# A.M. Foster & Co.

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Thomas K. Sheldon, Adelbert M. Foster, Elmer G. Foster (Adelbert's brother), and Charles L. Dean were variously intertwined in a series of glass works and distribution networks that produced medicinal containers, including prescription bottles, along with a more general line of bottles and jars. Also see the related sections on Dean, Foster & Co., Foster-Forbes Glass Co., Marion Flint Glass Co., Sheldon Glass Bottle Co., Sheldon-Foster Glass Co., and Upland Flint Bottle Co.

All these companies can trace their ancestry back to Joseph Foster, who opened a factory at Stoddard, New Hampshire, in 1842. Foster's sons (George, Charles, Wallace, and Joseph Jr.) built the New Granite Glass Co. at Mill Village (Stoddard) about 1860, and George went on to help found Dean, Foster & Co., the parent firm of A.M. Foster & Co. While the earlier firms manufactured glass products, the latter two were jobbers or distributors.

# Histories

#### A.M. Foster & Co., Chicago, Illinois (1893-1928)

The son of George W. Foster and Mary A. Sawyer Foster, Adelbert Merton Foster was born on January 29, 1859, at Stoddard, New Hampshire (Bethman 1971:73; Leonard 1905:244; Marquis 1911:244). According to Marquis (1911:244), Foster "entered the Boston house of Dean Foster & Co. as employee and partner" at Boston on October 14, 1874. He would have been almost sixteen years old at the time.

George Foster sent his son, Adelbert, to Chicago to be present for the opening of the new branch of the firm on January 1, 1883. Arthur J. Dawley is credited with starting the Chicago branch of Dean, Foster & Co. under the name of Dean, Foster & Dawley. When Dawley withdrew in 1889 due to ill health, Adelbert M. Foster took control of the business. He probably continued under the name of Dean, Foster & Dawley (or possibly Dean, Foster & Co.) until October 9, 1893,<sup>1</sup> when he purchased the company and began to operate it as A.M Foster & Co. (A.M. Foster & Co. 1907; Bethman 1971:75; Leonard 1905:244; Marquis 1911:244; O'Leary & Czaplewski [1898] 2002).

In 1900, William C. Forbes became associated with Adelbert M. Foster in Chicago, Illinois, and later became an important element of the business (Toulouse 1971:45-46). Adelbert's brother, Elmer G. Foster, was a co-owner of the firm. Both the "offices and facilities" were at 120 Lake Street. Additional addresses at 6 E. Lake and 404 Lake apparently indicated other outlets or warehouses by 1913. Upon Elmer's death on June 22, 1921, Adelbert Foster became the





sole owner of the company (Bethman 1971:73; Pottery, Glass & Brass Salesman 1921:25).

The firm remained affiliated with Dean, Foster & Co., listed in the A.M. Foster 1907 catalog as the "Eastern House" – suggesting that A.M. Foster was the "Western House" of the business. At some point, the business became associated with the American Cork Co., 67 Blackstone St., Boston. Since the factory was just down the street from Dean, Foster & Co. (14 Blackstone St.), American Cork was probably one of the businesses owned by the combine (A.M Foster & Co. 1907 – Figure 1).

A further interesting feature of the 1907 catalog was a drawing of the "Chicago Heights Factory" (Figure 2). The Sheldon-Foster Glass Co. opened a branch at Chicago Heights, Illinois, in 1901 and soon closed its older Gas City, Indiana, plant. Not surprisingly, A.M. Foster was

<sup>&</sup>lt;sup>1</sup>Toulouse (1971:45), however, claimed that A.M. Foster began his own business in Chicago in 1885. However, he also suggested that the company began using its initials "at once" which indicates soon after the business was formed, then he dated Foster's mark "circa 1895 to 1911." It is likely that 1885 was a typographic error, and Tolouse intended the opening date to be 1893. Of course, he may simply have been in error.

one of the principals of Sheldon-Foster. The plant made prescription and proprietary bottles as well as packers' ware and also produced milk bottles from at least 1907 (possibly 1905) on semiautomatic machines. Sheldon-Foster was undoubtedly the plant shown in the drawing, and it was certainly a supplier for A.M. Foster & Co. See the sections on Chicago Heights Glass Co. and Sheldon-Foster for more information.

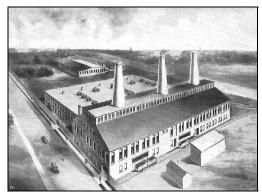


Figure 2 – Chicago Heights Factory (A.M. Foster & Co. 1907:3)

Toulouse (1971:44) added that A.M. Foster "was an officer of Marion Flint Glass Co. and B.F. Leach Glass Co. (Fowlerton, Indiana). Both of these companies probably made bottles for him 'with his private mark.'" Despite claims that the firm of A.M. Foster & Co. was a glass manufacturer (see Figure 1), it is apparent that both Dean Foster & Co. and A.M. Foster & Co. were jobbers, and their bottles were actually made elsewhere (A.M. Foster & Co. 1908; Marquis 1911:244). Caniff (2007:7) noted that Foster listed 18 glass houses as his suppliers in 1899.

A.M. Foster & Co. was listed at Chicago in the earliest Thomas Register (1905), but the enumeration listed no products. The listing disappeared in 1915 but returned only under the "Fruit Jar" heading in 1917, although the bottle listing reappeared and jar enumeration vanished in the 1920 and 1921 editions<sup>2</sup> (Thomas Publishing Co. 1905:103; 1914:529, 3010; 1917:4104; 1920:826; 1921:780). The plant was not included in the 1927 factory list (*American Glass Review* 1927), although, by that time, the list was probably refined sufficiently to exclude jobbers or distributors.

Caniff (2007:7) placed the death of Adelbert M. Foster in December 1934, with W.C. Forbes dying in April of the following year. Bethman (1971:73) noted that A.M. Foster & Co. sold bottles and jars until 1928. This timing is interesting. The Foster-Forbes Glass Co. began in 1929, replacing the Upland Bottle Co. and A.M. Foster & Co. at the same time (Foster-Forbes [ca. 1966]; Toulouse 1971:45-46). See the section on Foster-Forbes for more details.

