A.G. Smalley & Co.

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

After working for several years in the employ of glass jobbers and factories, Albert Geary Smalley took over the sales office of A.E. Buck & Co. in 1877, renaming the firm as A.G. Smalley & Co. Initially serving the druggist trade, Smalley branched into fruit jars by at least 1882. In the 1890s, Smalley received several patents for square fruit jars and one milk jar – and gained control of some demijohn patents. He served these venues – with increasing emphasis on fruit jars – until his death in 1906. At that point, his wife and one of his sons incorporated the business and continued until ca. 1915. Another son entered in competition against the original firm and eventually became Smalley, Kivlan, and Onthank.

Histories

Lovell & Smalley and Smalley's Early Glass Dealings (1873-1877)

In 1873, Albert G. Smalley teamed up with Clinton S. Lovell as Lovell & Smalley, glass manufacturers' agents. The firm was apparently very short lived; Smalley became one of the principals in Dean, Foster & Co., another glass jobber in 1874 and remained until the following year. By 1876, Smalley worked for E.A. Buck & Co. (Roller 1983:439; von Mechow 2021). The Westford Glass Co., operated by A.E. Buck & Co., was a major supplier for Dean, Foster & Co. until at least 1878 (see the Dean, Foster & Co. section for more information). According to Roller (1983:439), Buck also operated a sales office in Boston – a business that was succeeded by A.G. Smalley & Co. by 1877.

A.G. SMALLEY & Co., Boston, Massachusetts (1877-1915)

According to Griffenhagen and Bogard (1999:104), Albert G. Smalley & Co. was established in 1866 in Clayton, New Jersey. The authors noted that Smalley had two glass factories by 1890 – in Clayton and Pittsburgh – and opened a third one in Woodbury, New Jersey. The firm made "glassware for druggists, shop furniture, and lettered prescription bottles with extra long corks." We have been unable to verify a single one of the factory claims,

although Smalley *did* advertise druggists' glassware and sundries from 1877 to at least 1907 (Roller 1997; 1998; von Mechow 2021).

The confusion almost certainly arose from Smalley's suppliers. Although John M. Moore & Co. purchased the Fislerville Glass Works in 1859, Fislerville became Clayton, New Jersey, in 1867. The plant made a large variety of bottles, including pickles, preserve and jelly jars, druggists' and perfumer's glassware. This was almost certainly Smalley's Clayton business (Pepper 1971:183; Roller 1983:257-258; Toulouse 1971:367). The Woodbury factory was again surely the Woodbury Glass Works, open from 1881 to 1901 at Woodbury, New Jersey (Pepper 1971:195-197, 199). The Pittsburgh plant could have been almost any that produced either prescription ware or jars.¹

An 1898 Boston city directory ad noted that A.G. Smalley & Co. was "ESTABLISHED IN 1866," and this was almost certainly Griffinhagen & Bogard's source for the early date. This probably referred to the Westford Glass Works of A.E. Buck & Co. Although the original factory was incorporated in 1859, the firm declared bankruptcy in 1865. The new operating firm, A.E. Buck & Co., incorporated later that year – although the official opening may have been 1866 (McKearin & Wilson 1978:151-152). Since Smalley was certainly involved with A.E. Buck & Co. by 1876, he may have claimed the older firm in his advertisement.

A.G. Smalley & Co. was first listed in the 1877 Boston city directory as Successors to A.E. BUCK & CO. The firm was located at No. 18 Blackstone Street and was listed as "MANUFACTURERS OF FRUIT JARS, CARBOYS, DEMIJOHNS, BOTTLES, FLASKS, STONE JUGS, Corks, Labels, Bottle caps, and Bar Goods, Druggists' and Perfumers' Glass Ware. MOULDS MADE, AND BOTTLES BLOWN TO ORDER." The company was also listed separately under Druggists' Glass Ware. By 1882, the firm also had locations at 35 and 39 John St. By 1886, the second address had changed to 128 Hanover, but that listing had disappeared by 1889. The firm was not listed under the glass manufacturers heading from 1902-1907 and last appeared in the 1910 directory (Freeman 1965:333; von Mechow 2021).

¹ A review of Pepper (1971) disclosed no glass factories other than the Moore Brothers at Clayton and the Woodbury Glass Works at Woodbury that could have been Smalley's suppliers. Hawkins (2009) had no listing for A.G. Smalley & Co. at Pittsburgh.

Although Smalley called himself a "Manufacturer of Genuine Mason Fruit Jars" in an 1882 order form, there is no evidence that his firm actually made any glass. The form included a wood cut of an obvious factory with smoking chimneys, and this may have been at 35 and 39 John St. (Freeman 1965:333).² This address, however, was no longer listed in the city directories after 1886. If Smalley actually *owned* a glass plant, it was only for a few years. The Consolidated Fruit Jar Co. may have been his first supplier of Mason jars, although he used many different glass houses to provision his needs (Toulouse 1969:355-356; 1971:447-448).

