

Part II

The Bottles of

the

Southwestern Coca-Cola Bottling Co.

of

New Mexico and Arizona

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Most archaeological (and other) dating schemes have centered on nationally-distributed products or manufacturing techniques (e.g. Jones & Sullivan 1989; Munsey 1972; Newman 1970; Stoddard 2003). Although collectors have shown an interest in dating local or regional bottles, only a few archaeologists have created similar works (cf. Lockhart 2000, 2001a, 2001b; Pollard 1993). While national data are useful in dating glass artifacts, especially containers, local and/or regional data are more specifically applicable to many collections/assemblages. The national generalities may or may not fit the actual local or regional usage.

## Guides for Dating Coca-Cola Bottles

### National Dating Guides

The earliest Coca-Cola bottles were cylindrical and topped with Hutchinson finishes (the uppermost part of the bottle – the last to be “finished” using a manufacturing technique where the bottle is formed by blowing the glass into a mold). Patented in 1879, Hutchinson's Patent Spring Stoppers were not generally discontinued until 1912 and some were made as late as 1920. The end dates may be somewhat misleading, however, as most companies had switched to the more efficient crown cap by the early 1900s. According to Kendall (1978:7), the Hutchinson stopper was used on Coca-Cola bottles between 1894 and 1910. Except for the use of the Coca-Cola script trademark, there was virtually no standardization among franchises.

Although the crown cap and accompanying crown finish on bottles was invented in 1892, it was not in common use until after 1900. Kendall (1978:7) placed its use on straight-sided Coca-Cola bottles between 1905 and 1922, although he admitted that some franchises did not switch to the famous “hobble-skirt” bottles until after the second patent on December 25, 1923.

Gilborn (1968) was the first to provide a dating guide for the “hobble-skirt” Coca-Cola bottle originally patented on November 17, 1915. Munsey (1972:62-63) followed with information obtained from the Coca-Cola company that reflected its guidelines rather than actual use by the franchises. Munsey's guide only presented beginning dates for use and suggested no termination dates. Munsey also provided a guide for determining manufacture dates for individual Coca-Cola bottles (1972:59; see also Lockhart 2000, chapter 8b).

Kendall (1978:7) combined local information with empirical data (apparently influenced by Gilborn) to create a more useful guide but only dated the first five (embossed) variations of Coca-Cola bottles (1917-1965). His view included end dates as well as dates for initial use. Kendall (1979:13) also noted that the original bottle (patented November 16, 1915) was not

actually in use until 1917. Pollard (1993:45) followed with empirically based dates (from Plattsburgh, New York) that essentially agreed those suggested by Munsey with a few exceptions.

Porter (1996) is the most recent dating researcher. He also used empirical data to assign dates and is in very close agreement with Kendall. Porter adds a more useful key for ascertaining the individual dates embossed on the sides of hobble-skirt Coke bottles and a warning about the 1989 imitation of the December 25, 1923 “Christmas” bottles. He finally offers some updated information about manufacturer’s marks found on Coke bottles. Both authors of this paper agree that Kendall’s date ranges are probably the most accurate.

According to Munsey (1972:63), the parent company changed the volume information “MIN. CONTENT 6 FL OZS.” to “CONTENTS 6½ FL. OZS.” in 1948. Kendall (1978:7) placed the change at 1957 but stated that some franchises continued to use the older style until 1959. Porter (1996:6) generally agreed with Kendall, placing the date “about 1958.” Our empirical observations support Porter. For example, bottles from Carlsbad, New Mexico, are embossed with both volume descriptors in 1958. Kendall, however, probably drew from a larger national sample, and, as usual, there was probably a bit of an overlap in the adoption of the new style by all bottlers. A comparison of the four dating schemes provides a reasonably useable background for dating hobble-skirt Coca-Cola bottles (see Part IV – Dating Hobble-Skirt Coca-Cola Bottles).

A final useful national date is the parent company’s adoption of a larger size bottle in 1955 (Munsey 1972:60). At that time, the company introduced ten, twelve, sixteen, and twenty-six ounce bottles. Actual use of the different sizes varied according to local franchise needs (see Part IV – Dating Hobble-Skirt Coca-Cola Bottles for more detailed information about dating hobble-skirt Coca-Cola bottles).

### Local Dating Guides

At least two researchers have added local information about dating Coca-Cola bottles, although many collectors have provided limited information about Coca-Cola bottles in their local/regional studies. Pollard (1993:46-47) notes difference in markings on Plattsburgh, New York, Coca-Cola hobble-skirt bottle bases, and Lockhart (2000, Chapter 8b; 2004a:34-36) provides similar findings for El Paso, Texas. In both cases, local data may be useful in determining age of the original bottle when only the base is available. Such dating, however, requires the observation of numerous local bottles.

## Dating Southwestern Coca-Cola Bottles

It is likely that all Southwestern plants received bottles from a central location, probably Deming prior to 1929 and Phoenix after that date. As with most Coca-Cola franchises and other bottlers of popular brands, Southwestern ordered bottles frequently and in large quantities (Price 1996). Throughout most of its existence, Southwestern seems to have ordered bottles about once a year, although orders seem to have been more frequent during the early years (especially 1917 and 1918) and took a notable decline during the Great Depression from the two branches that survived.

