B.F.G.Co. Logos

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

Occasional bottles are found embossed on the bases with B.F.G.Co. Three glass companies had the correct initials to have used the marks, but only two of them made containers. Each of the remaining companies were in business at different times and in different geographical regions. Both used the B.F.G.Co. manufacturer’s mark, but the variance in time, type of container, and minor logo differences usually makes identification secure. For convenience, this section is divided by geographical regions.

Beaver Falls, Pennsylvania

Histories

Beaver Falls Glass Co., Beaver Falls, Pennsylvania (1869-1879)

William F. Modes and Thomas B.A. David, purchased land in Beaver Falls on May 13, 1869, and built the Beaver Falls Glass Co. What became of David is apparently not recorded, but the early operating company was Modes & Eakin (William F. Modes and J.R. Eakin). The factory initially made jars and bottles but soon was also producing insulators (Hawkins 2009:65-66; Beary 1990:106-107). The 1870 Industrial Census recorded a temporal snapshot of the company:

Beaver Falls Glass Co., Beaver Falls, PA, $45,000 invested, Machinery: 2 steam powered engines of 12 horsepower; Employees: 63 males, 5 females, 39 children; Payroll: $42,500 yearly; Mfrs. per year; 8,000 gross of bottles & flasks valued at $52,000; 7,000 gross of fruit jars valued at $77,000 (quoted in Roller 1998).

To place these values in perspective, 8,000 gross of bottles & flasks @ $52,000 equals $6.50 per gross or an average of 4½ ¢ per bottle or flask. 7,000 gross of fruit jars @ $77,000 equals $11 per gross or 7.6 ¢ per jar. These were, of course, wholesale prices.
Modes apparently refinanced the company in an agreement with John B. Canfield. In a December 1871 agreement, Canfield:

agreed that he would furnish Modes with materials for the manufacture of glass, and advance him money to assist him in carrying on his business, Modes agreeing to give Canfield a lien, by way of security, on all the products of the glass works, Canfield to have a right to sell the goods if he should desire and retain the proceeds to apply to the indebtedness, and if Modes should sell, Canfield to have the avails, and upon settlement Canfield to pay Modes any over-payment. (Smith 1875:502, cited in Solar 2012).

Also in 1871, Beaver Falls Glass had a sales office at 411 Liberty in Pittsburgh, but the listing was not repeated in the city directories (von Mechow 2013). A letterhead, dated July, 22, 1872, listed Modes as superintendent of the plant, with J.R. Eakin as manager. Apparently, the business was not going well. According to an 1874 Pennsylvania Supreme Court case, Modes “was insolvent on the 18th day of December 1872” (Smith 1875:503). On January 29, 1873, at noon, the sheriff sold the glass company property, consisting of manufactured glassware, material, etc. for the sum of $14,866.66 (Smith 1875:504, cited in Solar 2012).

This date of dissolution is supported by Modes’ subsequent activities. Modes was the first superintendent of the Mississippi Glass Co. at St. Louis in 1873. Considering the distance between Beaver Falls and St. Louis, combined with the transportation limitations at that time (i.e., either train or horse-drawn conveyance), Modes could not well have maintained his respective positions in both locations.

A ca. 1876 leaflet from Kreider, Campbell & Co., listed Modes & Eakins of Beaver Falls as users of the Kelly & Samuel’s Keystone Grinding Machine. The machine, patented on December 28, 1869, was used for grinding the rims of fruit jars, flasks, and other containers where the process required a smooth rim for sealing – especially with screw caps (Roller 1998).

This leaves us with a bit of a mystery. Modes apparently lost the glass factory at the end of 1872. The Kreider, Campell & Co. pamphlet apparently indicated that the firm remained in business under Modes & Eakin (or Eakins) until 1876. However, the machine was invented in 1869, so the use of it may refer to the early days of the factory.
Roller (1998) cited Beaver County, Pennsylvania, deed records that William F. Modes and his wife, Mary Kate, sold property in Beaver Falls to Christian G. Modes (apparently William’s father), for $10,000 on May 20, 1869. Unless Roller missed something, this could not have been the property purchased by Modes and Thomas David on May 13, 1869. It is also unlikely that this was the factory site, which was apparently operated by Modes & Eakin and financed by John B. Canfield. Roller (1998) further noted – again citing deed records – that the property of Christian G. Modes at Beaver Falls was auctioned at a sheriff’s sale in 1876. Welker and Welker (1985:28-29) were a bit confused about which Beaver Falls Glass Co. they discussed, but they, too, noted that the factory was sold at a sheriff’s auction for back taxes on September 12, 1876.

