

C.L. Flaccus Glass Co.

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[Part of this chapter was originally published in Lockhart et al. (2007).]

Charles L. Flaccus began glass making in 1879 and remained in business for almost 40 years. Flaccus manufactured a variety of bottles and jars, although the firm rarely applied a maker's mark to any products. The few exceptions are of interest to archaeologists and collectors. The C.L. Flaccus Glass Co. should not be confused with the packing business and colorful jars of his cousins, who operated the Flaccus Bros. and E.C. Flaccus Co. (addressed in the Flaccus Bros. file, in the F section).

Histories

Flaccus & Angers, Tarentum, Pennsylvania (1879-1880)

In 1879, the newly formed firm of Flaccus & Angers¹ purchased the former Lippencott & Co. plant at Bridge St. and First Ave., Tarentum, Pennsylvania (originally built in 1874). The plant began with a single furnace and six pots but soon grew to eight pots. According to the *Crockery & Glass Journal* (April 8, 1880), Angers – who had left the firm by that time – held a patent in glass manufacturing and planned to open his own glass house in Pittsburgh. The mysterious Mr. Angers apparently disappeared from the historic record about that time (Hawkins (2009:213)). We have been unable to discover Angers' first name or find his patent.

¹ The J. Stanley Brothers papers on file at the Corning Museum of Glass recorded this firm as Flaccus & Agnew. Caniff (1996:9) also called the firm Flaccus & Agnew. While this makes good sense, since the Agnew family was a well-known name in Pittsburgh glass manufacture, but we have been unable to find any other reference to Flaccus & Agnew.

Containers and Marks

The firm *may* have had a single logo.

F.&A.

Knittle (1927:321-322, 444) described an “F.&A.” mark that was located “either in the panel or on the bottom of the bottle.” Toulouse also noted this mark and dated it 1860-1862. Both sources assumed that Fahnstock, Albree & Co. used the logo, even though no firm associated with either individual used “F&A” initials. It is likely that Knittle mis-recorded the “FA&Co” logo. On page 441, she noted the mark as “F.A.&Co.” of Pittsburgh but used “F.&A.” on page 444. This logo probably does not exist, but the initials fit Flaccus & Angers much better than Fahnstock, Albree & Co.

Charles L. Flaccus, Tarentum, Pennsylvania (1880-ca. 1888)

After the disappearance of Angers in 1880, Charles L. Flaccus became the sole owner of the firm and listed the plant in the city directories only under his name. Despite the addition of other factories over the years, Tarentum remained the principal plant until the company’s demise – although the main business office was located at Pittsburgh until 1926. Flaccus had opened a warehouse and/or office at Willow and 41st Streets in Pittsburgh by 1880. The following year, the factory had a single furnace with seven pots, making flint prescription ware, and Flaccus opened a second plant at Leechburg, Pennsylvania. The Leechburg factory was reported to be the first glass house to fire its furnace with natural gas.² (Hawkins 2009:213; Humphreys 1882:57; Welker & Welker 1985:54).

Flaccus razed the Tarentum factory in 1883 and began construction of a new plant with double the original six-pot capacity. On October 18, 1884, a two-story wood-frame building on the site caught fire and burned to the ground. The following year, on August 28, another fire – possibly set by arson – destroyed the packing house. Despite the destruction, the plant added a

² There is some disagreement about which glass factory first used national gas – e.g., Murphy 1903:68. We have found no other information about the mysterious Leechburg plant. It may have been short lived.

second, 11-pot furnace in August of 1886. Flaccus established another plant at New Brighton, Pennsylvania, ca. 1887 but closed it in April 1896 (Flaccus 1890; Hawkins 2009:213; Roller n.d.). For a list of Flaccus factories, see Table 1.³