On May 4, 1905, Smalley filed for a trade mark for the term "WARRANTED FLASK" with "WARRANTED" in a slight arch. He received Trade Mark No. 49,875 on February 20, 1906, for use on glass bottles and claimed it had been used since October 1, 1882. Strap-sided flasks embossed "WARRANTED / FLASK" and similar variations are common and are illustrated in various glass house catalogs.³ For example, a flask with Smalley's exact configuration was illustrated



Figure 1 – Warranted Flask (Carey 1970:57)

in the 1901 catalog for Dean, Foster & Co. (Freeman 1965), the 1907 catalog for A.M. Foster & Co., and the 1909 Price List for Robert J. Alther (Carey 1970:57 – Figure 1). All of these firms were jobbers, and their affiliation – if any – with Smalley are currently unknown to us.

In 1906, Smalley was disabled by a stroke and died in March of the following year, followed just 52 days later by his daughter, Florence. His widow, Elizabeth, and son, Frank H., incorporated as A.G. Smalley & Co., Inc. in 1906, apparently in connection with the senior Smalley's stroke (Caniff 2013:44; Roller 1983). A 1907 ad in the Boston city directory not only confirmed the incorporation date, it noted that the Smalley firm was "Manufacturers of Patented Fruit Jars[,] Milk Jars and Bottle Glassware Controllers of Patented Glass Specialities." Mother

² The Dick Roller files for Boston (Roller 1998) only listed John St. as an address for Smalley – not for any type of glass factory.

³ During the period between the late 1890s and the onset of Prohibition, consumers were increasingly concerned about the volume of glass bottles and jars. Liquor flasks were often embossed with words like "WARRANTED," "FULL PINT," "GUARANTEED," or similar words to indicate that the container held the correct amount.

and son continued to operate the business until ca. 1915, when they renamed the firm the Smalley Fruit Jar Co. (Roller 1983:440; von Mechow 2021). The Thomas Registers listed A.G. Smalley & Co. as making fruit jars at Boston, Massachusetts in 1905 and continued that listing until 1916 (Thomas Publishing Co. 1905:577; 1916:3781). Roller (1983:311) noted that, "according to Frank Smalley, son of A.G. Smalley, the firm began to sell machine-made jars" about 1912.

Smalley Fruit Jar Co., Boston, Massachusetts (1915-1918)

A.G. Smalley & Co. incorporated on April 12, 1915, although Roller (1983:440) stated that the new firm began ca. 1914.⁴ As noted above, the Thomas Registers still listed A.G. Smalley & Co. as making fruit jars as late as 1916. Beginning in 1917, the firm was listed as the Smalley Fruit Jar Co. Smalley was no longer listed in the 1920 or 1921 editions (Thomas Publishing Co. 1917:4104; 1918:4420). According to Roller (1983:440), the business apparently failed in 1917; however, *Good Housekeeping* magazine (1918:95) still listed the Smalley Fruit Jar Co. as making both the Smalley Nu Seal Fruit Jar and the Eureka Fruit Jar in May of 1918. It is likely that Smalley reorganized the corporation as the Eureka Jar Co. soon thereafter. See the Other E section for a short discussion of Eureka jars and the Eureka Jar Co.

Smalley Jar Co., Boston, Massachusetts (1906-1907)

Frank Smalley's younger brother, Edgar, began working for the firm by ca. 1894. Upon the death of the senior Smalley in 1906, Edgar separated from his mother and older brother in A.G. Smalley & Co. – along with John L. Kivlan and Charles F. Onthank; the three formed the Smalley Jar Co. Mrs. Smalley and Frank sued Edgar and his two partners over the name and won. The partners then called themselves Smalley, Kivlan & Onthank. See that section for more information.

⁴ We have not discovered why Roller chose the ca. 1914 date.

⁵ Toulouse (1969:355; 1971:447-448) noted that the Smalley Jar Co. was a subsidiary of A.G. Smalley & Co. that was established in 1905 and closed in 1911. Roller called earlier writings "incorrectly written histories" of the company.

Patents

According to an ad in the 1898 Boston city directory, Smalley was the owner of several patents, including:

"Smalley" Square Fruit Jars; "Smalley" Glass Milk Jars with Tin Handles; "Smalley" Crated Demijohns; "Oakman" Crated Demijohns; "Smalley" Boxed Demijohns; Smalley's Tall Carboy.

Smalley's Square Fruit Jar Patents

applied for two

patents on

Albert G. Smalley received three patents for square fruit jars in 1896. He

A. G. SMALLEY.

FRUIT JAB.

Patented Dec. 1, 1896.

Fig. 2.

A. G. SMALLEY.

Fatented Dec. 1, 1896.

Fig. 2.

A. G. SMALLEY.

Fatented Dec. 1, 1896.

Fig. 2.

A. G. SMALLEY.

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Fig. 2.

A. G. SMALLEY.

Fig. 2.

Figure 3 – A.G. Smalley's final 1896 patent

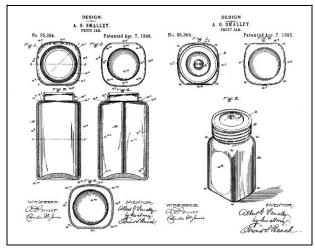


Figure 2 – Two of A.G. Smalley's 1896 patents

February 24, 1896. One was for a "Design for a Fruit-Jar." He received Design Patent No. 25,354 on April 7 of the same year. Although Smalley applied for a regular (letters) patent for a "Fruit-Jar" on the same day, he was not issued Patent No. 572,281 until December 1, 1896. Although there are small differences in the patent drawings, they are clearly for the same jar (Figure 2). Smalley filed for a slight change in the design on March 4, 1896, and received Design Patent No. 25,355 on April 7 of that year — the same date that he was granted his earlier design patent. Again, it is obvious from the drawings, that this is for essentially the same jar (Figure 3).

