Winslow Glass Co.

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Although the Winslow family had been involved in glassmaking for some time, it was not until 1898, that Palmer Winslow and his mother, Hannah, broke away from the Fairmount Glass Works and opened the Winslow Glass Works at Matthews, Indiana. The plant intended to produce tableware but ended up making a general line of bottles. Hannah died in 1904, and Palmer moved the plant to Columbus, Ohio, a year later.

By 1907 or 1908, the plant had begun manufacturing milk bottles, relying more and more on milk bottle production until ca. 1912, when the plant shifted to exclusive milk bottle manufacture. The Berney-Bond Glass Co. purchased the firm in 1927, continuing milk bottle production, and the Owens-Illinois Glass Co. acquired the company the plant in its bid to enter the milk bottle field.

History

Winslow Glass Co., Matthews, Indiana (1898-1905)

William C. Winslow joined with John Rau, Frank Taylor and Charles Tigner to build the Fairmount Glass Works, Fairmount, Indiana, in 1889, Rau & Winslow buying out their other partners the following year. In 1894, William Winslow died, and his wife, Hannah, and son, Palmer, inherited his share of the business. Rau acquired the Winslow portion in 1898, and the Winslows started their own business. See the section on the Fairmount Glass Works for more information.

On September 9, 1898, Palmer Winslow, Hannah A. Winslow (his mother), and H.P. Henshaw incorporated the Winslow Glass Co. at Matthews, Indiana. Hannah Winslow was president, with Palmer as secretary and treasurer. The capital stock was \$10,000, and the group planned to make "tableware of all kinds" (*Indianapolis Journal* 9/9/1898; *National Glass Budget* 1898:3). The plant actually opened in February of 1899 and made "a miscellaneous line of glass containers, i.e., Beverage, whiskies, panels, ovals, etc." (Gibson 1952; *Indianapolis Journal*

2/2/1899). Winslow Glass made "Glass Bottles, Fruit Jars, Lamp Founts, etc." according to a 1901 letterhead (Roller 1994:66). That year, the state inspection require that Winslow "discharge all boys under the age of fourteen years; secure affidavits from all minors between the age of fourteen and sixteen years and keep them on file post laws" (McAbee et al. 1901:168).

A 1903 city directory only showed the firm as making "bottles" (Krone 2000). The 1904 Glass Factory Yearbook noted that the company used two continuous tanks with 10 rings to make "prescription, proprietary and packers ware." Palmer Winslow became president with Hannah's death on March 15, 1904, with C.M. Tigner as vice president (*American Glass Review* 1934:155; Ebert 2016:3). Charles Tigner was involved in other glass works as well. See the Other T and Fairmount Glass Works section for more on Tigner.

The closing of the Matthews plant is the subject of some contention. The *American Glass Review* (1934:155) noted that the company moved to Columbus in 1905. Toulouse (1971:532), however, claimed that the Matthews factory closed in 1908. Ebert (2016:3), however, noted that the plant was no longer listed in the 1906 city directory. An Owens-Illinois history (1952) stated that "in 1910, the Matthews, Indiana plant was closed because of it's [*sic*] inaccessability [*sic*] and high gas rate." Wacker (n.d.), however, noted a letterhead from Winslow, dated January 19, 1908, that claimed factories in Matthews and Columbus.¹

Gibson (1952), however, provided a different explanation:

During 1906, the Federal Food and Drug Act became affective [sic], which resulted in the sale of Peruna to sharply decrease.² Mr. Winslow, seeing that this act would lead states to pass more rigid sanitation laws, foresaw the future for the demand for glass containers for milk, and he went after this type business. However, during the conversion, he closed the Matthews plant and manufactured

¹ It is possible that Winslow could have been using up old stationery. Glass houses generally used everything until it wore out or the supply was exhausted. The Toulouse date is also suspect, although he may have had access to Wacker's history. Toulouse had numerous typographic errors, especially those connected with mistyped dates.