Table 1 – C.L. Flaccus Glass Factory Locations

Firm	Location	Date Range
Flaccus & Angers	Tarentum, Pennsylvania	1879-1880
C.L. Flaccus	Tarentum, Pennsylvania	1880-ca. 1888
C.L. Flaccus	Leechburg, Pennsylvania	1881-?
C.L. Flaccus	New Brighton, Pennsylvania	ca. 1887-1896
C.L. Flaccus Glass Co.	Tarentum, Pennsylvania	ca. 1888-1927
C.L. Flaccus Glass Co.	Beaver Falls, Pennsylvania	1893-1900
C.L. Flaccus Glass Co.	California, Pennsylvania	ca. 1913-ca. 1919
C.L. Flaccus Glass Co.*	Charleroi, Pennsylvania	1919-1927

* This was a merger with the Imperial Glass Co.

Containers and Marks

Flaccus apparently did not mark most of his containers during this period (or any other, apparently). The early Vaseline jars produced at the Enterprise Glass Works (Beaver Falls) had no manufacturer’s marks. It is probable that the jars had a horizontal seam around the base of the shoulder, but they are so scarce that we have not examined an example in person. It is likely that the “CLF” logo and the Flaccus name (without “Glass Co.”) were used during this period. We have only found two examples.

³ Although Hawkins was quite clear about the Flaccus plant at New Brighton, the Dick Roller files only listed the Dithridge Flint Glass Co. and New Brighton Glass Co. Both were in business during the period listed for Flaccus. We have found no other evidence for Flaccus at New Brighton.

CLF (1880-ca. 1888)

Whitten (2014) noted that he had seen these initials on the base of a “clear prescription/medicinal bottle” and dated the mark 1879-1928. Jay Hawkins (personal communication 11/17/2007) provided us with a photo of the mark on a colorless, pint-sized, pumpkin-seed flask (Figure 1) and also noted the mark on prescription bottle bases (Hawkins 2009:216). We have not



Figure 1 – CLF logo (Jay Hawkins collection)



Figure 2 – Clock flask (eBay)

discovered why

Flaccus seems to have used this logo on a few bottles but not others. In view of his later propensities (see below), he was likely fulfilling some requirement by a customer or state/local government.

well as hour and minute hands. In the center, it said “GOOD / NIGHT” (Figure 2). The base was embossed “CLF” horizontally. The flask was somewhat crudely made with an applied finish. It appears to fit the 1880-ca. 1893 period.

An eBay auction offered a colorless picnic flask embossed on one face with a large, five-pointed star and on the other with a clock face, complete with Roman numeral hours as

C.L. FLACCUS PITTSBURGH (ca. 1880-ca. 1888)

Creswick (1987:62) illustrated a grooved-ring wax-sealer fruit jar embossed “C.L. FLACCUS / PITTSBURGH” on the base (Figures 3 & 4). She noted, however, that the company “made a variety of bottles and jars, including some of the Mason’s Patent Nov. 30th 1858 jars.” The wax sealer was probably the same jar listed as “fruit jars” in 1889 (see above). Roller (1983:125; 2011:196) noted the same wax sealer and added that a “Groove Ring Fruit Jar” appeared in a ca. 1895 Flaccus catalog. He dated the jars “c. 1879-1910s.” The ad also mentioned the Mason jar described by Creswick.

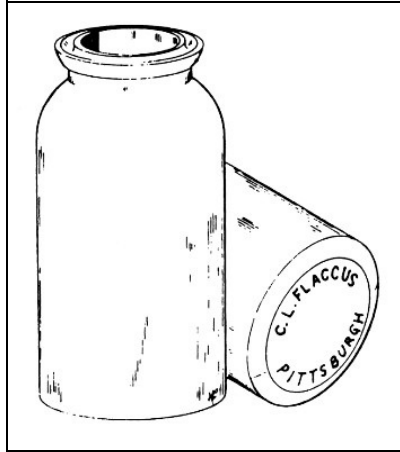


Figure 3 – Flaccus jar (Creswick 1987:62)



Figure 4 – Flaccus jar base (Jay Hawkins collection)