Smalley's Milk Jar Patent

Smalley applied for a patent for a "Bottle Attachment" on August 2, 1897, and received Patent No. 601,988 on April 5, 1898. This was for a completely different type of vessel – a milk

jar. The patent was for a metal handle that attached to a somewhat typical cap-seat (common-sense) milk bottle by two metal bands. The top band encircled the neck, and the lower band fit into a groove blown into the center of the body of the bottle – a slight modification to the bottle, itself. The handle/band composite was not removable (Figure 4).

Demijohn Patents

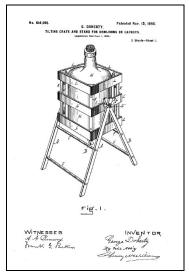


Figure 5 – George Doherty's 1898 Demijohn patent

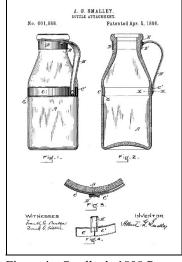


Figure 4 – Smalley's 1898 Patent

boxes during the 1894-1898 period – including a stand with a swivel for easier pouring from these larger containers (Figure 5). Most of the applications for these patents were filed in 1897. None of these were specifically patented by Smalley, nor were any directly assigned to A.G. Smalley & Co. There were dozens of patents for demijohns issued between 1877 and 1898, but we have been unable to identify any that were specific to Smalley.

The patent office issued at

Searches for carboys produced similar results.

least 18 patents for demijohns in

1898, along with seven for crates or

Thomas J. Duffy's 1900 Milk Bottle Handle Patent

On February 23, 1899, Thomas J. Duffy of Boston applied for a patent for a "Bottle Attachment." He received Patent No. 654,056 on July 17, 1900, and assigned the patent to Florence E. Smalley of Chelsea, Massachusetts. This immediate assignment suggests two things about the relationships. First, an immediate assignment was usually made by an employee to his/her employer. Thus, Duffy likely worked for A.G. Smalley & Co. Second, Smalley's daughter, Florence, was very involved in the workings of the family firm by that time.

The patent drawing (Figure 6) showed two different shapes for the handles. These handles were adapted to fit the Smalley Milk Jar, patented two years earlier in 1898. The larger handle, dubbed the "No. 4 Florence Handle" in a 1901 ad, was named for Smalley's daughter, while the inventor claimed the "No. 5 Duffy Handle" for himself. They were an apparent failure. According to Caniff (2013:44), only a couple of Duffy-handled jars have ever been reported and none of the Florence variations.

Fig. 2. Withdraw Marketter Markette

Figure 6 – Thomas Duffy's 1900 milk jar handle patent

Charles H. Nicholson's 1904 Patent

Charles Harold Nicholson applied for a patent for a "Jar-Closure" on April 6, 1903. He received Patent No. 748,642 on January 5, 1904. Although the patent was not assigned to Smalley, he apparently purchased the rights to it. The patent drawing showed a simple wire clamp holding a glass lid to the jar, but Smalley adapted the closure to work with the same Lightning clamp as used on his earlier jars (Figure 7). The major change was a "slight annular groove for a packing ring" on the sealing surface and "one small thread on the neck" (Creswick 1987a:194).

Containers and Marks

Various references, including Toulouse (1969; 1971), Roller (1983; 1998), and Creswick (1987a:194; 123-124; 134-135, 154) either inferred or named several glass houses that supplied Smalley and the related companies. John M. Moore of Clayton, New Jersey, and the Woodbury Glass Works were probable suppliers of drug store bottles and sundries for the original company, as was A.E. Buck & Co. in Westford, Connecticut (Roller 1983:439). Early suppliers of jars were the Clyde Glass Works, Poughkeepsie Glass Works, and the Cohansey Glass Mfg. Co. (Roller 1983:439). Creswick (1987a:194) listed other suppliers, including the Illinois Glass Co., Hazel-Atlas Glass Co., Whitall Tatum Co., Marion Flint Glass Co., and others. She did not discuss *why* she chose these firms.

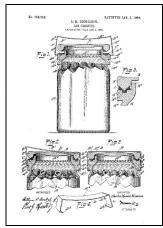


Figure 7 – Nicholson's 1904 patent

We have not discovered any identifiable markings that would indicate prescription or other druggists' containers sold by Smalley. It is likely that Smalley only had his identification blown into fruit and some product jars.

Smalley's jars may be divided into products made for each company (A.G. Smalley & Co., A.G. Smalley & Co., Inc., and the Smalley Fruit Jar Co.), jar types, or logos. This section concentrates on logos. See Discussion & Conclusions section for a discussion of the jars by company and a chronology of jar types.

AGS monogram (1895-ca. 1909)

Toulouse (1971:41, 479) showed an AGS monogram and dated it 1877-1907. He attributed the mark to Smalley and illustrated a single example of it in his fruit jar book (Toulouse 1969:286). In his earlier book, however, he



Figure 9 – Base of Full Measure AGS monogram jar (North American Glass)

dated the jar ca. 1896-1907 (based on the patent date and his understanding on the closing of the firm).