² As noted in the Columbus section (below), Peruna was the sole buyer for the Ohio plant's output.

the miscellaneous lines at Columbus until such a time as he could secure sufficient volume of dairy container business to operate on full production of that line.

The Gibson account is probably apocryphal. Both Gibson and the Owens-Illinois history were probably attempts to explain the closure, but both were formulated well after the fact. The source closest to the event indicated that the plant ceased operations in 1905. Our own research into the local newspapers showed that there was no mention of the Matthews factory after 1905.

Winslow Glass Co., Columbus, Ohio (1902-1927)

Winslow opened a branch in Columbus "just northeast of the Federal Glass Plant" that was expected to be operational by November 1, 1902 (*Newark Advocate* 6/24/1902).³ The factory contained a single continuous tank, and the entire output of bottles was consumed by the Peruna Co., located at Columbus (Gibson 1952). Fire destroyed the Columbus plant on May 8, 1905 (*Van Wert Bulletin* 5/8/1905), but the firm rebuilt the plant and it was producing again by September 1 (Owens-Illinois 1952).

Dr. Samuel B. Hartman invented Pe-ru-na for his patients, probably during the early 1870s. He began manufacturing the mixture in 1877 at Osborne, Ohio, and built a larger factory at Columbus, Ohio, in 1883. He trademarked Pe-ru-na in 1895. Although the public generally wrote the name as Peruna, Harman always used the hyphenated version of the name. In 1905, numerous critics attacked Peruna as being a substitute alcoholic beverage that could be available in areas under Prohibition. The Pure Food & Drug Act of 1906 required a full disclosure of the quantity of alcohol in the concoction, and sales fell dramatically. Although Hartman remained in business, Peruna was never regained its popularity (Sullivan 2007; Young 1999).

Peruna bottles came in at least two colors: colorless (solarized amythest) and aqua. These bottles were cylindrical with a single-part finish for a cork. The slightly concave base was

³ The *Advocate* was confused. The article called the firm the "Winslow Glass Company of Marion, Ind." and noted that the "Marion" plant would remain open along with the new factory in South Columbus. Matthews is ca. 14 miles southeast of Marion (a small city but the larger of the two).

embossed "DR. S.B.H. & Co. (arch) / P.R. (inverted arch)" – although some bases had the more correct "PR." abbreviation (Figure 1). At least some of the bottles also included other basal embossing, such as "REGISTERED" in a circle within the other initials and a "W" in the center. The latter almost certainly indicated the Winslow Glass Co. The product was touted by a paper label affixed to the side of the bottle (eBay; Sullivan 2007:28-29). The "P.R." or "PR." was almost certainly a strange abbreviation for "Peruna."

As noted above, the Columbus plant had been dependent on sales to the Peruna Co., so the sales loss required a rethinking of company's policies. The plant immediately began to retool to produce liquor, brandy, beer, wine, soda, ink, packers' and preservers' bottles, as well as lamps (Owens-Illinois 1952; Thomas



Figure 1 – Peruna bases (eBay)

Publishing Co. 1907:159). According to Gibson (1952), Winslow decided to convert to the manufacture of milk bottles about 1906, although Owens-Illinois (1952) placed the milk bottle conversion ca. 1910.

Initially, milk bottles (and other types) were made by hand, but Winslow bought Teeple-Johnson semiautomatic machines and eventually converted them to fully automatic production (Gibson 1952). The plant began making milk bottles by machine in 1909. Sciota⁴ noted that "the machine milk bottle trade is in a good condition at present, owing to the action of the boards of health in many cities passing a law that milk shall only be sold in bottles." Due to a leak in Winslow's "machine department" tank in August, however, the machines were moved to the "brownware factory" during the repairs, replacing the hand operation in that section ("Sciota" 1909:4). By December, the repairs were completed, placing 12 "blow shops" at "maximum production" along with eight machines that made milk and Horlick bottles. The plant produced "nothing smaller than eight-ounces ware" (Mayer 1909:1).