According to Hawkins (2009:67), the Beaver Falls Glass Co. remained in business until the reorganization that created the Co-operative Flint Glass Co. in 1879. We have been unable to find any contemporary source that referenced the years between the December 1872 insolvency and the opening of the Co-operative Flint Glass Co. If the plant was in operation, there should be some indication during that period.

**Containers and Marks**

**B.F.G.Co. (1869-1870s)**

Whitten (2013) noted that the B.F.G.CO. logo is “found on glass telegraph insulators made by the Beaver Falls Glass Company, Beaver Falls, PA (1869-1879). The mark was also very likely used on bottles, as this same set of initials are seen on certain soda/mineral water bottles of the period.”

Earlier, Beary (1990:106) had specified that “only a few insulators are embossed ‘B.F.G.CO’” (Figure 1). The initials were on the skirt, with “L.A.C.’S PAT JULY 25 1865” on the dome. However, another insulator was embossed “S.T. PAISLEY / MAKER / BEAVER

1 Roller (1983:363) noted that Christian was William Modes’ father and thought that the factory was located on the tract of land sold to Christian. As noted above, we dispute that claim.
FALLS, PA.” on the front with “L.A. CAUVET’S / PAT’D / JULY 25TH 1865” on the back (Figure 2). Both of these insulators are the same type – made to the 1865 Cauvet patent (Figure 3).

Brown (2007:21-40) went into great detail about the characteristics of the Paisley and B.F.G.CO. insulators. His discussion included colors, mold characteristics, and other small but important details. His conclusion was that the Paisley insulators were made by the same firm as the ones marked B.F.G.CO. – along with other unembossed insulators. Paisley was very likely Samuel T. Paisley (see Discussion and Conclusions section below).

Beary (1990:107) illustrated a July 24, 1872, letterhead from the Beaver Falls Glass Co., claiming that the company was “Manufacturers of Fruit Jars, Bottles, &c.” Feldhaus (1986:90:98) listed the B.F.G.CO. mark on soda bottles from two Minnesota companies. He did not have dates for one company, but the other was in business from 1871 to 1875. Von Mechow (2013) listed a total of 14 soda and porter bottles, a third of which were used at Chicago. They were made for bottlers as far away as St. Louis, St. Paul, Kansas City, and Memphis.

Farnsworth & Walthall (2011:59) noted the B.F.G.Co. mark on nine “sodas, ciders, and ales” from the Chicago area, all from the early 1870s, along with one other Illinois soda bottle with the logo from the same period (Figures 4 & 5). Other soda and beer bottles, marked with the B.F.G.Co. logo and made for companies in the U.S., have been offered on eBay – as have crudely made union (strap-sided) flasks with
“B.F.G.Co.” basemarks in circular formats and applied finishes (Figures 6-8). Each of the bottles offered on eBay had a lower-case “o” in “Co.”

Ring (1980:86, 165) listed two bitters bottles embossed on the base with B.F.G. CO. One was Dr. W.H. Black’s Rocky Mountain Bitters, offered by Black & Richardson. Unfortunately, we were unable to find any information about the company. The other was Dimmit’s “50 CTS BITTERS,” St. Louis, Missouri. Although Fike (1987:23-24) failed to list the bitters, he noted that Marcellus Dimmitt established his wholesale and retail drug business in 1864. The firm became Dimmit & Bro. in 1870 but was no longer listed after 1874.

Ring & Ray (1984:91) noted the BFG CO mark on the base of a San Diego Wine Bitters bottle, from Quinlin Bros. & Co., St. Louis, Missouri. In her 1988 update, Ring also listed the mark on a West India Stomach Bitters bottle used by Moody Michel & Co., St. Louis. This bottle, too, was amber. Fike (1987:43) noted a different bottle but added that the West India Mfg. Co. began in 1876, and the product was advertised at least in 1882.