<sup>&</sup>lt;sup>2</sup> Unfortunately, we have not gained access to and Thomas Registers later than 1921.

# B.F. Leach & Co., Leach, Indiana (1896-1902)B.F. Leach Glass Co., Fowlerton, Indiana (1902-1904)

According to Brothers (n.d.), B.F. Leach & Co. began operations in 1896. The firm was listed in 1898 under the "Green Bottle and Holloware Factories" category, making bottles at 12 pots. The company was not in either 1897 list that we have. However, the 12-pot listing continued until 1900 but decreased to four pots in 1901 and 1902 (*National Glass Budget* 1897:4 ; 1897:7; 1898:7; 1900:11; 1901:11 1902:11). The firm incorporated as the B.F. Leach Glass Co. on December 19, 1902, with a capitalization of \$10,000. The plant operated one continuous tank with four rings in Fowlerton, Indiana, in 1905 (Roller 1994:28; Storms 1904:130). As noted above, Toulouse (1971:44) claimed that A.M. Foster was a vice-president of this firm, although that may or may not have extended into the next incarnation of the company. However, an anonymous author (*Midwest Glass Chatter* 2014:2), claimed that Foster leased the Leach plant in 1903.

# Spencer Cooperative Glass Co., Spencer, Indiana (1904-ca. 1908)

In 1904, J.E. Daily discussed his attempts to unionize the B.F. Leach Glass Co. He discovered that the firm was seeking a new location. The firm first attempted to make a deal with the town of Shoals, Indiana, but could reach no agreement. Daily (1904:102) reported:

We next heard of Mr. Leach at Spencer, Ind. in December. On our arrival there, we found that the deal had been closed between Mr. Leach and the Commercial Club for the erection of a six ring tank. We did all in our power to induce the Commercial Club to have Mr. Leach operate his plant union but were unsuccessful.

Leach closed the plant at Fowlerton in 1904 and moved to Spencer, Indiana. The relocated firm was now called the Spencer Cooperative Glass Co., with B.F. Leach as president and manager, E.W. Leach as secretary, and L.G. Richards as treasurer. The plant operated a single tank with eight rings to make proprietary ware and fruit jars. The 1907 Sanborn Fire Insurance Map illustrated the factory at the intersection of Graveyard and West Market Streets (*American Glass Review* 1934:155; Roller 1995).

By 1907, J.E. Leach had become the president, with M. Wallace as vice president, E.W. Leach as secretary, and L.G. Richards as treasurer. Charles Lythgoe was the manager of the plant (Roller 1994:96). The Thomas Registers (Thomas Publishing Co. 1907:158; 1909:200) called the firm the Spencer Cooperative Bottle Co. in 1907 and continued to list the business in 1909. The company no longer appeared in the next issue – in 1912. Roller (1994:96) reported that another 1909 glass factory list noted that the factory was "not in blast" (i.e., not actively working). The annotated 1904 glass factory directory reprinted by the *American Glass Review* (1934:155) claimed that the plant ceased operations by 1914; however, closing dates in this source were not always reliable.

#### Marion Flint Glass Co., Marion, Indiana (1888-1922)

The Marion Flint Glass Co. made bottles from 1888 to 1922. A.M. Foster was the secretary in 1888. The factory made a variety of flint (colorless) containers – most notably prescription bottles and jars. A.M. Foster certainly distributed prescription bottles and very likely also sold Sealfast jars made by the Marion factory. For more information, see the Marion Flint Glass Co. section.

#### Millgrove Glass Co., Millgrove, Indiana (1898-1911)

Foster was also supplied by the Millgrove Glass Co., Millgrove, Indiana. On June 8, 1906, union representative H.J. Mackinaw (1906:78) received the following letter from A.M. Foster:

I write you regarding the situation at Mill Grove. The union blowers that we have are not turning out one half the production that the non-union factories in our section are for the same weight bottles. It is a fact that the ten or fifteen non union factories in the gast [*sic*] belt have men who can turn out a big day's work and are making money. We believe if you could go to Mill Grove you could remedy this complaint.

Mackinaw "visited the Mill Grove plant on the 14th and found they had resumed operation making beer bottles. Some of the men were not quite familiar with that class of work." He also found that the prevailing sentiment in the town was in favor of non-union work (Mackinaw 1906:78). The phrase "union blowers that *we* have" (our emphasis) indicates that Foster had a strong connection with the factory.

Mackinaw's report certainly referred to the Millgrove Glass Co. at Millgrove, Indiana. The firm incorporated in 1898, with C.H. Modes (son of W.F. Modes) as the manager. The plant used a six-pot furnace to make glass containers. By 1901, Modes had been replaced by W.H. Cox. A.M. Foster purchased the factory in 1903and rebuilt it, installing a single continuous tank with eight rings. C.H. Modes was secretary and manage. W.C. Forbes took charge in 1905. By 1907, A.M Foster was the president of the corporation – when Millgrove was listed as the "Glass Factory" in the 1907 A.M. Foster catalog. Foster was probably the president from the the original purchase (A.M Foster & Co. 1907; Toulouse 1971:359).

Although the plant clearly made some beer bottles, Toulouse (1971:359) noted that the company's "product was chiefly proprietary medicine bottles and packers." Millgrove was listed in 1904 as making "amber and green liquors and packers' ware" (*American Glass Review* 1934:153) and in 1907 as making "Prescription; Packers'; [and] Preservers'" ware, a listing that remained in the 1909 edition (Thomas Publishing Co. 1907:158; 1909:199). The plant closed in 1911 to move the operation to Upland, Indiana, as the Upland Flint Bottle Co. (Roller 1996). See the section on Upland Flint Bottle for more information.

