 1962, but we have found little additional history. According to Hay (2001), ca. 12 percent of the output of the Tracy plant was devoted to the manufacture of wine bottles. The factory remains in production at 14700 W Schulte Rd. in 2018.

Plant No. 23, Los Angeles, California (1932-present)

The Illinois-Pacific Glass Co. opened its Los Angeles plant in 1903, making wicker-wrapped demijohns and other bottles. The reorganized firm – Illinois-Pacific Glass Corp. – razed the factory and began construction of a new plant in June 1928, beginning production the following February. This was very likely the ancestral location of the Portland Ave. factory (Plant No. 23) of Owens-Illinois. For more information about the early history, see the description of Plant No. 21 (above) and the sections on Illinois-Pacific.

The 1936 Annual Report noted that expansion at this factory was “near completion of an addition to the one-furnace plant increasing it to a three-furnace plant” – finished in 1937. As

often happens, we have very little information on this plant after its acquisition by Owens-Illinois. On December 31, 1943, and the West Coast units became an integral part of the general company (OI papers). Although we have discovered very little information on the more recent history, the plant remains open at 2901 Fruitland Ave., Vernon, California, in 2018.

Plant No. 24, Los Angeles, California (1932-1937)

This plant originated as the West Coast Glass Co. at Los Angeles in 1908. The factory initially operated semiautomatic machines to produce milk bottles. The Pacific Coast Glass Co. bought the firm in January 1930, just before it merged with the Illinois-Pacific Glass Co. to form the Illinois-Pacific Coast Co. See Plant No. 22 (above) and the sections on the West Coast Glass Co. and Illinois-Pacific firms for more information. Owens-Illinois closed the factory in 1937.

Plant No. 24, Mansfield, Massachusetts (1975-1983)

Owens-Illinois opened the factory at Mansfield, Massachusetts, in 1975. On April 5, 1983, UPI reported that Owens-Illinois announced the permanent closure of the Mansfield plant. The factory had been losing business since 1977 and had temporarily closed in 1981 – citing “forced deposit laws” that “resulted in a substantial decrease in orders for containers leaving us with no choice but to permanently close the plant.” The primary output of the factory was soft-drink bottles.

The legislature of Massachusetts had passed its Beverage Container Recovery Law on June 4, 1981, overriding the governor’s veto. The law allowed an 18 month grace period for bottlers to use up supplies before the law was enforced beginning on January 1, 1983. With four of the five New England states – as well as New York – having deposit requirements on *all* containers, there was no reason to keep the plant in existence.

Plant No. 24, Ada, Oklahoma (1988-1991)

In 1928, the Hazel-Atlas Glass Co. purchased the Ada Casket Co. of Ada, Oklahoma, but the Brockway Glass Co. became the owner when it acquired Hazel-Atlas in 1964. When Owens-Illinois acquired Brockway to form Owens-Brockway on February 29, 1988, the Ada factory was part of the deal. The Ada plant closed on December 3, 1991, moving its food and beverage bottle

production to the Muskogee factory (Chavez 1991). See the sections on Hazel-Atlas and Brockway for more information on the earlier operations.

Plant No. 25, Terre Haute, Indiana (1934-1947)

When the Root Glass Co. incorporated in 1901, it built its initial plant at Terre Haute, Indiana, opening the factory in November. The Terre Haute plant was the flagship unit for Root until November 1, 1932, when Owens-Illinois purchased the entire assets of the Root Glass Co. of Terre Haute, Indiana. A March 1933 Owens-Illinois press release discussed the purchase of the Root Glass Co. and noted that the Terre Haute plant had three furnaces that “specialized in the manufacture of beverage bottles, although it also manufactures other types of glass containers.” Owens-Illinois intended to continue using the factory to make soda bottles with the 1934 purchase, but the release failed to mention any other types (OI papers 1932, 1933). For more information on the Root Glass Co., see its section.

Owens-Illinois closed the plant on January 22, 1937, and began reconditioning and refitting the operation near the end of 1941 to handle the demand for more food bottles. One furnace was in production by year’s end, and the second was operational by mid-1942. Although the plant added a third furnace in 1944, a dip in sales after the war caused the plant to shut down during 1947 (Annual Reports 1937, 1941, 1942, 1947; OI papers).

Plant No. 25, Volney, New York (1977-2001)

A commemorative amber, non-returnable beer bottle was embossed “FIRST PRODUCTION / PLANT NO. 25 / VOLNEY / NEW YORK / MAY - 23 - 1977” (Figure 19), setting a date for the opening of the factory. The Town of Volney (2018) confirmed the 1977 opening date. The plant manufactured beer bottles for breweries such as Miller and Anheuser-Busch.

