

Carolina Glass Co.

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History

Carolina Glass Co., Columbia, South Carolina (1902-1912)

A group of businessmen from Columbia, South Carolina, incorporated the Carolina Glass Co. in June 1902, with a capital of \$60,000. The president and treasurer was Edwin G. Seibels (also recorded as J.J. Seibels), with Thomas Naylor, Jr., as vice president, J.H. Williams as superintendent, and Clinton A. Norton as manager. Other stockholders included the B.F. Taylor, W.B. Smith, W.G. Childs, and Harry Smith. Both Williams and Norton had previous glass working experience, but the others were local businessmen. The group assembled the firm specifically to manufacture bottles for the South Carolina Dispensary,¹ possibly the largest single bottler in the world at that time. At least part of the reason for opening the works was the idea that a local glass house could produce bottles more cheaply than those at greater distance (Columbia City Directory 1907; Hamer 2003:25; Huggins 1997:10; Teal 2005:103-104).

The *National Glass Budget* (1902:8) noted on May 31, 1902, that work had “commenced on the erection of the factory of the Carolina Glass Co., at Columbia, S.C., and it is expected to have the plant completed early in August. The plant will consist of a 12-shop continuous regenerative tank furnace, for lears [lehrs] and two gas producers. Bottles and druggists’ ware will be produced.” This makes it clear that the firm intended to produce a variety of glassware from the beginning.

Workers completed the plant in September 1902, at a cost of \$32,000. The factory operated a single continuous tank with six rings and cooled the workers with an abundance of

¹ The 1892 law establishing the South Carolina Dispensary system created a public monopoly that ended all private enterprise selling alcoholic beverages within the state on July 1, 1893. The law created a state agency to administer the system until it was abolished in February 1907 (see Wallace 2005).

electric fans. The plant imported sand from Ulmer, South Carolina, and Lumber City, Georgia; manganese from Newark, New Jersey; soda ash from Wyandotte, Michigan, and Syracuse, New York; crude oil from New York, box shooks from Wisconsin and North Carolina; and wood fillers from Anderson, Indiana, and St. Louis, Missouri (Teal 2005:104-105).

In December 1902, Carolina Glass purchased the contract for Dispensary bottles from the C.L. Flaccus Glass Co. – including “all snaps tools and molds now used by them for making glass bottles for the said South Carolina Dispensary at fifty per cent of the cost of each of said articles It being expressly understood and agreed that the said CL Flaccus Glass Company will plug the lettering of all bottom plates and will cut the letters CGC near the bottom of all molds.” (Committee Appointed to Investigate the Dispensary 1906:290).² Manager Norton, however, stated that the molds were worn out when they arrived, and Carolina Glass never used them (Teal 2005:105).³ See the section on C.L. Flaccus for information about that company.

According to Teal (2005:106), the first bottle sale recorded by the Carolina Glass Co. was to one Kirkley, probably C.L. Kirkley, a Columbia soda bottler in business from the late 1890s to 1903. This bottle apparently had no manufacturer’s mark. The bulk of the firm’s output, of course, went to the Dispensary, generally by railroad carload at a freight cost of \$4.00 per car. The glass plant manufactured its own wooden boxes to ship the bottles, each box complete with wooden slat separators to reduce bottle breakage. Each box would hold 18 quarts, 36 pints, or 60 half-pint flasks (Teal 2005:106).

Because the Carolina Glass Co. was the first glass house in the state, the firm had to import glass blowers and all skilled workers. As a result, the plant was a union shop, paying union wages. By 1906, the firm employed 240 workers at an annual payroll of \$250,000; however, 1906 marked the year when Carolina Glass lost its Dispensary contract after the

² Although this is purely speculation, it is curious that Flaccus would sell a lucrative contract with one of the largest bottle buyers in the U.S. Subsequent information suggests that some of the stockholders and/or management of Carolina Glass was involved personally with principals of the Dispensary – who may have pressured Flaccus to sell the contract.

³ As noted in the Containers and Marks section, Norton was incorrect. Some Carolina Glass molds show altered Flaccus basemarks. These could only have been the former Flaccus molds.

delivery of ca. 1,000 carloads of bottles. This greatly reduced the business for the plant (Teal 2005:106-107). The Carolina Glass Co. appeared in the 1905 Thomas Register (1905:105), although it did not list any products. The company made “Prescription; Beer; Soda; Wine; Proprietary Medicine; Brandy; Packers’ [and] Preservers” ware by 1907 and continued that listing in 1909 (Thomas Publishing Co. 1907:161; 1909:202).

