Acme Glass Co. and the Acme Logos

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

Although the Acme Glass Co. was not known to have used any manufacturer's marks, earlier researchers have attributed glass logos to the company. As we demonstrate below, the uses of the "ACME" logo can be traced to other glass houses.

An unusual case involves "Acme" embossed in cursive on the bases of prescription bottles. This almost certainly indicated a brand or type of bottle and involved three glass houses – Acme Glass Co., H.C. Fox & Sons, and the Dominion Glass Co. – as possible manufacturers.

Histories

Acme Glass Co., Olean, New York (1895-1929)

The Acme Glass Co. incorporated in August 1895 with a capital of \$7,000. The initial investors were John E. Farrell, Martin A. Brunner, Joseph Sharp, Philip A. Von Starch, Henry U. Hanover, Joseph N. Thomas, and Abram Cullaher (Roller 1998). In 1897, the plant made "green bottle[s] and holloware" in 12 pots, increasing to 18 pots the following year. By 1901, the listing decreased slightly to 16 pots and remained at that level until at least 1902 (*National Glass Budget* 1897:7; 1898:7; 1900:11; 1901:11; 1902:11). Another source claimed that the factory used one continuous tank with six rings in 1897 and 1899 but had increased to three tanks with 22 rings by 1904, making prescription, liquor, and proprietary ware (Roller 1998).

Although the number and type was not recorded, Olean was using machines by at least 1907 (*Commoner & Glassworker* 1907). In 1908, Acme had an "enlarged 12-ring tank" handling 21 shops. The plant had a total of five tanks, two on flint glass, three on amber, producing beer, soda, and wine bottles as well as flasks (Mayer 1908:13).

By 1909, the Olean plant used 13 semiautomatic machines to make "vaselines, inks, etc." (*National Glass Budget* 1909:1). Three years later (1912), however, seven machines were used at Olean, New York, to make "vaselines, inks, shoe polish and pint and half pint milks"

(National Glass Budget 1912:1). It is important to note that the article did not mention which company used the machines, although the similarity to the 1909 report suggests that at least some of them were in the Acme plant. Presumably, as the quality of the machines improved, less were needed.

Acme competed locally with the older Olean Glass Co. that originally began business in 1883. After a checkered history that included shut downs and a major fire, the Acme Glass Co. bought Olean Glass in 1911. In that year, Acme used two continuous tanks with 15 rings to produce "prescription, beer, liquor and water [i.e., soda]" bottles, vials, and flasks (*Journal of Industrial and Engineering Chemistry* 1913:953).

The Acme Glass Co. made "prescription, beer, soda, wine, and brandy" bottles at least as early as 1907. In 1912, the list was abbreviated to "prescription, beer, etc." and remained that way until at least 1920. In 1920, the firm was first listed as making fruit jars (Thomas Publishing Co. 1905:159; 1907:159; 1912:480; 1920:827, 4616).

In July 1916, Acme ordered at least one O'Neill semiautomatic machine. The anonymous correspondent noted that the new machine "does away with one boy" (*National Glass Budget* 1916:1). The plant was now "operating one tank with six hand-blow shops, three Olean¹ and three one-man O'Neill machines on two shifts and a miscellaneous line of bottles being turned out" (Bristow 1917:16).

The Eastern Glass Co., Rochester, New York, purchased the Acme Glass Co. in June 1926 and vastly increased the capacity of the plant by December. Acme built a new plant in 1927 and added fully automatic machines, but the company was sold at auction two years later (1929) to local interests who renamed the plant the Olean Glass Co. The factory made prescription bottles, beers, minerals, patent-medicine and proprietary-medicine bottles, liquors, flasks, fruit jars, packers, preservers, and milk jars as well as soda, wine, and brandy bottles (Olean Glass Co. 1929:430; Toulouse 1971:35-37).

¹ Although we have not discovered the date, Olean developed its own semiautomatic machine, known as the Olean machine. This was probably the machine designed and patented by John A. Burleigh of Olean, New York, in 1911 (No. 998,673) and 1912 (No. 1,030,252).