According to the *Blade*, on January 31, 2001, Owens-Illinois announced that the firm would close the Volney plant by the end of April because so many companies were switching to plastic containers.

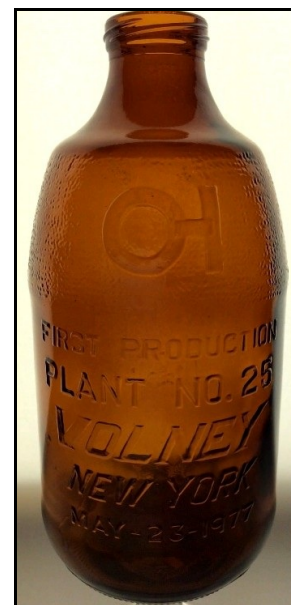


Figure 19 – Volney bottle (Russ Hoenig)

With the “bottle bills” enacted on all sides, there was only a need for one factory in New York, and the Albany plant was better equipped – so the Volney operation lost. On June 10, 2014, the old plant caught fire as workmen were dismantling some equipment. Fire departments extinguished the blaze (Sturtz 2014).

Plant No. 26, Muncie, Indiana (1933-1935)

In 1870, the Hemingray Glass Co. grew from several earlier glass houses at Covington, Kentucky. The firm moved to Muncie, Indiana, in 1888, specializing in glass insulators but also producing glass containers and tableware. Although the plant continued to expand, the firm did not open additional factories. For more information, see the section on the Hemingray Glass Firms.

The Owens-Illinois Glass Co. purchased “the entire assets and business of Hemingray Glass Company” in 1933 for 17,827 shares of Owens-Illinois stock and \$177,000 in cash (OI papers 1933). After Owens-Illinois acquired the firm, the plant was used to make beer bottles for a couple of years – probably until the Hemingray molds wore out (Toulouse 1971:249; Bob Stahr, personal communication 2006). In April 1935, the Muncie factory produced the first Insulux Glass Blocks, “a hollow water-clear pressed glass unit 3 7/8" thick, hermetically sealed at high temperature with a near vacuum center” (OI papers 1943). Although the timing is unclear, the plant probably ceased bottle production that year.

In 1937, Owens-Illinois created the Industrial and Structural Products Division with the Muncie factory as the exclusive producer of both insulators and Insulux Glass Blocks (OI files 1937:6, 12). Owens-Illinois dropped insulator production in 1967 because sales were poor and closed the factory on July 15, 1972 (McDougald & McDougald 1990:65, 77; Roller 1999; Stahr 2016).

Plant No. 26, Toano, Virginia (1980-present)

According to the Virginia Beer Co. (2017), their guide on the tour of the Owens-Illinois Toano factory told them that “the Toano plant was built in the mid-1970s in response to the opening of Williamsburg’s Anheuser-Busch brewery in 1972” to produce beer bottles. However, the first production bottle had an embossed date of “2-29-80 (February 29, 1980)” on it, almost

certainly setting that as the time the factory began actual manufacture. Newspaper articles confirmed the 1980 date.

For example, the *Richmond Times-Dispatch* reported on February 10, 1980, that the new plant had two furnaces with four IS machines, making amber non-returnable beer bottles of Anheuser-Busch. The pressure was on to begin production as soon as possible, but the plant had one machine ready to go but no conveyers to the lehr. As a result, the earliest bottles were delivered to the lehr by hand. In 2009, Owens-Illinois invested \$20 million to upgrade equipment at the Toano plant, and the factory remains open at 150 Industrial Blvd. in 2018.

Plant No. 27, Toledo, Ohio (1960-1970s)

According to Phil Perry, one of our Owens-Illinois contacts (now retired), a Libby Glass Co. plant temporarily made liquor containers (possibly only a few) at Toledo in the 1960s and possibly 1970s. It was assigned Plant No. 27 during the bottle production period.

Plant No. 27, Oakland South, California (1988-1989)

The Hazel-Atlas Glass Co. built a new factory at Oakland, California, in 1929. With the sale of Hazel-Atlas to the Brockway Glass Co., in 1964, the Oakland plant became Brockway's Factory No. 15. The purchase that joined Owens-Illinois and Brockway on February 29, 1988, brought the plant under the Owens-Brockway umbrella, although the firm closed the plant the following year. Apparently Owens-Brockway felt that one factory in the city was sufficient. See the files on Hazel-Atlas and Brockway for more information – as well as Plant No. 20 (above).

Plant No. 28, Pomona, California (1988-January 1995)

The Hazel-Atlas opened a new plant at Pomona, California, in 1947, and the factory became part of the Brockway Glass Co. in 1964. Like the rest of the former Brockway Glass Co. plants, Pomona transferred to Owens-Brockway with the February 29, 1988 merger. The factory closed in January of 1995. See the files on Hazel-Atlas and Brockway for more information.