Griffenhagen and Bogard (1999:122) noted that A.G.S. was used by Albert G. Smalley from 1877 to 1907. We currently do not know whether Griffenhagen and Bogard actually referred to the monogram, made a typographical error, or had seen bottles with

the initials spread out in a line – but they were probably parroting Toulouse. Roller (1983:229-330, 357; 2011:478-479) illustrated the AGS monogram on two SMALLEY jars (Figure 8) and noted it on the SMALLEY FULL MEASURE jar and the FULL MEASURE jar. At least one of these jars was advertised on July 5, 1895.

All the jars with the AGS monogram were square in design and were embossed on the bases with either the April 7 or December 1, 1896



Figure 8 – Slight variations of the AGS monogram (North American Glass)



Figure 10 – Full Measure, AGS monogram jar (North American Glass)

patents or the December 13, 1892 – or all three (see Patents above – Figure 9). All the jars with the AGS monogram also included the term "FULL MEASURE" in an arched outline above the logo (Figure 10). Smalley received Trade Mark No. 22,146 for the term "Full Measure" on December 13, 1892. By July 5, 1895, Smalley advertised and illustrated the SMALLEY FULL MEASURE container as the "New Smalley Fruit Jar" (Roller 1997). Roller (1983:330; 2011:478) illustrated one of these jars on a Poughkeepsie Glass Works envelope (Figure 11).

Caniff (2011:42-43) added that at least some of the square jars



Figure 12 – Consolidated Fruit Jar Co. insert (North American Glass)

were made and advertised by the Poughkeepsie Glass Works. A liner on a round jar with the AGS monogram was POUGHKEEPSIE GLASS WORKS,
Poughkeepsie, N. Y.

GUART

From undated Poughkeepsie
Glass Works envelope.

Figure 11 – AGS monogram jar from Poughkeepsie envelope (Roller 1983:330)

embossed with "CONSOLIDATED FRUIT JAR COMPANY" – suggesting that Consolidated also made some of the jars (Figure 12). Caniff further noted that the description "Smalley' Square Fruit Jars" on a 1908 list may indicate that jars with the AGS monogram were made that late, although the jars were *not* mentioned on a 1910 billhead.

Creswick (1987a:194) illustrated and discussed four variations of the jars, made in pint, quart, and half-gallon sizes (Figure 13). Two variations were embossed "SMALLEY" above "FULL MEASURE." These include the monogram both in and without a plate. Lids for these also vary – one with



Figure 13 – Variations of the AGS monogram jar (Creswick 1987a:194)

the monogram and one with "FOR SMALLEY FRUIT JARS." The lids may have a glass insert embossed "CONSOLIDATED FRUIT JAR COMPANY / NEW YORK" with the CFJCo

monogram in the center. The second two variations used "TRADE MARK" above the "FULL MEASURE" and vary by closure type. One had a screw cap; the other used a lightning-style closure. Based on the above information, these jars should be dated 1895-ca. 1909.



Figure 14 – Smalley lid variations for AGS monogram jars (North American Glass)

The AGS Full-Measure jars were accompanied by two lid styles (Figure 14). One style was a milk-glass lined zinc lid stamped "TRADE MARK FULL MEASURE (arch) / FOR SMALLEY FRUIT JARS (inverted arch)" with leafy designs in between the two lines. The milk-glass liners could be unmarked or could be embossed "CONSOLIDATED FRUIT JAR COMPANY (arch) / NEW YORK (inverted arch)" with the CFJCo monogram in the center. The second type – made of aluminum – was stamped "ALUMINUM SMALLEY CAP (arch) / PUREST METAL KNOWN (inverted arch)" with the AGS monogram in the center. We have been unable to determine any temporal associations for these variations.

A.G.S.&Co. (1897-ca. 1912)

Toulouse (1971:40) stated that an AG&SCo mark was of "uncertain age" and "unknown maker or user." He described the bottle as a "quart round bottle, straight neck for cork finish. All-over design of eagles except the oval label space." We were unable to find a design patent for this bottle, and the arrangement of the letters/ampersand may or may not be a typographic error.

Taylor (1972:49) and Tutton (1994:23; 2003:9) both described a milk bottle embossed on the base "AGS&Co., Pat. April 5, 1898." The bottle was the Smalley Milk Jar, patented by A.G.



Figure 15 – Smalley Milk Jar (California Parks collection)

Smalley & Co. on April 5, 1898 (see the Patent section above). The BRG found two examples

of the AGS&Co mark with the 1898 patent date in the California State Park milk bottle collection (Sacramento) in 2006. Both marks were on milk jars with sheet-metal "pitcher" handles attached to the jars by two metal bands (Figure 15). The closure was "Lightning" style.



Figure 16 – Earliest Smalley Milk Jar base (eBay)



Figure 17 – Base of most common Smalley Milk Jar (California Parks collection)

Giarde (1980:5-6) presented three variations of this mark (A.G.S., A.G.S.Co., or A.G.S.&Co.) and dated

them "turn of the century." He noted that "Smalley did not manufacture milk bottles but had them made by glass manufacturers such as Whitall-Tatum & Company and Illinois Glass Company." He was probably in error about the A.G.S.Co. logo. As Toulouse before him and most researchers since, Giarde often relied on information mailed to him by other collectors. The A.G.S. mark was probably a misreport of the first variation

described below.