Hawkins (2009:71) noted that the Beaver Falls Glass Co. “marked some soda and mineral water bottles with B.F.G.Co.” He, too, commented that the same mark was used on insulators. Since these insulators, bitters bottles, flasks, beer and soda bottles all fall within the 1869-mid-1870s period, it is virtually certain that they were made by the Beaver Falls Glass Co.
Farnsworth & Walthall (2011:59) noted that bottles with the BFGCo mark are found in the greater St. Louis area. Local lore suggested that the mark was a variant used by the Belleville Glass Co. The tradition, however, failed to supply any reason for a “F” to be tucked into the logo. We find no evidence to support this hypothesis.

**BEAVER FALLS GLASS Co. BEAVER FALLS, PA. (1869-1879)**

Creswick (1987:211-212) illustrated a series of grooved-ring, wax-sealer fruit jars embossed “UNION” on the side and “BEAVER FALLS GLASS Co. (arch) / BEAVER FALLS, PA. (inverted arch)” around the base (Figure 9). The series was marked N2 1 through N2 4. Some jars were marked with the Beaver Falls identification on the base, but some contained no maker’s mark, although they were identical to the ones with the designation.

Roller (1983:363) listed the same jars but added markings of No. 1 and 5 below UNION. In the Roller revision (2011:524), the editors noted only a single example (embossed “N1” on the shoulder) with “BEAVER FALLS GLASS Co. BEAVER FALLS, PA.” on the base. Roller dated the jars ca. 1870s and claimed Beaver Falls Glass as the manufacturer of them all. Hawkins (2009:71) also noted the jars. For a discussion about the connection between these jars and the ones made at the Aetna Glass Works, see the section entitled “The Strange Case of the Aetna and Arsenal Glass Works.”

**Co-operative Flint Glass Co., Beaver Falls, Pennsylvania (1879-1889)**

A reorganization on February 7, 1879, culminated in a renaming of the Beaver Falls Glass Co. as the Co-operative Flint Glass Co.,2 with John Stoehr was as chairman and George K. Brown was as sec. & treas.

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2 Most secondary sources include “Beaver Falls” as part of the Co-operative Glass Co. name. Roller’s (1998) entry for February 7, 1879, was “Beaver Falls Co-Operative Flint Glass Co. organized under management of John Stoehr, Chairman, George K. Brown, sec. & treas. Lorenz Stoehr became the first mgr. [History of Beaver County, Pa., 1888, p. 435; Peterson, Glass Patents & Patterns, pp. 38 & 44].” This was probably the basis for the use of “Beaver Falls” with the name. All other contemporary sources we have found just call the firm “Co-
Brown [almost certainly Joseph K. Brown] as secretary and treasurer. In early 1880, the new group installed a “new patent teaser” at the plant. Although Captain J.C. Irvin and Patrick McLaughlin purchased the factory in 1881, they apparently retained the name. The plant added a second tank in 1889 (Hawkins 2009:67; Roller 1998).

In their 1904 history of Beaver County, Bausmann & Duss (1904:677) stated, “At a later date the firm was composed of the following officers: William Scheffler, Sr., as chairman; C.C. Vogely secretary and treasurer; Phillip Scharf, foreman.” This probably followed the Irvin and McLaughlin days, because Charles S. Vogeley (note slightly different initials and spelling) was noted as leaving the company in mid-1891. The plant apparently concentrated on tableware.

Co-operative Flint Glass Co., Ltd., Beaver Falls, Pennsylvania (1889-1937)

The Co-operative Glass Co. plant was badly damaged by a fire on October 24, 1889. This disaster probably led to the reorganization of the firm as the Co-operative Glass Co., Limited – that is generally dated as 1899. An 1889 ad (with the name change) listed William Scheffler as chairman and J.C. Wiegel as secretary and treasurer. The new factory had a single furnace, but the group added a new, 16-pot furnace in August 1896 (Hawkins 2009:68-70).