The Dispensary closed on February 16, 1907, as a result of clearly evidenced corruption, graft, and mismanagement. The Dispensary had purchased such items as bottles, labels, and liquor at a great loss in profit to the state. The Carolina Glass Co. was apparently part of the profiteering, leading to an investigation of the glass house (Huggins 1997:10; Wallace 2005:43).

When the Dispensary ceased operation, the State Legislature authorized counties the option to establish their own dispensaries. A total of 25 South Carolina counties exercised the option and created their own dispensaries – and most of these contracted with the Carolina Glass Co. to supply their bottles. The glass house again prospered (Teal 2005:107; Wallace 2005:43).

South Carolina adopted local option for alcohol sales. Each county could establish a county dispensary or could abolish alcohol sales entirely. In 1909, all but six counties within the state voted to be “dry,” again greatly reducing the glass house market base. Between 1906 and 1915, the number of county dispensaries fluctuated between six and fifteen.

Early in 1910, trouble arrived from a different direction. Carolina Glass had made a claim that the state owed the glass house \$23,013.75 for unpaid merchandise. The commission formed to investigate the corruption of the Dispensary, however, found that Carolina Glass had overcharged the Dispensary by \$51,432.99, leaving a balance owed by the glass house of \$28,419.24. The court delivered its verdict on February 23, 1910. An appeals court rapidly handed down a decision on November 17 of the same year, supporting the lower court. The Dispensary owed the money (*National Glass Budget* 1916:3; West Publishing Co. 1913:636).

To make the financial situation worse, Carolina Glass delivered a final load of glassware to the county dispensary board for Richland County – one of the last of the remaining county dispensaries – between February and December 1910. Although the Richland County Dispensary remained operational until 1915, it apparently defaulted on its payment to Carolina

Glass – owing the glass house \$17,550.07. The debt was eventually remanded to the state. When Carolina Glass requested payment from the state, the glass house was informed that the money had been applied to the \$28,419.24 debt described above. When Carolina Glass sued for the funds, the courts upheld the state’s actions (West Publishing Co. 1913:637-640).

In addition, the glass house was having labor problems. In late June 1910, the firm notified the Glass Bottle Blowers Assn. (GBBA) that it expected its blowers to work during the summer months – despite union rules prohibiting summer labor – possibly for extra income to pay the money owed the state due to the judgement. Because the union would not allow its members to work in the summer, Carolina Glass signed a contract with the American Flint Glass Workers Union to take charge of the plant during that period. The Flints agreed to admit GBBA members to its ranks free of charge if they would consider summer work (Glass Bottle Blowers Association 1910:32).⁴

The timing was perfect. The Charles Boldt Co. had recently discharged many of its blowers after the plant installed Owens Automatic Bottle Machines, so the Flints “gathered up” the displaced workers and relocated them to Columbia. Understandably irritated, the GBBA voted unanimously to “call the men out” (i.e., begin a strike) on June 23, 1910 (Glass Bottle Blowers Association 1910:32-33). It is unclear how long the strike lasted, but this certainly weakened the position of the firm.

The combination of the court pressure, the strike, a total of \$40,563.82 in lost revenue (the state and Richland County debts), and the reduced liquor bottle sales apparently produced more strain than the company could withstand. It is highly likely that glass production ceased by the end of 1910. On October 28, 1911, John J. Abney noted that “the Glass Company is in a derelict shape.” The statement was apparently accurate. The Carolina Glass Co. closed its doors in 1912 (*American Glass Review* 1934:173; Teal 2005:108).

Even though the plant was officially closed, Carolina Glass appeared on a 1913 list as using one continuous tank with nine rings to make “prescription and beer” bottles and flasks

⁴ Typically, the GBBA represented bottle blowers, while the “Flints” supported laborers who made glass tableware and novelties. This division created a great deal of tension within the industry, especially among factories that made both bottles and tableware.

(*Journal of Industrial and Engineering Chemistry* 1913:954). The Carolina Glass Co. also continued to be listed in the Thomas Registers as late as 1921. (Thomas Publishing Co. 1921:782). The Registers clearly did not keep good contact with southern glass houses.

Containers and Marks

During the eight years the Carolina Glass Co. was in business, it produced a large variety of bottles. Its output included several container types for the South Carolina Dispensary as well as soda, beer, prescription, proprietary medicine, wine, brandy, and packers' bottles. Another unusual item was jardinieres – decorative flower pots or urns.