Despite the excellent article by Caniff (2013), these jars have not been well studied. There were at least three different basal configurations. Certainly the earliest base, on the original bottle advertised in 1897 (Caniff 2013:43-44), was embossed "A.G.S. / PATENT (both arches) / 2 / APP'D FOR / & CO. (both inverted arches)" on the base (Figure 16). The most common base was embossed "AGS&CO. (arch) / 4 / PATENTED / APRIL 5, 1898 (inverted arches)." These are also found with the numeral 9 in the center and probably other numbers (Figure 17). Likely the



Figure 18 – Last Smalley Milk Jar base (eBay)

last of the series (unless there are more variations) was embossed "A.G. SMALLEY & CO. / PATENTED APRIL 5 1898 (both arches) / 5 / BOSTON & / NEW YORK (horizontal)." Although late, these were still on bottles with the original type of handle (Figure 18).

Although intended as milk jars, the Smalley-patent containers were also used for other purposes. Caniff (2013:42-43) illustrated two of the jars with unusual paper labels. One had a

label proclaiming that the contents were "The Finest Coffee Produced in the World at any Price" – although the label lacked the company or brand name. The other was filled with "The Champion Brand" – probably maple syrup. As noted in the patent section, Thomas J. Duffy patented two alternative handles for the Smalley Milk Jar in 1900. Unlike the earlier Smalley-patent handle, these only attached to the bottle's neck. A larger handle – styled the "No. 4 Florence Handle" in a 1901 ad – was made to fit the entire hand (or three fingers for a large person), while the smaller "No. 5 Duffy Handle" could only accommodate two fingers (Caniff 2013:44) – also see the discussion in the patent section.

Caniff (2013:43-44) reproduced a depiction of the Smalley milk jar from a Smalley letterhead dated August 31, 1897, just 21 days after Smalley applied for the patent. The last report of the milk jars was a billhead dated June 2, 1910, but the later fim – the Smalley Fruit Jar Co. – only advertised fruit jars, not milk jars (Caniff 2013:44; Roller 1997). Thus, the milk jars were probably made from 1897 until the shift to machine production ca. 1912.

A.G. SMALLEY & CO. (1896-1915)

Creswick (1987a:193-194) illustrated and/or discussed four varieties of jars marked with A.G. Smalley & Co. Three of these were



Figure 20 – Base, lid, and finish (North American Glass)

square in cross section and were embossed with the company name on the base and

glass insert for the lid. These bore the April 7 and December 1, 1896, patent dates. The remaining jar was round and only had the name on the glass insert. The base was embossed with December 13, 1892, the trade mark date for "FULL MEASURE" (even though the trade mark was *not* embossed on the jar) and the April 7, 1896, patent date (Figures 19 & 20).



Figure 19 – A.G. Smalley & Co. base (North American Glass)

Smalley also had product or packer jars made in his name. An example was a coffee jar, probably made by the Hazel Glass Co. prior to 1902 and the Hazel-Atlas Glass Co. after that date. The amber coffee jar had straight sides with no discernable neck or shoulder and was sealed by a screw cap. The base was embossed "A.G. SMALLEY & CO. BOSTON



Figure 22 – Base, lid, and finish (North American Glass)

& NEW YORK (or BOSTON, MASS.) and was topped by a glass liner in either colorless or white milk



Figure 21 – Unmarked square coffee jar (North American Glass)

glass (Figures 21 & 22). The jars were likely used during the early part of the 20th century (Caniff 1997:136-137). It is highly probable that

Smalley had numerous product jars made for his firm that do not show up in any of the literature. Product or packers' jars have not been discussed well in publication.

FULL MEASURE (1897-1915)

An 1898 ad in the Boston city directory noted that Smalley was the owner of "all Bottles with Trade Mark 'FULL MEASURE,' blown in the glass" (von Mechow 2021). Despite the word "bottles" in the description, the Full Measure trademark appears to have been primarily (possibly exclusively) used on jars (see sections on Royal – below – and AGS monogram – above). Only two other bottles consistently used of the term "Full Measure." One was a small, machine-made, medicinal-type bottle embossed "BAKER'S / FLAVORING EXTRACTS / BAKER EXTRACT COMPANY" on the front, with "FULL MEASURE" on one side panel and "STRENGTH &



Figure 23 – Baker's Full Measure bottles (eBay)

PURITY" on the other (Figure 23). These bottles are common, and the term "Full Measure" is almost certainly related to Baker rather than Smalley.

A series of flasks also were embossed "FULL MEASURE" on the front shoulder – in both arched and horizontal formats (Figure 24). These solarized to an amethyst color and were mouth blown into a two-piece mold with a cup bottom. The two-part finish was tooled. However, at least one flask was embossed "HONEST / FULL /



Figure 25 – Honest Full Measure flask – center (eBay)

MEASURE" (Figure 25). While Smalley certainly was involved with "WARRANTED" flasks – as shown by his 1905



Figure 24 – Full Measure flask (eBay)

trademark registration – it is unclear whether all (or even some) of the Full Measure ones were linked to Smalley. The Warranted and Full Measure (arched) flasks *are* the same style of container – the union oval (see Lindsey 2021 for a discussion of flask types). In addition, the fruit jars embossed "FULL MEASURE" had the

words in an arched configuration. Thus, the union oval flasks with the arched variation of the term "FULL MEASURE" *may* be ones commissioned by Smalley. The others likely were not.