C.L. Flaccus Glass Co., Tarentum, Pennsylvania (ca. 1888-1928)

Although the city directory first listed the C.L. Flaccus Glass Co. in 1893, a letterhead from May 28, 1888, indicates that “Glass Co.” was added to the name at least that early. By 1889, the Tarentum plant operated three furnaces with 40 pots, making bottles, vials, flasks, fruit jars, prescription & druggists ware The 1890 Flaccus Glass Co. catalog included prescription ware, milk bottles, mustards, inks, nursing and perfume bottles, liquor flasks and bottles, and castor oils (Flaccus 1890; Hawkins 2009:213; Roller 1998).

In May 1893, Flaccus purchased the Enterprise Glass Co. – affectionately known in the trade as the “Yellow Cow” – at Beaver Falls, Pennsylvania. It was in the latter plant that he produced some of the earliest machine-made container glass in the United States.⁴ At the end of 1893, he received a license from the United States Glass Co. to use the two-mold Arbogast machine. After experimenting for a year, he began production in early 1894, the first product being Vaseline jars (Lockhart & Bernas 2014; *National Glass Budget* 1910:1; Toulouse 1971:190). See Lockhart & Bernas (2014) for more on early Vaseline jar production.

⁴ The Yellow Cow is often cited as the first plant to produce machine-made glass in the U.S. – specifically Vaseline jars. However, the West Virginia Flint Bottle Co. at Central City, West Virginia made Vaseline jars a year earlier – 1892 (Lockhart & Bernas 2014). See the BFGCo section for more information on the Beaver Falls Glass Co. that became the Enterprise Glass Co.

By 1892, the firm offered a full line of ware in flint glass. The following year saw a strike at the Beaver Falls plant that was apparently fairly short-lived. The plant also began to use side-lever presses to form the parisons (i.e., first stage in glass blowing) for mouth-blown bottles (Hawkins 2009:214; Welker & Welker 1985:54).

On April 1, 1896, *China, Glass & Lamps* reported that the New Brighton plant was using steam-powered presses that were invented by Jonathan Haley. The presses turned out 720 tumblers per hour. The article noted that the “press was invented fully 20 years ago, and was used at the old Bennett factory on the Southside, Pittsburgh, for nearly a year, then in England for about 3 years” (Roller 1898a).⁵ Haley received at least 20 glass-apparatus-related patents between 1872 and 1905. He applied for the patent for this machine on July 21, 1876, and received Patent No. 181,434 for an “Improvement in Presses for Molding Glassware” on August 22 of the same year (Figure 5). Although he received his first patent for a steam press in 1873, this was an improvement.

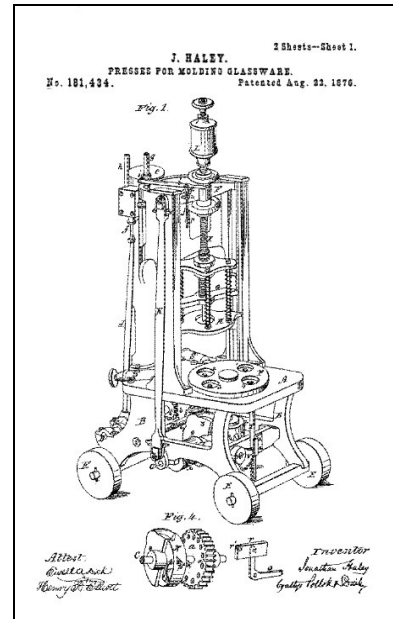


Figure 5 – Haley 1876 patent

In 1897, Flaccus installed continuous tanks. By September 1898, the factory had two furnaces with 28 pots and one continuous tank with eight rings. Also that year, the Atlas Glass Co. sued Flaccus because the machines designed by Jesse R. Johnston were too similar to the Blue machines used by Atlas. These machines are a mystery. We have found no information on how they worked, no patent, and no date of installation. The Johnston machine may never have been patented. In any event, Flaccus lost the battle and stopped using the machines (Hawkins 2009:214; Lockhart & Bernas 2014; *National Glass Budget* 1897:7; 1898a:7; 1898b:3).