Although we have divided the bottles into two main section (Coca-Cola and house brands), it is important to realize that these bottles had parallel developments. For almost every Coca-Cola bottle, there is a corresponding flavor bottle, usually made by the same company. After the adoption of Orange Crush (around 1924), those bottles also fit into a similar pattern. For example, in 1926, Southwestern ordered Coke bottles, flavor bottles, and Orange Crush bottles all from the Southern Glass Co. These are all marked on each base with the distinctive S-in-a-star logo. Such patterns are a common theme throughout the life of Southwestern.

### Deming Coca-Cola Bottling Works

The first Coca-Cola bottle used by Gardner in his Deming Coca-Cola Bottling Works in 1916 was a cylindrical bottle (i.e. straight sides, rather than the later, curvaceous hobble-skirt bottle) embossed at the shoulder with the script Coca-Cola trademark and identified at the heel as PROPERTY OF COCA-COLA / BOTTLING WORKS on one side and CONTENTS 6½ FL. OS. / DEMING, N. MEX. on the other. The area in the center of the body was left bare for the early, diamond-shaped Coca-Cola paper label (Figure 2-1).



### Southwestern's Straight-Sided Coca-Cola Bottles (1917)

The first bottle style used by Southwestern was almost identical to the one used by the Deming Coca-Cola Bottling Works except for the embossing, PROPERTY OF SOUTHWESTERN / COCA-COLA BOTTLING CO on the front heel and CONTENTS 6½ FL. OZ. / NEW MEXICO - ARIZONA on the reverse (Figure 2-2). As discussed in Part I, these initial bottles resembled both

Figure 2-1 – Deming Coca-Cola Bottling Works – Coke Bottle [Keith Austin Collection]

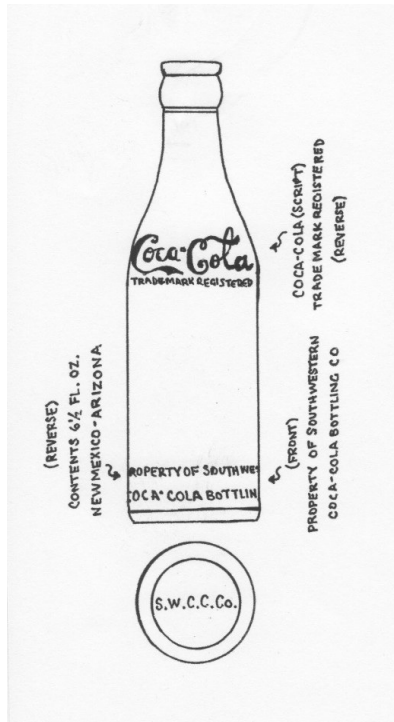


Figure 2-2 – Paper label Coca-Cola Bottle – 1917

those used by Gardner in the Deming Coca-Cola Bottling Works and those used by Hope Smith at the Magnolia Coca-Cola Bottling Works in El Paso. Since the styles were the same, it is impossible at this point to identify the correct ancestor bottle.

Gardner ordered these bottles at least twice (they are found in both colorless and aquamarine) for the Deming, Las Cruces, and Douglas plants (it is highly likely that the other plants opened after this bottle was used). The initial bottles were probably ordered sometime between June and November 1916 when the new plant was built. The second order was later, possibly as late as early 1917 when the company had its incorporation proceedings (see discussion of 1916 bottles in “House Brand” section). Bottles in both colors are very rare.

At some point, probably late 1917, Southwestern eliminated the paper label by including a circular plate mold (frequently called slug plates in collectors’ literature and usually just called a plate by the glass industry) on the bottle. An

adaptation of the two-piece mold process, the “plate” was a circular, oval, or tombstone-shaped (even rectangular in medicinal bottles) insert set into the mold (usually in the front center). The name of the local bottler, along with any information he deemed pertinent, was engraved on the plate which could be inserted into the mold at much lower cost than retooling an entire mold for each bottler. The plate outlines left a visible mold line (usually quite distinct) on the surface of the bottle (Paul and Parmalee 1973:21). The process continued to be used with machine-made bottles. The circular plate mold on the Southwestern bottles was embossed with the company name at the top and NEW MEXICO - ARIZONA at the bottom. Each bottle was marked 17 S 1 or 17 S 6 on the heel (Figure 2-3). This mark was used by the Streator plant of the Owens Glass Co. The “17” indicated the year, 1917; the “S” stood for Streator; and the final digit was a mold code (see Part III – Marks for a more in-depth discussion of the code). The plate-mold bottle style was used from 1917 until the bottles wore out; at that time, Southwestern switched to the nationally-famous, hobble-skirt bottle. These bottles are scarce.

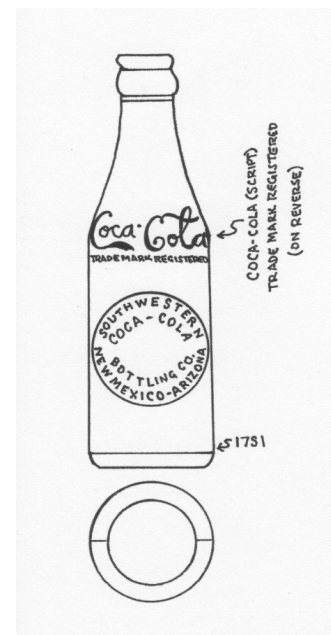


Figure 2-3 – Plate Mold Coca-Cola Bottle – 1917

## Hobble-Skirt Coca-Cola Bottles - Patented November 16, 1915

The first hobble-skirt bottle known to be from Southwestern is the bottle patented November 16, 1915, the initial variation offered by the parent company. It is important to recognize that only one of the eight earliest hobble-skirt bottles used by Southwestern was marked with a specific chronologically datable characteristic (a date code, in this case). We have created a relative order for the other bottles and have assigned them probable dates, but these should not be taken as absolute. All descriptions of hobble-skirt bottles assume that the side marked with the patent date is the front of the bottle. See Table 2-1 for a probable chronology of Coca-Cola bottles used during the New Mexico era (1916-1927).