The Carolina Glass Co. began production specifically to manufacture flasks and bottles for the South Carolina Dispensary. Between 1893 and March 1899, Dispensary bottles were embossed with the Carolina Palmetto tree and crossed log emblem, after ca. 1896, the initials of the glass house. Carolina Glass also made unmarked half-pint “rib ovals” and

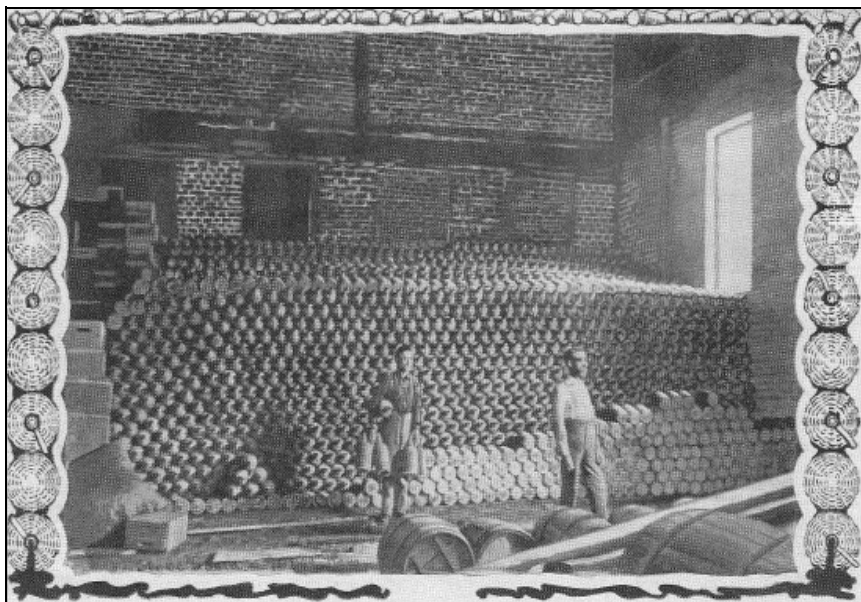


Figure 1 – Demijohns stacked at the Carolina Glass Co. (Teal 2005:106)

quart “Brandy 4s” that were filled by the Dispensary and only marked with paper labels. These were sold by local dispensaries. In addition, the plant made large numbers of rattan-covered demijohns that were filled with wine or alcohol for use by druggists (Figure 1). All of these were probably unmarked (Teal 2005:107).

Teal (2005:107) recorded some of the customers of the Carolina Glass Co., including the Richland Distilling Co., Marray Drug Co., Augusta Brewing Co., and Sommers & Co. By 1906,

Carolina Glass had 400-500 customers (Teal 2007:107). Although it is clear that the bulk of the non-Dispensary bottles were unmarked, it is very likely that some of these beer, soda, liquor, and/or prescription bottles bore the initials of the glass house.

C.G.Co. (1902-1911)

The Carolina Glass Co. embossed its “C.G.Co.” initials on South Carolina Dispensary bottles and flasks between 1902 and 1906. It is also possible that the firm also placed its initials on selected other bottles for some of its customers – although it is virtually certain that many (possibly most) of its non-Dispensary products were unmarked.

Dispensary Bottles and Flasks



Figure 3 – Monogram flask (Treasurenet)

Teal (2005:107) noted that the Carolina Glass Co. produced “whiskey and beer bottles for distilleries and breweries in the variety of sizes and shapes that were in vogue at the time.” The main buyer, however, was the Dispensary.

Carolina Glass Co. marks were only found on monogram bottles and flasks (Figures 2 & 3) – never on ones with the palmetto tree design. The C.G.Co. initials were ca. 1/8" tall on the half-pint flasks in a slight arch on

the back heel (Figure 4). On round quart bottles, the initials were horizontal at the rear heel, with an upper-case “O” in “CO” (Figure 5). These initials were smaller than on California Glass Co. bottles (Teal 2005:103-108, 149; Harvey Teal, personal communication, 10/17/2006) (Figure 6).



Figure 2 – Monogram quart bottle (eBay)



Figure 4 – C.G.CO. – flask heel (eBay)

The vast majority of Dispensary bottles with the C.G.CO. logo were made by the Carolina Glass Co. According to Teal (2005:109), the California Glass Co. shipped a total of 16 boxcars of bottles to the South Carolina Dispensary during the 1898-1899 period. However, the Carolina Glass Co. shipped ca. 1,000 boxcar loads between 1902 and 1906, more than all other manufacturers combined!⁵ Carolina Glass produced ca. 62.5 times as many bottles as California Glass.