The firm sold the Beaver Falls operation to the Imperial Glass Co. in December 1900 but enlarged the Tarentum plant the following year. The company incorporated in May 1904 with a

⁵ Roller (1998) seemed to think that this was the Beaver Falls plant, but Roller had no record of the New Brighton factory – probably the basis for that assumption, although the two towns are virtually side by side. He also noted “Crystal” after the “old Bennett factory” – evidently meaning the Crystal Glass Co.

capital of \$500,000. Flaccus, of course, was the president, with his son, Leonard G. Flaccus, as vice president, and Edgar S. Runnette as superintendent. Another son, Charles L. Flaccus, Jr., was a director (Hawkins 2009:214; Welker & Welker 1985:54).

At that point (1904), the plant offered prescription and proprietary containers as well as machine-made packers' ware. In 1905, the firm added a day tank to the Tarentum factory, which made flint prescription and druggist bottles. The listing remained the same until 1912. Jacob Unversagt became secretary and treasurer in 1909 (*American Glass Review* 1934:167; Thomas Publishing Co. 1905:104; 1912:482; Welker & Welker 1985:54).

Although the *Glassworker* (1919:1) stated that the C.L. Flaccus Glass Co. had leased the California Bottle Co. plant in California, Pennsylvania, in 1910, there is some evidence that California Bottle continued in operation until at least 1913. We have thus accepted ca. 1913 as the likely date of lease. The article was written in 1919 with Flaccus apparently still there. Our searches have failed to discover any later references to either the California Bottle Co. or a Flaccus presence at California, Pennsylvania.

Meanwhile, the Tarentum plant operated five continuous tanks with 40 rings and a single 16-pot furnace in 1912. By 1913, the plant made a general line of bottles and jars as well as opal (milk glass) ware by both machine and hand methods. Also in 1913, the senior Flaccus retired from active participation but retained the presidency. Leonard Flaccus succeeded his father as president ca. 1915, with Charles, Jr., as vice president (Hawkins 2009:215; *Journal of Industrial and Engineering Chemistry* 1913:953; Welker & Welker 1985:54).

By 1914, the firm made milk bottles, along with prescription bottles. The Thomas Registers first listed fruit jars for the firm in 1916.⁶ Until 1918, only flint bottles were listed, but the 1920 edition included "all kinds flint prescriptions druggists', packers in flint, amber and blue" with a continued listing for milk bottles and fruit jars. (Thomas Publishing Co. 1914:532, 536; 1916:661, 664, 3782; 1918:811, 814, 4429; 1920:828, 830, 8616).

⁶ Toulouse (1971:191) place the first fruit jars at 1918.

The workers struck at the Tarentum plant in 1917, and C.L. Flaccus died on July 22 of that year at his “summer home” near Sharpsburg, Pennsylvania. He had been in poor health for the final two years of his life. He never saw the end of the strike, which continued until 1918. The C.L. Flaccus Glass Co. merged with the Imperial Glass Co. of Charleroi, Pennsylvania, in 1919, although the combined firms both used the Flaccus name (for more discussion about Imperial, see the Other I section). As a result, the firm raised its capital stock from \$500,000 to \$750,000 (Hawkins 2009:215; *National Glass Budget* 1917:6; Roller n.d.).

C.L. Flaccus moved the main office to Tarentum in late 1925 or early 1926, but closed the plant soon thereafter. The former Imperial factory apparently remained in business for another year. H.J. Booth became president in 1926, with Alfred Martin as secretary and treasurer. The *American Glass Review* still listed the Tarentum plant as making “prescriptions, vials, flint, green and amber beers and minerals, patent, proprietary, liquors, flasks, packers and preservers” by both machine and hand production in 1927. The factory made its products at four continuous tanks with 34 rings and one day tank with four rings in 1927, but the listing almost certainly reflected 1924 or 1925 production. The last glass was probably made in 1926 or 1927 (*American Glass Review* 1927:133; 1928:135; 1929:97; Caniff 1996:9; Hawkins 2009:215; Roller n.d.; Welker & Welker 1985:54).