Eureka Fruit Jar

Although these jars have generally been associated with the Eureka Fruit Jar Co., some were apparently sold by the Smalley Fruit Jar Co. According to *Good Housekeeping* (1918:95), the Smalley Fruit Jar Co. produced the Eureka Fruit Jar in 1918. Toulouse (1969:112-113) discussed two of these jars, both embossed on the front "EureKa" in cursive with the tail of the "E" underlining the slightly upwardly slanted word. One was embossed "EUREKA JAR CO. BOSTON, MASS" in a circle on the base; the other, "EUREKA JAR CO. DUNBAR, W.VA."

Roller (1983:117; 2011:183) added "PAT. PENDING" on jars from both company locations. Roller interviewed Frank H. Smalley, vice president of the Eureka Jar Co., who told him that "no patent was ever granted for these jars, because there was already a patent that interferred [*sic*] with their patent application." The Eureka firm paid a royalty to C.H. Nicholson

of New York, whose patent of January 5, 1904 (No. 748,642), enveloped the Eureka jars. Creswick (1987b:51-52) discussed the jars and noted two variations in finish designs (Figure 26). One of these had a single continuous thread to engage the metal clamp that held on the glass lid. On the other, two wide cam surfaces engaged the clamp. If the Smalley Fruit Jar Co. actually sold any of these jars, they were either entirely unmarked or were embossed with the name of the succeeding Eureka Jar Co. See the Eureka Jar Co. writeup in the Other E section for more information.



Figure 26 – Eureka Jar (Creswick 1987b:51)

Mason Jars (ca. 1880s-1890s)

Smalley's earliest ad in the 1877 Boston city directory listed the firm as "Manufacturers of Fruit Jars." Unfortunately, neither that ad nor one from 1880 (cited in Caniff 2013) mentioned what kind of fruit jars the firm sold. There is little doubt, however, that the original jars were Mason jars.

Freeman (1965:333) illustrated an 1882 order form from A.G. Smalley & Co. that showed two jars. The one to the left was embossed "MASON'S / PATENT / NOV. 30TH / 1858 (all horizontal)." The jar to the right was embossed "MASON'S (slight arch) / IMPROVED (horizontal)." The form included pint, quart, and half-gallon sizes of both jar types. Smalley noted that "our jars are warranted to be a strictly first-class Jar in every respect, being clear and bright and well packed."



Figure 27 – 1886 Smalley trade card (North American Glass)

By 1886, a Smalley trade card illustrated the same two types of Mason jars along with The Smalley Fruit Jar (see Smalley jar discussion below). The card bragged that the jars were "of our own make, bright and clean, and superior to most of the Mason jars on the market" (Figure 27). This order form suggests that Smalley originally sold Mason jars and later added the other jar types. At some point, Smalley apparently dropped the Mason line, probably when he introduced the screw-top square jars of his own design.

NU-SEAL (1904-1917)

According to Toulouse (1969:227-228, 287; 1971:389), A.G. Smalley & Co. used the NU-SEAL mark in two formats, although there appears to be no temporal distinction between them. One format was



Figure 29 – Royal jar with Nu-Seal (North American Glass)

simply the term "NU-SEAL" alone. The other was more complex, with "NU-SEAL" in an elongated diamond with "SMALLEY'S" above the diamond and "TRADE MARK" below it, all within a second, larger diamond. In his earlier book, Toulouse dated the simpler mark ca. 1915-

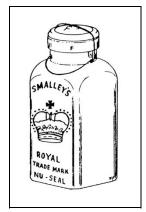


Figure 28 – Royal jar with Nu-Seal (Crestwick 1987a:194)

1919 and the more complex mark ca. 1904. In his later book, he spread the date range for both to 1904-1929.

The Nu-Seal jars actually divide into two major variations. The earliest was a jar in the

"Royal" series that was also embossed "NU-SEAL" on the heel and A.G. SMALLEY & Co. on the base. Another virtually identical jar had



Figure 31 – Royal Nu-Seal jar - ca. 1915 Marion Fruit Jar Co. brochure (Roller 1983:332)

a basemark of "SMALLEY FRUIT JAR Co. / BOSTON, MASS." (Figures 28-30) Both bases also had the January 5, 1904, patent date. (Creswick 1987a:195; Roller 1983:332; 2011:480-481). Roller (1983:332) added that



Figure 30 – Base of Royal Nu-Seal jar (North American Glass)

the jars could have a double-helix just below the rim, and he illustrated one the jars from the ca. 1915 Marion Flint Glass Co. brochure (Figure 31). This was almost certainly a transitional jar, made between 1904 and probably 1915. It is likely that the Smalley Fruit Jar Co. discontinued this model in favor of the diamond label jars.

The second style, illustrated and/or described by Roller (1983:331) and Crestwick (1987a:194) included both round and square jars embossed with the diamond logo discussed by Toulouse. These were embossed "SMALLEY FRUIT JAR Co. (arch) / BOSTON,



Figure 32 – Nu-Seal in diamond motif (Crestwick 1987a:194)

MASS. (inverted arch)" on the bases and were made between 1915 and 1917 (Figure 32). Roller (1983:332) illustrated one jar from Smalley Fruit Jar Co. that appeared in a ca. 1915 Marion Flint Glass Co. brochure (Figure 33).