⁴ Some correspondents for the *Commoner and Glassworker* used pen names. Both "Sciota" and "Pythagorus," for example, wrote in 1909.

Giarde (1980:140) noted that milk bottle manufacture had become important to the company by 1907. Roller (1998) supported the Girade date. He quoted an ad from May 16, 1908, that offered "Milk Bottles, Liquor and Machine Ware." Although Giarde stated that the Columbus plant made milk bottles exclusively from 1912 until the sale to the Berney-Bond Glass Co. in 1927, the Thomas Register (1909:201) showed that the plant made the same types of bottles in 1909 as it had in 1907 – with no listing for milk bottles. The 1914 Thomas Register (1914:531, 536) listed Winslow as making the same line of bottles but also placed the plant for the first time in the milk bottle category. Ads in the *National Glass Budget* also contradicted Giarde. Until 1911, the ads feature "Milk Bottles, Liquor and Machine Ware," but the 1914 ad only noted "Machine Made Milk Bottles" (*National Glass Budget* 1911:7;1914:3).

Oddly a 1912 article listed no machines (*National Glass Budget* 1912:1), possibly because of a fire that partially destroyed the plant sometime during the year. The shutdown, however, was fairly brief (Owens-Illinois 1952). In 1913, Winslow was using two continuous tanks with 14 rings to make a "general line" of bottles by both machine and hand processes (*Journal of Industrial and Engineering Chemistry* 1913:953). Winslow was also on the 1913 list for glass factories allowed to sell milk bottles to Wisconsin dairies (*Stevens Point Journal* 1913:1).

On January 1, 1916, the *Bridgeton Evening News* reported "one tank in commission, with six one-man machines on four shifts and one machine on day shift only. However, later in the year, the natural gas supply had diminished to the point where Winslow closed the plant and began looking for a new location (*Lancaster Gazette* 1916), although the difficulties were eventually resolved, and the move averted. By 1918, the plant operated one tank with "6 automatic machines on four shifts producing milks." The machines kept four mold makers and one apprentice busy in the mold shop (Bristow 1918:1).⁵

The Owens-Illinois history (1952) discussed quality control (or lack thereof) at both ends of the operation, probably in the early days of the plant:

⁵ This is a bit strange. Scotia, in 1909, indicated that there were two plants (or at least two tanks), one for making milk bottles by machine, the other for "brownware." The 1918 reference, however, only suggested a single tank. By 1925, however, there were two factories (again, almost certainly referring to two tanks.

Batch was unloaded, mixed, and stored by hand. It was stored in bins in an old frame building. Batch was not accurately weighed and weight was determined by the number of wheelbarrows dumped into the furnace. It was haulde (*sic*) up a long incline and dumped into the furnace at the doghouse. A long pole was used to push the glass back into the furnace. An absolutely accurate [count] of the number of wheelbarrows dumped into the furnace was not always kept.

Quality, naturally was poor but the customers knew nothing about bottles and accepted everything. . . . annealing was tested by eyesight. If the bottles were a cherry red they were O.K. Bottles were then tested by inserting a handful of nails and shaking. If they withstood the shock they were good. A friction and hot water test were administered.

Winslow ads during 1924 concentrated on quality control and the strength of the containers. A January ad (*Milk Dealer* 1924:51) illustrated a bottle being sawed in half to illustrate the uniformity of the glass (Figure 2). Others noted that there were "no blemishes or rough spots anywhere," and



Figure 3 – Winslow ad (*Milk Dealer* 1924:93)

one showed a steel hammer being used to test the bottles' strength. One from the January 5 *Milk Dealer* bragged that the molds were tested twice daily (Figure 3).