By 1927, the plant used two continuous tanks with seven rings to produce its glass, entirely by machine² (*American Glass Review* 1927:125; 1929:93). An Olean announcement "assured a continuance of the same prompt service and the high quality packers' ware [that customers] have been receiving in the past" (Olean Glass Co. 1929:430). Acme remained in business until the Thatcher Mfg. Co. acquired the firm in 1944 (Lockhart et al 2006; 2007).

Dominion Glass Co., Montreal, Canada (1886-1995)

The history of this firm is recorded in the D section and in detail in King (1987:127-135; 145-152; 159-164, 217-220). The plant was established in 1886 and incorporated in 1894. In 1895, the company merged with the Diamond Glass Co. and Sydenham Glass Co., with numerous locations. Dominion acquired the exclusive rights to the Owens Automatic Bottle Machines in Canada. The firm made various types of bottle and jars (including prescription bottles) during its tenure both by hand and machine processes. The plants typically identified all bottles with the Diamond-D logo embossed on the bases.

The Henry C. Fox Factories

Henry C. Fox, flint glass bottle manufacturer, Philadelphia (1853-ca. 1876)

We have found very little about this early glass house. According to the H.C. Fox & Sons ca. 1904 catalog, the company was established in 1853. This, of course, referred to the firm of Henry C. Fox that manufactured flint glass druggists' and perfumers' ware. By at least 1876, Fox brought his sons into the business. The Hexamer General Survey (1884) noted that the extensive buildings were erected from 1856 to 1883.

H.C. Fox & Sons Flint Glass Works, Philadelphia (ca. 1876-ca. 1915)

Fox brought his sons into the business and renamed the firm H.C. Fox & Sons prior to the 1876 Philadelphia Centennial Exhibition, where the family styled themselves as manufacturers of "Druggists' and Perfumers' Glassware" and displayed many of their bottles (Ingram [1876]). As

² The plant was still listed as Acme until 1929, although the glass factory listings were notorious for continuing to include plants that had closed.

with the earlier firm, we have discovered very little information about the actual glass house or its workings.

The Hexamer Ganeral Survey (1884) illustrated a huge complex that extended between Sutherland Ave. on the west side to Verner St. on the east, with a northern boundary along the U.S. Naval Asylum Grounds and Kansas St. to the south. The complex – named the H.C. Fox & Sons Flint Glass Works – had three large smokestacks.

H.C. Fox & Sons was one of the founding firms in the organization of the National Glass Co. in 1899 – although the firm maintained its own identity. National Glass was a loose merger of independent glass houses that came apart in 1907. Fox probably left the conglomeration in 1904, when it incorporated (H.C. Fox & Sons ca. 1904; von Mechow 2012).

H.C. Fox & Sons was listed as making green glass (i.e., containers) – prescription and druggists' ware – in the first Thomas Register in 1905. The listing added packers' and preservers' ware in 1907. In 1913, the plant used both hand and machine methods to make a general line of bottles at a single continuous tank with 14 rings and three furnaces using 28 pots (Thomas Publishing Co. 1905:104; 1907:161; *Journal of Industrial and Engineering Chemistry* 1913:953).

The next change in the Thomas Registers occurred in 1914, finally noting the incorporation and the location at Schuyhill Ave. & Catherine St. The plant was now listed as making flint (colorless) prescription, preservers, etc. The enumeration remained the same until 1916, the last listing (Thomas Publishing Co. 1914:532; 1916:661). Although the Thomas Register is *not* a reliable source for closing dates, H.C. Fox & Sons was certainly still in production in 1913 and probably continued until at least the following year if not into 1915. We thus suggest ca. 1915 as a reasonable end date for the firm.

Fox, Fultz & Webster, Boston (1885-possibly 1915) Fox, Fultz & Webster, New York (1885-1904)

Fox, Fultz & Webster was first listed in the 1885 Boston city directory and continued to be enumerated until 1894. The following year, H.C. Fox & Co. replaced Fox, Fultz & Webster

and remained in the directories until at least 1911 (von Mechow 2012).³ By ca. 1894, the New York location was 52 Park Place, with an 18 Blackstone St. address at Boston.