In March 1928, the Pittsburgh Federal Court appointed H.C. Burchinal, J.H. Beal, Jr., and Alfred Martin as receivers for the C.L. Flaccus Glass Co. However, it was not until May 16, 1929, that H.T. Rosemeyer – a Pittsburgh broker – purchased the plant, property, stock, and equipment a reported price of \$48,900. Presumably, Rosemeyer sold the various assets to different buyers (Roller n.d.).

Toulouse (1971:191) blamed Prohibition for the demise of the Flaccus company, a strange statement considering that the plant seems to have made numerous non-alcoholic bottle and jar styles – not to mention that Prohibition had been in effect for some time when the last plant closed. It seems more likely that other firms – e.g., the Owens Bottle Co. – simply had machines that out performed those used by Flaccus. Other factors – unknown to us – are also probable.

Containers and Marks

Flaccus apparently did not mark most of his containers. It appears that the few logos used by Flaccus were in response to requirements set by his customers or the states in which he sold products. These fell into two categories: liquor containers and milk bottles – with a single exception for a fruit jar lid.

Liquor Bottles and Flasks

Only one logo appeared on Flaccus liquor bottles and flasks: C.L.F.G.CO. However, the mark was only embossed on containers sold to a single organization, the South Carolina State Dispensary.

C.L.F.G.CO. (1898-1902)

The South Carolina State Dispensary regulated all liquor sales within its jurisdiction from 1865 to 1915. This mark was almost certainly applied due to regulations demanded by the Dispensary. According to Teal (2005:130):

The requirement for a glass house supplying bottles to the [South Carolina] Dispensary to have their initials blown into their bottles was a quality control measure that resulted from having more formal and specific bids and contracts. All of the glass house contracts from 1897 forward in the Dispensary records at the State Archives carry this provision.

Teal (2005:102) cited Dispensary records indicating that the C.L. Flaccus Glass Co. shipped bottles from the Tarentum factory between 1898 and 1902, although he suggested that the Beaver Falls plant likely provided some bottles as well. Flaccus supplied two types of containers to the Dispensary. In 1898 and 1899, the Tarentum plant shipped 19 railroad carloads of half-pint and pint Jo-Jo flasks, each embossed on one face with a Palmetto tree above two crossed logs with “S” to the left of the tree trunk and “C” to the right (Figure 6). These were made in both colorless and light green glass (Teal 2005:102).



Figure 6 – South Carolina Dispensary flask – palmetto (eBay)

The second shipments occurred between 1899 and 1902, also for half-pint and pint Jo-Jo flasks along with round quart bottles. This group comprised 132 carloads, all made from colorless glass in the “monogram” style. These bottles and flasks were embossed with a large SCD monogram above “S. C. (horizontal) / DISPENSARY (inverted arch)” (Figure 7). Both sets were embossed “C.L.F.G.CO” on the bases (Teal 2005:102).



Figure 7 – South Carolina Dispensary flask – monogram (eBay)



Figure 8 – C.L.F.G.CO. flask basemark (Jay Hawkins collection)

Huggins (1997:10) noted that there were several minor variations of the mark (although he did not describe them) as well as a capital “F” or “G” embossed above the “C.L.F.G.CO” logo on some bottles – although we have also seen a “B” – and there



Figure 9 – C.L.F.G.CO flask basemark (eBay)

were probably other letters as well.⁷ Teal (2005:102, 109) also noted the mark on Dispensary flasks and bottles and also attributed the marks to Flaccus. He illustrated quite a few variations in the palmetto tree flasks – although the Flaccus logo only appears to have been placed on one type.

⁷ Like so many other letter and numerical codes, we have no way to decipher the meaning. They were probably a form of internal quality control used by Flaccus.