## **The Adelbert Foster Patent**

Griffinhagen and Bogard (1999:41) and Caniff (2006:7) noted that Foster patented the Chicago oval in 1888. Adelbert M. Foster applied for a patent for a "Design for a Bottle" on March 14, 1888. He received Design Patent No. 18,309 on May 15 of the same year. Unfortunately, the drawing has been lost. Foster noted that

the body of bottle consisted of a bottom bounded upon one side by a cylinder semi-elliptical in form, the other three sides being plane surfaces, and which consist of three rectangular parallelograms forming a semi-hexagon. . . . The four sides of said bottle terminate at the top of the shoulder of the bottle, which is slightly convex to where it meets the neck, the same being of ordinary form. The description, indeed, fits the Chicago oval. It most certainly does *not* compare with the Kellogg or Klondike ovals. Griffinhagen and Bogard (1999:41) added that the bases of the bottles were embossed either "D.F.&Co" or "D.F.&D." The latter mark referred to Dean, Foster & Dawley, the Chicago branch of Dean, Foster & Co. that eventually became A.M. Foster & Co.

# **Containers and Marks**

# **Prescription and Druggists' Bottles**

A.M. Foster & Co. was a major distributor of druggists' supplies. The firm had its logo embossed on various forms of glass containers specifically targeted for drug stores. These included but were not limited to two specific models – the Kellogg and the Klondike.

**A.M.F.&Co.** (1893-ca. 1911)



Figure 3 – Arched A.M.F.&Co. logo (Tucson Urban Renewal collection)

According to Bethman (1991:73), "bottles produced by Adelbert M. Foster & Co. have the company's initials marked on the base either in a straight line, or in an arch. Any number marked on the base along with the initials refer to the style of bottle and in some cases the ounce capacity of

the bottle" (Figures 3 & 4). Toulouse (1971:44-45) dated the mark ca. 1895 to 1911, suggesting that Foster ceased using his name on bottles when the Upland Flint Bottle Co. adopted the "U" logo. Toulouse claimed John Foster – Adelbert's son – as one of his sources.

Giarde (1980:108) noted the mark as possibly being found on milk bottles between 1905 and 1912. However, he was probably conflating the company with the Sheldon-Foster Glass Co. (see the Sheldon-Foster section) and stated that "A.M.F.&Co." was "unlikely as

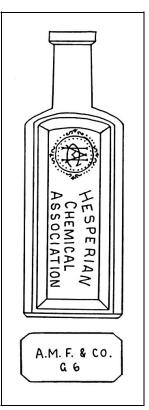


Figure 4 – Horizontal A.M.F.&Co. logo (Bethman 1991:789)

a Sheldon-Foster mark." The A.M. Foster & Co. 1907 catalog (p. 24-25) offered the Common Sense Milk Bottle in <sup>1</sup>/<sub>4</sub> pint, <sup>1</sup>/<sub>2</sub> pint, pint, quart, and <sup>1</sup>/<sub>2</sub> gallon sizes. The bottles were "finished to take paper caps," but they could be "furnished with patent Lightning stoppers as shown in cut No. 268" (Figure 5). Despite the catalog entry, we have never heard of a milk bottle with the "A.M.F.&Co." logo.

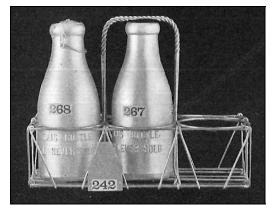


Figure 5 – Milk bottles offered by A.M. Foster & Co. (A.M. Foster & Co. 1907:25)

Bethman (1991) illustrated a total of 15 A.M.F.&CO. marks, all embossed on prescription bottle bases. All but two were in the form of a slight arch with horizontal numbers below the actual logo. One of the exceptions was a small jar with an arched logo but no numbers (Figure 6). The second exception had the logo embossed horizontally with G6 below it (Bethman 1991:789), the only example with both a letter and a number (see Figure 4). Overall, the date range for the bottles illustrated by Bethman is 1895-1904.

Both Jones (1966:15) and Colcleaser (1965:82; 1966:28) illustrated the arched mark on colorless drug store bottles. Several other researchers (Burggraaf and Southard 1998; Griffenhagen and Bogard 1999:122; Miller 1999:89, 101, 104, 110; and Preble 2002:422, 437, 446, 535, 648, 656) illustrated and/or described the marks on prescription bottles both in arched and horizontal formats. They dated the bottles (not the marks) according to local research on the drug stores that used them. The contexts were remarkably consistent within the ca. 1893-ca. 1905 range, with a single outlier extending from 1895 to 1911.

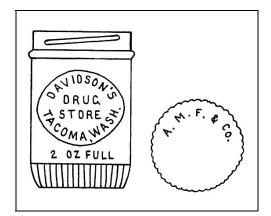


Figure 6 – Arched A.M.F.&Co. logo with no number (Bethman 1991:776)

We can find no demarcation to suggest that the two variations (arched and horizontal) were used at different times; they were apparently concurrent. In comparing bottles from the

various sources with the Dean, Foster & Co. 1901 catalog (Freeman 1968), most of the AMF&Co bottles did not match any offered by the older company. There were two exceptions, including, a Klondike Oval, that is show in the catalog with a horizontal AMF&Co mark (Freeman 1968:X8 – see Klondike below).

Numbers accompanying the marks fell into three broad categories, again with no temporal association that we could determine. The most common of the three is a two- or three-digit number below the mark. These are likely model or catalog numbers. We discovered three cases where more than one bottle was embossed with the same number, and the styles and shapes matched in each case (e.g. Bethman 1994).

The next most common numbering style includes a single-digit number (although theoretically a two-digit number is possible) between the mark and the catalog number (e.g., AMF&Co / 1 / 58). According to Bethman (1994:73), this probably indicates the capacity of the bottle in ounces. The least common numerical format is "No. *xxx*" below the mark (e.g., No. 334). In all cases where bottles from the "No." series were illustrated, the final digit indicated the capacity in ounces. For example, the bottle with a basal embossing "A.M.F.&Co. / No. 334" PRESCOTT ARIZONA

Figure 7 – A.M.F.&Co. / No. 336" (Miller 2008:226)

was also embossed "4 OZ." on the shoulder (e.g., Bethman 1994:410). Miller (2008:226) also illustrated an example (Figure 7).