Fox, Fultz & Webster was a jobber (wholesaler) supplying druggists, chemists, and perfumers. Along with being the outlet for H.C. Fox & Sons glassware, the Boston and New York locations offered metal tools, ceramic containers, syringes, pill molds, and virtually any other tools or items related to the three retail groups they served (Fox, Fultz & Webster ca. 1894). The factory probably vended its own goods prior to 1885, then developed Fox, Fultz & Webster as a sales arm.

In March 1904, E.L. Lillibridge, former manager of Fox, Fultz & Webster's New York office, announced a new corporation – the Lillibridge Weeks Thurlow Co. – that had purchased the New York business of Fox, Fultz & Webster at 31 Warren St.. Lillibridge was the president and treasurer of new firm, with M.R. Thurlow as the secretary. Clarence W. Fox (one of Henry's sons) retained an interest as a director of the company (*American Druggist* 1904:148). A second source – *Druggists Circular & Chemical Gazette* (1904:xxvi) – reported the same occurrence in greater detail, but called the older firm Fox, Fultz & Co. Based on these two descriptions and the New York address of both Fox, Fultz & Webster and Fox, Fultz & Co. being 31 Warren St., it is highly likely that both names actually applied to the same firm.

Fox, Fultz & Co., New York (at least 1898-1904) Fox, Fultz & Co., Boston (1895-ca. 1915)

As noted above, Fox, Fultz & Co. replaced Fox, Fultz & Webster in the Boston city directory. In February 1898, Fox, Fultz & Co. announced "the marriage of the business of Messrs Fox Fultz & Co to Every Retail Druggist" at 31 Warren St. New York. They described the business as an "extensively equipped house in New York handling druggists specialties such as flint and green prescription ware corks brushes hard and soft rubber goods etc." (*American Druggist* 1898:62). The Boston office was open until at least 1915., when it advertised itself as "Manufacturers and Jobbers [of] Bottle Glassware Druggists' Sundries [and] Toilet Specialties" in the program of the Boston Negro Business League convention (1915).

³ The directories were only listed by von Mechow to 1911, so this is not a defining date.

The Charles D. Fox 1874 Patent

On February 5, 1874, Charles D. Fox (one of Henry's sons) applied for a patent for an "Improvement in Glass-Molds." He received Patent No. 149,461 on April 7 of the same year. Fox noted that the object of his invention was "to provide a mold which will produce letters and figures on glassware more clearly and distinctly than any heretofore provided" (Figure 1).

Using the old method, he claimed, "the air therein is compressed, having no means to escape, and prevents the glass from completely filling up the depressions. He improved on this by drilling tiny "perforations or orifices" that led from the letters to an air chamber built into the mold. These allowed the air to escape so that the letters would be "full, clear, and raised to the desired extent." The essential

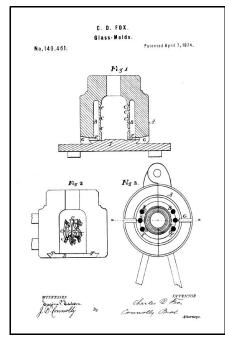


Figure 1 - Charles D. Fox 1874 patent

method was so effective that it remains in use in the 21st century.

Containers and Marks

Although an ad for the Acme Glass Co. (*Glass Container*1922) shows the word "ACME" embossed on the heels and shoulders of bottles, there is no evidence that such a mark was actually used by that firm (Figure 2).

Acme Glass Company Olean, N. Y. MANUFACTURERS OF ALL KINDS OF GLASS BOTTLES AND JARS We are authorized manufacturers of ORANGE CRUSH Bottles, WHISTLE Bottles, etc. Have made a specialty of Soda Water Bottles for over 30 years. Our clear Flint Glass gives you an attractive container. Write for prices. PRESCRIPTION WARE, HORSERADISH, POLISH, INK, MILK, KETCHUP BOTTLES

Figure 2 – Ad for Acme Glass Co., 1922 (Glass Container 1922)

ACME

Milk Bottles

Giarde (1980:5) dated the ACME mark as being used between 1920 and 1930. Although he noted that Acme "made milk bottles prior to the 1920's," Giarde drew his dates from

Toulouse (see fruit jar discussion below). The Acme Glass Co. was *not* listed as a milk bottle producer in the Thomas Registers from 1905 to 1920 (Thomas Publishing Co. 1905:159; 1907:159; 1912:480; 1920:827, 4616). Thus, the ACME mark on milk bottles was almost certainly unrelated to the Acme Glass Co., although the plant may have made milk bottles by machine in 1909. Like IDEAL, however, the ACME mark (Figure 3) was a brand name used by Creamery Package Mfg. Co. (see Creamery Package Mfg. Co. section or Lockhart et al. 2008a; 2008b; 2008c for evidence).