Figure 5 – C.G.CO. – bottle heel (eBay)

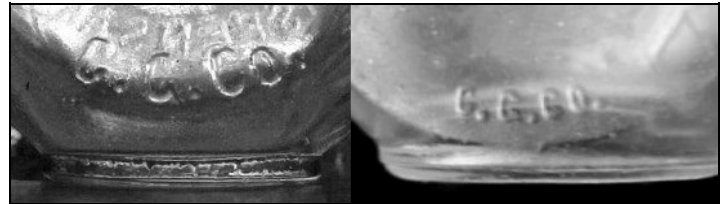


Figure 6 – Comparison of California Glass Co. (l.) and Carolina Glass Co. (r) initials (eBay)

According to Huggins (1997:11):

It is of interest to note that some of the bottles bearing the mark of C.L. Flaccus are identical to those of the Carolina Glass Company, the reason being that Carolina Glass Company used molds acquired from C.L. Flaccus. Some bottles exhibit a faint “C.L.F.G.CO.” and a superimposed “C.G.CO.,” which probably represents an attempt to change the former mark on newly acquired molds.

One eBay example had the typical small “C.G.CO.” in an inverted arch on the heel and a large “CG” (and possibly another letter) on the base (Figure 7). This may be an example of the molds Huggins noted.

⁵ Between 1893 and 1906, all companies combined shipped ca. 1,725.5 boxcar loads of bottles to the dispensary. Thus, the Carolina Glass Co. produced ca. 58.1% of all bottles used by the dispensary, although all of these figures are approximate. The records do not show what size each boxcar was or whether they were all full. A carload of half-pint flasks would also hold considerably more containers than one of quart bottles.

We have noted that cylinder whiskey bottles were embossed on the heels with the C.G.CO. mark. All the initials that we have observed on quart bottles have had a “G” that was engraved with a downwardly sweeping serif (similar in shape to a reversed comma or dog’s tail) and a capital “O” in “CO.” In some cases a two-digit number was embossed on the base.



Figure 7 – Heel & Base of former Flaccus bottle (eBay)

Toulouse (1971:116-117) showed this mark “found on a whiskey or wine bottle made in a three-part mold.” Although he could not identify the company, he dated the mark “circa 1870 to 1880.” Toulouse may have had his dates for the process confused.

The bottles usually described as three-piece (or three-part) molds are those similar to the one pioneered by Henry Ricketts in 1821. In this type of process, the body of the bottle is blown into a dip mold with two hinged parts at the shoulders that form the shoulders and lower neck of the bottle. According to Jones and Sullivan (1898:30), these were in use from 1821 until the 1920s, although they admit that by the “late-19th century,” this process had virtually disappeared from the liquor trade. Toulouse was probably referring to the Dispensary bottles from a hand-written reference sent by a collector. We have not seen any other referrals to a bottle of this type.

The Carolina Glass Co. used some, perhaps many, of the old Carolina Dispensary bottle molds to make bottles for the county dispensaries. These were altered to remove the side embossing, so that the bottles could be used with paper labels. Generally, however, the firm did not remove the C.G.CO. logos, so the bottles maintained the marks. One of the authors (Teal) has discovered some of these bottles without the labels; therefore, flasks and bottles with no Dispensary identification – but *with* the C.G.CO. logos – may be found.

Soda and Beer Bottles

The C.G.CO. logo has also been reported on numerous Pepsi-Cola and Coca-Cola bottles, mostly from the southern states (e.g., Ayers 1997; 2001). In addition, a large number of beer bottles and various soda bottles with the mark were used in Midwest and Eastern cities. In our sample, the logos fall into four configurations, and these are discussed in detail in the Cohansey Glass Co. and Coshocton Glass Co. sections.

Teal (2005:107) noted that bottles from many local South Carolina “soda and mineral water establishments” were embossed with C.G.Co. and suggested the Carolina Glass Co. as the producer. The company mainly manufactured “½ pint, pint, and quart crown-capped bottles for their soda and mineral water customers.” It thus seems reasonable to accept the Carolina Glass Co. as the manufacturer of soda bottles with C.G.CO. logos made for Southern bottlers – *except* that many of the Pepsi bottles, marked with exactly the same logos as the earlier bottles, were apparently made during the 1910-1915 period – after the Carolina Glass Co. closed.