# AMF

Burggraaf and Southard (1998) showed seven examples of the AMFCo mark and 15 examples of the AMF mark. Although date ranges for pharmacies and drug stores using bottles with both marks extended through the entire period suggested for the AMF&Co mark (1893-ca. 1911), the companies using the AMF&Co-marked bottles tended to have been in business earlier that those using AMF bottles. It is worth noting that the same bottle style was recorded by the authors in every case. Since only this source mentioned the mark, it may have been a misrecording of the AMFCo mark.

#### **KELLOGG** (ca. 1897-ca. 1902)

Bethman (1991:75) described this container type as "a particular style of prescription bottle which was designed and produced by Adelbert M. Foster & Co., of Chicago. It was distributed in the mid-to-late 1890s." According to Griffenhagen and Bogard (1999:41, 99), Kellogg bottles were listed in the 1899 A.M. Foster & Co. catalog.



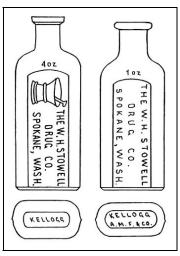
Figure 8 – KELLOGG basemark (eBay)



Figure 9 – Bottle with KELLOGG base (eBay)

Bethman (1991) illustrated 10 examples of this mark. With one exception, all are clearly the same style of bottle. Base markings, however, appear in two different styles. Style #1, by far the most common (8 examples), was embossed "KELLOGG / A.M.F.&CO." on

the base. Style #2 had only "KELLOGG." Both had the entire basemark in backslanted, capital letters (Figures 8, 9, & 10). Overall, the date ranges presented by Bethman extended from 1897 to 1902. Mark style #2 may have been used slightly later than #1, but the sample is too small to be definitive. It is also possible that A.M.Foster distributed the bottles with his logo, and Dean, Foster & Co. carried the ones only embossed with "KELLOGG." In



the 1907 catalog, Foster illustrated the KELLOGG bottle with *no* embossing on the base (Figure 11).

Figure 10 – KELLOGG bottles (Bethman 1991:762)

Preble (2002:424) only showed a single example (KELLOGG / A.M.F.&CO.) dated 1898-1901. The Kellogg Oval was also listed in the 1901 Dean, Foster & Co. catalog. The bottle came in sizes ranging from ½ to 32 ounces (Freeman 1968:X8). Although no evidence has yet surfaced, this may be another conglomerate bottle, similar to the Klondike, discussed below.

# **KLONDIKE** (1897-1900)

According to Bethman (1991:75):

The "Klondike" style of prescription bottle was produced from about 1897 to 1900. The name came from the Klondike gold rush, as that big event was occuring [*sic*] at this time, and fit the time period of use of this bottle. Adelbert M. Foster & Co., of Chicago, produced and sold this bottle. . . . It is unusual in that this style of bottle has a "pedestal" style base.



Figure 12 - KLONDIKE base

Bethman (1991) illustrated six examples of bottles with this mark. All were the same style of bottle, and all had identical embossing on the base: "KLONDIKE (slight arch) / A.M.F.&CO. (horizontal)" (Figures 12 & 13). The overall date range for

KLONDIKE bottles was 1895-1900. According to Griffenhagen and Bogard (1999:41), Klondike bottles were listed in the 1899 A.M. Foster & Co. catalog.

Colcleaser (1966:21) illustrated the same bottle and mark, which also appeared in the Dean, Foster & Co. 1901 catalog (Freeman 1968:X8 [plate]) as the Klondike Oval. The bottle was made in  $\frac{1}{2}$ - to 32-ounce sizes. What appears to be exactly the same page was included in the 1907 A.M. Foster & Co. catalog (Figures 14 & 15). Preble (2002:419, 659) showed two examples of the mark dated 1897-1900.

Owen Roberts, of A.M. Foster & Co., wrote to mold maker Charles Yockel on August 12, 1897, requesting a mold for a new type



Figure 11 – KELLOGG bottle(A.M. Foster & Co. 1907:5)

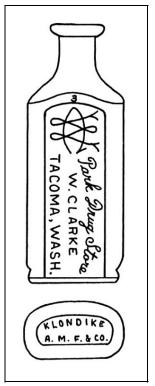


Figure 13 – KLONDIKE bottle (Bethman 1991:798)



Figure 14 – KLONDIKE bottle (A.M. Foster & Co. 1907:5)

requested "using the Eastlake Oval as a base, with a footed base as in the Penn Oval and a shoulder and neck as in the Hollis Oval – but with the neck 1/4" shorter. The base was to be embossed "Klondike / A.M.F.&Co." (Girffinhagen & Bogard 1999:42). This new aggregate bottle was apparently never patented.

of bottle. Included with the letter were sample bottles of a Penn Oval (made by Whitall Tatum & Co.), an Eastlake Oval, and a Hollis Oval (the latter two made for Foster). The letter

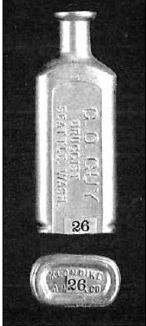


Figure 15 – KLONDIKE bottle (A.M. Foster & Co. 1907:5)



Figure 17 – PARIS bottle (A.M. Foster & Co. 1907:5)

**Paris** (1900-ca. 1911)

Bethman (1991:76) noted that "the 'Paris' marking appears on a certain stocky rectangular style of prescription bottle, and dates from about 1900 to 1904." The letters were always backslanted and were embossed "PARIS" in the slightly indented center on the bases of the bottles. This style of bottle



Figure 16 – PARIS base (eBay)

was illustrated in the 1900 Dean, Foster & Co. catalog (Figures 16 & 17). The listing called the bottles "Our latest shape in prescription bottle, being entirely different from anything now in the market.Anyone who wants a striking appearing package would do well to investigate this line. These molds can be lettered" (quoted in Bethman 1991:76). The 1901 Dean, Foster & Co. catalog (Freeman 1968:10X)

[plate]) also showed the bottle and description but added that the bottle was available in  $\frac{1}{2}$ - to 32-ounce sizes.

