

Alexander Arbogast

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This little-known firm was only mentioned in passing by a few researchers. Little is known about its bottles and even less about its history. The name, location, and family connections, however, are intriguing. Several members of the Arbogast family were involved with the glass industry as manufacturers, inventors, or both.

Histories

Arbogast & Kapphahn, Pittsburgh (1860-1861)

Born in 1829, Alexander Arbogast was one of ten children of Ignatius Arbogast and Catherine Muhlbach Arbogast (Ancestry.com). He teamed up with Gustavus Kapphahn to form the firm of Arbogast & Kapphahn, listed in the city directories along with an ad in 1860. The ad claimed that the firm was “Manufacturers of Black Glassware, Wine, Brandy, Porter, and Schnapps Bottles, Carboys, Demijohns, Inks and Acids” (Figure 1). By 1861, Kapphahn had disappeared, and the only listing was for Alexander Arbogast, Glass Manufacturer.



Figure 1 – Arbogast & Kapphahn ad (1860 city directory)

Alexander Arbogast, Pittsburgh (1861-1863)

As noted above, Kapphahn left the firm at some point after the 1860 directory listing, leaving only Alexander Arbogast. An ad in the 1861 directory called Arbogast “Successors to Arbogast & Kapphahn” but included the same products. Despite the listing, he also appears to have been styled A. Arbogast & Co., a name found embossed on bottle bases (Hawkins 2009:34).

Van Rensselaer (1969:181) noted the bottles listed in the 1861 ad, but Knittle (1927:350) only mentioned the 1860 listing for the earlier firm. The McKearins (1941), Jones (1968), and Toulouse (1971) were all completely silent about Arbogast, although Toulouse and the

McKearins mentioned the Philip Arbogast machine (see below). None of the sources cited a successor to the firm.

However, a notice in the *Pittsburgh Daily Commercial* for February 13, 1864, announced the co-partnership of John Pastorius, Adolphus Schulz, and Wm. F. Modes as Pastorius, Schulz & Co., noting that the firm “will continue the manufactory of GLASS, heretofore conducted by Alex. Arbogast” – dated February first. Arbogast died on October 3, 1872 (Ancestry.com).

Containers and Marks

Although Arbogast & Kapphahn apparently failed to use a logo, Alexander Arbogast may have used three marks during his brief span in business.

AA (1861-1863)

Farnsworth & Walthall (2011:57, 402-403) described and illustrated a soda bottle embossed “FRANCIS SCHONWALTD (arch) / CHICAGO / AA (both horizontal)” – with the “AA” positioned just above the heel – a typical location for a manufacturer’s mark at that time (Figures 2 & 3). The bottle is bright blue in color (but not cobalt blue), had an improved pontil scar on the base, and had a rounded tapered finish. This was the only report we have found for this mark, but Schonwaltd was apparently only bottling mineral water during 1859 and 1860 – the timing is perfect.

A. ARBOGAST PITTS (1861-1863)

Wilson (1981:113) showed this mark in his collection from Fort Union (1862-1891). It was situated in a Ricketts mold, a type of plate that wrapped around the outside of the base of a bottle allowing embossing while the center was raised in a kick-up (Figure 4). The base shown



Figure 2 – Lomax bottle A.A. (Farnsworth & Walthall 2011:350)



Figure 3 – Heel of Lomax bottle A.A. (Farnsworth & Walthall 2011:350)

also had a dot or mamelon, common in bottles with kick-ups. The bottle was likely a “cylinder whiskey” or an earlier bottle for porter, ale, or even wine. Jones (1966:6) noted that the mark was found on “straight barrel. 3 piece mold. Also on amber whiskey type.” Glassworks Auctions provided a photo of what was almost certainly the same bottle (Figure 5).

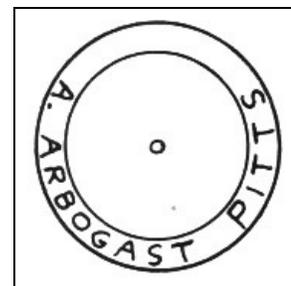


Figure 4 – A. Arbogast
(Wilson 1981:113)

Hawkins (2009:36) added that the name was found on “plain and embossed black glass three-piece mold cylinder whiskies.” At least one porter and one soda bottle were also marked in a circle on a Rickett’s mold (von Mechow 2013). The mark should be dated 1861-1863. Farnsworth & Walthall (2011:57, 402-403) noted two cylinder whiskey-type bottles that were found at St. Louis. Along with the “A. ARBOGAST PITTS” basemark, one of the bottles was embossed “U.S.A. / MEDICAL SUPPLIES / FROM / PIKE & KELLOG, ST. LOUIS” on the shoulder. Hawkins (2009:36) noted these as “three-piece mold whiskey bottles such as Pike & Kellogg Medical Supplies bottles from St. Louis.”