To place our dates in perspective, Munsey (1972:62) notes the use of the 1915 bottle as beginning in 1916 (he offers no end dates); Kendall (1978:7) claims a range from 1917 to 1930, and Pollard (1993:45) suggests 1916-1923. Our empirical observations suggest that Kendall is closest, although Miller has found no 1915-patent bottles dating later than 1928. Several other variations of hobble-skirt bottles followed, and two of those will be examined below.

### Graham Glass Co. (1917-1923)

The Graham Glass Co. made the first hobble-skirt bottles used by Southwestern. Graham used a complex code for most of its soda bottles and different marks for the earliest Coca-Cola bottles. The first letter identified the plant (L = Loogootee; E = Evansville; O = Okmulgee; CH = Checotah) The second letter described three bottle types: P = Private Mold (occasionally PR); S = Specialty; G = General. Note that all these identifications were derived by empirical methods; we have found no records describing the codes. The company initially used letters as date codes (see Part III) but changed to two-digit, numerical date codes sometime during 1920 (Porter 1996; Lockhart 2004b, 2006a).

The first bottle was made during 1917 (the “Q” in OP105Q indicates 1917), although it was probably ordered very late in the year. This bottle is a pale blue aqua color with S.W.C.C. embossed on the base in large letters. The heel is embossed OP105Q, and this may be found on either side of the bottle, probably indicating at least one reorder (Figure 2-4).

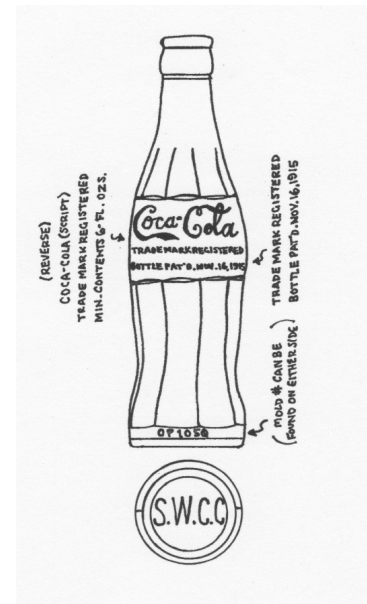


Figure 2-4 – Hobble-Skirt with Large Letter S.W.C.C. – 1917

Table 2-1 – Southwestern Coca-Cola Bottles, New Mexico Era (1916-1929)

Distinguishing Characteristics	Heelmarks	Basemark	Date
Script Coca-Cola; Deming Coca-Cola company info at heel; straight-sided	None	Coca-Cola (script)	1916
Script Coca-Cola; Southwestern company info at heel; straight-sided	None	S.W.C.C.Co.	1916
Script Coca-Cola; company info in plate mold on body; straight-sided	17 S 1; 17 S 3 (back)	None	1917
Hobble-Skirt; pale blue aqua	OP105Q (front or back)	S.W.C.C. (large)	1917
Hobble-Skirt; pale blue aqua	None	S.W.C.C. (large)	ca. 1918
Hobble-Skirt; light aqua	OP5S (back)	S.W.C.C. (small)	1919
Hobble-Skirt; very light aqua	OP5S (front); 76G20 (back)	1 / S.W.C.C. (small)	1920
Hobble-Skirt; very light aqua	576 G20 (front); OP5S (back)	2 (or 4) / S.W.C.C. (small)	1920
Hobble-Skirt; pale blue aqua	None	S.W.C.C. (medium)	ca. 1921 or 1922
Hobble-Skirt; pale blue aqua	None	S.W.C.C.Co	ca. 1922 or 1924
Hobble-Skirt; aqua	576 G23 (front)	S.W.C.C.Co.	1923
Hobble-Skirt; Georgia Green	64-15 (back)	S.W.C.C.Co. / Southern Star	1926
Hobble-Skirt; Georgia Green	IPG triangle (front); 7-5 (back); 7 on crown	S / CCBCo. / W	1927

This number is not present on subsequent bottles. The bottle was made at the Okmulgee plant (O) and is a private mold style (P). Surprisingly, these bottles are relatively common, a phenomenon we cannot explain, unless the company was so prosperous at that time that it disposed of bottles with fairly little wear. [Also see Addendum]

A virtually identical bottle (with large letters on the base and the pale blue aqua color) had no heel marks and was likely made during 1918, but these are very rare (Figure 2-5). The



color of both bottles, however, is somewhat of an anomaly. According to Porter (1996:6), light blue bottles were made by the Chattanooga Glass Co. or Laurens Glass Co., yet one of these has a Graham mark. The large letter variations also display another odd anomaly. They appear to have an extra circular plate mold in addition to a machine scar on the bases. Currently, we have no explanation for this phenomenon.

