Pacific Coast Glass Companies and Their Marks

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The Pacific Coast glass firms consisted of three companies, although what little information we have found about the first one is mostly theoretical. The next two, however, were well documented. The Pacific Coast Glass Works opened in 1902 and made a variety of glass containers, using three different logos during its tenure, each with its own temporal period. The final firm, the Pacific Coast Glass Co. also made many different forms of bottles and jars from the reorganization in 1924 to its merger with the Illinois-Pacific Glass Corp. in 1930. The company apparently only used a single logo.

Histories

Newman-Davis (ca. 1900-1902)

References to a glass house called Newman-Davis are very tenuous. Toulouse (1971:415-416) noted that:

Shortly after they had sold the San Francisco & Pacific Glass Co. to the Abramson-Heunisch Glass Co., George H. Newman and Carlton Newman Davis, descendants of the Carlton Newman who had founded the San Francisco Glass Works in 1895, reentered the glass business. It may have been first as bottle jobbers under the name of Newman-Davis, using a ligatured "ND" as a trademark, but by 1902 they had a glass factory.

An ad for Illinois-Pacific Coast Co. stock supports the idea of the earlier Newman-Davis company. Under the heading "History of the Business," it noted that the Pacific Coast Glass Co. "was founded in 1900" (Mitchum, Tully & Co. 1930:15). This is two years prior to the opening date for Pacific Coast Glass Works and strongly suggests an earlier firm operated by Newman and Davis.

Containers and Marks

ND (ligature) or ND

Toulouse (1971:384, 384, 416) discussed this mark in both the ND and ND-ligature formats (Figure 1). He stated that the mark was on a beer bottle and cited May Jones. He suggested a possible relationship to Newman and Davis who may have been jobbers or even glass manufacturers from ca. 1899 to 1902 when they started the Pacific Coast Glass Works. Jones (1965:[20]) merely showed the mark from a John Rapp & Son, S.F. "Big beer." In the connected mark, the second upright from the "N" also formed the upright for the "D."

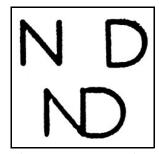


Figure 1 - ND marks (Toulouse 1971:384)

Pacific Coast Glass Works, San Francisco (1902-1924)

On January 3, 1902, the Pacific Coast Glass Works incorporated with a capital of \$100,000 (Curry 1902:63). In 1905, there were milk bottle machines in use at Alexandria, Virginia; Mannington, West Virginia; Olean, New York; San Francisco, California; and Fairmont, West Virginia. The San Francisco factory also made fruit jars on five machines and "cherries" on the same machine that made milk bottles (*National Glass Budget* 1912:1). The San Francisco machine could only have been used by either the Pacific Coast Glass Works, Illinois Pacific Glass Co., or both. Each company later made milk bottles and made jars about that time. Pacific Coast used semiautomatic machines by at least 1912, although Illinois-Pacific had them at least three years earlier (see that section for more information).

Pacific Coast was not listed in the directories until 1907 – with two continuous tanks, making green glass prescription and proprietary medicine bottles and packers. George H. Newman was the president by 1908 with Carlton Newman Davis as treasurer and manager. The factory was at 7th & Irvin. The company began using semi-automatic machines ca. 1911 or 1912²

¹ An appendix to the work, however, noted the date as January 8, 1902.

² In his discussion of the Pacific Coast Glass Co., Toulouse (1971:141) made one of his numerous typographical errors and placed the semi-automatic machines at 1911; on page 416, he

– along with continued hand production – at two continuous tanks with 16 rings. In 1913, the plant added a third tank, with only two additional rings for a total of 18 (Toulouse 1971:416).

Dinda (1918:36) noted that the Pacific Coast Glass Co. was "successfully operating four of the new type Lynch No-Boy machines, which have recently been installed here" in 1918. According to a 1919 article, however, Pacific Coast had purchased land to build a new, fully automatic factory in San Francisco. Its plans were to abandon the old plant (*Glassworker* 1919:1). By 1923, Davis (by now vice president) announced the 75% completion of a \$250,000 improvement on the plant. In the process, the firm replaced the old semiautomatics with Lynch LA machines. The company reorganized as the Pacific Coast Glass Co. in 1924 (Toulouse 1971:416).