Plant No. 28, Windsor, Colorado (2005-present)

At a construction cost of \$140 million, Owens-Illinois opened the Windsor, Colorado, factory in August 2005, primarily to produce beer bottles (Dunn 2005). The plant remains in operation at 11133 Eastman Park Dr. in 2018.

Plant No. 29, Danville, Virginia (1988-present)

The Brockway Glass Co. built a new factory at Danville, Virginia, in 1978. A decade later, the Danville plant was part of the February 29, 1988, purchase of Brockway by Owens-Illinois, creating Owens-Brockway. The factory remains open in 2018.

Plant No. 30, Toronto, Ontario (1997 [2001]-2008)

The Consumers Glass Co. built a plant at Etobicoke, Toronto, Ontario, in 1953, and operated it until its bankruptcy, when Owens-Illinois purchased the defunct Consumers jointly with Consumers Packaging, Inc., a new corporation, and the Anchor Glass Container Corp. in 1977 – and continued to operate the old factories under the former name (*Times Staff and Wire Reports* February 27, 1997).

On September 1, 2001, Owens-Illinois gained full control of the former Consumers factories, assigning them Owens numbers. The *Toronto Globe and Mail* announced on July 29, 2008, that Owens-Illinois would be closing its Toronto facility on September 30. Scott Murcheson, president of the Glass Container Division, stated that the

closing was driven by our global asset utilization process which identified the opportunity to shift our production to other O-I North American facilities, resulting in lower energy consumption and production costs while still meeting current and anticipated market needs The market impacts of a strong Canadian dollar, high energy prices and the recent activities of the Liquor Control Board of Ontario were contributing factors.

Also see the section on the Consumers Glass Co.

Plant No. 31, Brampton, Ontario (1997 [2001]-present)

The Dominion Glass Co. opened the Brampton plant in 1954. At some point, this factory was transferred to the Consumers Glass Co., and it eventually became part of a joint Owens-Illinois, Consumers Packaging, and Anchor Glass Container Corp. operation in 1997 – then came under full Owens-Illinois control in 2001. Interestingly, there is a local legend that the factory was built over an Indian burial site and is forever doomed to have operating problems. The plant remains in operation at 100 West Dr, Brampton, in 2018. For more information on the earlier firms, see the sections on Consumers Glass Co. and the Dominion Glass Co.

Plant No. 32, unknown

Neither the Bottle Research Group nor our Owens-Illinois contacts have discovered any information about Plant No. 32. Apparently, the firm never assigned the number to a factory.

Plant No. 33, Chicago Heights, Illinois (1949-1999)

The Chicago Heights plant was originally plant No. 13 until it was sold to Kimble. When it was later repurchased, it had to be given a different number (No. 33) as the old No. 13 had been reassigned to another factory. See the discussion of Plant No. 13 (above) for a much more thorough history of the factory.

Plant No. 33, Milton, Ontario (1997 [2001]-2003)

The Consumers Glass Co. began construction of the Milton, Ontario, plant in 1977, but the factory did not begin production until 1980. The operation became part of a joint Owens-Illinois-Consumers Packaging, Anchor Glass Container Corp. operation in 1997, then Owens-Illinois gained full control in 2001. Owens-Illinois announced the permanent closing of the factory in November of 2003. For more information, see the section on the Consumers Glass Co.

Plant No. 34, Montreal, Quebec (1997 [2001]-present)

The Consumers Glass Co. began construction of its first factory in 1917 at Vlle. St. Pierre (Montreal), Quebec, Canada, and started production on August 15 of the following year. The

firm began acquiring and building other factories and grew into one of Canada's giant glass manufacturers (the other being the Dominion Glass Co.). In 1997, the firm was in bankruptcy, and Owens-Illinois acquired its assets in conjunction with Consumers Packaging and the Anchor Glass Container Corp. In 2001, Owens-Illinois assumed full control of the firm, assigning it an Owens-Illinois plant number. The factory remains in production at 2376 Wellington St. in 2018. See the section on the Consumers Glass Co. for more information.

Plant No. 35, Auburn, New York (1994-present)

The Miller Brewing Co. built the plant in 1978 to make its own beer bottles for its Fulton, New York, brewery. When Miller closed the Fulton operation in 1994, it sold the glass factory to Owens-Illinois, and the new owner continued to produce beer bottles (West 2003). In 2018, the plant remains open at 7134 County House Rd.