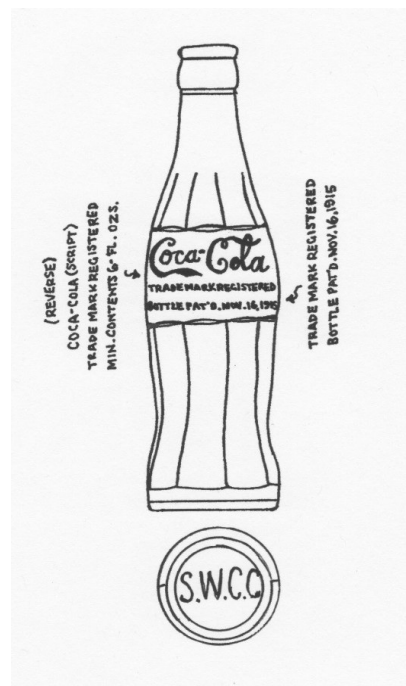


Figure 2-5 – Large Letter Variation – ca. 1918

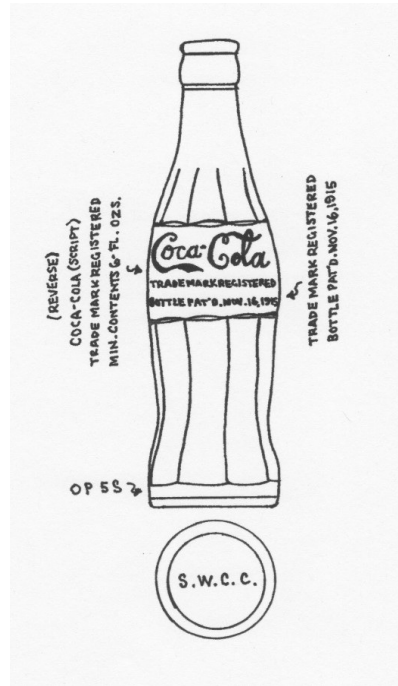


Figure 2-6 – Small Letter S.W.C.C. (no base number) – 1919

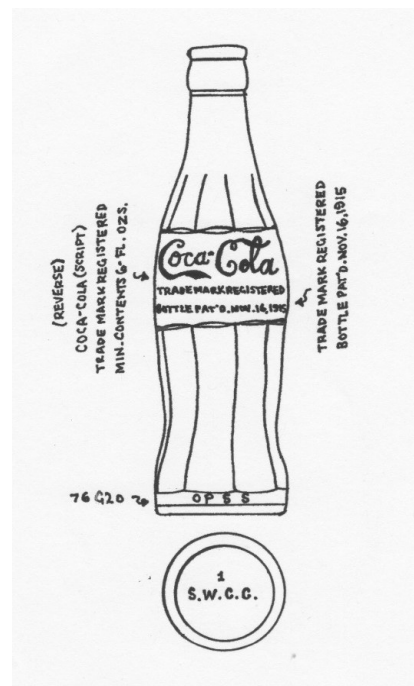


Figure 2-7 – Small Letter S.W.C.C. (1 on base) – 1920

The next three bottles, all from Graham, follow a very logical progression. All bear the OP5S code (the “S” indicating a manufacture in 1919), had small letters on the S.W.C.C. logo on the base, and were light aqua in color (not the pale blue aqua of the bottles described above). The first, made in 1919, is embossed S.W.C.C. on the base in small letters with OP5S on the reverse heel (Figure 2-6). These bottles are rare.

The second, also rare, is embossed OP5S on the front heel and 76G20 on the reverse. The base has a “1” above the “S.W.C.C.” (Figure 2-7) The third bottle in this series, again rare, is marked OP5S on the reverse and 576 G20 on the front, as well as a “2” or a “4” above the basal logo (Figure 2-8). The “G20” on the last two bottles indicated a manufacture by Graham in 1920. These last three bottles (with 1, 2, or 4 on the base), made in 1920 (note the two-digit date code) were undoubtedly manufactured with the same mold used for the bottles the year before. The “S” date code for 1919 was erroneously left on the bottles’ heels.

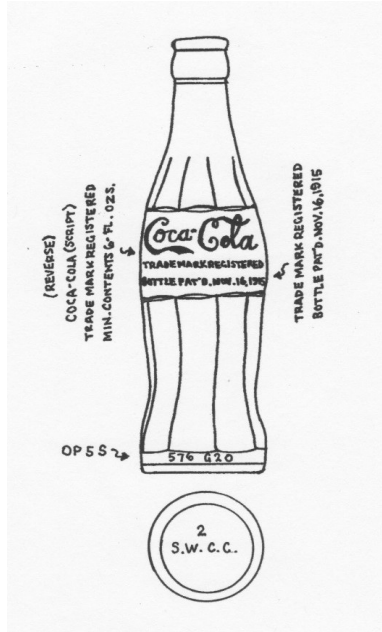


Figure 2-8 – Small Letter S.W.C.C. (2 or 4 on base) – 1920

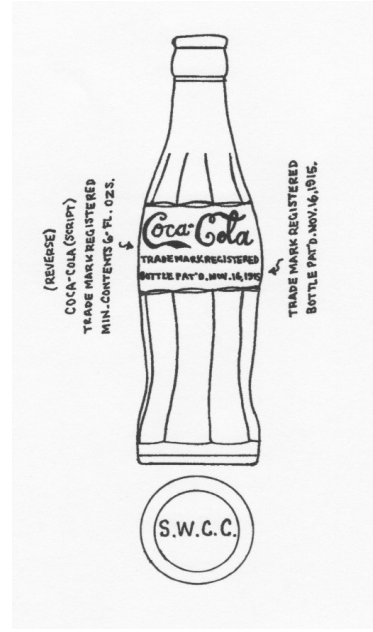


Figure 2-9 – Medium Letter S.W.C.C. – poss. 1921-1922?