Containers and Marks

PCGW in a Maltese Cross (1902-ca. 1904)

Toulouse (1971:415) illustrated this mark and dated it ca. 1902 to 1924. Although he used identical dates for both this and the other logo used by the company, there was likely a temporal difference. The Maltese Cross marks appear to be scarce or at least unusual, suggesting that the mark was used for a short period, probably early in the company's history. The few we have seen were on mouth-blown bottles and had double stamps (Figure 2). It is likely that the firm discovered that it took extra time and energy to form the cross and discontinued the logo in favor of the simpler one.



Figure 2 – Maltese Cross

P.C.G.W. (ca. 1903-ca. 1920)

Jones (1965:[16]) correctly identified this mark as belonging the Pacific Coast Glass Works, but she had no guess for its dates of use (Figure 3). Toulouse (1971:416) also showed

dated the same installation at 1912. The machines were certainly in place by 1913 (*Journal of Industrial and Engineering Chemistry* 1913).

this mark as being used by the Pacific Coast Glass Works and dated it from 1902 to 1924. Colcleaser (1966:14, 32) showed examples of this mark, one on a whiskey bottle with a "brandy" finish, two on crown-finished beer bottles. Miller (1999:7, 36, 42) illustrated three examples of soft drink bottles with the mark. The composite date range for the companies using the bottles was 1909-1915. All of the bottles in Miller's book were pre-machine. Creswick noted this mark (with full punctuation) on a grooved-ring wax-sealer fruit jar that was otherwise unmarked. However, she noted that the company would have been quite late to have made this type of jar. Alternatively, she assigned the mark to the Pittsburgh City Glass Works (Cunningham & Duncan), 1852-1865.

Markota and Markota (2000) observed the mark on 17

from Fort Bragg. They dated the company ca. 1905-1920+.



Figure 3 – PCGW (Lindsey; Cal. Parks)

Hutchinson soda bottles from California. Of the marked California
Hutchinsons, P.C.G.W. was by far the most common. Date ranges estimated by the Markotas for various bottles generally fell into the 1902-1910 period. It should be noted that the authors placed an end date on Hutchinson bottles (as the date they went out of popularity). The Markotas (2000:130) also showed a variation of the mark (P.C.G. / S.F.) on the base of a Hutchinson bottle

Hutchbook (Fowler 2018) listed a total of 54 Hutchinson soda bottles with the P.C.G.W., almost all with punctuation and on bases. The unusual exceptions were heelmarks when a large letter was embossed on the base. Von Mechow (2018) included 29 uses of the logo on various bottle types, including Hutchinsons, champagne beers, pony bottles, and export beers.

Griffenhagen and Bogard (1999:127) noted that the P.C.G.W. mark was used for California Laxative and Marshall's Bitters and selected the Toulouse date range of 1902 to 1924. Fike (1988:38) dated the Marshall's Bitters bottle 1902 to 1908 and cited Wilson and Wilson (1969). He showed no manufacturer's mark but noted that the bitters also came in an unembossed bottle with a paper label. Ring (1980:321) listed the bottle with no manufacturer's mark. She noted that the name was registered as Trade Mark No. 31664 on June 7, 1898, and had been used since February of that year. The bitters was advertised as early as 1888.

Ring (1980:305, 387, 476) also listed three other bitters bottles with the P.C.G.W. mark on their bases. These included Liebig's Eucalyptus Tonic and Bitters, Eucalyptus Bitters Co., San Francisco, California; Prune Bitters (according to Ring "it is believed to be dated about 1902-06, possibly started in 1905 and ruined in the earthquake a year later"); and Wait's Kidney and Liver Bitters.