Figure 3 – ACME – base of Creamery Package Mfg. Co. milk bottle

Fruit Jars

According to Toulouse (1969:14), an upwardly slanted ACME in an American Flag shield (with five stars and bars) was embossed on a machine-made, quart fruit jar with a "Lightning beaded neck closure, glass lid" (Figure 4) He attributed the mark to the Acme Glass Co. with a use ca. 1920-1930. He noted that the pint size had three stars in the shield.

Roller (1983:3) told a completely different story about the ACME "shield" jars. He noted that the jars were made by the Schram Glass Mfg. Co. ca. 1922-1925. He also illustrated an ad for the jar from a ca. 1920s Schram canning booklet. He explained:



Figure 4 – ACME shield jar (eBay)

This jar has been incorrectly listed in the past as having been made by the Acme Glass Co., Olean, N.Y. Early in 1922, the Schram Glass Mfg. Co. sent a salesman, Thomas F. O'Hara, to the Acme plant to determine whether they had ever made any jars marked "ACME." He reported that they had not, and on this basis, Schram's patent attorney approved the use of the name for their new jar.

Creswick (1987b:1) illustrated the jars and agreed with Roller that Schram was the maker. She added that Trademark #163,166 for the shield design was "issued on Jan. 2, 1923" to the Schram Glass Mfg. Co., Hillsboro, Illinois, and St. Louis, Missouri. The jar, itself, received

Patent No. 1,352,119 on September 7, 1920 (Figure 5), and Design Patent No. 57,772 on May 3, 1921, both assigned to Schram. She further noted that the Ball Brothers continued to make the jars when they took over Schram in 1925.

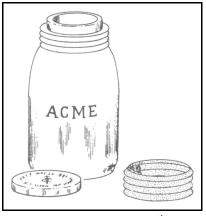


Figure 6 – ACME jar, late 19th century (Creswick 1987a:2)

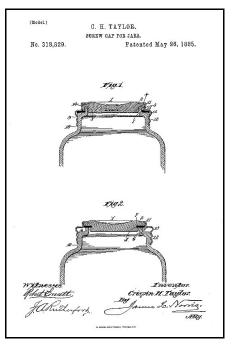
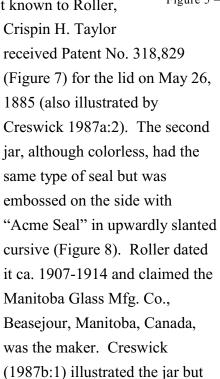


Figure 7 - Taylor's 1885 Patent

Roller (1983:2-3) also noted two other jars marked with the ACME logo. One was an aqua or yellowish green jar with a "straddle-lip top seal, glass lid and metal screw band" (Figure 6). Although the maker was not known to Roller,



added no additional information.

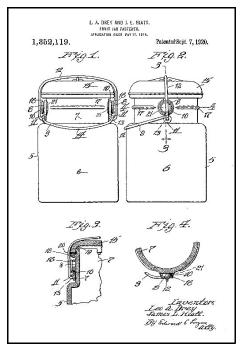


Figure 5 - Drey & Hiatt's 1920 Patent



Figure 8 – Acme Seal jar, Canada (Creswick 1987b:2)

The word "Acme" was also part of a complex logo that consisted of "ACME" / "LG" around the top point of a five-pointed star with "Co." between the bottom two points / "TRADE

MARK"/"1893." According to Roller (1983:241), the jar was made by the Lamont Glass Co., Trenton and New Glasgow, Nova Scotia, Canada, ca. 1890-1898. A variation without the 1893 trademark date was probably used earlier. Creswick (1987b:2) illustrated the jar but did not add any additional information.