The firm made a large variety of tableware and novelties (plus occasional druggists’ ware) until at least 1909 (Hawkins 2009:70; Roller 1998). The plant made “druggists’ [bottles], etc.” until at least 1918 (Thomas Register 1905:104; 1918:810). However, by the 1927 directory, Co-operative Flint was not listed under the bottle heading but made “tableware, decorated tableware, stemware, bar goods, opal ware, novelties, and specialties” at two furnaces with 32 pots. The 1936 edition noted that Co-operative Flint was “in process of liquidation, March 1, 1936” (American Glass Review 1927:85; 1936:115).

operative Glass Co.” The term “Limited” was certainly added during the reorganization of 1889.

3 These were almost certainly druggists’ show bottles rather than prescription ware.

4 Older sources were very confused about this company. Creswick (1987a:263) dated the plant from 1877 to 1890s; Roller 1983:363) claimed the period was 1869-1876. Even Beary (1990:106-107) was off by a year, stating that the plant closed because of the Great Depression in 1937.
Beaver Falls Glass Co., Ltd., Beaver Falls, Pennsylvania (1886-1890)

Also located in Beaver Falls, Pennsylvania, the Beaver Falls Glass Co., Ltd., was a separate operation. George E. Smith, Charles T. Mustin, and John H. Ohnsman formed the company on January 7, 1887. Known as the “Yellow Cow,” the factory made pressed tableware. The firm ceased operations due to a depressed glass market on March 25, 1890, but leased the plant to the Canton Glass Co. until Canton move to Marion, Indiana in 1891. At that point, the company liquidated the assets (Hawkins 2009:71-72; Welker and Welker 1985:28-29).

Toronto, Canada

History

Beaver Flint Glass Co. (1896-1939)

Creswick (1987a:263) noted that the Beaver Flint Glass Co, Toronto, Ontario, Canada, was in business from 1897 to ca. 1948. King (1987:225, 235), however, placed the firm in existence from 1896 to 1939. The firm was actually incorporated as the Beaver Flint Glass Co. of Toronto on August 6, 1896, with a capital of $20,000 (Province of Ontario 1897:4). The plant was “a secondary manufacturer and used a flame to convert glass rod and tubing into articles for the pharmaceutical trade.” The company also imported goods for druggists and chemists. The factory did not make bottles or insulators.

Miller & Jorgensen (1986:5) stated that Beaver Flint was “more of a jobber than a manufacturer.” Numbers from the 1898 Beaver Flint catalog match the numbers from the Diamond Flint Glass Co. catalog, “creating strong evidence that the Beaver Flint Glass Company was a distributor of the bottles produced by the Diamond Flint Glass Company and its predecessor, the Diamond Glass Company.”
Containers and Marks

**B.F.G.CO. (1896-1939)**

Whitten (2013) placed the Beaver Flint Glass Co. as a user of the B.F.G.CO. mark, and numerous prescription and poison bottles have been offered on eBay with this basemark. The presence of a “T” in association with the logo is further evidence. The “T” below or preceding a three- or four-digit number was consistent and almost unquestionably indicated Toronto; the “O” in “CO.” was always capitalized (Rosewarne 1971:29).

**Prescription Bottles**

Rosewarne (1971:44) described an oval bottle with a flat front face that was mouth blown from colorless glass. Although generic, the face could have been used for an embossed label. The bottle was half round with three flat surfaces on the other side. The shoulder was surrounded by an indented ridge that also extended down both sides of the labeling area. The drawing showed a simple (unreinforced) prescription finish. The base of the bottle was embossed “B.F.G.CO.T. / 982” (Figure 10). As noted above, the “T” on this bottle immediately followed the “B.F.G.CO.” initials and certainly indicated Toronto. Based on catalog numbers, Rosewarne identified the manufacturer as the Dominion Glass Co.

We have only seen a single example of a slightly different style that was half-round in cross-section, with three flat sides and no graduations (Figure 11). The shoulder was rounded, and the bottle was topped by a simple finish. The base of the eBay example was embossed “B.F.G.CO. / 836 / T” (Figure 12).
One other style (from eBay) was also half-round in cross-section with three flat sides, but the shape of the flat sides was less abrupt. The shoulder had a crescent rounding, and this bottle, too, had a simple prescription finish. The base had a diamond configuration with “B.,” “F.,” “G.,” and “Co.” above the four lines, but the center of the diamond was bare (see Canuck Oval or Crown Oval below for a similar diamond style). We have only seen examples of these two bottles in cobalt blue color. These may have been the forerunner of the Ovals discussed below.