Bill Lindsey noted that in his collection the P.C.G.W. marks sometimes have punctuation and sometimes do not. Many of these bottles are double stamped (see Figure 3). They are mostly on the bases of cylinder whiskey bottles, Webb's Tonic, or Lash's Bitters. All the bottles with this mark that Bill has seen were mouth blown, although he admitted he has not looked at as many machine-made bottles. The general date ranges given for bottles marked P.C.G.W. suggest that these initials were used from ca. 1904 to ca. 1920.

We also conducted a study of West Coast milk bottles at the California Parks facility at Sacramento in 2006 (see more about that in the Milk Bottle Rim Code section below). Thirteen of the milk bottles were embossed with the P.C.G.W. logo, usually with clearly distinguishable periods between all the letters. Although the logo was almost always embossed in an arch on the base, there was sometimes an accompanying horizontal P.C.G.W. embossed on the heel (Figure 4). Three of the bottles even had the arched-letter basemark accompanied by



Figure 4 – PCGW (Cal. Parks)

the PC in a broken and separated rectangle embossed on the heel. This indicates either a transition bottle (at the point where one mark changed to the other – see next entry) or the use of an old baseplate with a newer body mold.

PC in a broken and separated rectangle (1917-ca. 1925 – occasionally later)

Jones (1965:[16]) seems to have been the first to identify this mark (at least in publication). She noted that it was used by the Pacific Coast Glass Co. "prior to the merger with Illinois-Pacific in 1930." This is also one of the six marks that Toulouse (1971:414) attributed to the Pacific Coast Glass Co. and dated between 1925 and 1930 (Figure 5). Colcleaser (1965:60) showed an example of the mark on a fruit juice bottle that looks like a whiskey quart (including a "brandy" finish).

However, the earlier assumptions were incorrect. The Pacific Coast Glass Works (not Co.) registered this distinctive PC trademark on May 31, 1921, claiming its first use on June 1, 1919, on jars and bottles (Creswick 1987:102). Roller (1983:108-109) listed two jars with the "PC in divided rectangle logo" embossed on their bases: the Double Seal and Double Seal MASON. He dated the mark 1919 to 1925 and noted that the company name was changed in 1925 to the Pacific Coast Glass Co. However, he may have confused the divided rectangle mark



Figure 5 – Separated logo (Cal Parks)

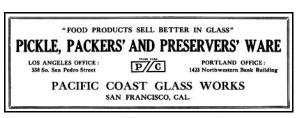


Figure 6 – 1917 ad (*Western Packer & Canner* 1917:37)

(below) and the separated mark – although he may never have seen the separated logo. He described the earlier mark as being registered on February 22, 1921, and first used on June 1, 1919. Note the difference between Roller's and Creswick's registration dates – almost certainly reflecting the

registration and

application dates. Roller (1983:273) also enumerated a Pacific MASON with the divided logo and illustrated the separated mark. This mark appeared in ads as early as 1917 – with TRADE MARK above the logo (*Western Packer & Canner* 1917:37 – Figure 6). A PC trade mark was also registered in 1914, although we are not yet sure whether this was the split (separated) mark.

BOSCO Double Seal

Toulouse (1969:49-50) described a fruit jar with a Lightning closure that was machine made and embossed "BOSCO / Double Seal (upwardly slanting cursive, with a fancy underlining tail)" on the side and "'PC' in a divided rectangle" on the base (Figure 7). He suggested the Pacific Coast Glass Co. as the manufacturer (1925-1930) and possibly Pacific Coast Glass Works (1902-1925). He noted a variation with a "beaded style Lightning design."

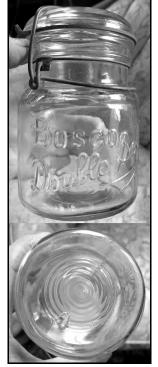


Figure 7 – Bosco Double Seal (Pick Click)

Roller (1983:70) discussed the BOSCO / Double Seal jar and noted that the base was embossed with "PC in a divided-rectangle logo." Creswick (1987:31) illustrated the jar and dated it ca. 1919-1930, citing the Pacific Coast Glass Co. as the manufacturer, possibly the earlier one and noting that the jar had the beaded neck seal (Figure 8). Roller 2011:109) added that the base could be embossed with the divided logo or unmarked (see Figure 7).

