# Chapter 2 Dating Containers Used by Small Bottlers

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I have discussed the general principles of dating soda bottles in *Bottles on the Border: The History and Bottles of the Soft Drink Industry in El Paso, Texas, 1881-2000* (Lockhart 2010). Please refer to that for a more complete discussion on the topic. Following a short section on bottle trends from 1910 to 1950 (the period when local bottlers reigned in Alamogordo), I will confine dating issues to factors dealing with small bottlers and/or small town bottling.

Many of the methods used by T.L. Reber, Alamogordo's earliest bottler, are unknown – at least by that time. Reber originally used Hutchinson soda bottles, a style that used an internal stopper, where a rubber gasket was held against the inside bottom of the bottle's throat by a wire device and the pressure of the carbonation. The wire was bent in a figure-8 or hourglass shape that fit into the throat. The bottle was opened by pushing the wire down, which released the seal. The bottle could be resealed by pulling up on the wire (Figure 2-1).

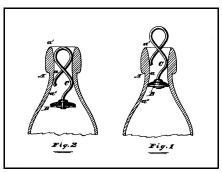


Figure 2-1 – Hutchinson finish (Patent No. 219,729, September 16, 1879, W.H. Hutchinson)

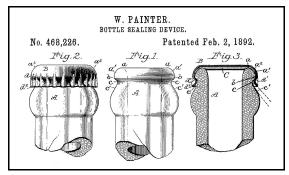


Figure 2-2 – Crown finish (Patent No.468,226, February 2, 1892, William Painter)

one would buy Reber's business.

When Reber arrived, probably in 1898, the crown cap was available (Figure 2-2), but the Hutchinson seal was still the dominant closure used by soda bottlers. However, Henry Pfaff was already using crown-capped bottles for his El Paso sodas by the end of 1898, so Reber may have been forced to switch. It is more likely, however, that Reber's use of Hutchinson bottles was a factor in his failure to sell out. The superiority of Pfaff's bottles and caps may have been so apparent that no

By the time George Weigele began bottling sodas in Alamogordo, in 1910, the crown finish and cap were firmly entrenched in the soda industry and remained the primary type of closure until the continuous thread began to dominate the industry near the end of the returnable bottle era in the 1980s and 1990s. Although paper labels had been used earlier, the most common method of labeling was embossing. Embossing was created during the molding process and consisted of raised (or occasionally indented or debossed) letters and designs on the outside of the container. Glass makers had blown embossed bottles in the United States since at least 1815, probably as early as 1807 (McKearin (1970:51, 75; McKearin & Wilson 1978:103, 438; Toulouse 1971:252-257).

The major problem with embossed names and designs was cost. Each individual bottle buyer had to pay for the molds used for his or her containers. Because each message or design had to be cut into the mold by hand, the operation could become expensive. As each mold wore out, the process was repeated. Often, however, a bottler would only identify his plant and beverage with embossed containers marked with circular, oval, or horseshoe-shaped (sometimes called tombstone-shaped) plates on the fronts of the bottles.

These plates (also called plate molds or slug plates) were smaller plates that fit into the sides of two-piece body molds (Figure 2-3). A bottle of standard design could then be produced and individual company markings inserted at a greatly reduced cost. Bottles used for the earliest three identified soda bottles from Alamogordo (Weigele, Johnson, and Karosen) used plates to identify the bottlers. The use of obvious plates was generally discontinued by the mid-1920s.



Figure 2-3 – Plate on Alamogordo Bottling Works bottle

During the late teens, the trend swept away from plate molds and often from any form of embossed identification. Paper labels, of course, had been applied with glue to glass containers of various sorts by at least the late 18<sup>th</sup> century, often in conjunction with embossed identification. Paper labels removed the necessity for embossing, and they became the norm by 1918. Paper labels were inexpensive, easy to apply, and contained complex advertising messages. The major drawback, however, was that the paper tended to wash off when bottles were cooled in buckets or barrels of ice – the only medium then in general use for cooling soft drinks.



Figure 2-4 – Specialty bottle, Alamogordo

The missing bottles used by the later owners of the Alamogordo Bottling Works probably contained paper labels identifying the various flavors. At least one owner, E.L. Craig, sometimes (possibly always) used bottles without any labels of any kind! Delaware Punch and Ginger Mint Julip offered in the 1924 advertisement (NMSBD 1924) were probably also sold in bottles with paper labels. Thus far, we have only found three embossed bottles used by owners of the Alamogordo Bottling Works – and one of those first came to light in the summer of 2010.

The easy destruction of paper labels led to a reverse trend back to embossing as a sole method of identification. The new bottles were called specialty bottles by the glass industry, and have generally been called proprietary bottles by archaeologists and deco bottles by



Figure 2-5 – ACL bottle, Alamogordo

collectors. The embossed designs became *very* complex (Figure 3-4). Although a few national brands began using specialty bottles much earlier (e.g. Coca-Cola's famous hobble-skirt bottle – first patented in 1915), common usage of this style of container did not begin until the mid- to late 1920s. The earliest Crystal Beverage Co. bottle was a specialty bottle.