Plant No. 36, Scoudouc, New Brunswick (1997 [2001]-2008)

Domglass (Dominion Glass Co.) originally built the Scoudouc plant in 1970 to service the Mooseheart Brewery, although it later became part of Consumers Glass Co. Like the other Consumers factories, the Scoudouc plant fell under joint Owens-Illinois/Consumers Packaging/Anchor Glass Container Corp., operation in 1997 – after the Consumers bankruptcy. Owen-Illinois acquired full control in 2001.

On January 17, 2008, Owens-Illinois announced that it would close the plant at Scoudouc on March 31. Scott Murchison, president of the Glass Container Division, specified that “the performance of the employees at the Scoudouc facility is not the reason for our actions. . . . We have worked to improve operations and to try to secure business to support the Scoudouc facility. Unfortunately, market conditions have not provided any alternative solutions.”

Plant No. 37, Lavington, British Columbia (1997 [2001]-2008)

After a ground breaking in 1969, Consumers Glass Co. opened the Lavington factory in 1970. When Owens-Illinois purchased Consumers in conjunction with Consumers Packaging and the Anchor Glass Container Corp. in 1997, the plant became part of that operation. Owens-Illinois gained complete control of the firm in 2001, and the plant shifted to U.S. ownership.

According to *Coldstreamer News*, Owens-Illinois planned to close the Lavington factory by the end of September, 2008. The plant was shut down for the same reasons as the other Canadian factories.

Plant No. 51, Antioch, California (1997)

On December 12, 1996, Owens-Illinois agreed to purchase the Antioch and Hayward, California, factories of the Anchor Glass Container Corp. for \$125 million plus certain liabilities. The firms closed the deal on February 5, 1997 (OI 1997). Owens-Illinois announced on February 27, 1997, the closing of the Antioch plant in May (*Times Staff & Wire Reports*).

Plant No. 52, Puerto Rico (1953-1954)

Although this plant was listed in the Owens-Illinois records as being open between 1953 and 1954, we have found no other information about the factory – including its location in Puerto Rico.

Plant No. 52, Hayward, California (1997-2003)

On December 12, 1996, Owens-Illinois agreed to purchase the Antioch and Hayward, California, factories of the Anchor Glass Container Corp. for \$125 million plus certain liabilities. The firms closed the deal on February 5, 1997 (OI 1997). According to Hay (2001), the Hayward plant only produced wine bottles by 2001. The *San Francisco Business Times* announced on August 19, 2003, that the Hayward plant would close on November 17 and mentioned that it was originally opened in 1949 – although the article failed to identify the earlier name.

Plant No. 55, R.M.B.C., Wheat Ridge, Colorado (1996-present)

The Columbine Glass Co. built the factory at Wheat Ridge, Colorado, in 1970 but sold it to the Adolph Coors Co. in 1976, when Coors opened its Coors Glass Division to make its own beer bottles (Toulouse 1971:125). In May 1995, the Coors Brewing Co. and Anchor Glass joined together as partners in the operation of the Coors Bottle Plant under the name of the Rocky Mountain Bottle Co. (R.M.B.C.) at 10619 W. 50th Ave., Wheat Ridge (Terracon Consultants 2015).

As part of the contract to purchase the Hayward and Antioch, California, plants from the Anchor Glass Container Corp., Owens-Illinois also acquired Anchor's share of the joint enterprise, in conjunction with the Coors Brewing Co., on December 12, 1996 (Bankrupt.com n.d.). The plant remains in operation in 2018 as MillerCoors LLC.

Plant No. 65, Vega Alta, Puerto Rico (1975-2008)

In an article on machine-made Hutchinson soda bottles, Lockhart et al. (2011) noted that “the Owens-Illinois Glass Co. opened Plant No. 65 at Vega Alta, Puerto Rico – located in the north-central section of the island – in late 1974 or early 1975. . . . The plant reported as preparing to close on February 18, 2008, and it apparently did shut down on that date.”

Discussion and Conclusions

Ray Mulford once counseled a disgruntled employee:

I suggested he start thinking of his work not as a job of selling bottles but of helping to build a way of life. A way that means an awfully lot to people who are living reasonably well, who are living in the best society that has been developed. And who are fundamentally dependent on the plant and other plants like it.

This is the basis, the foundation. And if we can contribute to that, we are not just selling soda pop bottles, we are helping create that way of life (Untitled anonymous OI history, OI papers).

Indeed, the story of Owens-Illinois is at least partly written in the lives of the workers. The firm seems to have been ahead of its time in employee relations and providing benefits for its workers. When the Owens Bottle Co. and the Illinois Glass Co. merged in 1929, the ensuing company probably seemed huge at the time – but it was only the beginning. In the intervening decades, the firm has changed, evolved, enlarged, shrunk, and diversified – but it became a true giant of the glass industry and remains so in 2018. For information about the logos and codes used by Owens-Illinois, see Part 2 of this series of Lockhart & Hoenig 2015).

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