Figure 2 – Winslow ad (*Milk Dealer* 1924:51)

There were two plants, Factory A and

Factory B. In June 1925, a 150-ton glass tank burst at Factory B, setting the plant afire. Damage was estimated at \$72,000, but Factory A was unharmed (*Glass Industry* 1925:136). By 1927, the company made only "flint milk jars" by machine at two continuous tanks with 14 rings

(*American Glass Review* 1927:147), indicating that Factory B was back in production. Palmer Winslow died on April 25, 1927, after a 16-month illness, and his heirs sold the company to the Berney-Bond Glass Co. on May 1 (*Columbus Dispatch* 4/25/1927; Gibson 1952; Owens-Illinois 1952). Berney-Bond continued to make milk bottles at the plant, as did the Owens-Illinois Glass Co., when it acquired the operation in 1930 (Owens-Illinois 1952; Toulouse 1971:533).

Containers and Marks

All Winslow milk bottles that we have seen were manufactured by machine. It is likely that Winslow manufactured very few milk bottles prior to its adoption of machines and that it made other bottles by hand. Aside from a "W" in the center of a Per-u-na base, we have never found a manufacturer's mark that we could trace to Winslow on any non-milk bottle, so it is likely that the company only marked its dairy containers. Although Winslow made Horlick's bottles in 1909 (and possibly at other times), we have not seen an examples with a "W" basemark or any other logo we could ascribe to Winslow.

W (1900-1911)

Giarde (1980:140) noted that this mark was used by Winslow from 1900 to 1911. This timing is certainly not intuitively obvious, and the end date probably reflects Giarde's idea that Winslow began exclusive milk bottle production in 1912. Giarde (1980:140) probably based both the identification of the "W" mark and the time period on his observation that "the W mark has been found on a tin top."

We have seen marks that could be either "M" or "W" on bases of pharmacy bottles. These could have been made by Winslow during this early period, but that identification is shaky at best. Currently, attaching a "W" mark alone to any company should be regarded as a risky identification. An equally (or more) likely choice of manufacturer of the drug store bottles is the Whitney Glass Works (see Whitney section for more discussion).



Figure 4 – Peruna bottle (eBay)

However, Winslow almost certainly used a solitary "W" in the center of the base to identify the firm as the manufacturer of Peruna bottles (Figures 4 & 5). This virtually certain connection between the "W" mark and Winslow suggests that the plant may have used the logo on other bottle types as well. It is also possible that Winslow made some Peruna bottles with no identifying letter.



Figure 5 – Peruna base (eBay)

Milk bottles marked with a "W" in a typical manufacturer's Fig mark position were very likely made by Winslow prior to 1911,

possibly not earlier than 1913. Winslow produced machine-made milk bottles by at least 1908 and may never have made dairy containers by hand. See Discussion and Conclusions below.

5W (1911-1927)

Toulouse (1971:532) showed a 5W mark as the only one used by Winslow – from ca. 1912 to 1927. Giarde (1980:140) noted three marks for the company but agreed with the Toulouse dates for the 5W mark. Winslow had certainly begun using the 5W mark on



Figure 6 – 5W

milk bottles by 1913 (Figure 6). That year, the 5W mark was registered by Winslow for use on Wisconsin milk bottles (*Stevens Point Journal* 1913:1). The State of Wisconsin required that all glass factories selling milk bottles to dairies within its borders register and commit to following state guidelines.

New York was probably the first state to require numerical codes, demanding that all glass houses wishing to sell milk bottles within the state emboss "the name or initials and a designating number" on the container (*Orange County Times-Press* 1910). Wisconsin and Maine required numbers in 1913, and several other states soon followed. Complying with the volume regulations demanded by New York and the other states required that the factories make milk bottles by machine; the hand process was simply not precise enough. By at least 1909, Winslow milk bottles were machine made, so the 5W mark should not appear on mouth-blown bottles.

