# **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. Three members of the Arbogast family were involved with the glass industry as manufacturers, inventors, or both.

### Histories

Arbogast & Kappahan, Pittsburgh (1860-1861) Alexander Arbogast, Pittsburgh (1861-1863)

Born in 1829, Alexander Arbogast was one of ten children of Ignatius Arbogast and Catherine Muhlbach Arbogast (Ancestry.com). He teamed up with Gustavus Kappahn (or Kaplahn)<sup>1</sup> to form the firm of Arbogast & Kappahan, listed in the city directories in 1860 and 1861. At some point during 1861, Kappahn disappeared, and the only listing was for Alexander Arbogast, Glass Manufacturer. 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) added that the firm made "dark glass schnapps bottles, porter bottles, brandy bottles and wine bottles, carboys, and demijohns." Knittle (1927:350) only mentioned the 1860 listing. 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 mentioned a successor to the firm. Arbogast died in 1872 (Ancestry.com).

<sup>&</sup>lt;sup>1</sup> Hawkins (2009:34) provided the probable first name. The directories did not directly name the Kappahn or Kaplahn who partnered with Arbogast.

#### **Containers and Marks**

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

#### AA

Farnsworth & Walthall (2011:57, 402-403) described and illustrated a soda bottle embossed "FRANCIS SCHONWALTD (arch) /



Figure 2 – AA on heel of Schonwaltd bottle (Farnsworth & Walthall 2011:402)

CHICAGO / AA (both horizontal)" — with the "AA" positioned just above the heel — a typical location for a manufacturer's mark at that time (Figures 1 & 2). The bottle is bright blue in color (but not cobalt blue), has an improved pontil scar on the base, and has a rounded tapered finish. This is the



Figure 1 – Francis Schonwaltd bottle (Farnsworth & Walthall 2011:402)

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 mold that wraps around the outside of the base of a bottle allowing embossing while the center is raised in a kick-up (Figure 3). The base shown also had a dot or mamelon, common in bottles with kick-ups. The bottle is 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 4).

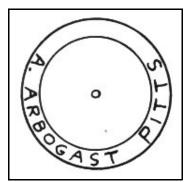


Figure 3 – A. Arbogast & Co. on Rickett's mold (Wilson 1981:113)

Hawkins (2009:36) added that the name was embossed 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 ca. 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 "U.S.A. / MEDICAL SUPPLIES / FROM / PIKE & KELLOG, ST. LOUIS" on the shoulder. Hawkins (2009:36) noted that these as "three-piece mold whiskey bottles such as Pike & Kellogg Medical Supplies bottles from St. Louis."

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



Figure 4 – A. Arbogast & Co. on cylinder whiskey bottle (Glassworks Auctions)

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 is embossed on a Rickett's-type mold around the base. Although this name was never recorded in the Pittsburgh directories, it was obviously used by Arbogast, although it may actually reflect the Arbogast & Kappahn period from 1860-1861 or may refer to Philip Arbogast's involvement with his brother (see below).

## Pittsburgh Seamless Bottle Co., Pittsburgh (ca. 1896-1905)

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

According to Hawkins (2009:35, 424), the Arbogast Brothers opened the Optical Seamless Bottle Co. at Pittsburgh, near the Hays or Streets Run area on February 4, 1898. The plant was formed to manufacture amber whiskey bottles at five pots. One brother was almost certainly John I. Arbogast, later to become an inventor. John's father, Philip (also an inventor), had an even dozen children, six of whom were male. Aside from John (1863-1935), the brothers were Charles V. (1875-1934), Francis J. (1868-1928), Frederich L. (1871-1943), Philip R. (1876-1937), and Algemon G. (1880-unknown). Any or all of these brothers would have been old enough to have been involved in the factory in 1898.

Despite the name in the article cited by Hawkins, the firm was listed in official Pennsylvania 1898 and 1899 reports as the Pittsburgh Seamless Glass Bottle Co., with a location at Hays Station (Campbell 1899:810; 1900:784).

The factory for the Pittsburgh Seamless Bottle Co.<sup>2</sup> was relocated to Everson, Pennsylvania, ca. 40 miles south of the larger city. By 1901, John I. Arbogast was president of the corporation, with Francis J. Arbogast listed as a chemist for the firm. Construction of the plant began in March 1901 and was completed by July.

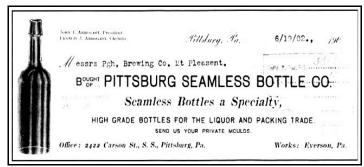


Figure 5 – Billhead for the Pittsburgh Seamless Bottle Co. (Hawkins 2009:424)

The plant opened with 24 pots to make beer and whiskey bottles (Figure 5). The factory was last listed in 1905 (Hawkins 2009:424-425; Thomas Publishing Co. 1905:104).

<sup>&</sup>lt;sup>2</sup> Although we have found no direct reference, the term "seamless" probably meant turn-mold bottles. In this system, the blower "twisted" the bottle inside the mold to eradicate the seams.

### **Containers and Marks**

We have found no logos ascribed to this firm, probably because the factory made "seamless" – almost certainly turn-mold – bottles. The turning process obliterates 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.