The jars with the broken or separated logo were possibly made during the entire period when the mark was employed – ca. 1917-1925 – by the Pacific Glass Works. The Pacific Glass Co. may have continued the logo until the old molds wore out. The jars with no basemark have one of two explanations. Either they were made prior to



Figure 8 – Bosco Double Seal (Creswick 1987b:31)

the logo's use or after the reorganization that created the Pacific Glass Co. in 1924. Since the "Co." used the non-separated divided logo from 1925 to 1930, however, it is less likely that they ignored their logo on jars.

Double Seal and Double Seal MASON

Toulouse (1969:97) described these jars as being embossed "Double Seal" in upwardly slanted cursive, with a fancy underlining tail (identical with the BOSCO jars described above but without "BOSCO"). The first variation had the old-style Lightning closure, and he ascribed it to the Pacific Coast Glass Works ca. 1910-1920. The second variation was the same but with the beaded neck design. He dated the second one ca. 1920-



Figure 9 – Double Seal (eBay)

1930, Pacific Coast Glass Works and Company. He did not note any logo on either jar.

Roller (1983:108) illustrated and discussed the Double Seal jar, noting that it came with both the "old style neck" and the beaded neck variations. He dated the jars ca. 1919-1925 and noted the divided rectangle mark on the base (not denoting *which* divided rectangle this was). The only example we have found online had a beaded neck and the undivided rectangle

embossed on the base – suggesting a 1925-1930 manufacture by the Pacific Coast Glass Co. instead (Figure 9). Roller (1983:109) also discussed the Double Seal MASON jar, probably used with a shoulder seal. He again noted the divided rectangle logo on the base but still did not distinguish between the two marks.

Creswick (1987:45) illustrated and discussed four variations of the Double Seal jars. The first had the "old style Lightning seal"; the second the "Lightning beaded neck seal" (Figure 10). This one

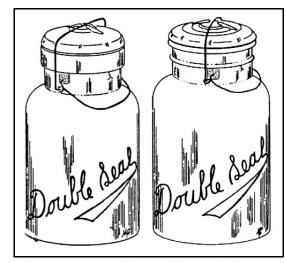


Figure 10 – Double Seal (Creswick 1987b:45)

was embossed with "PC

MASON

Figure 11 – Double Seal (Creswick 1987b:45)

in broken rectangle" on the base. The third variation had the same embossed label but had a continuous-thread finish, and the final one – also with a continuous-thread finish and the Mason beaded neck –

also had the broken rectangle basemark (Figure 11). She dated the first variation ca. 1919-1925, the second 1925-1930. Roller (2011:170) also listed all four variations and noted that the bases of the first three could be marked with the divided logo or unmarked – but did not deal with each variation separately. The editors noted that the Double Seal MASON jar had the divided logo on the base.

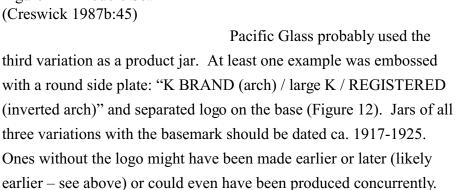




Figure 12 - K Brand (eBay)

Our hypothesis, based on the above discussion, is that Double Seal jars with the old-style finish were made during the ca. 1917-1925 period, and those with the newer, beaded finish were made during from 1924 to 1930.

Pacific (cursive) MASON

Toulouse (1969:231) described a jar with the "Mason beaded neck design" that was embossed "Pacific (upwardly slanted cursive) / MASON" on the side with the separated PC-rectangle logo on the

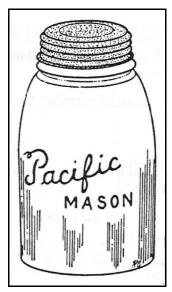


Figure 14 – Pacific Mason (Creswick 1987b:101)

base (Figure 13). He ascribed the Pacific Coast Glass Co. as the maker and dated the jars ca. 1925-1930. Roller (1983:273; 2011:403) discussed this jar, noting that its closure was a bead seal with a zinc screw cap. This time, Roller illustrated the *divided* rectangle logo on the base of the jar. He dated the jars ca. 1919-1925, and we concur. Creswick (1987b:101) illustrated the Pacific MASON and claimed it was made by the Pacific Coast Glass Co. (Figure 14). She noted the jars were made from ca. 1921 to 1930 and had



Figure 13 – Pacific Mason (North American Glass; eBay)

the "broken" logo on the base. As discussed above, jars with the separated logo were probably made during the ca. 1917-1925 period.