Although embossing still appears on bottles, today, it was gradually replaced on soda bottles by the Applied Color Lettering (ACL) technique between 1934 and the early 1940s (Figure 3-5). Unlike embossing, ACL was applied after manufacture as "a paste-like glass material consisting of finely ground lead, borosilicate glass and mineral pigments, [which] was forced through a screen mesh directly onto the bottles [*sic*] surface" (Sweeney 1995:6). By reapplying different colors, a glasshouse could produce polychromatic bottles, although the use of more than two colors was unusual due to the extra cost of second and third applications.

### Seasonal Opening

George Weigele's first ad for Weigele's pop appeared on April 21, 1910. Unfortunately, the second owner, Jerry M. Johnson, did not advertise by any means I have been able to find. L.H. Karosen bought the Alamogordo Bottling Works in August 1920, but his 1921 ads did not appear until early June. D.R. Pharr began advertising in early June 1922, and his ad for April 9, 1923, stated that "the Alamogordo Bottling Works of Alamogordo, N. Mex., will open for [the] season on April 10<sup>th</sup>" (Figure 2-6).

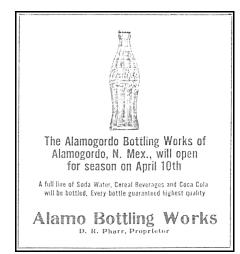


Figure 2-6 – D.H. Pharr ad noting an April opening (*Alamogordo Times* 4/9/1923)

Pharr sold to A.B. Rose before the plant opened in 1923, and Rose began to advertise in May. In August, Rose

told the public that the works had opened on April 18 (Figure 2-7). The last owner, E.L. Craig, only advertised "Crystal Sweets" in two issues of the newspaper, both in early April 1928. When Thomas O'Conor opened Crystal Beverage Co. in 1930, he did so in March, and his 1931 ads did not begin until April.

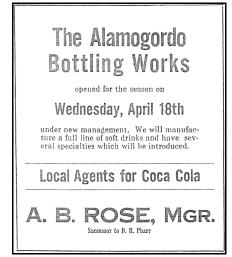


Figure 2-7 – A.B. Rose ad confirming the April opening (*Alamogordo Times* 8/19/1923)

Although incomplete, the above data suggest that Alamogordo soda bottlers only operated seasonally. Even though spring arrives early in the desert (usually in late February), the bottlers apparently did not open their plants until April. Marketing does not seem to have created a year-round outlet for soft drinks in Alamogordo until sometime after 1931. Ads seem to have tapered off around midsummer and were gone completely by October or November. Thus, a bottler had to have a high volume of seasonal sales or develop a winter career to maintain a year-round reliable income, although each almost certainly continued to sell already bottled stock until the supply ran out.

By the time national franchises took over in the mid-1940s, year-round bottling seems to have become the norm. I found no indication of seasonal bottling in my El Paso research, although it was clear that sales increased in warmer weather. The increase in summer sales mirrors my personal experience as a Pepsi-Cola route salesman in the early 1970s.

## New Machinery and Change of Location

In its 30 years if existence, the Alamogordo Bottling Works was owned by six proprietors, the last of whom, E.L. Craig, renamed it the Crystal Bottling Co. Craig was followed by Thomas O'Conor, who then called the business the Crystal Beverage Co. In 1910, George Weigele, the original owner (and his son, George, Jr.), brought the original bottling equipment to the business. Jerry M. Johnson moved the plant to a new location in 1914, but I have not found any reference to new equipment.

While L.H. Karosen did not leave a record of new equipment in 1920, the paper was much more interested in his pitching skills (baseball) than the bottling works. However, since he obtained the first Coca-Cola franchise in Alamogordo, it may have necessitated new bottling machinery – although he may have purchased already filled bottles from the Magnolia Coca-Cola Bottling Co. at El Paso. I have found no newspaper account of the changeover from Karosen to D.H. Pharr in 1922, so any technological changes for that period are unknown.

A.B. Rose overhauled all the old equipment prior to opening for the season in 1923, and E.L. Craig renamed the business (as the Crystal Bottling Co.) in 1928, when he brought in new equipment to compliment the name. Thomas O'Conor, who again renamed the operation, also changed the location (across the street and a switch to ownership rather than renting) and purchased new equipment.

Thus, each of the last three owners either purchased new equipment or overhauled the old. This indicates that at least 57% of the owners (including Weigele, the initial owner) either overhauled equipment or bought new. Change of machinery, therefore, may have been a normal consideration during a change of ownership.

Both the second owner and the last independent bottlers in Alamogordo changed locations, although Johnson may not have had any options; Weigele may have only offered the

business for sale, not the lot. O'Conor, on the other hand, obviously wanted to own the land his business was on. Once he discovered that the plant would make money, he invested more deeply.