### **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

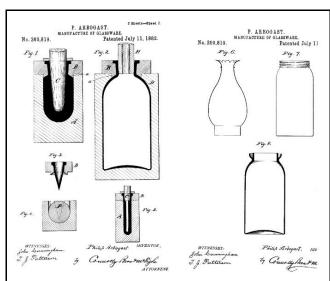


Figure 6 – Philip Arbogast 1882 patent

was two decades later when he patented the invention for which he is best remembered. Philip died just six years after receiving his patent – in 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 6). 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 21<sup>st</sup> century – 130 years later – the machine was largely unsuccessful (Bernas 2012:27).

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. We have found no link between Collins any of the Pittsburgh glass houses, although the nature of the assignations suggests that he and Arbogast were partners.

# **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 one-half of the rights to Henry L. Collins.

# 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 7). This machine was intended to make narrowmouth bottles. Unlike the other patents, he did *not* assign any of this one to Collins. Note that even though Arbogast

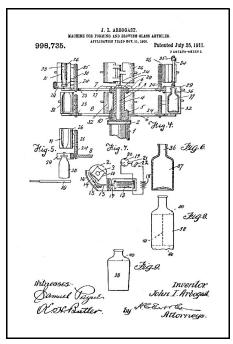


Figure 7 – One of John Arbogast's 1911 patents

applied for this patent two month earlier than the one listed below, he *received* this one more than a month later.

# 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 8). On July 16, 1910, he had applied for a patent for a "Method of

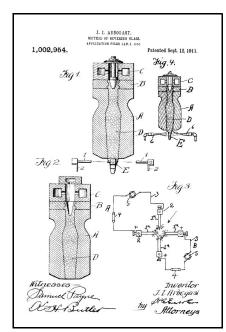


Figure 8 – One of John Arbogast's later 1911 patents

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.

### **Discussion and Conclusion**

It is reasonably certain that 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 operated a later glass works, he was a prolific inventor, patenting seven machines or processes.

#### Sources

### Ancestry.com

2013 "Ignatius Arbogast (1788 - 1854)."

http://records.ancestry.com/Ignatius Arbogast records.ashx?pid=86686800

## Brothers, J. Stanley

n.d. "A collection of materials collected and organized by J. Stanley Brothers pertaining to the glass industry and glass objects. Includes information copied from books and periodical articles, ads, actual copies of newspaper and magazine articles, etc. published between the late 19th century and the early 1970s." Corning Museum of Glass.

# Campbell, James

1899 Ninth Annual Factory Report of the Factory Inspector of the Commonwealth of Pennsylvania for the year 1898. Wm. Stanley Ray, State Printer.

1900 Tenth Annual Factory Report of the Factory Inspector of the Commonwealth of Pennsylvania for the year 1899. Wm. Stanley Ray, State Printer.

## Farnsworth, Kenneth B. and John A. Walthall

2011 Bottled in Illinois: Embossed Bottles and Bottled Products of Early Illinois Merchants from Chicago to Cairo, 1840-1880. University of Illinois, Urbana. Studies in Archaeology No. 6, Illinois State Archaeological Survey.

# Jones, May

1966 The Bottle Trail, Volume 6. Nara Visa, New Mexico.

1968 The Bottle Trail, Volume 9. Nara Visa, New Mexico.

# Hawkins, Jay W.

2009 Glasshouses & Glass Manufacturers of the Pittsburgh Region, 1795-1910. iUniverse, Inc., New York.

## Knittle, Rhea Mansfield

1927 Early American Glass. Appleton-Century, New York.

## Lockhart, Bill and Barry Bernas

2014 "Turning Blue: Charles Blue and the Early Jar Machines." In *Guide to Collecting Fruit Jars: Fruit Jar Annual, Volume 16 – 2018*, edited by Jerry McCann, pp. 19-47. Privately published, Chicago.

# Lockhart, Bill, Carol Serr, and Bill Lindsey

2007 "The Dating Game: De Steiger Glass Co." Bottles and Extras 18(5):31-37.

# McKearin, Helen and George McKearin

1941 American Glass. Crown Publishers, New York.

# Meyer Brothers Druggists

1918 "St. Louis, the Leading Drug and Chemical Market: A Review of Industries in the Drug Trade: History of Drug and Allied Interests in St. Louis." *Meyer Brothers Druggists* 39(1):6-7

## Missouri Digital Heritage

2013 "Secretary of State Jason Kander." Handwritten ledger page from Pike & Kellogg describing the debt owed by James M. Kershaw, June 11, 1861. Missouri Digital Heritage.

http://cdm.sos.mo.gov/cdm4/document.php?CISOROOT=/stlmeclien&CISOPTR=28657 &REC=17

### Pre-Pro.com

2013 "Pike & Kellogg, St. Louis, MO, 1860." Pre-Pro.com. [Pre-Prohibition Distillers & Importers.] http://www.pre-pro.com/midacore/view\_vendor.php?vid=STL3968

## Thomas Register of American Manufacturers

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

### Toulouse, Julian Harrison

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

### Van Rensselaer

1969 Early American Bottles and Flasks. Rev. Ed. J. Edmund Edwards, Stratford, Conn.

## von Mechow, Tod

2013 "Soda & Beer Bottles of North America: Bottle Attributes - Beer & Soda Bottle Manufacturers." <a href="http://www.sodasandbeers.com/SABBottleManufBeerSoda.htm">http://www.sodasandbeers.com/SABBottleManufBeerSoda.htm</a>

# Wilson, Rex

1981 Bottles on the Western Frontier. University of Arizona Press, Tucson.

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