Figure 10 – C.L.F.G.Co. round bottle basemark (eBay)

In our small sample, we have noted three variations of the mark. All flasks in our sample were embossed “C.L.F.G.CO.” on the base.

Note the capital “O” in

“CO.” (Figure 8). In several eBay photos, the final period was missing (Figure 9). On round quart bottles, however, the logo had a lower-case “o” in “Co.” (Figure 10). We have also

noticed that the periods on many of the flasks were larger than those on typical marks – or on other “C.L.F.G.CO” logos (Figure 11). Finally, the letters varied in size (tall, medium, or short) and in thickness.



Figure 11 – C.L.F.G.CO. flask basemark with large periods (eBay)

On December 5, 1902, the Carolina Glass Co. agreed to pay \$1,650 in cash to the C.L. Flaccus Glass Co. for its contract to the South Carolina Dispensary. The contract included “all snaps tools and molds now used by [Flaccus] for making glass bottles for the said South Carolina Dispensary” (Committee Appointed to Investigate the Dispensary 1906:288-289). The Flaccus involvement with the Dispensary was at an end.

Milk Bottles

Various states established two different systems during the early 20th century that strongly affected the embossing on milk bottles. The state of Massachusetts created the first of these that it called the seal system. This plan required dairy owners to bring all milk bottles to a county “sealer” – who checked the bottles to make sure they contained the correct capacity. The system was cumbersome and placed the burden of responsibility on the individual dairies (Schadlich & Schadlich 1984:1-2).

In 1909, the law shifted the onus to the manufacturers. Each glass house that desired to sell milk in Massachusetts had to post bond to guarantee that its milk bottles were within the state limits for correct capacity. The state further required each glass house to permanently mark its bottles with its initials or logo as well as the words “MASS SEAL” (Schadlich &

Schadlich 1984:3-4). Manufacturers soon discovered that the only way to make milk bottles of consistent capacity was by machine. Soon, other states adopted similar laws, and most of these remained in effect until 1947.

The second system created a numbering format to accomplish the same purpose as well as clearly identifying the manufacturer. Beginning January 1, 1910, the state of New York required “the name or initials and a designating number” to be embossed on the milk bottles by any glass manufacturer wishing to sell dairy containers within the state (*Orange County Times-Press* 1910). Once again, other states quickly adopted the system, each assigning its number to the glass houses. Glass houses requested (and generally received) the same number from each state, and many added that number to their logos (e.g., E4 for the Essex Glass Co. or 5W for the Winslow Glass Co.). By ca. 1915, the system had become mostly universal (Lockhart et al. 2010).

FL in the Massachusetts Seal (ca. 1914-mid-1920s)

From 1910 to 1947, the Commonwealth of Massachusetts required that all glass factories selling bottles to dairies within the state mark their containers with a Massachusetts seal. From some point after 1910, factories embossed the seal on the shoulder of each milk bottle, usually in a circular form embossed “MASS (arch) / {factory designator} / “SEAL (inverted arch).” The circular format was required by Massachusetts law in 1918, although many



Figure 13 – FL Mass Seal on shoulder (Al Morin collection)



Figure 12 – FL Mass Seal on body
glass houses used this format as early as 1914 (or possibly earlier). The round configuration often appeared in a small plate on the shoulder.

The Mass Seal used by Flaccus was “FL” (Blodget 2006:8; Schadlich [ca. 1990]). At least some bottles – probably earlier ones – had the FL seal embossed on the center reverse body of milk bottles in a plate (personal communication, Albert

Morin, 3/4/2007), although the shoulder seal was more common (Figures 12 & 13). Since the earlier seal was embossed on the body of the bottle, it was used prior to 1918 and as early as 1914. The mark was likely used between ca. 1914 and the mid-1920s.