Pacific Coast Glass Co. (1924-1930)

Upon the retirement of George H. Newman, on May 29, 1924, the firm reorganized as the Pacific Coast Glass Co., a Delaware corporation, with Carlton Newman Davis as the president. The six new Lynch LA machines used Howard feeders, making them fully automatic. The firm built a third continuous tank in 1926 to support two more machines. The plant now made milk, soda, and prescription bottles along with packers and preservers – all of flint (colorless) glass (Toulouse 1971:414).

By 1927, the Pacific Coast Glass Co. made "flint green and amber bottles, jars, milk jars, beverage bottles, [and] bottle specialties" at three continuous tanks with "8 Hartford-Empire feeders." In 1929, the plant added two more Hartford-Empire machines. The listings continued until 1931 (*American Glass Review* 1927:143; 1929:102).

Pacific Coast bought the West Coast Glass Co. in February 1930, intending to modernize the plant and extend its trade to Los Angeles and south. However, in September, the firm merged with the Illinois-Pacific Glass Corp. to form the Illinois-Pacific Coast Co. – with Carlton Newman Davis as the president. The Owens-Illinois Glass Co. took over the operation in late 1932, again revising the name to the Owens-Illinois Pacific Glass Co. (Toulouse 1971:414-415). For more information about the succeeding firms, see the section on the Illinois-Pacific Glass Co.

Containers and Marks

Toulouse (1971:414) attributed six logos to the Pacific Coast Glass Co. We discuss one of those below, but four others – PC, PCGCo, PC-in-a-Triangle, and PCGCo-in-a-Triangle – are almost certainly bogus. The final mark (PC in a separated rectangle) was discussed above. Since Toulouse was part of May Jones's collectors' network, these were probably reports that he received via longhand letters or verbal reports that were misunderstood. P.C.G.CO. may have been the mark of the Pittsbutgh City Glass Co. See the Other P file for a discussion of the mark.

After the merger that formed the Illinois-Pacific Coast Co., the Pacific Coast plant was "kept in operation and the trademark still in use," although it is not clear how long the older logo continued to be used (*Pacific Bottler* 1930). The firm also continued to make the Double Seal fruit jars with beaded Lightning necks as shown on eBay jars – even though none of the jar sources mentioned the non-separated logo.

PGCo

Possibly a misreading of the bottle or a typographical error, this mark was listed by Ring (1980:353) on an Old Mission Bitters, Kidney, Liver, Stomach and Blood Purifier. The product was made by the Old Mission Bitters Co., San Francisco, California. The bottle may have actually been made by the Illinois Pacific Glass Co. We have seen two examples of marks that had been mis-labeled on eBay as PGCo. In each case, there was a faint "I" at the beginning.

PC in a Divided Rectangle (1924-1930)



Figure 15 – Divided rectangle

This is one of the six marks that Toulouse (1971:414) attributed to the Pacific Coast Glass Co. and dated between 1925 and 1930 (Figure 15). Beginning in 1925, Pacific Coast ads frequently showed the divided rectangle logo but not the separated mark. It is likely that the divided (but not separated) rectangle

was only used by the "Company" from 1924 on. The logo could appear on the heel or the base of bottles or jars. The few jars we have found with the logo were generally unmarked on the side – almost certainly product jars for paper labels. One example was embossed "KNIGHT PACKING CO." around the outside of the base with the divided (but not separated) logo in the center (Figure 16). At least one of the Double Seal jars, however, had the newer logo as a basemark (see the jar discussion in the Pacific Coast Glass Works section above). The firm occasionally continued to use the separated rectangle, but that

probably indicated the use of old molds stored on a shelf since Pacific Coast Glass Works days.