Creswick (1987b:1) added one more style of Acme mark, this time on a product jar embossed "Acme (upwardly slanted cursive with underlining tail) / BUTTER / SCOTCH (both upwardly slanted) / SUNDAE (horizontal)." She made no guess as to the manufacturer, but the jar was listed in her second volume, devoted to jars made from ca. 1900 on.

Acme (cursive)

The Bottle Research Group photographed the base of an oval prescription bottle embossed "Acme" in cursive (Figure 9). The bottle was mouth blown into a two-piece mold with a cup bottom, but we did not record any further information. Griffenhagen & Bogard (1999:100, 117) noted that a 1900 ad from Fox, Fultz & Webster listed an Acme Oval – which the authors ascribed to H.C. Fox & Co. A Fox, Fultz &



Figure 9 – Acme script prescription bottle base

		A	CI	VI.	E	(7(7 1	1]	L	3.						
This st	yle	is man	ke	d	1	ri	t h		t l	ie	1	11	et	r	ie en	pacity	
	17,	onnce,													per	gross.	\$6,50
	1																7.00
	2	٤.															7.75
	3	11															9.50
	-4																10,75
	6																12.25
	8	4.6															14,00
	12		٠.,														18.00
	16																20.25
	.1 4	sorted	1.														12.00

Figure 10 – Acme Oval in H.C. Fox & Co. catalog (ca. 1904)

Web

ster catalog (estimated by the Corning Glass Museum between 1983 and 1895) did *not* include the Acme Oval, but the H.C. Fox & Sons catalog (ca. 1904 or later) illustrated and listed the Acme Oval in nine sizes (Figure 10). The illustration is very similar to our photo of the base. This suggests that the Acme Oval was first offered between ca. 1896 and 1900.

Miller & Pacey (1985:43) listed an

Acme oval in seven sizes of "hand" molds in the 1926 mold inventory of the Hamilton plant of the Dominion Glass Co. Unfortunately, neither set or researchers illustrated a bottle or base, but it is possible that Dominion adopted the name and style after Fox disbanded. To further

complicate matters, a bottle illustrated in the 1922 Acme Glass Co. ad (see Figure 2) appears to be approximately the same shape as the base shown in Figure 9.

Other Fox Company Marks

FF&W

Whitten (2012) recorded an FF&W mark on the "the base of a colorless druggist bottle from Greenville, NH, probably made circa 1885." He attributed the logo to Fox, Fultz & Webster, Boston. The Fox Fultz & Webster catalog (ca. 1894 according to the Corning Museum of Glass) illustrated a Hub Prescription

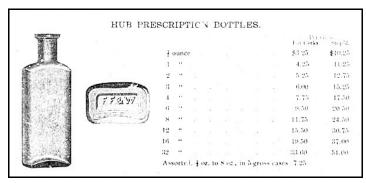


Figure 11 – FF&W logo on prescription bottle base (Fox, Fultz & Webster ca. 1894 catalog)

bottle embossed "FF&W" on the base (Figure 11). However, it should be noted that the same catalog also illustrated the "FF&W" initials on the shoulders and bodies of bottles where manufacturer's or jobbers logos are virtually never known to appear.

FOX, FULTZ & WEBSTER

A Worthpoint auction illustrated and described a vented nursing bottle embossed "CLEAN FONT VENTED NURSING BOTTLE FOX, FULTZ & WEBSTER NEW YORK & BOSTON PATENTED OCT. 25 1892" on the front face.

Otis K. Newell of Boston applied for a patent for a "Nursing-Bottle" on March 7, 1892, and received Patent No. 484,811 on October 25 of that year. His

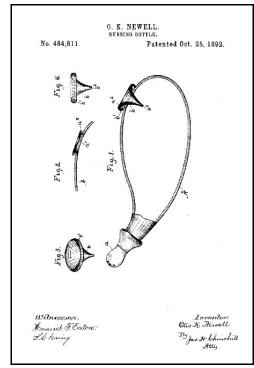


Figure 12 - Otis K. Newell 1892 patent

invention was intended "to provide a nursing-bottle with an automatic vent which possesses all

the advantages of the vented stopper without its attendant disadvantages" – which included leaking and having the stopper popping out at awkward moments.