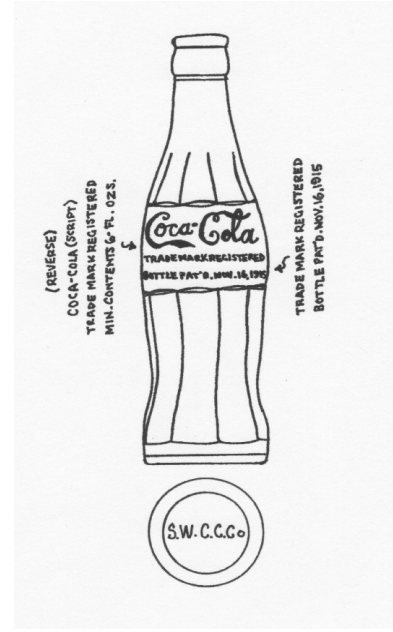


Figure 2-10 – First S.W.C.C.Co – poss. 1922 or 1924

According to Porter (1996:4), 576 was the private mold number for the hobble-skirt Coke bottles. The “76” variation was possibly an engraver’s error or may have been an earlier number for the hobble-skirt bottle. If combined with the “5S” on the other side of the bottle, the code becomes “5S76” – the typical “576” code with an added “S” (date code) in the center. This may be an evolution of Graham’s code system.

Two other bottles were probably made by Graham but had no codes of any kind. Both were a pale blue aqua in color. One was marked S.W.C.C. on the base in medium sized letters (Figure 2-9). These bottles are scarce. The other, very rare, was marked S.W.C.C.Co. in smaller letters (Figure 2-10). The color suggests Graham as the manufacturer of both bottles. A final Graham bottle, also very rare, was aqua in color and had the same S.W.C.C.Co. mark on the base (Figure 2-11). This one, however, was embossed 576 G23 on the reverse heel (the Coca-Cola private mold number and date code for 1923). The change to the longer logo by 1923 suggests that the last S.W.C.C. bottle was probably made in 1921 or 1922, and the otherwise unmarked S.W.C.C.Co. bottle was made in 1922 or 1924.

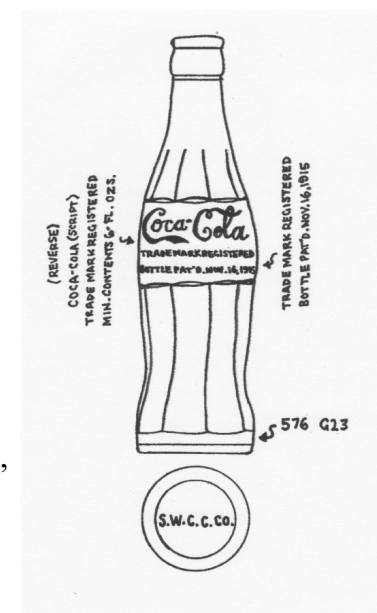


Figure 2-11 – Hobble-Skirt – 1923

Southern Glass Co. and Illinois-Pacific Glass Co. (1926-1927)

For reasons we may never know, Southwestern stopped buying bottles from Graham by 1926. By that time, the Owens Bottle Co., owners of Graham Glass since 1916, had closed two of the Graham factories, although the Okmulgee plant, the manufacturer of the marked Graham bottles for Southwestern, remained open until 1929 (Lockhart 2004b, 2006a). Possibly, the plant stopped producing Coke bottles, or Southwestern may have gotten a better deal elsewhere.

In any event, Southwestern next bought hobble-skirt Coke bottles, still the 1916 patent, from the Southern Glass Co. These were embossed on the base with S.W.C.C.Co. and the “Southern Star” trade mark, a “S” within a star. These very rare bottles were embossed 64-15 on the reverse heel (Figure 2-12). The meaning of the heel embossing is currently unknown, although “64” appears to have been Southern’s hobble-skirt Coke bottle code. Southern

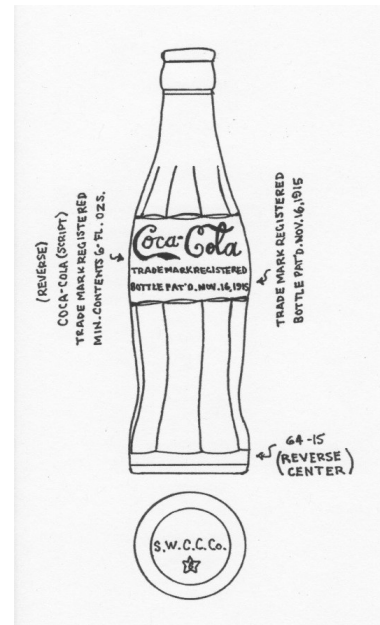


Figure 2-12 – Hobble-Skirt, Southern Glass Co. – 1926

began using the Southern Star in 1926 and introduced a date code, usually accompanying its trade mark on the base, in 1928, so these bottles were made between 1926 and 1928, probably in 1926. See Section III, Manufacturer’s Marks, for a discussion about Southern Glass Co.

In 1927, Southwestern switched again, this time to the Illinois-Pacific Glass Corp. The bases of these bottles bear a distinctive cross-shaped logo with an “S” above “CCBCo” and a “W” below. The front heel was embossed with IPG in a triangle, the mark used by Illinois-Pacific from ca. 1925 to 1930. The bottle was marked with two distinctive date codes, a “7” embossed on the reinforcing ring of the crown, and “7-5” on the reverse heel – both indicating a manufacture in 1927 (Figure 2-13). Like the Southern Glass Co. bottles, these are very rare.