Bethman (1991) illustrated a total of 20 bottles marked on the base with "PARIS." Each bottle was the same style, and each basal embossing was identical. He dated a single bottle 1908 and one other 1904; all others fell in the 1900-1902 range. This clearly supports his statements about the bottle (above).

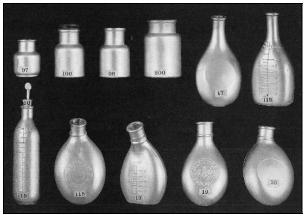


Figure 18 – Nursing bottles (A.M. Foster & Co. 1907:21)

Bethman (1991:76) further suggested that the name "Paris" might have been related to the Exposition Universelle, held in Paris, France, from April 15 to November 12, 1900, and that explanation fits the period when the bottle was apparently used.

Griffenhagen and Bogard (1999:126) dated the PARIS mark a bit earlier – from 1888 to 1900, probably incorrectly. Preble (2002:647, 696) showed two examples of the PARIS mark dated from 1901 to 1915. The "Paris" appears to have been used for only a short period of time, although it was still offered in the 1907 A.M. Foster & Co. catalog.

# **Other Bottle Types**

The 1907 A.M. Foster & Co. catalog also included two other bottle types that are not necessarily considered typical "druggist" items. The first – nursing bottles – were typically found in drug stores during the early 20<sup>th</sup> century, although we do not generally associate them with druggists today. Foster offered seven different

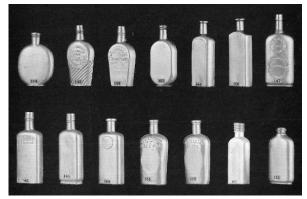


Figure 19 – Liquor flasks (A.M. Foster & Co. 1907:23)

"nursing" or "sterilizer" bottles (Figure 18). The second category was liquor flasks. The catalog advertised 14 varieties of "flint liquor ovals for drug trade" (Figure 19). At this point, we have not discovered any nursers or liquor flasks embossed with any recognizable A.M. Foster & Co. logo.

# **Fruit Jars**

Both Roller (1983) and Creswick (1987) claimed that A.M. Foster sold Sealfast jars. Listings for the firm's jars in the Thomas Registers, however, was somewhat bizarre. Although the company appeared in the initial, 1905 issue of the Register, it was only listed under "Bottles." The following edition (1907) included a fruit jar

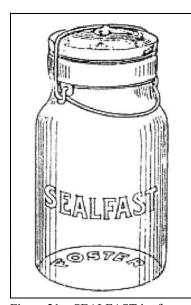


Figure 21 – SEALFAST jar from 1914 A.M. Foster & Co. catalog (Caniff 2007:7).

listing, and that continued until

1914. The firm was not enumeratedunder any heading during 1915 and1916. The 1917 edition included

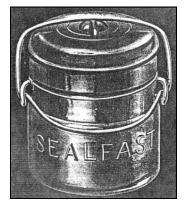


Figure 20 – SEALFAST jar from 1909 Dean, Foster & Co. catalog (Caniff 2007:6).

A.M. Foster & Co. as fruit jar manufacturers but not in the "Bottles" section. The firm reentered the "Bottles" list in 1920 and 1921, but there was no enumeration under "Fruit Jars" (Thomas Publishing Co. 1905:103; 1914:529, 3010; 1917:4104; 1920:826; 1921:780). Although this all seems odd, it almost certainly reflects enumeration errors rather than actual fact.

Foster certainly sold jars by at least 1903. On March 10 of that year, the University of Illinois purchased \$9.63 worth of jars from A.M. Foster & Co. and bought another \$10.75 worth on January 20, 1908 (University of Illinois 1903:167; 1908:609). The "Eastern Branch" – Dean, Foster & Co. – advertised and

illustrated "The Sealfast Wide Mouth Fruit Jar" in its 1909 catalog (Caniff 2007:6 – Figure 20). An illustration from the 1914 A.M. Foster & Co. catalog showed "SEALFAST" on the front of the jar and "FOSTER" on the base (Figure 21).

SEALFAST (ca. 1903-ca. 1922)

Toulouse (1969:279-281) described three different types of Sealfast jars:

SEALFAST (horizontal, body) and FOSTER (base) (Figures 22 & 23)
 FOSTER / SEALFAST (horizontal, body) and FOSTER (base)

3. SEALFAST (arch) / SOLD BY (horizontal) with various names of grocers, hardware stores, and other outlets in a plate below.

All were sealed by a Lightning wide-mouth closure, old-style neck design (Figure 24). Toulouse noted a variation of the second type without FOSTER on the base and described six variations of the "SOLD BY" jars. He suggested that the jars were "made by Ball Bros. Co. and Hazel Atlas for the Upland Glass Co., Upland, Ind., 1911-1922; Marion, Ind. 1922-29. Now Foster Forbes Glass Co., 1929 to date."



Figure 22 – SEALFAST on body (eBay)



Figure 23 – Foster on base (eBay)

Roller (1983:324) provided more variations (see Table 1), along

with solid information linking the Sealfast jars to A.M. Foster &

Co. (Roller #1170-1171). He noted that "a circa 1908 advertising brochure of A.M. Foster & Co., 120 Lake St., Chicago, showed a photograph of these jars." He claimed that several firms



Figure 24 – Detail of finish (eBay)

made the jars, including the Upland Flint Bottle Co., Hazel-

Atlas Glass Co., Ball Brothers Co., and Hart Glass Co. –

during a period extending from 1908 to 1925. However, he added that "Foster historical records [stated that] most of these jars were made by Hazel-Atlas Glass Co."