The bottles may have been made at the H.C. Fox & Sons factory, or they may have been produced elsewhere. Although Fox, Fultz & Webster was apparently formed to sell H.C. Fox products, it grew to encompass many other levels of goods and probably glassware made by other glass houses – especially for items *not* produced by Fox. Newell did not assign the patent to H.C. Fox & Sons or any other firm, so we have no way to track the actual manufacturer.

FOX, FULTZ & CO.

An eBay auction featured an apothecary vessel (apparently pewter) stamped with "FOX, FULTZ & CO." in a circle on the bottom. The name was also painted on some equipment, such as suppository presses. We have not found the name on glass containers.

Discussion and Conclusions

The word "acme" derived from ancient Greek and meant "pinnacle" or "highest level of achievement" – indicating high quality. Because of the quality connotation, the term was used by a number of glass manufacturers on various products. Thus, the term did not – on its own – indicate the Acme Glass Co. However, it is likely that Acme Glass chose the name to connote quality products, although part of that choice may have been to achieve an enumeration near the top of glass factory lists in directories.

It appears that the Acme Glass Co. did not use a mark on its containers. Although fruit jars, product jars, prescription bottles, and milk bottles are embossed with "Acme" in various formats, almost all of those have been traced to other companies. In addition, the Acme Glass Co. admitted in 1922 that it had not used the mark on fruit jars.

It is certain, however, that "ACME" was used by the Creamery Package Mfg. Co. on milk bottles during the early 20th century, and the mark was used on the sides of fruit jars by the Schram Glass Mfg. Co., the Lamont Glass Co., and possibly by the Manitoba Glass Mfg. Co.

The attribution of the cursive "Acme" on the bases of colorless prescription pharmacy bottles – while not absolute – is now fairly certain. Although the Acme Glass Co. illustrated a bottle that was similar in shape to the base with the cursive "Acme," we have no evidence that the firm offered an "Acme" oval. Although the Dominion Glass Co. *did* manufacture an Acme Oval, the Dominion plants were very consistent in the use of the Diamond-D logo on the bases of its products. Since H.C. Fox & Sons made and advertised the Acme Oval through its own catalogs and its sales outlet – Fox, Fultz & Co. – the Fox factory is the most likely choice.

Acknowledgments

We are grateful to Doug Leybourne for granting us permission to use drawings from the Alice Creswick books. These drawings are better representations in many cases than photos of the actual jars.

Sources

American Glass Review

1927 "Glass Factory Yearbook and Directory." *American Glass Review*, Pittsburgh, Pennsylvania.

1929 "Glass Factory Yearbook and Directory." *American Glass Review*, Pittsburgh, Pennsylvania.

Bristow, A. E.

1917 "Good Runs Reported." *Glassworker* 35(34):1, 16.

Commoner & Glassworker

1907 "Good Report from Olean." Commoner & Glass Worker 26(3):7.

Creswick, Alice

1987a *The Fruit Jar Works, Vol. I, Listing Jars Made Circa 1820 to 1920's*. Douglas M. Leybourne, N. Muskegon, Michigan.

1987b *The Fruit Jar Works, Volume II, Listing Jars Made Circa 1900 to Modern.* Privately printed, Grand Rapids, Michigan.

H.C. Fox & Sons

ca. 1904 Illustrated Catalogue and Price=List H.C. Fox & Sons Incorporated Glass Manufacturers. H.C. Fox & Sons, Philadelphia.

Fox, Fultz & Webster

ca. 1894 Illustrated Catalogue. Fox, Fultz & Webster, Manufacturers of Druggists', Chemists' and Perfumers' Glassware. Manufacturers and Importers of Druggists' Sundries. Fox, Fultz & Webster, New York and Boston.

Giarde, Jeffery L.

1980 Glass Milk Bottles: Their Makers and Marks. Time Travelers Press, Bryn Mawr, California.

Griffinhagen, George and Mary Bogard

1999 *History of Drug Containers and Their Labels*. American Institute of the History of Pharmacy, Madison, Wisconsin.

Ingram, J.S.