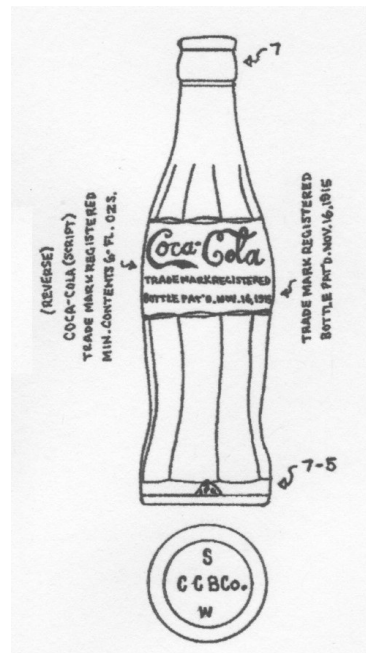


Figure 2-13 – Hobble-Skirt, Illinois-Pacific Glass Co. – 1927

Although Illinois-Pacific (along with Southern Glass Co.) began embossing its milk bottles with date codes in 1925, it did use the same technique on its soda bottles until a year later. The codes

included both month and year of manufacture in year-month format. On the Southwestern Coke bottle, for example, “7-5” means the bottle was manufactured in May or 1927. The codes were often beside the manufacturer’s mark but could be on the opposite side of the bottle or even around the logo (with the year to the left and the month to the right). Illinois-Pacific introduced the year mark on the reinforcing ring of the crown finish in 1927 but retained the heel codes. By 1929, heelcodes no longer indicated dates, and the crown code had become double digit by 1930 (Lockhart et al. 2005b).

The bottle with the Illinois-Pacific mark was the last one marked with the Southwestern’s initials. If Southwestern were facing financial trouble, it would have continued to use bottles that would ordinarily have been discarded instead of ordering replacements – especially those that were worn rather than chipped or cracked. No 1915 hobble-skirt bottles are known to be specifically marked with either the Deming or Las Cruces names. The earliest hobble-skirt bottles from either town are the “Christmas” bottles patented December 25, 1923. According to Kendall (1978:7), the “Christmas” Coke bottles were never actually used by the franchises prior to 1926. Silver City never had hobble-skirt bottles of any style marked with its name (see Porter 1996:40).

The Arizona Branch (ca. 1927)

Apparently predicting the demise of the New Mexico/Southern Arizona hub, both the Globe and Phoenix plants began ordering their bottles individually about 1927. The ordering patterns of both plants were similar, so it is likely they remained affiliated by more than just the name.

The Globe plant ordered a final bottle from the PAT’D NOV. 16, 1915 series. The bases of these very rare bottles was embossed with “GLOBE (arch) / ARIZ. (Inverted arch) and the Southern Star (Southern Glass Co.) in the center. The front heel was

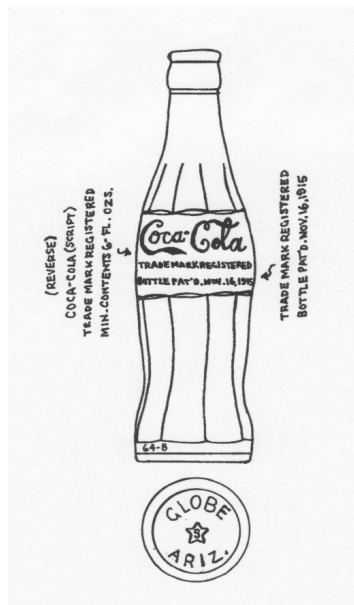


Figure 2-14 – Globe’s Southern Glass Co. Bottle – 1928

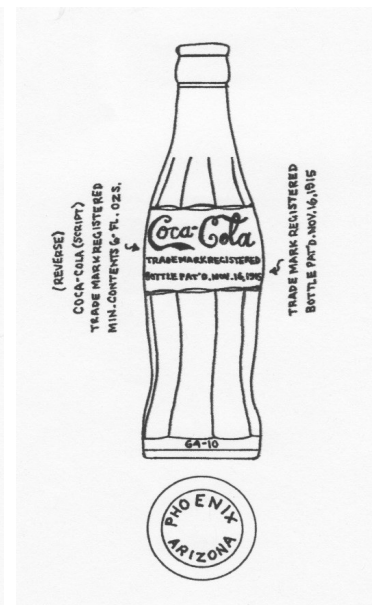


Figure 2-15 – Phoenix Bottle, Prob. Southern Glass Co. – 1928

embossed “64-8” – possibly a date code for 1928 (Figure 2-14). However, the final 1915-patent hobble-skirt bottle for Phoenix had a similar heelmark (64-10) but no manufacturer’s mark (Figure 2-15). The base was embossed PHOENIX (arch) / ARIZONA (inverted arch). Despite the lack of manufacturer’s mark, the similarity in heelmarks suggests that the Phoenix bottle was also made by Southern Glass. It is possible that the “64” indicated hobble-skirt Coke bottles, and the final digit showed the individual bottler (e.g., 10 = Phoenix). The sample, of course, is far too small for anything but speculation. Like the bottle from Globe, the Phoenix bottle is also very rare. The 1915-series bottles were replaced in 1928. See Table 2-2 for a chronology of Coca-Cola bottles used by the Globe and Phoenix plants.