Figure 5 – A. Arbogast & Co.
(Glassworks Auction)

Pike & Kellogg succeeded Bacon Hyde & Co. at St. Louis by at least 1855. The firm was in turn replaced by E.C. Pike & Co. (*Meyer Brothers Druggists* 1918:6). Pre-pro.com (2013) only discovered Pike & Kellogg at 129 N. 2nd St. in 1860, despite consulting St. Louis directories from 1859 through 1918. The firm was a wholesale whiskey dealer. Edward C. Pike and Sanford B. Kellogg sued James M. Kershaw for the sum of \$93.95 on June 16, 1861(Missouri Digital Heritage 2013). The firm apparently reorganized soon thereafter.

ARBOGAST & CO. PITTS PA (1861-1863)

Jones (1968:5) illustrated two examples of this mark, and another resides in the Jay Hawkins collection on a blackglass, three-piece mold whiskey bottle. The mark was embossed on a Rickett’s-type plate around the base. Although this name was never recorded in the

Pittsburgh directories, it was obviously used by Arbogast, although it could reflect the Arbogast & Kappahn period from 1860-1861.

Pittsburgh Seamless Bottle Co., Pittsburgh (1898-1905)

Brothers (n.d.) dated the Pittsburgh Seamless Bottle Co. as being in business between 1896 and 1898. This was the earliest reference to the firm, and we have discovered no other information about this period – including location, operating company, and products.

Although Hawkins (2009:35, 424) noted that the Arbogast Brothers opened the Optical Seamless Bottle Co. at Pittsburgh, near the Hays or Streets Run area on February 4, 1898, the *Pittsburgh Press* announced on May 31 of that year that the firm had “completed the erection of a plant at Six Mile Ferry, where

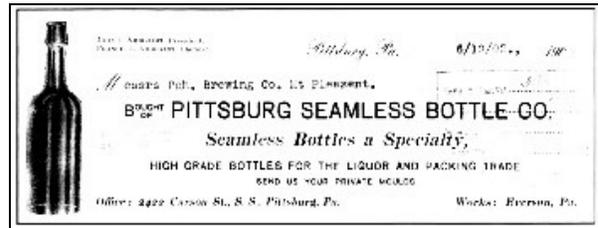


Figure 6 – Seamless Bottle Co. Billhead (Hawkins 2009:424)

bottles will be made for the whiskey and prescription trade. The factory is small at present, but will be enlarged in proportion to growth of the business.” The plant was formed to manufacture amber whiskey bottles at five pots (Hawkins 2009:35). An article on the price war between whisky bottle makers in the *Press* edition of September 26, 1901, confirmed our suspicion that “seamless” bottles were formed by the turn-mold process.

Under the title of “Ready to Begin Work,” the *Pittsburgh Press* announced on May 25, 1901, that “the works of the Pittsburgh Seamless Bottle company at Everson, a sister town, will be ready for operations in a few days” and noted that “F.J. Arbogast, of Pittsburgh, has already taken permanent residence in Everson.” Hawkins (2009:424-425) noted that this was a relocation rather than a second plant, with John I Arbogast as president of the corporation. The plant opened with 24 pots to make beer and whiskey bottles (Figure 6). A 1903 Sanborn Fire Insurance Map provided a view of the property (Figure 7).

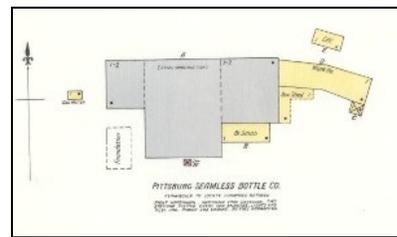


Figure 7 – Seamless Bottle Co. (1903 Sanborn map)

On April 9, 1904, the *Pittsburgh Weekly Gazette* reported that the Pittsburgh Seamless Glass Co. had received a new charter the day before with a capital of \$100,000, succeeding the earlier corporation. The directors were John I. Arbogast, Frederick L. Arbogast, Charles V. Arbogast, Francis J. Arbogast, and Phillip R. Arbogast. John I. Arbogast was the inventor of a new process for bottle formation as well as other patents (see below). John's father, Philip (also an inventor and brother of Alexander Arbogast), had an even dozen children, six of whom were male. All but the youngest brother, Algemon G. Arbogast, were on the Board of Directors.

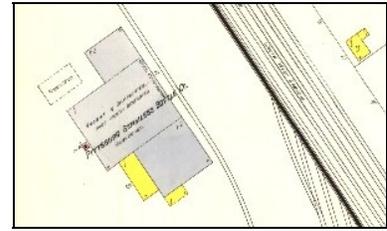


Figure 8 – Seamless Bottle Co. (1908 Sanborn map)

Although John declared in the September 23, 1904, edition of the *Press* that “the outlook for the bottle trade looked very good,” something went terribly wrong. The factory was last listed in 1905 *Thomas Register* (Hawkins 2009:424-425; Thomas Publishing Co. 1905:104). The plant was shown as “Abandoned” on a 1908 Sanborn map (Figure 8).