Based on the simple prescription finishes, all three of these styles appears to be older than the Canuck and Crown ovals discussed below. Virtually all of these prescription bottles were made for drug stores located in Toronto or nearby Canadian locations – with the names of the firms embossed on the front. It is a very safe assumption that bottles made for Canadian drug stores and embossed with the B.F.G.CO. mark – with or without the additional “T” – were manufactured for and sold by the Beaver Flint Glass Co.

**Canuck Ovals and Crown Ovals**

The Canuck Oval and Crown Oval were two prescription bottles made for the Beaver Flint Glass Co. Typically, the words “CANUCK (slight arch) / OVAL (slight inverted arch)” were enclosed by an elongated diamond, with “B.” above the diamond in the upper left; “F.” in the upper right; “G.” in the lower left; and “Co” in the lower right. The Canuck oval had a stepped shoulder and a reinforced prescription finish. Made from either cobalt blue or colorless glass, the bottles were essentially rectangular in cross-section with no graduations on the chamfered corners (Figures 13 & 14).
The Crown Ovals had identical basemarks except that “CROWN / OVAL” replaced “CANUCK OVAL” – still with slight arches (Figure 15). The bottle was very similar in shape to the Owens Oval, produced in the United States. The shoulder had ten flutes, and the finish was the double reinforced prescription type. The bottle was basically rectangular in cross-section, with graduations on two chamfered corners (Figure 16). Both of these ovals were made in both cobalt blue and colorless forms.

Poison Bottles

All eBay examples have been cobalt blue in color and were six-sided with three wider sides forming essentially a triangular shape in cross-section. The sides were also embossed with a pattern of pointed “X” marks so that the poison bottle could be determined by feel, even in the dark. This shape and the presence of the projecting “X” marks is an almost certain indicator of a poison container (Figure 17). A typical poison example was embossed “B.F.G.CO. / 1018 / T” – all horizontal (Figure 18).

Nursing Bottle

We have seen a single style of nursing bottle (on eBay) with “B.F.G.Co.” (very faint periods) embossed on the base (Figures 19 & 20). These were embossed “OUNCES” on the shoulder with a graduated scale down the front. The bottles were variously known as the “Handy Nurser” (Whittall Tatum & Co. catalog – Bailey:1892), “Oval or Baltimore Graduate” (W.H. Hamilton Co. 1902:37 – Figure 21), or just “Graduated Nurser” (Swindell 1902:21).
John W. Nicholson applied for a patent for a “Design for a Bottle” on October 27, 1890. A significant aspect of the bottles were the “ribs” (i.e. the graduations) on the “opposite side body and shoulder portion” (Figure 22). Nicholson received Design Patent No. 20,527 on February 24, 1891, and assigned the patent to James Whitall and the other principals of Whitall Tatum & Co. The bottle first appeared in the 1992 Whitall Tatum & Co. catalog. The Baltimore Nursing Bottle was a much older style (e.g., Whitall Tatum & Co. 1880 catalog – Whitall Tatum 1971:17), but it lacked the graduations.
Discussion and Conclusions

The B.F.G.CO. manufacturer’s mark was used by two firms, separated both geographically and temporally.

Beaver Falls Glass Co.

The Beaver Falls Glass Co., Beaver Falls, Pennsylvania, was open from 1869 to some point during the 1870s and made bottles, flasks, and fruit jars during that period. It was followed by the Co-operative Glass Co., and there is no reason to consider that the B.F.G.Co. logo was used by the latter firm. Co-operative Glass apparently specialized in tableware and novelties. At this point, we have found the B.F.G.Co. mark on blob-top soda bottles, beer bottles with one-part finishes, and flasks. The flasks were generic, but the applied finishes almost certainly place them within the Beaver Falls time frame rather than that of the later Beaver Flint period. The beer and soda bottles were generally embossed with the names of U.S. bottlers or breweries.