Table 2-2 – Hobble-Skirt Coca-Cola Bottles, Globe and Phoenix (1927-1948)

Heelmarks or Skirtmarks	Basemarks	Dates
64-8 (front)	GLOBE (arch) / {Southern Star} / ARIZ. (inv. arch)	ca. 1927
8 {IPG triangle} 5 (fornt)	GLOBE (arch) / ARIZ. (inv. arch)	ca. 1928
CHATT 31 (front); GG or 67 (back)	GLOBE (arch) / ARIZ. (horiz.)	1931
64-10 (front)	PHOENIX (arch) / ARIZONA (inv. arch)	ca. 1927
8 {IPG in a triangle} 11 (front)	PHOENIX (arch) / ARIZ. (inv. arch)	1928
CHATT 28 (front); 6 (back)	PHOENIX (arch) / ARIZ. (horiz.); very pale aqua	1928
CHATT 29 (30, 31) (front); 6 (back)	PHOENIX (arch) / ARIZ. (horiz.)	1929 and 1930
{number} © 34 (35 or 36) (skirt)	PHOENIX (arch) / ARIZ. (horiz.)	1934-1936
{number} © 34 (39 to 48) (skirt)	PHOENIX (arch) / ARIZ. (horiz.)	1939-1948

#### Hobble-Skirt Coca-Cola Bottles - Patented December 25, 1923

The second hobble-skirt bottle authorized by Coca-Cola bears the inscription BOTTLE PAT'D DEC. 25, 1923, and is commonly known as the “Christmas” Coke bottle. Munsey (1972:62) dates the use of these as beginning in 1924; Pollard (1993:45) agrees but ads an end date of 1937; and Kendall (1978:7) places the range between 1926 and 1938. One of these has

been reported to exist with S. W. C. C. Co. embossed on the base, but neither author can currently verify this. With this possible exception, Southwestern succumbed to Coca-Cola's tradition at this point and, in the two remaining plants, substituted the city and state embossing on the base for the company's initials. Variations of this bottle style are known from Globe and Phoenix, all embossed with the city/state designation. Plants in each city began use of these bottles around 1928, just before the New Mexico and Southern Arizona plants went out of business.

Globe (1928-1931)

The Globe plant ordered its first "Christmas" Coke bottle in 1928. It is Georgia Green, the color preferred by the parent company, and bears the IPG-in-a-triangle heelmark used by the Illinois Pacific Glass Corp. from ca. 1925 to 1931 (Lockhart et al. 2005b). The numeral "8," a date code indicating 1928, is embossed to the left of the mark, with a month code of "5" to the right. The base is embossed GLOBE (arch) /ARIZ. (inverted arch), and the bottles are rated very rare (Figure 2-16). It is worth noting that this is the first Coke bottle used by Southwestern that was actually made in Georgia Green.

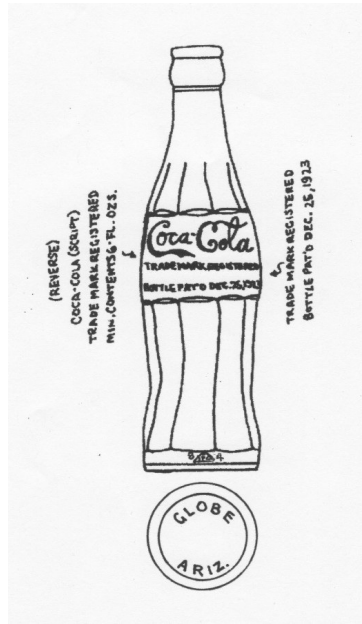


Figure 2-16 – "Christmas" Coke Bottle – Globe Plant – 1928

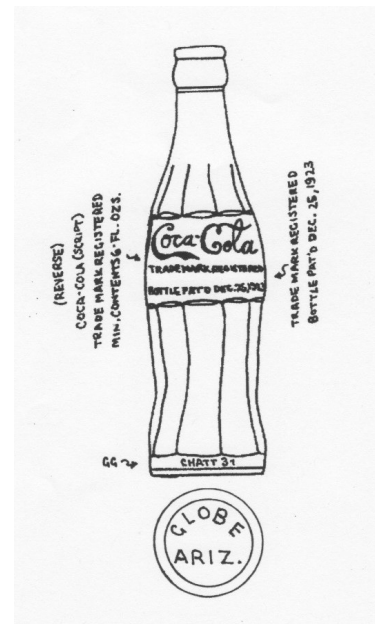


Figure 2-17 – Globe's Last "Christmas" Coke Bottle – 1931

The second "Christmas" bottle from Globe is embossed CHATT 31 (indicating 1931) on the front heel and GG or 67 on the back heel. These bottles are scarce. The inclusion of two different heel codes *may* indicate two orders during 1931. The GG may indicate "Georgia Green," the color preferred for Coke bottles by the Coca-Cola headquarters. However, earlier bottles from Phoenix (see below) are marked with a "6," and one Globe bottle is marked "67." The continuity of the number "6" suggests that the "GG" may be an engraver's error. We will probably never know the full story of this heelmark. The base has GLOBE around the top edge and ARIZ. horizontally across the bottom (Figure 2-17). Bottles with both heelmarks are scarce.

Although Toulouse (1971) does not list CHATT in his guide to manufacturer's marks, this is identified by Porter (1996:4-5) as the mark used by the Chattanooga Bottle & Glass Co. "until mid-1934." CHATT plus a two-digit date code was still used on some Coke bottles as late as 1948 (see e.g., Lockhart 2006b and Section III, Manufacturer's Marks).