Containers and Marks

We have found no logos ascribed to this firm, probably because the factory made “seamless” turn-mold bottles. The turning process obliterated any embossed logos, although there was at least one invention to allow for a baseplate that turned with the bottle to allow basal embossing (Lockhart et al. 2007). Although wine bottles were the major type of container made by the turn-mold process, the plant was listed as making whiskey bottles.

Arbogast-Brock Glass Co., Greensburg, Pennsylvania (1907-1910)

Undeterred by the failure of the Pittsburgh Seamless Bottle Co., John I. Arbogast gathered financial backers around him (although none of his brothers, this time) and founded the Arbogast-Brock Glass Co. with H.L. Collins, Lem S. Brock, F.C. Park, and W.H. Baily, incorporating on January 8, 1907 (*Pittsburgh Press* 12/17/1906). The object of the firm was to manufacture “glass in all forms including glassware, glass ornaments, cut glass, structural glass and all articles of commerce of a similar or cognate character, made of glass or glass in composition with wire.” The company's capital was \$300,000.

Construction of the factory began on May 20, 1908, and was finished by August 1 – possibly at 2422 Carson (Gillette 1910). The firm was beset by difficulties from the beginning. The operation was formed to create “wire glass by welding window glass onto a wire mesh” using a new process developed by John Arbogast. The *Weekly Underwriter* (1908) noted that Arbogast-Brock was

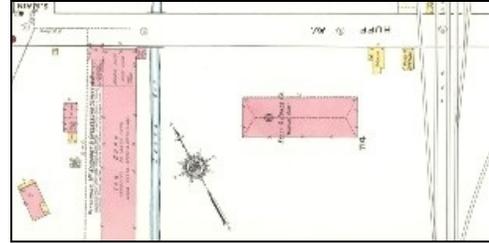


Figure 9 – Arbogast-Brock Glass Co. (1915 Sanborn map)

the first to utilize ordinary window glass in the manufacture of wired glass. The process consists of taking two pieces of window glass with an interposed layer of wire mesh and subjecting them to gradually increasing heat. This method permits of their having what is known as natural fire polish, and thus obviating the necessity of grinding and polishing.

According to the (*National Glass Budget* 1915), the process was a failure, and the plant never actually produced any glass. On August 5, 1910, the *Latrobe Bulletin* posted a notice that the Merchants’ Trust Co. of Greensburg had foreclosed on the four-acre parcel of land and the brick building thereon. An iron firm, the Kelly-Jones Co., took over the building in 1915. The 1915 Sanborn Fire Insurance Map showed the structure (Figure 9).

Patents

Two members of the Arbogast family were also inventors of glass-making machines and/or processes.

Philip Arbogast

Philip J. Arbogast – born in 1834 – was the brother of Alexander Arbogast (Ancestry.com). Hawkins (2009:35) stated that Phillip, noted for his building of high quality furnaces and his 1881 invention of a press-and-blow semiautomatic glass blowing machine, was listed as a glassworker during the period when Alexander operated his glass plant. He may have worked for his brother – although it was two decades later when he patented the invention for

which he is best remembered. Philip died just six years after receiving his patent – on September 25, 1887.

July 11, 1882

On August 11, 1881, Philip Arbogast – of Pittsburgh – applied for a patent for the “Manufacture of Glassware” and received Patent No. 260,819 on July 11, 1882 (Figure 10). Arbogast applied the basic two-step principle that governed mouth-blown bottles to machine

production. What was brilliant was his innovation that created the “finish” first. Even though the Arbogast patent provided the basic model for the technique that *continues* to be used in the 21st century – 130+ years later – the machine was largely unsuccessful (Bernas 2012:27).

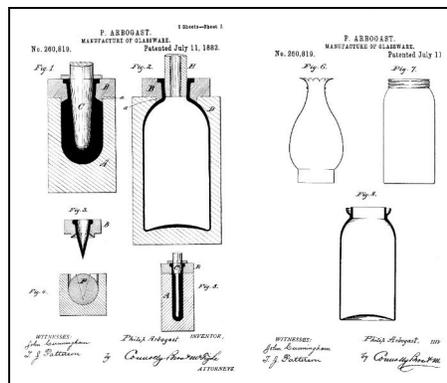


Figure 10 – Phillip Arbogast 1882 patent

The *National Glass Budget* (1917:6) noted that

the Arbogast process was not taken seriously, and in the course of a short time the patent was sold for a trifle to the late Daniel C. Ripley, then of Ripley & Co., local glass manufacturers. Although it had never been utilized, nor any serious attempt made to utilize it, it became the property of the United States Glass Co., when that company was organized in 1891.