ROYAL (1896-1915)

Jars trademarked ROYAL along

with an embossed crown on the front were marked A.G. SMALLEY & ca. 1915 In Co. or A.G. SMALLEY & CO., INC. on the bases. Albert G. Smalley registered the Royal trademark (#48,030) on December 5, 1905. The date of first use was unfortunately not recorded (Creswick 1987a:260; 1987b:150).

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Figure 33 – Nu-Seal jar – ca. 1915 Marion Flint Glass Co. brochure (Roller 1983:332)

At least nine varieties are known (Figure 34). One only had the word "ROYAL" embossed on the neck with both mouth-blown and machine made variations. The remaining variations had an illustration of a crown and the "FULL MEASURE" trademark embossed on the front. Most had

"ROYAL"
embossed on
the crown or
beneath it —
sometimes in
both places and
usually had the
capacity

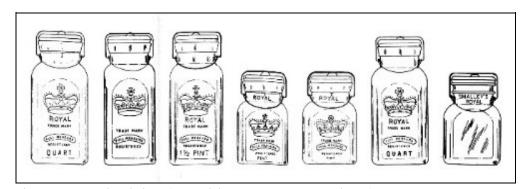


Figure 34 – Royal variations (Crestwick 1987a:186-187; 1987b:114)

(QUART,

PINT, etc.) embossed just above the heel (Figure 35). The front embossing could be in a tombstone-shaped plate. Bases were embossed "A.G. SMALLEY & Co." or "A.G. SMALLEY & Co., INC." (Creswick 1986a:186-187; Roller 1983:310-311; 2011:481 Toulouse 1969:264-265; 287).

Creswick (1987a:186) dated the jars only by their patent date – 1896 – and trademark date of 1905. She also noted that the jars were probably made for Smalley by the Cohansey Glass Mfg. Co., Clyde Glass Works, or Poughkeepsie Glass Works (and possibly others). These should not be confused with the earlier ROYAL jars made by the Hemingray companies. Roller (1983:310-311) added the Cohansey Glass Mfg. Co. to the list of manufacturers and dated the jars ca. 1896-1914. A ca. 1910 Cohansey trade card called the line "Royal Crown." Giarde (1980:6) included this mark as possibly being used on milk jars at the "turn of the century," although we have found no examples of that use.

THE SMALLEY (ca. 1884-ca. 1895 and ca. 1907-1917)

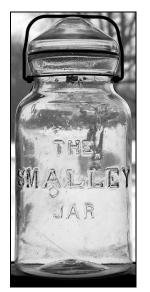


Figure 36 – The Smalley Jar (North American Glass)

This term was used on jars in two contexts. The earliest was embossed "THE / SMALLEY / JAR" on the front and had a conical lid held on by a wire bale arrangement (Figures 36 & 37; see Figure 27). The jar appeared with Patent dates of September 23, 1884 (Patent No. 305,554), and June 16, 1885 (Patent No. 320,107). Both patents were issued to Abram V. Whiteman (Creswick 1987a:195). These were probably made for Smalley

by the Warren Glass Co. (operated by the Whiteman brothers) between ca. 1884 and the early 1890s, when Smalley began to use jars made to his own patent (see the Whiteman/Warren section or Schulz et al. 2010). Roller (1983:330) showed a jar of this type from the ca.



Figure 35 – ROYAL on crown only (North American Glass)



Figure 37 – Detail of finish and lid (North American Glass)



Figure 38 – Smalley Jar - ca. 1887 Smalley catalog (Roller 1983:330)

1887 A.G. Smalley & Co. catalog (Figure 38) and compared it to the Whiteman Fruit Jar in a July 23, 1885, A.V. Whiteman ad (Figure 39). The jars appear to be identical.

The later series consisted of the Smalley Self

Sealer jars, all topped with Lightning-style



Figure 39 – A.V. Whiteman ad – July 23, 1885 (Roller 1983:330)



Figure 40 – Smalley Self-Sealer jars (Creswick 1987a:195)

closures. The first of three variations was embossed "THE SMALLEY (arch) / SELF SEALER / WIDE MOUTH (both horizontal)" in an oval plate on the front (Figure 40). Bases were either embossed with "A.G. SMALLEY & Co., INC. BOSTON, MASS." or were unmarked (Creswick 1987a:195; Roller 1983:331; 2011:480; Toulouse 1969:287-288). Since the incorporation of the company followed the death of Albert Smalley in 1906, the jar was probably made between 1906 and 1915.

Patent Dates

North American Glass included a series of photos of an interesting square jar. The sides of the jar had no embossing, but the base was embossed "PATENTED (arch) / 1 / DEC. 16, 1892 / APRIL 7, 1896 / DEC. 1, 1896 (all horizontal). The metal lid was stamped with the AGS monogram in the center

and "TRADE MARK FULL MEASURE (arch) / FOR SMALLEY FRUIT JARS." The milk-glass insert was embossed "CONSOLIDATED



Figure 41 – Unmarked jar with Smalley patent dates and lid (North American Glass)

FRUIT JAR COMPANY (arch) / NEW YORK (inverted arch)" with the CFJCo monogram in the center (Figure 41).