Three different bottles – all machine-made with the 5W logo – have interesting numerical codes in the ejection scars or on the reverse heels. Two of these had "22" in the ejection scar; one had "25" on the heel in addition to the ejection mark; and the other had "27" on the heel. All three of these codes fell within the date ranges when the individual dairies were in operation. Although this is only in the hypothetical stage, the heelmarks are the more likely date codes. Former Winslow bottles made by Berney-Bond (see below) used date codes, so Berney-Bond may have adopted the practice from Winslow upon the purchase of the smaller firm.

If these are indeed date codes, it may suggest that the 5W logo was used later than the 5 / W logo described below. However, it is also possible that these merely identified two different plants.

5 / **W** (1912-1927).

Giarde (1980:140) illustrated a mark consisting of a "W" with a 5 above the "mid-point" of the "W" and between the two "arms" of the letter (Figure 7). He dated the mark's use between 1912 and 1927. This variation may have been the earlier of the two. It was probably in use by ca. 1915 in Maine (see Maine Seal below). The mark was certainly used until 1927 and continued in use on some Berney-Bond milk bottles – in

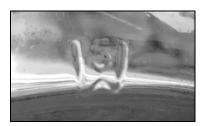


Figure 7 - 5 / W (Russ Hoenig)

conjunction with the BB48 mark – probably until the molds wore out (Figure 8).

W in the Massachusetts Seal (ca. 1914-1929)

From 1900 to 1947, the Commonwealth of Massachusetts required that all glass factories selling bottles to dairies within the state mark their containers with a Massachusetts seal. The initial seals were etched on individual bottles by local "sealers." Beginning in late 1909, the state required glass factories to emboss the seal on each milk bottle sold within its jurisdiction.



Figure 8 – BB48 5 / W (*Milk Dealer* 1924)

The seal used by Winslow was embossed in a circular form as "MASS (arch) / W / SEAL

(inverted arch)" (Figure 9). These often appeared in a small plate mold on the shoulder of the milk bottles (Blodget 2006:8; Schadlich [ca. 1990]).

The Massachusetts seals in circular form began to be embossed on the shoulders of milk bottles ca. 1914, so that is a good beginning date for the "W" shoulder seal. These bottles had



Figure 9 - Mass W Seal

either "5W" or "5 / W" heelmarks. The mark and company was listed in the 1918 Massachusetts Bulletin (Schadlich & Schadlich 1984:4-5). Winslow probably made milk bottles for sale in Massachusetts until Owens-Illinois bought the firm in 1927 – although local collectors rate bottles with the seal as uncommon.

5 / W in the Maine Seal (ca. 1915)

We have observed a single milk bottle with "MAINE (arch) / 5 over W (horizontal) / SEAL (inverted arch)" in a plate mold on the shoulder (Figure 10). The bottle also had the "5 / W" heelmark. Interviews with Maine collectors indicated that this seal was rare. It was probably only used during the very early years of the Maine seals, probably ca. 1915, when the seal was required to be located on the shoulder (Public Laws of Maine 1915:28). The earliest types of seals were on the body and apparently only appeared on bottles made by the Thatcher Mfg. Co.



Figure 10 – Maine W Seal

5 in the Minnesota Triangle

Although the study of the Minnesota triangle marks is in its infancy, the triangles were certainly embossed on the shoulders of milk bottles used within the state by 1916 (*Milk Dealer* 1916:58). Empirical observation shows that shoulder seals continued to at least 1932 before they migrated to the heels by at least 1940. The triangles were bisected by a horizontal line that divided the number in the upper chamber from the abbreviation "MINN" in the lower one. A single milk bottle offered on eBay, with the triangle embossed on the shoulder, is the only example of this mark we have found so far.

W in conjunction with Berney-Bond logos (1927-1931)

Giarde (1980:18) stated, "Another BBGCo48 milk bottle has been found . . . which also bears a W on the bottom. This 1930 milk bottle thus bears both the Berney-Bond mark and the Winslow W mark. A 1929 round 5ϕ Store quart has been identified with the Winslow W on the bottom and the Berney-Bond BB48."