Temperite

By at least February 1928, Pacific Coast used a process called Temperite (*Pacific Bottler* 1928:26), an obvious counter to Illinois-Pacific's Electroneal process (Figure 17). Both were forms of glass tempering. We have not discovered whether this was ever embossed on bottles or jars.



Figure 16 – Product jar (eBay)

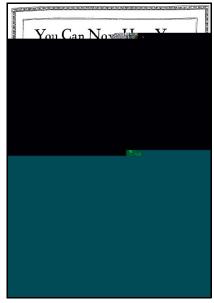


Figure 17 – Temperite ad (*Pacific Bottler* 1928:26)

Date Codes

The Pacific Coast Glass Co. began embossing date codes first on milk bottles (ca. December 1925) and on soda bottles by 1928.

Milk Bottle Rim Codes

Milk bottle rim codes were numbers for the year and month of manufacture that were embossed on the rims of milk bottles. The combination of a unique sealing method (ligneous disks set in a cap seat below the rim of the bottles) and form of manufacture (molds where the top plate was very small and expendable) allowed for these embossed numbers to be placed at the extreme upper end of the bottle. The Southern Glass Co. of Los Angeles pioneered the system in 1923 or 1924, but it came to be used by virtually every West Coast milk bottle producer from the mid-1920s to the early 1930s.

Rim codes were embossed on opposite sides of the bottle rim, to be read while looking straight down at the top of the bottle (Figure 18). The code to the left varied from 1 to 12 and indicated the month of manufacture. With only two exceptions, the code to the right was always a single digit and indicated the year. The two exceptions were both on bottles made by the Pacific Coast Glass Co. – 25 and 26 (1925 and 1926). At some point during 1926, Pacific Coast joined the other glass houses in only using single-digit year codes.



Figure 18 – Rim code (California State Parks)

A study of 66 milk bottles with Pacific Coast marks in the California State Park collection (Sacramento) was instructive. All of the bottles were made by a press-and-blow machine (creating an ejection or valve mark on the base), almost certainly a semiautomatic machine with the earlier marks.

The remaining 53 bottles were marked with either the PC in a broken and separated rectangle mark or PC in a vertical rectangle divided by a diagonal line. Both marks were consistently embossed on the heels of the bottles. Both marks were usually (but not always) accompanied by a single-digit number (and a "10" on one bottle). The numbers were generally

embossed to the right of the logo but could appear on the left or, occasionally, below the mark. About half of the marks were accompanied by date codes on the rim of the finish.

The lack of rim codes accompanying the divided (but not separated) marks is significant. Although our sample is small – an even dozen bottles – the earliest date code was 12 // 25 or December of 1925. This suggests that Pacific Coast began using date codes in late that year. Our sample included both 3 // 26 and 6 // 26 as well as 12 // 6 – indicating that the glass house dropped the two-digit year codes sometime between June and December of 1926. All later codes were single digit.

Since rim code use began in 1925, and at least half of all milk bottles made by the "Company" have no rim codes, that only leaves a single year in which the undated bottles were made, *unless* there is another reason for the lack of the codes. It seems likely that the date codes were offered as a special "add-on" item and may have only been embossed at a cost to the customer. If so, many dairies were probably unwilling to pay for the service; hence, the lack of rim codes on many bottles.

Two anomalies also require explanation. One milk bottle had rim codes of 3 // 2 – indicating a manufacture in March of 1932 – two years after the firm had merged with the Illinois-Pacific Glass Corp. Typically, when glass houses changed names – regardless of the reason – the new firm continued to use the older logos to fill existing orders and/or until the molds wore out. This process generally took one or two years, sometimes more. This late date was obviously one of these extensions.