Creswick (1987:119-121) added much more detail about variations, including illustrations (Table 1 and Figure 25). She dated the jars between 1912 and 1924. Although small variations were probably made at a moldmaker's whim (e.g., the presence or

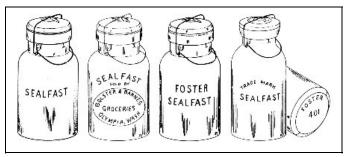


Figure 25 – SEALFAST jar series (Creswick 1987:19-20)

absence of "FOSTER" on the base), two traits allow us to infer at least some finer dating distinctions than those offered by Toulouse, Roller, or Creswick. At least one of the regularmouth jars embossed only "SEALFAST" on the body but with no "FOSTER" on the base was mouth-blown and finished by hand. That almost certainly places this variation as the earliest one. It was followed by the same jar – but machine made. A wide-mouth "SEALFAST" jar – with and without "FOSTER" on the base – was almost certainly produced next.

Front	Base	Mouth	Seal*	Mfg. Char.
SEALFAST	no embossing	regular	old-style	mouth
SEALFAST	no embossing	regular	old-style	machine
SEALFAST	no embossing	wide	old-style	machine
SEALFAST	FOSTER	wide	old-style	machine
FOSTER / SEALFAST	no embossing	wide	old-style	machine
FOSTER / SEALFAST	FOSTER	wide	old-style	machine
FOSTER / SEALFAST	no embossing	unknown	beaded neck	machine
FOSTER / SEALFAST	FOSTER	unknown	beaded neck	machine
TRADE MARK / SEALFAST	FOSTER	regular?	old-style	machine
SEALFAST / SOLD BY**	no embossing	wide	old-style	machine

# **Table 1 – Sealfast Jar Variations**

\* All seals are Lightning style.

\*\* Creswick (1987:119-121) listed 23 variations of this style – all with the names and addresses of various businesses, often grocers.

Roller (2011:469) added a variation embossed "SEALFAST" on the front heel. The editors noted that Jerry McCann has discovered a total of 25 variations of the "SOLD BY" jars (Figure 26). For more information, see Roller (2011:801-804) for a discussion of the firms who used the "SOLD BY" jars.

Creswick (1987:120) mentioned the same manufacturers as Roller, but she added that the Upland Flint Bottle Co. became the Foster-Forbes Glass Co. in 1929, and Foster-Forbes made jars after that period. Although she dated the series (jars #2577-2602) in general from 1912 to 1924, she agreed with Toulouse that the "MADE FOR" jars were produced *by* Hazel-Atlas (possibly also by the Ball Brothers) *for* the Upland Flint Bottle Co. but used a shorter date range – from 1914 to 1924.

Caniff (2007:7) explained the reason behind the Hazel-Atlas production. When A.M. Foster purchased the Upland Cooperative Glass Co. in 1911 and renamed it the Upland Flint Bottle Co., the plant only made bottles by hand methods. The factory had no jar machines. In 1972, John M. Foster noted that Hazel-Atlas was the leading supplier of the jars for the Foster firms.

A.M. Foster & Co. advertised three sizes of SEALFAST jars in its 1907 catalog. According to Foster, SEALFAST jars were "jars of quality – especially designed for women who take pride in their preserving. . . . made from Clear Flint Glass which *heat does not effect*. . . . Nothing but glass comes in contact with fruit insuring [*sic*] purity of contents" (Figure 27).

A.M. Foster & Co. also produced a catalog in 1914, specifying that they were "Owners of the Foster Sealfast Jar" and introducing the new half-pint size. This increased the selection to four sizes: half-pint, pint, quart, and half-gallon. The illustrations showed that the jars were sealed by the old-style Lightning closures. Various newspapers advertised Sealfast jars from 1917 to 1922 (Caniff 2007:7).



Figure 26 – SEALFAST "SOLD BY" jar (North American Glass)



Figure 27 – SEALFAST jars (A.M. Foster & Co. 1907:28-29)

Caniff (2007:6-7) added a new dimension to the study of Sealfast jars. Caniff included photos of two half-pint jars, one embossed "SEALFAST" on the side, the other embossed "FOSTER / SEALFAST" in the same place. What made these jars unusual was a glass bead around each neck (Figure 28). The former Kearns-Gorsuch plant of the Hazel-Atlas Glass Co. (Zanesville, Ohio) made one beaded SEALFAST jar; it was embossed "FOSTER K-340-11" around the outside of the base (see Kearns factory section or Lockhart et al. 2008).

On the same page, Caniff discussed and illustrated another unusual SEALFAST jar (Figure 29). These jars had to have been made after the 1914 catalog that showed the old-style neck. He also noted a 1990 report by collector Bob Good of a quart SEALFAST jar with a beaded neck. We suspect that these jars were all made near the end of the tenure of A.M. Foster & Co. Hazel-Atlas did not acquire the Kearns-Gorsuch plant until 1920 (Lockhart et al. 2008).

On a final note, most of the jars (and many of the prescription bottles) that have no embossed manufacturer's logos were probably made by the Marion Flint Bottle Co. between 1893 (when Foster began business) and 1922, when Marion became part of the Upland Flint Glass Co. The firm was making fruit and packers' jars by at least 1904 and had two semiautomatic press-and-blow machines by at least 1909. Although the firm adopted an MB ligature when a reorganization created the Marion Bottle Co. in 1916, the earlier business seems to have rarely used a logo. The latter firm seems to have discontinued fruit jar production (see the section on Marion Flint Glass Co. and Discussion and Conclusions [below] for more information).



Figure 28 – SEALFAST jars with beads around the necks (Caniff 2007:6)

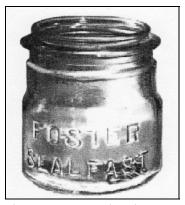


Figure 29 – Unusual neck on FOSTER SEALFAST jar (Caniff 2007:6)

#### **SEALTITE** (ca. 1922-ca. 1929)

Toulouse (1969:281) listed a machinemade jar with a "Lightning closure, old-style neck" embossed "SEALTITE / TRADE MARK" on the side. Although he could not identify the manufacturer, he dated the jar ca. 1920-1930.