Discussion and Conclusions

As a jobber, Smalley sold a variety of items that included liquor flasks, druggists' ware, fruit jars, and other containers. Aside from fruit jars and the Smalley milk jar – with one possible exception – none of Smalley's ware was embossed with his name, logo, or initials. The possible exception was the liquor container embossed "WARRANTED (arch) / FLASK (horizontal) on the front shoulder. Smalley's 1906 trade mark registration for the term "WARRANTED FLASK" – in the same configuration as is found on actual flasks – was first used in 1880. The time period for Smalley's claim fits perfectly with the generally accepted use period of the flasks.

Smalley patented his unique milk jar in 1898, and it continued to be produced until at least 1910, probably until hand production was replaced by machines ca. 1912. About this time, many states were becoming concerned about consistent capacity of milk bottles. Mouth-blown bottles simply could not match machines for consistent sizes, so the mouth-blown era rapidly faded after 1910.

Smalley advertised fruit jars in his earliest directory listing. The fruit jars were often (possibly almost always)⁶ embossed with the Smalley name or some other wording that identified one of the Smalley firms as the wholesaler. These jars can be cataloged in three ways. One of these – by embossed markings – was dealt with in the Containers and Marks section. The other two are by jar types and by temporal periods.

Smalley Jars by Type

The earliest jars vended by Smalley were Mason jars. Although an 1882 order form illustrated both "MASON'S / PATENT / NOV. 30TH / 1858" and "MASON'S / IMPROVED" jars, we have no information about how long either was offered by Smalley or what other styles of Mason jars may have followed them. Mason jars were probably phased out of his inventory soon after Smalley introduced his line of square jars in 1895.

⁶ Any jars that were unmarked would be difficult or impossible to trace.

Smalley's next line was apparently the square jars embossed "FULL MEASURE" along with the AGS monogram – in 1895. These continued in production – in varying formats – until at least 1912, probably to 1915. There is no indication that these jars were made for the Smalley Fruit Jar Co. (1915-ca. 1917).

Soon after, probably by 1896, Smalley introduced the Royal jars. Although there was quite a bit of variation, most of these jars were embossed with the figure of a crown and the word "ROYAL." This line extended to at least 1915, possibly until the firm became the Eureka Jar Co. in 1917 or 1918.

Smalley added the "SELF-SEALER" – a round jar – ca. 1910, and the succeeding firms continued to sell the jar probably until the end of the company ca. 1917. Smalley's "NU-SEAL" was a late comer, only made by machine, possibly as early as 1912. Unlike most of the Smalley lines, these were made in both square and round configurations. A few other round and square jars were only marked on the bases and lids. These are much more difficult to place in a chronology, although the square ones could not have been made prior to the 1896 Smalley patent.

Smalley Jars by Temporal Periods

The obvious time line for the Smalley jars is to list them by company: A.G. Smalley & Co., A.G. Smalley & Co., Inc., and the Smalley Fruit Jar Co. However, the division can be greatly refined. The initial period – prior to square jars – extends from the beginning of A.G. Smalley & Co. in 1877 to the square jar patent of 1896. In all probability, most of the jars that were sold during this time were Mason jars.

As noted, the square jar period began with the 1896 Smalley patent (although a few were offered in 1895). The main two styles of square jar were the Full Measure jar with the AGS monogram and the Royal line. Until the machine period, which began ca. 1912, all of these were blown into molds that consisted of two side pieces and a cup bottom. The finish was then ground until it was reasonably flat. However, the firm incorporated in 1906, when the name became A.G. Smalley & Co., Inc.

Unfortunately for fine dating, Smalley's suppliers certainly used the existing molds – embossed "A.G. SMALLEY & Co." – until they wore out. Thus, jars embossed "A.G. Smalley & Co., INC." were used after the 1906 incorporation, but jars without "INC." could still have been used during the incorporation period. According to Frank Smalley, the jars were made by machine by ca. 1912. Therefore, the 1906-ca. 1912 period is the handmade, corporation era. Once again, however, there is a complication. The two-piece molds used for mouth production were incompatible with machines. Thus, the "ground-lip" jars almost certainly continued in production after the beginning of the machine period – possibly until the molds wore out.

The machine period *does* set a beginning date for machine-made jars. Assuming Frank Smalley was correct, ca. 1912 is the earliest year for machine-made Smalley jars. Although machine production continued well beyond the Smalley firms, the initial machine period ceased with the dissolution of A.G. Smalley & Co., Inc., ca. 1915.

Smalley was likely correct in his assignation of ca. 1912 for the beginning of machine-made Smalley jars. Most of the identified manufacturers made jars by machine by that time, and most were probably phasing out hand production then. The Woodbury Glass Works had machines by at least 1915, and the Clyde Glass Works used them by at least 1913. The Marion Flint Glass Co., Illinois Glass Co., and Hazel-Atlas Glass Co. all adopted machine manufacture *much* earlier. See the entries for each of these firms for more details.

The final Smalley period – the Smalley Fruit Jar Co. era – extended from the incorporation of the firm in 1915 to its termination ca. 1917. By at least June 2, 1918 (*New York Tribune*), Frank Smalley was president of the Eureka Jar Co.; the last Smalley period was over.

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