The only "W" marks we have seen on milk bottles have been in conjunction with Berney-Bond Glass Co. logos. We have recorded milk bottles with "W 28" on the base and "BBGCo48" on the heel as well as others with "28 W" or "31 W" on bases along with "BB48" on heels. The two-digit numbers were obvious date codes for 1928 and 1931. These almost certainly indicated the Winslow factory during the period when Berney-Bond owned the plant (1927-1931) or during the very earliest years of Owens-Illinois ownership (1931 on). See the section on Berney-Bond for more information. Occasional Berney-Bond bottles carried the "BB48" and "5 / W" heelmarks, probably reflecting the use of older molds until they wore out.

DE LAVAL

At some point, Winslow made bottles for the De Laval Cream Separator Co. (see Other D Marks section). These were embossed with both the "5W" logo on the heel and "DE LAVAL" on the base. Other De Laval bottles were only embossed "DE LAVAL," with no manufacturer's mark. It is currently unknown if these were also made by Winslow.

Discussion and Conclusions

There is no indication that the Winslow Glass Co. ever used a manufacturer's mark on any type of container – except the "W" on some Per-u-na bottles – but milk bottles. Winslow began making milk bottles by at least 1909 on semiautomatic machines, although tradition suggests that milk bottles were mouth blown earlier. Giarde's suggestion of 1907 for the inception of milk bottle production is therefore probably correct. The date for exclusive milk bottle production is less certain. The plant still made a general line of bottles in 1913, but exclusive milk bottle manufacture was suggested by 1918. However, the point is probably moot. It is clear that milk bottles were the firm's main products by at least 1912.

Winslow used the "5W" manufacturer's mark on the heels of machine-made milk bottles, although the initial date of use is unclear. Marks may have been used as early as 1907 (although we consider a date that early to be unlikely), and the combined manufacturer's mark and numeric code was in place as early as 1913 to take advantage of the various state laws that demanded them on milk bottles during that era. The "W" combined with the "5" was certainly not used prior to 1910, when New York enacted the first "number" law we have discovered.

Giarde also contended that a "W" mark was used during the ca. 1900-1912 period, and that is certainly possible, if a "W" mark is found on an older milk bottle (as noted by Giarde), especially one that was mouth blown. That era was prior to the 1910 initial requirement for identifying numbers for the plants of milk bottle producers. It is unlikely, however, that the "W" mark found on drug store bottles was used by Winslow. It is possible that the "5W" and "5 / W" marks were used concurrently, with the one logo being adopted by Factory A and the other by Factory B. The second plant may have been operational prior to 1909 (see Scotia in the History section). The "5W" and "5 / W" marks were used until the sale of Winslow to Berney-Bond in 1927.

Winslow bottles conformed to the Massachusetts, Maine, and Minnesota seal systems during the teens, although very few bottles seem to have been made for Maine (and possibly few in Minnesota). The seal system was also used in Pennsylvania and Rhode Island, although we have found no "5" or "W" seals for either state. The seal system ceased in 1947. The state of glass production had reached a peak where consistency was virtually assured, and the system was no longer needed.

Acknowledgments

Our gratitude to Wanda Wakkinen for proofreading our works.

Sources

American Glass Review

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

1934 "Glass Factory Yearbook and Directory." *American Glass Review*, Pittsburgh, Pennsylvania. Includes reprint of the *Glass Trade Directory for 1904*. Commoner Publishing Co., Pittsburgh, Pennsylvania.

Blodget, Bradford G.

2006 "Milk Bottles from the Heart of the Commonwealth: A Collector's Guide to the Milk Bottles from the City of Worcester, Massachusetts, 1890-2006." Unpublished manuscript.

Bristow, A. E.

1918 "Bottle Plant News." Glassworker 36(27):1.

Ebert, Louis E.