[1876] Centennial Exposition, Described and Illustrated, Being a Concise and Graphic Description of this Grand Enterprise, Commemorative of the First Centennial of American Independence. K.D. Thompson & Co., St. Louis

Journal of Industrial and Engineering Chemistry

1913 "The Present Status of the Glass Bottle and Hollow Ware Industries in the United States." *Journal of Industrial and Engineering Chemistry* 5(11):951-954.

Lockhart, Bill, Pete Schulz, David Whitten, Bill Lindsey, and Carol Serr 2006 "The Dating Game: Tracking the Elusive Monogram – Carl Conrad & Co., Olean Glass Works (Co.), and a Man Named O'Hara." *Bottles and Extras* 17(4):38-47.

Lockhart, Bill, Pete Schulz, Carol Serr, and Bill Lindsey

2007 "Thatcher Glass Co., Maker of Soda Bottles?" The Soda Fizz 4(6):34-42.

2008a "Creamery Package Mfg. Co. – Part 1" Milk Route 328:1-3.

2008b "Creamery Package Mfg. Co. – Part 2" Milk Route 329:1-2.

2008c "Creamery Package Mfg. Co. – Part 3" Milk Route 330:3-4.

Mayer, Charles C.

1908 "From the Mountain District." Commoner and Glassworker 26(29):12-13.

Miller, George L. and Antony Pacey

1985 "Impact of Mechanization in the Glass Container Industry: The Dominion Glass Company of Montreal, a Case Study." *Historical Archaeology* 19(1):38-50.

National Glass Budget

1897 "Glass Directory." National Glass Budget 12(42):7.

1898 "Flint, Green and Cathedral Glass Factories of the United States and Canada in Operation." *National Glass Budget* 13(38):7.

1900 "Complete List of Glass Factories in the United States and Canada." *National Glass Budget* 15(48):11.

1901 "Complete List of Glass Factories in the United States and Canada." *National Glass Budget* 17(1):11.

1902 "Complete List of Glass Factories in the United States and Canada." *National Glass Budget* 17(52):11.

1909 "Hayes on Bottle Machines." National Glass Budget 11:1.

1912 "Changes Wrought in 7 Years." National Glass Budget 30:1.

1916 "Big Demand for O'Neill Machines." National Glass Budget 32:(8):1.

Olean Glass Co.

1929 "Olean Glass Company Inc. Announces." Glass Packer 2(11):430.

Roller, Dick

1983 Standard Fruit Jar Reference. Privately published.

Thomas Register of American Manufacturers

1905 The Buyers' Guide: Thomas' Register of American Manufacturers and First Hands in all Lines. Thomas Publishing Co., New York.

1907 Thomas' Register of American Manufacturers and First Hands in all Lines: The Buyers Guide. Thomas Publishing Co., New York.

1909 Thomas' Register of American Manufacturers and First Hands in All Lines: A Classified Reference Book for Buyer and Sellers. Thomas Publishing, New York.

1912 Thomas' Register of American Manufacturers and First Hands in All Lines: A Classified Reference Book for Buyer and Sellers. Thomas Publishing, New York.

1914 Thomas' Register of American Manufacturers and First Hands in All Lines: A Classified Reference Book for Buyer and Sellers. Thomas Publishing, New York.

1915 Thomas' Register of American Manufacturers and First Hands in All Lines: A Classified Reference Book for Buyer and Sellers. Thomas Publishing, New York.

1916 Thomas' Register of American Manufacturers and First Hands in All Lines: A Classified Reference Book for Buyer and Sellers. Thomas Publishing, New York.

1917 *Thomas Register of American Manufacturers and First Hands in All Lines*. 9th ed. Thomas Publishing Co., New York.

1918 *Thomas Register of American Manufacturers and First Hands in All Lines*. Thomas Publishing Co., New York.

1920 *Thomas Register of American Manufacturers and First Hands in All Lines*. Thomas Publishing Co., New York.

Toulouse, Julian Harrison

1969 Fruit Jars. Thomas Nelson & Sons, Camden, New Jersey.

1971 Bottle Makers and Their Marks. Thomas Nelson, New York.

von Mechow, Tod

2012 "Soda & Beer Bottles of North America: Bottle Attributes - Beer & Soda Bottle Manufacturers." http://www.sodasandbeers.com/SABBottleManufBeerSoda.htm

Last updated, September 2, 2012