F 13 (ca. 1914-mid-1920s)

Albert Morin (personal communication, 3/4/2007), reported that all milk bottles with the FL Massachusetts seal that he had seen were also marked “F 13” on the heel (Figure 14). The “F 13” mark – without the Mass Seal – was embossed on other milk bottles, and it is possible that many of these were not



Figure 14 – F 13 heelmark

identified with Flaccus by collectors. In some cases, a tiny letter was embossed below the mark, and our only example with the letter was on a bottle *without* the Mass Seal. These numerical marks could not have been used prior to 1910, the beginning of the number system. However, the strong correlation between the “F 13” heelmark and round Mass Seals suggests that ca. 1914 is a more likely initial date, and they probably followed the Mass Seals into disuse (*by Flaccus*) during the mid-1920s.

F in a keystone (ca. 1914-mid-1920s)

Giarde (1980:22) noted that the C.L. Flaccus Glass Co. used the F-in-a-keystone mark from 1900 to 1928 on milk bottles, although milk containers were not a major product of the firm. Toulouse (1971:190) had been less certain, dating the mark, “Probably not before 1900” (Figure 15). Neither author mentioned any bottle types – except milk containers – in conjunction with this mark.

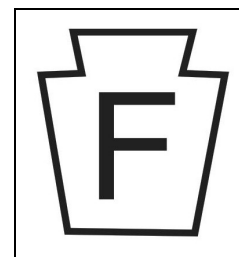


Figure 15 – Our conception of the Keystone-F logo

When Giarde noted 1900 as a beginning date for the mark, he probably derived the date from Toulouse. Toulouse (1971:191) noted “side-lever pressed milks [that Flaccus] started to make in 1902.” This is the earliest reference we have found to machine-made milk bottles. The Thomas Registers (see history section above), first listed milk bottles at Flaccus in 1914, and the listing continued to at least 1920.

However, the 1927 list did not include milk containers. Schadlich ([ca. 1990]) noted that the keystone symbol was found on milk bottle bases, but we have not seen an actual example.

C.L. FLACCUS GLASS CO. PITTSBURGH PA.

Tom Caniff reported a colorless “lightning type lid” embossed “C.L. FLACCUS GLASS CO. PITTSBURGH PA.” in 1993 (Roller n.d.). Unfortunately, we have not found any other reports of similar lids.

Discussion and Conclusions

Although his cousin, Edward C. Flaccus, operated the Wellburg Glass Co. for a few years (see the Flaccus Bros. section), the C.L. Flaccus Glass Co. was the only well-known glass factory operated by any of the Flaccus relatives. Our investigation makes it clear that Flaccus used no manufacturer’s marks on the vast majority of his products. The firm seems to have only used logos when it was required by state law or demanded by the organization purchasing the bottles.

The C.L.F.G.Co. logo was created especially for use on liquor bottles and flasks for the South Carolina Dispensary, which demanded such marks from the makers of its bottles. “FL” in the Massachusetts Seal is solidly confirmed by research, although we have not found Flaccus marks in connection with the seals from other states. Flaccus’ use of the F13 mark was confirmed by its presence on bottles with the “FL” Mass Seal. The F-in-a-keystone logo was probably only embossed on milk bottles, although that is currently unconfirmed. The keystone mark appears to have been rarely used.

Future research on C.L. Flaccus logos needs to confirm which marks were used on milk bottles – especially the elusive Keystone-F logo – and the periods when the marks were used. Investigations should also center around the secondary plants of the C.L. Flaccus Glass Co. We have found very little about the Leechburg factory. Leechburg is located just northeast of Pittsburgh, but Dick Roller – who discovered glass plants at virtually unheard of towns and cities – failed to mention any glass works there – or at New Brighton. Our information on these areas is limited to brief peripheral mentions. It is possible that the New Brighton references were actually for the nearby Beaver Falls plant.

Acknowledgments

As always, we are grateful to Douglas M. Leybourne, Jr., for allowing us to reproduce drawings from the books created by Alice Creswick in 1987.

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Last updated February 20, 2014