The Enigmatic S.T. Paisley

Samuel Theodore Paisley was born in May 1846. Although he attended Harvard University, he left school in 1863 at the age of 17 to serve as the chief telegraph officer for Generals Sherman, Burnside, and Rosecrans during the Civil War. After the war, he moved to Pittsburgh, and he became the chief telegraph operator for the Pennsylvania Railroad, where he “had control of all the lines and operators between Pittsburg and Altoona” (Burgoyne 1892:47).

Paisley left the railroad to become the first superintendent of Pittsburgh’s new Fire Alarm Telegraph system in 1866. Under his supervision, the city introduced the Gamewell system, and “his management of the work of construction elicited the highest commendations.” In 1871, Paisley “went east to fill a position of similar character” (Burgoyne 1892:47). Burgoyne (1892:48) included a drawing of Paisley (Figure 23). Paisley was reappointed to his former position in 1877 (Scott 1908:70).
In 1879, Paisley became the Superintendent of the East End Highways Department (also called the Department of Highways and Sewers). He had a spotless reputation until an audit discovered that Paisley had “embezzled $52,000 of city funds” over a ten year period “by means of padded payrolls and pretended Expenditures.” At this point, he fled the city (Public Policy 1900:190).

On July 8, 1900, the Pittsburgh Press reported Paisley’s death (probably two days earlier) and the return of the body to Pittsburgh. Paisley had died at Newport News, Virginia. The newspaper had no information about the cause of death.

An interesting speculation is worth a short post script. As noted above, an insulator embossed “S.T. PAISLEY / MAKER / BEAVER FALLS, PA.” has been attributed to the Beaver Falls Glass Co. Brown (2007) discussed possible connections between the elusive Mr. Paisley and Beaver Falls, and he contributed a great deal about the insulators, themselves. Coupled with our research above, the use of the word “Maker” on the insulator may indicate that Paisley was the buyer of the Beaver Falls Glass Co. in 1873. He could have manufactured the insulators during the “empty” period between 1873 and 1879.

This timing is very interesting. According to Burgoyne (1892:47), Paisley resigned his position in the fire department telegraph system to “go east” for a three-year period. Scott (1908:70) placed the date of Paisley’s resignation at 1871, so he would have returned by 1873 or 1874 – depending on the month when he left and when he returned. The timing fits very well with the sheriff’s sale of the Beaver Falls Glass Co. in 1873. Scott also set Paisley’s return to public office at 1879 – again an almost perfect match for the year when the Co-Operative Glass Co. began business. Both authors were concentrating on Paisley’s public life, so they could have missed (or ignored) a period when he was an insulator manufacturer. With Paisley’s background in telegraphy, this speculative hypothesis fits the few known facts.

Beaver Flint Glass Co.

Although a jobber instead of a manufacturer, the Beaver Flint Glass Co., Toronto, Ontario, Canada, also had “B.F.G.CO.” or “B.F.G.Co.” embossed on some of its bottle bases. So far, we have only seen the marks on prescription, poison, and nursing bottles, many of which were cobalt blue in color – although others, including the nursers, were colorless. Except for the
nursers, Beaver flint bottles are strongly characterized by the cobalt blue color, combined with embossed labels for Toronto drug stores, and the B.F.G.CO. logo – and they usually had what appears to be a model code on the bases.

Miller and Jorgensen (1986:13-24) discussed the Beaver Flint Glass Co. ca. 1896-1898 catalog and the relationship between the numbers of the Beaver Flint bottles and those of the Diamond Flint Glass Co., Sydenham Glass Co., and Dominion Glass Co. – all likely suppliers for Beaver Flint. Although there was a tremendous degree of association, none of the numbers we have seen on eBay (1017, 1018, 1020, and 1021 on poison bottles; 836 on a prescription bottle) appeared in the catalog.

Although the Beaver Flint catalog listed picnic flasks, it did not list union (strap-side) flasks, such as the ones shown on eBay – further confirming their probable manufacture by Beaver Falls. As noted above, the nursing bottles were not designed until 1890 and could not have been made by the American company.

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