Figure 30 - SEALTITE jar series (Creswick 1987:21)

#### Both Roller (1983:325) and Creswick

(1987:121) presented essentially the same information about these jars (Roller #1174-1177, Creswick #2603-2606) – although Creswick added two extra variations. Two of these had the old-style Lightning seals and wide mouths. All but one were colorless, and some solarized to an amethyst color. The main four variations were:

- 1. SEALTITE (horizontal block letters)
- 2. SEALTITE (horizontal block letters) / TRADE MARK
- 3. Seal Tite (upwardly slanted cursive)

4. SEALTITE (slight arch) / WIDE MOUTH / MASON (horizontal – block letters)

Several distinctions are worth noting (Figure 30). First, some of the SEALTITE (block letter) and SEALTITE / TRADE MARK jars were embossed "PA G Co" on the base. These were made by the Pennsylvania Glass Co. of Anderson, Indiana (ca. 1900s-1915) or Dunbar, West Virginia (ca. 1915-1920s). One variation had the "TITE" in SEALTITE ghosted over "FAST."



Figure 31 – Lid as noted by Roller (2011:471)

Roller (2011:471) added that the lids on the "PA G Co" jars were embossed with "S" to the left of a "raised dot dual ramp sealing aid where bail rests" and "T" to the right (Figure 31). At least one jar with a ghosted "SEALTITE" over "SEALFAST" had a "54" inside the ejection (valve) scar on the base. Second, one variation of the SEALFAST / TRADE MARK jars had both the "TITE" over a ghosted "FAST" on the side and the a ghosted "FOSTER" covered by "PA G Co" on the base (Figure 32). This certainly establishes a connection between Pennsylvania Glass and Foster. It is possible that Hazel-Atlas (or another factory making Sealfast jars) used the Pennsylvania Glass Co. as a subcontractor for the Sealtite jars and sent them some old Sealfast molds to use. The ghosting probably indicates that the Sealtite jars were made (or at least introduced) later than the Sealfast brand.



Figure 32 – Seal Tite jar (Caniff 2006)

Third, Creswick noted a variation unlisted by Roller. This jar still used the Lightning seal, but it was embossed "Seal Tite" in upwardly slanted cursive. Creswick (1987:121) also noted that "lids on the Sealtite jars are often embossed with letters S T." She seems to have intended the statement to be generalized, although she placed it in the section with the cursive jar. See the Discussion and Conclusions section for different look at these jars.

The final distinction is for the only jar in the series with a continuous-thread finish for a screw-top closure. The finish had a large bead for sealing and was embossed "SEALTITE (slight arch) / WIDE MOUTH / MASON (both horizontal" in block letters. Roller (1983:325) called these "rare, little-known jars." They were made in light green glass and were embossed on their bases with "IPGCo" in a diamond – the logo of the Illinois-Pacific Glass Co., used from ca. 1908 to 1926 (see Illinois-Pacific section or Lockhart et al. 2005). These jars were obviously made for use on the West Coast (Table 2 provides the characteristics of Sealtite jars). According to Roller 2011:471), the caps on these jars were embossed "SEALTITE WIDE MOUTH MASON ILLINOIS PAC. GLASS CO."

We attempted to find advertisements for Sealtite jars. Initially, we duplicated the search performed by Caniff (2007:7). We searched for Sealfast jars by using the search string "sealfast fruit jar" in a newspaper, limiting the search to the 1900-1930 period; we discovered dozens of ads for the Sealfast jars – including those reported by Caniff. When we attempted an identical

search during the same time period – substituting "sealtite" for "sealfast" – we failed to locate a single ad for these jars. Using "seal tite" (two words) instead of "sealtite" also failed to uncover a single ad for the jars. We repeated the search from 1930-1950 with the same results. We *did* discover that the terms "sealtite," "seal tite," and "seal-tite" were used for an incredible number of products including (but not limited to) sealing rings for Mason jars, seals for garage doors, refrigerators, houses, and even hams – but no fruit jar ads.

Body	Base	Seal
SEALTITE	PA G Co	old-style Lightning
SEALTITE ghosted over SEALFAST	unknown	old-style Lightning
SEALTITE ghosted over SEALFAST	PA G Co ghosted over FOSTER	old-style Lightning
SEALTITE / TRADE MARK	bare	old-style Lightning
Seal Tite (cursive)	bare	old-style Lightning
SEALTITE / WIDE MOUTH / MASON	IPGCo in a diamond	Continuous-thread with bead

# Table 2 – Sealtite Jar Variations

This presents a bit of a problem. While Sealfast jars were clearly made for and offered by A.M. Foster & Co. from at least 1907 (probably 1903 or earlier) until probably the termination of the firm, we have no comparable date range for Sealtite jars. We should first review what we know.

1. Sealtite jars were virtually identical to Sealfast jars. At least two Selafast molds were altered to make Sealtite jars.

Sealtite jars were produced long enough to be available in at least four distinct variations.
 Although Leybourne (2008:388) priced the more common Sealtite jars at \$20-25 in 2008,
 McCann (2012:280) noted a range of \$50-75 for all Sealtite jars and specified that they were

"not available." This suggests that the jars are either *very* popular with collectors or that they were *not* made over a long period of time.

3. The leading fruit jar collector publications place these jars in production between 1900 and 1930 – the same range as the Sealfast jars.

4. Some of the most common Sealtite jars were made by the Pennsylvania Glass Co., in operation from at least 1889 to 1924. The rarest variation was made by the Illinois-Pacific Glass Co. between ca. 1908 and ca. 1926.