2016 "Tilting at Windmills, Part 2." Midwest Glass Chatter December:2-3.

Giarde, Jeffery L.

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

Gibson, Palmer

1952 Palmer Gibson to R. B. Wilhelm. Intra-Company Correspondence. Part of Owens-Illinois History #19.

Glass Industry

1925 "Trade Activities." Glass Industry 6(6):135-136.

1927a "Milk Bottle Companies Merge." Glass Industry 8(6):151.

1927b "Palmer Winslow." Glass Industry 8(6):152.

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.

Krone, Kristie

2000 "Grant County Glass Factories circa 1903."

http://archiver.rootsweb.com/th/read/INGRANT/2000-04/0956088414

Lancaster Gazette

1916 "Glass House to Quit Columbus: Shortage of Gas Given as the Reason for Change of Location." *Lancaster Gazette* December 20:7.

Mayer, Charles C.

1909 "Encouraging Trade Reports Noted." Commoner and Glassmaker 28(12):1.

McAbee, D.H., D.F. Spees, and H.A. Richards

1901 "Fourth Annual Report of the Department of Inspection of the State of Indiana, 1900. William B. Burford, Indianapolis, Indiana.

Milk Dealer

1916 Advertisement: "At Last We Have It." Milk Dealer 6(1):58-59.

1924 Advertisement: "Winslow Milk Bottles." Milk Dealer 13(6):73.

National Glass Budget

1898 "General Glass Notes." National Glass Budget 14(18):3.

1911 Advertisement: "Winslow Glass Co." National Glass Budget 28(8):2.

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

1914 Advertisement: "None Better than our Machine Made Milk Bottles." *National Glass Budget* 30(21):3.

Newark Advocate

1902 "Glass Factory: For Manufacture of Bottles to Start at Columbus by Winslow Company of Marion." *Newark Advocate* June 27.

Orange County Times-Press

1910 "Honest Bottles After January 1: New State Law Which Prescribes Sundry Necessary Fulfillments." *Orange County Times-Press* (Middletown, NY), September 6:2.

Owens-Illinois Glass Co.

1952 "History of the Columbus Plant." Part of Owens-Illinois History #19.

Public Laws of Maine

1915 Public Laws of Maine, Chapter 44.

Roller, Dick

1994 Indiana Glass Factories Notes. Acorn Press, Paris, Illinois.

1998 "Columbus, OH History Notes." Dick Roller files.

Schadlich, Louis

[ca. 1990] "Milk Bottles Marked by Manufacturers and Jobbers." Unpublished manuscript.

Schadlich, Louis and Nancy Schadlich

1984 "The 'MASS. SEAL' on Milk Bottles and Jars." Unpublished manuscript, Stourbridge, Massachusetts.

"Sciota"

1909 "From Ohio's Capital City." Commoner and Glassworker 27(39):4.

Stevens Point Journal

1913 "Notice to Milk Dealers" *Stevens Point Journal* [Stevens Point, WI] September 22, 1913:1.

Sullivan, Jack

2007 "The Peruna Story: Strumming that Old Catarrh." Bottles and Extras 18(3):28-31.

Thomas Publishing Co.

1907 Thomas' Register of American Manufacturers and First Hands in All Lines: A Classified Reference Book for Buyer and Sellers. Thomas Publishing, 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.

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

Toulouse, Julian Harrison

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

Van Wert Bulletin

1905 "Glass Works Burned." Van Wert Bulletin May 8.

Wacker, Janet

n.d. "Timeline for Winslow Glass and Charles Tigner." Dick Roller files. Wacker was the great granddaughter of Charles Tigner, an early associated of the Winslows.

Young, James Harvey

1999 "Hartman, Samuel Brubaker."

http://www.libarts.ucok.edu/history/faculty/roberson/course/1493/supplements/chp17/17.%20Samuel%20Brubaker%20Hartman.%20physican%20medecine%20manufacturer.htm

Last updated 8/28/2020