In addition, Harvey Teal and another collector searched a “waster” dump (i.e., a site used to dispose of broken bottles) in an attempt to find non-Dispensary fragments embossed with C.G.CO. logos. They found only one example, suggesting that the Carolina Glass Co. used the logo rarely if at all on bottles aside from the ones for the Dispensary. Because of this and other considerations (discussed in the Coshocton Glass Co. and Cohansey Glass Co. sections), we have eliminated the Carolina Glass Co. as a user of the C.G.CO. logo *on soft drink and beer bottles*. Although Carolina Glass made beer and soda bottles (as well as other types), we find no compelling evidence that the firm used a logo on any bottles – except when required to do so by the Dispensary.

C followed by a four-digit code

Bill Porter (personal communication 2/30/2010; 11/15/2010; 1/5/2014) reported “C + 4” basemarks (i.e., the letter “C” – sans serif – followed by a four-digit number) on straight-sided Coca-Cola bottles – as well as two with three-digit numbers. Porter noted several examples of marks and the cities associated with the bottles:

C.491 – Norfolk, Virginia (Figure 8)

C.492 – Elizabeth City, North Carolina

C.1113 – Monroe, Louisiana [third number is not fully legible]

C.1163 – Lexington, North Carolina (Figure 9)

C.1728 – Leesburg, Florida



Figure 8 – C.491 Coca-Cola base (Bill Porter collection)

C.1761 – New Bern, North Carolina
C.1820 – Rocky Mount, North Carolina
C.1825 – Emporia, Virginia
C.1825 – New Bern, North Carolina

Many of these “C” marks are followed by a period, then the number. Many were also double stamped on the base (especially visible in Figure 8). This technique appeared on mouth-blown bottles as early as 1890 but was rare until 1895 or later. It was most common during the early 20th century until ca. 1914, although the process never became the norm. For possible explanations, see the section on the American Bottle Co.



Figure 9 – C.1163 Coca-Cola base (Bill Porter collection)

Porter (2012:62) originally reported these marks as “still a mystery” and speculated that the unusual logo/number combination could have been a result of differences between the two major Coca-Cola franchise divisions at the time. Porter stated that all of these bottles would have been made “well before 1912” – a statement supported by the double stamped basemarks. Because all of these were used by Southern bottlers, the Carolina Glass Co. is a good candidate for user of the mark. There is also a chance that the Cumberland Glass Mfg. Co. used the mark instead (see that section for more discussion).

Although the early histories for requirements are currently unknown, Coca-Cola eventually demanded that its bottle suppliers emboss logos and specific codes on all bottles made for Coca-Cola franchises. Coca-Cola probably made a request for logos early – possibly by 1900 – although we have not found any documentation to support this idea. Much later – on May 13, 1918 – Coke required manufacturer’s marks to be embossed on the bases of its bottles by all glass houses (Lockhart & Porter 2010). These “C+4” marks may thus be in response to a Coca-Cola request.

Discussion and Conclusions

After ca. 1896, the Carolina Glass Co. was the major producer of containers for the

South Carolina Dispensary system from 1902, when the company began, to 1906, just before the Dispensary closed. Until 1910, the glass house made bottles for many of the county dispensaries. A combination of curtailed business from the dispensaries, labor issues, and garnished payments forced the plant to close during late 1910. Although the plant also made bottles for many local companies, their orders were insufficient to overcome the losses.

It should be noted that the 1911 Columbia city directory listed seven glass blowers, a bookkeeper, and a manager as employees of the Carolina Glass Co., and the firm remained listed in the 1912 directory. It was common throughout the U.S. for city directories to list out-of-business firms for two or more years. This is likely an example. As further evidence for the 1910 closure, Harry M. Brewer, manager of the Carolina Glass Co. in 1910 was not listed at all in 1911 and was manager of the Carolina Gay-Ola Co. in 1912.

The South Carolina Dispensary required its suppliers to emboss their initials on the containers they supplied. Both the California Glass Co. and, later, the Carolina Glass Co. used “C.G.Co.” with a lower-case “o” in “Co” on Dispensary flasks. Both also used “C.G.CO.” with a capital “O” in “CO” on round quart bottles for the firm. Since the letters used by the Carolina Glass Co. were smaller, it is easy to recognize which container was made by each glass house. We have found no evidence that the Carolina Glass Co. used its initials on other (non-Dispensary) bottles, although it may have used the letter “C” followed by a three- or four-digit number on the bases of some straight-sided Coca-Cola bottles.

Acknowledgments

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