The second anomaly consists of two bottles, both embossed on the heel with the separated logo (that was used from 1917-1924) with rim codes of 6 // 8 and 3 // 9. Again, both of these dates are quite late for the use of the older logo. This probably indicates still another common process – the use of old molds. Since molds were the single most expensive part of the bottle-making process, glass houses almost always used old molds until they wore out. Molds not in active use were stored on shelves and placed back into operation as they were needed. These two were probably pressed back into service and the date codes added to the rim molds.

Soda Bottle Date Codes

The Pacific Coast Glass Co. began embossing date codes on its soft drink bottles by at least 1928 (possibly a year earlier). A January 1928 article stated that it "is now possible to get your bottles with the date of manufacture blown in them" from Pacific Coast (*Pacific Bottler* 1928:26). Ads for Pacific Coast products later in the same year (*Pacific Bottler* 1928:53) offered "Beverage Bottles with the date of manufacture blown in them so that you can determine just how well they serve you." Date codes seem to have been picked up by California glass companies (Southern, Illinois-Pacific, and Pacific Coast, especially) for use on soda bottles during the 1926-1927 period.

Miller (2008:139) illustrated soda bottles with the separated logo heelmark that he noted were used in 1923, 1925, and 1928 – based on single-digit numbers embossed to the right of the marks. Identical bottles had the non-separated logo (discussed below) on the heel along with numbers 6 and 8 to the right. The latter bottle also was embossed with "8" on the reinforcing ring of the crown finish. The ads suggest that Miller – an excellent bottle researcher who has worked with the Bottle Research Group in the past – was incorrect on the heelmark codes, although the code on the crown falls within the advertised years.

Discussion and Conclusions

Although the histories of the Pacific Coast glass houses were confounded by the casual use of "Works" and "Company" during both periods, earlier researchers did a credible job of sorting through the confusion. Also confusing was occasional references to the Pacific Glass Works, an earlier firm (see that section for more information). The current history – provided here – is solidly researched. Past researchers, however, have often been stumped by the rather complicated trajectory of the bottle logos. Aside from the ND-ligature apparently used by Newman and Davis, the Pacific Coast Glass Works used three manufacturer's marks (see Table 1). PGCW in a Maltese Cross was almost certainly the first of these, used from the inception of the firm in 1902 for a year or two. It was replaced by the simple initials P.C.G.W. – usually (but not always) with punctuation and generally horizontal, although some milk bottles had arched basemarks. The initials were probably used between ca. 1904 and ca. 1920.

The next logo was more complex – PC in a horizontal rectangle that was divided diagonally and separated (noted by some as two parallelograms). Although Pacific Coast trademarked the logo in 1921, claiming a first use in January 1919, it was advertised by at least 1917 and likely used until the reorganization of the firm in 1924 – although a few examples were used later (see the text above for details).

The final version of the firm, the Pacific Coast Glass Co., used a single logo – PC in a divided (but not separated) square or rectangle (although the latter are common) – but a few of the older, separated, marks persisted. The firm also instituted milk bottle rim date codes in 1925 and date codes on soda bottle crown finishes by 1928 (possibly 1927).

Fruit jars remain perplexing. Although we have discovered the more recent non-separated rectangle logo on the Double Seal jars and a few product jars, none of the jar sources mentioned the newer mark. It is likely that the jar researchers simply did not distinguish between the two logos, although they may have not found examples in their samples. If any jars are discovered with the newer, non-separated logos, they should be dated 1925-1930. As noted in the text, we hypothesized that Double Seal jars with the old-style necks were made during the Pacific Coast Glass Works period (ca. 1917-ca. 1924), and those with the beaded necks were made between 1924 and 1930 by the Pacific Coast Glass Co.

This study also brings out an important research point. We have often based dating decisions on the first-use date, listed by most firms on trademark applications. One of our basic assumptions was that the glass companies involved knew that date when they began the use of a specific logo. However, this may often not be the case. The Pacific Coast Glass Works claimed June 1, 1919, as the first date of use for the separated rectangle logo discussed above, but the firm advertised the logo in November 1917 – almost a year and a half earlier. How many other "first use" dates were equally erroneous guesses? We can only hope that most were close.

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