While none of these facts lead to solid conclusions, they do provoke speculation. Despite the ghosting of "SEALTITE" over "SEALFAST," the period when the the Pennsylvania Glass Co. was in business corresponds to the date range when A.M. Foster offered Sealfast jars; thus, the two jars must have been made concurrently – at least during part of the Sealfast manufacturing history. Assuming that this logical conclusion is correct, there are several possible explanations:

1. A.M. Foster & Co. obviously marketed the Sealfast jars, but Dean, Foster & Co. might have sold the Sealtite containers – although this fails to explain the lack of advertising.

2. Sealfast may have been primarily marketed to housewives for home canning, while the packing industry was targeted for Sealtite jars. This may explain the lack of advertising of Sealtite in the popular press.

3. Sealfast may have been marketed by A.M. Foster & Co., while the Pennsylvania Glass Co. sold Sealtite as its own brand. Also see Discussion and Conclusion section below.

# **Discussion and Conclusions**

A.M. Foster & Co. was in business from 1893 to at least 1925, possibly until 1928 or 1929, when an apparent merger created the Foster-Forbes Glass Co. The firm was clearly a jobber (wholesaler) and did not make its own bottles – despite its claims in ads and catalogs. During at least the early days of the firm, however, most if not all of its pharmacy bottles were manufactured by glass houses that were in some way affiliated with Adelbert M. Foster. For example, Foster was an officer of both the B.F. Leach Glass Co. and the Marion Flint Glass Co. as well as purchasing the Millgrove Glass Co. It is apparent, however, that fruit jars were made for Foster by the Hazel-Atlas Glass Co., Kearns-Gorsuch Glass Co., Pennsylvania Glass Co., Illinois-Pacific Glass Co., and possibly others.

There appears to be no temporal difference between the arched and horizontal variations of the A.M.F.&Co. mark. Their use falls into the 1893-1911 period. The company apparently discontinued the mark after ca. 1911, possibly coinciding with the acquisition of the Upland Cooperative Glass Co. – renamed the Upland Flint Bottle Co. Although we have no documentary evidence, this corresponds with the beginning of the adoption of early generic bottles and the discontinuance of embossed labels on prescription bottles. By ca. 1922, embossed prescription bottles were almost entirely eliminated.

There was certainly an overlap in bottle styles between A.M. Foster & Co. and the older, Dean, Foster & Co., although each company also made bottle styles that were not manufactured by the other. Klondike ovals marked "KLONDIKE / A.M.F.&Co." were made for A.M. Foster & Co., but bottles embossed only "KLONDIKE" may have been made for Dean, Foster & Co. They appear in the 1901 Dean, Foster catalog. Kellogg Ovals were offered by Dean, Foster & Co., but we have not found any without the A.M.F.&Co. mark.

The Sealfast jars, as mentioned above, were possibly manufactured for both companies – although the A.M. Foster & Co. assignment is more certain. The distributor of Sealtite jars is less certain. It is interesting that neither Roller (1983) nor Creswick (1987) mentioned either of the Foster firms as distributors of the Sealtite jars – despite the obvious physical similarities between the jars and the ghosted SEALTITE over SEALFAST and PA G Co over FOSTER on some jars. We have not discovered any historical references to the use of the Sealtite jars by Foster (or anyone else). Caniff (2006) stated that "we know almost nothing" about the jar embossed "Seal Tite" in upwardly slanted cursive. He added that the jars had unmarked lids – even though Creswick (1987:121) claimed that the lids were embossed "S T." Caniff noted that housewives could have placed unmarked lids on these jars in place of the embossed ones. We would like to add that the reverse is equally possible. Caniff included a photo of two of the jars (see Figure 32).

Roller (2011:470) also provided some interesting information about Seal Tite jars. According to the entry for the jar, Jerry McCann and Tom Caniff noted "the closure to be a beaded neck (*Ball* **IDEAL** style) with a full wire bail. . . . since the pint jar has almost no shoulder, it is possible that the mold has been reworked" (Figure 33). We suggest that this provides an important clue to the *real* identity of this jar. *All* of the other Sealfast and Sealtite jars have block letters



Figure 33 – Comparison of SEALTITE, Seal Tite, and Ball IDEAL jars (Creswick 1987b:12, 21)

and the same type of finish and closure. Neither the embossing nor the finish on the Seal Tite jar fits the pattern set by the other jars.

There appears to have been no trademark or patent taken out for Sealfast, Sealtite, or the jar, itself. Thus, anyone could have made the jars, including one of the suppliers for A.M. Foster & Co. Since the cursive jars resemble ones made by the Ball Brothers, these jars may have been manufactured by that firm for its own use – *not* for sale to (or through) A.M. Foster & Co.

We would also like to propose a new dating sequence for the jars. There is no question that A.M. Foster was selling fruit jars to the University of Illinois by at least 1903, so we propose that as an early date for the SEALFAST jars (although they could have been made slightly earlier). SEALFAST certainly appeared in the 1907 A.M. Foster & Co. catalog and was advertised until 1922.

Although this is pure speculation, A.M. Foster & Co. could have discontinued Sealfast in 1922. The Upland Flint Bottle Co. could have commissioned the Pennsylvania Glass Co. to make the jars. When Pennsylvania Glass ceased operations in 1925, Upland may have become tired of the problems involved with jobbing out jar production and begun its own manufacturing of Sealtite jars. The plant was making fruit jars by at least 1915 and product jars soon thereafter. The factory began machine production by at least 1917, probably earlier. See the section on the Upland firms for more information. At least briefly, the Illinois-Pacific Glass Co. made the SEALTITE jars for western sales.

We propose that SEALFAST production ceased during ca. 1922, and SEALTITE manufacture began at the same point. SEALTITE may have continued as the only brand carried by A.M. Foster & Co. until the firm closed ca. 1929 – although the death of A.M. Foster may have created some major changes, including the elimination of fruit jars. We suggest date ranges for the jars of:

SEALFAST – ca. 1903-ca. 1922 SEALTITE – ca. 1922-ca. 1929 (possibly a shorter period)

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