As is common in much historic research, these data provide more questions than they do answers. How common was the replacement or upgrading of equipment when new owners purchased a bottling works? Did the replacement of equipment reflect more advanced technology, or was the new owner merely buying for the "newness?" Was this a common practice in other communities? Hopefully, the future will provide new answers.<sup>1</sup>

#### Small Company Bottle Use

Crystal Beverage Co. and its predecessors, provide us with some insight into the bottle ordering practices of small companies, although samples of each variation used by the firms are small. The three earliest owners of the Alamogordo Bottling Works seem to have only ordered embossed bottles once each. The Weigele bottles are so rare that I have only seen two of them in 20 years, and the only Johnson bottle I have seen surfaced in 2010! Although there are a few Karosen bottles around, they are scarce. At this point, I have seen no bottles from Pharr, Rose, or Craig. Presumably, all other bottles were generic and may have used paper labels. With only one bottler in town, it is possible that Parr, Rose, and Craig did not use any type of label, except, possibly, the cap.

Examples of the bottles used by Crystal over the 18 years of its existence suggest that the company ordered bottles fairly infrequently. The only two examples of the embossed bottle that I have seen each contained the manufacturer's mark of the Three Rivers Glass Co. on the heel and the digit "6" on the base – probably a date code for 1936. To my knowledge, there has been no research on specific dates for bottles made by Three Rivers (although the earlier bottles from that company in my collection did *not* include date marks). There was probably a previous run of the

<sup>&</sup>lt;sup>1</sup> Since this was originally written, we know that T.L. Reber was in the business of starting bottling works, usually in towns with no competition, building a clientele, and selling out. Obviously, his buyers did *not* purchase new equipment. Reber also operated from 1879 to ca. 1910, a period of two decades prior to the sale of soft drinks at Alamogordo by George Weigele.

same variation of the embossed bottle. The *Alamogordo Advertiser* of March 13, 1930, noted that Crystal had received "a carload of distinctive bottles (fluted sides) and new made-to-order cases to hold them." That description fits the known early bottles for the company.

The White Sands version of the bi-chrome ACL bottle was almost certainly only used in 1938 (six examples). The large letter "Lula" bottles (ca. nine examples) are all dated "39." They were apparently replaced by the only three small letter "Lula" bottles I have seen in 1941. The final all-white ACL bottles (ca. 12 examples) are all dated 1947, suggesting that they were bought after O'Conor's death by the group who ran the business for about a year or so prior to disbanding. See Bottles of Crystal Beverage Co. in Chapter 6 for descriptions of the above mentioned bottles.

Assuming that these bottles comprise the entire container history of Crystal, O'Conor bought bottles fairly infrequently compared to larger companies (many El Paso companies bought bottles more than once a year). Again assuming that I have seen examples of each of the O'Conor bottle except the first one, he bought the first embossed in 1930-1935; thesecond embossed bottle in 1936 [6 years later]; the first red-and-white ACL container (White Sands) in 1938 [2 year later]; the first red-and-white ACL Lula bottle (large letters) in 1939 [the next year]; the second red-and-white ACL Lula container (small letters) in 1941 [2 years later]; the first white-only ACL bottle in 1944 [3 years later], and the final white ACL bottle – used after O'Conor's death – in 1947 [3 years later].

Bottles seem to generally have been ordered every one to two years except for three periods. The first of these was during the initial five years of the business – during the Great Depression, a period of time when money was scarce, and resources were tight. The second was between 1941 and 1944 – during World War II, when sugar, steel (for bottle caps), and glass were all rationed. The final period was immediately after the war – possibly when O'Conor was beginning to have health issues.

Bottlers in El Paso reused their bottles during the Great Depression until they completely wore out. There are fewer bottles remaining from that period than from earlier, pre-Depression times. Similarly, orders for bottles slacked off during World War II, due to the scarcity of supplies and ingredients.

Many bottlers during World War II (except those adjacent to military bases/posts) were forced to drastically reduce their sales due to the shortage of sugar for home consumption. Other shortages also created problems. Harry Mitchell, owner of the Mitchell Brewery at El Paso personally went from bar to bar retrieving used bottle caps – to flatten out an recycle. There was no national reason for the final delay, although O'Conor died in 1946 – the logical next time for a two-year reorder – and that may be explanation enough.

The above reasoning assumes that O'Conor bought approximately the same number of bottles each time. The World War II bottles just lasted longer due to sugar rationing and other war shortages. That possibility, along with a longer use period, would explain why small letter (1941-1944) containers are scarce.

Although Alamogordo newspapers did not mention quantity, Deming and Las Cruces bottlers (the closest small New Mexico towns) were reported as ordering 1,000 containers at a time. It may be that 1,000 was a minimum order required by the glass houses (manufacturers). If this number is correct, then the normal life of a bottle in Alamogordo during the 1930s and early 1940s was about two years. Of course, some would last longer, and some would be broken within a week. It would be interesting to know whether all new bottles were added to circulation at once, or if they were gradually introduced to the production line as older bottles needed replacement.