Ripley patented two jar-blowing machines, the first to have even a limited success. These were followed by the Edwin Blue machines – the first truly practical press-and-blow machines to produce jars and wide-mouth bottles. See Lockhart & Bernas (2014) for more information about the early jar machines.

John Arbogast

The son of Philip J. Arbogast and Sarah Ann Hawthorne Arbogast, John I. Arbogast was born in 1863 – one of 12 children. About 25 years after Philip Arbogast received his machine patent, John Arbogast followed in his father’s footsteps and began patenting container-related inventions. Arbogast received seven patents in a two-year period – 1909-1911. It seems odd

that John’s inventive streak appeared about four years after the demise of the Pittsburgh Seamless Bottle Co. It is likely that Arbogast continued to be employed in the glass-making business. However, Arbogast assigned half of the rights to all but one of his patents to Henry L. Collins. Collins was one of the founders of the Arbogast-Brock Glass Co.

January 12, 1909

John I. Arbogast – of Pittsburgh – applied for a patent for a “Method for Making Machine-Footed Glassware” on October 4, 1907. He received Patent No. 909,842 on January 12, 1909. The “footed” container illustrated by the patent drawing is almost certainly a vase. Arbogast assigned one-half of the patent rights to Henry L. Collins.

November 30, 1909

On June 28, 1909, John I. Arbogast applied for another patent, this time for a “Machine for Making Wire-Glass.” He received Patent No. 941,842 on November 30, 1909. Again, he assigned half rights to Henry L. Collins, and this was the basis for the Arbogast-Brock Glass Co.

July 25, 1911

Arbogast applied for another patent on November 11, 1909, and received Patent No. 998,735 for a “Machine for Forming and Blowing Glass Articles” on July 25, 1911 (Figure 11). This machine was intended to make narrow-mouth bottles. Unlike the other patents, he did *not* assign any of this one to Collins. Note that even though Arbogast applied for this patent two month earlier than the one listed below, he *received* this one more than a month later.

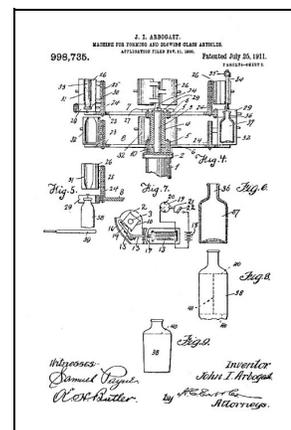


Figure 11 – John Arbogast 1911 patent

June 13, 1911

Arbogast filed for another patent on January 3, 1910. He was granted Patent No. 994,710 for a “Machine for Producing Hollow Glass Articles” on June 13, 1911. He also assigned half of the rights for this patent to Henry L. Collins.

September 12, 1911

Although he had applied for them at different times, John Arbogast received three sequentially numbered patents on September 12, 1911. He had applied for the first of these on January 3, 1910. He was granted Patent No. 1,002,954 for a “Method of Severing Glass (Figure 12). On July 16, 1910, he had applied for a patent for a “Method of Manufacturing Glass Case Goods” and received Patent No. 1,002,955 for that invention. The final of the three patents was also for a “Method of Manufacturing Glass Case Goods” and was applied on the same day. He received Patent No. 1,002,956 for the last one. In each case, Arbogast assigned half of the patent rights to Henry L. Collins.

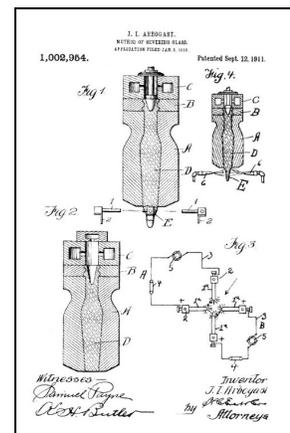


Figure 12 – Another Arbogast 1911 patent

Discussion and Conclusion

A. Arbogast & Co. grew out of Arbogast & Kaplahn, and “Alexander Arbogast” was the same company as “A. Arbogast & Co.” It is obvious that the principal member of each firm was Alexander Arbogast. Fort Union was open between 1862 and 1891, so we may assume that the A. ARBOGAST bottle was made during that period or slightly earlier. The bottle was probably deposited at Fort Union during the first decade the fort was open, before the widespread shipping of beer that began in the 1870s.

Bottle making seems to have run in the family. Alexander Arbogast, one of ten children, obviously operated a bottle works. His brother, Philip, worked as a glass blower – probably for Alexander – and designed a glass container machine that led to the revolution of the industry, specifically the early press-and-blow machines that made jars and wide mouth bottles (see Lockhart & Bernas 2014). Phillip’s son, John, not only founded two later glass works, he was a prolific inventor, patenting seven machines or processes.

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