Phoenix (1928-1948)

The Phoenix plant, which survived much longer than all the others, used four variations of the "Christmas" Coke bottles. The first variation is Georgia Green in color with the IPG-in-a-triangle mark used by the Illinois Pacific Glass Corp. from 1926 to 1930. The numeral "8" (1928) is embossed to the left of the mark with "11" (November) on the right. The base is embossed with "PHOENIX (arch) / ARIZ. (inverted arch), and these bottles are very rare (Figure 2-18).

A second bottle, also very rare, was also made in 1928. These are very pale aqua in color and are embossed CHATT 28 on the front heel and 6 on the back heel. The base is embossed with a larger PHOENIX in an arch and ARIZ. horizontally across the center (Figure 2-19).

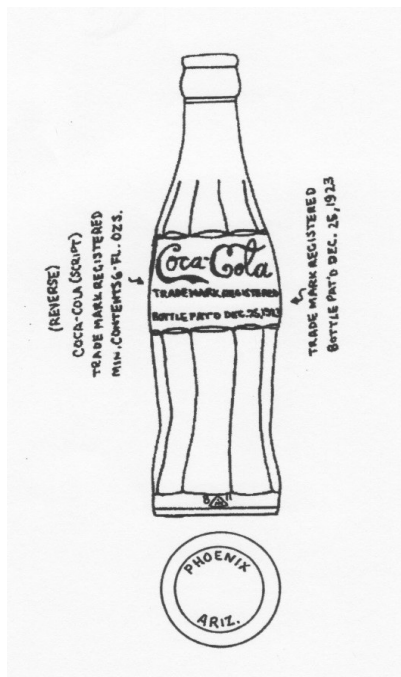


Figure 2-18 – "Christmas" Coke Variation – Phoenix – 1928

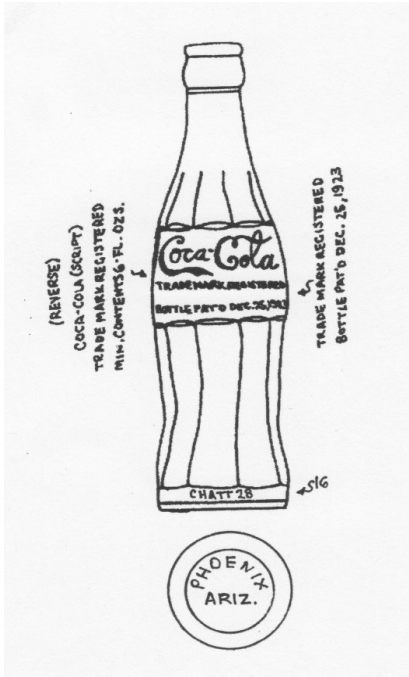


Figure 2-19 – Chattanooga Glass Co., Pale Aqua, Phoenix – 1928

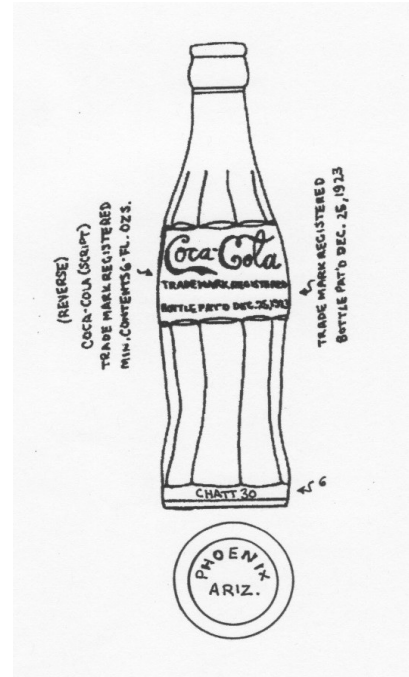


Figure 2-20 – Chattanooga Glass Co., Georgia Green, Phoenix – 1929 and 1930

The bottle was made by the Chattanooga Bottle & Glass Mfg. Co., and the “28” is a date code for 1928. The bottle is also found in a “29” variation with the same pale aqua color. This suggests that the Phoenix branch was still doing well enough to order bottles twice during 1928, probably early and late in the year. Both variations a very rare.

The next Phoenix variation of the Christmas bottle is Georgia Green in color and was made in two different years (both very rare). These bottles are embossed CHATT with either 29, 30, or 31 on the heel, and basal markings identical with the CHATT 28 bottle described above (Figure 2-20). In 1929 and 1930, a 6 is embossed on the back heel; 1931 has G4.

The next known bottle did not appear until 1934. The lack of bottles between 1932 and 1933 is not surprising. Those were some of the worst years of the Great Depression, so two things may have been happening. First, the company may not have been selling enough product to warrant replacing bottles yet. Second, money may have been so tight that the bottler reused worn bottles that would ordinarily have been thrown away. Times were tough, and many bottlers across the nation (including Southwestern’s Globe plant) just gave up and closed their doors.

The final variation of the “Christmas” bottle was made between 1934 and 1937, and all of these are scarce. The bases were embossed with PHOENIX in a much wider arch than the earlier variations and ARIZ. horizontally across the bottom. The bottle was embossed the Circle-C (©) manufacturer’s mark used by the Chattanooga Bottle Co. (see above for reference) along with “34,” “35,” “36,” or “37” date codes on the “skirt” (Figure 2-21). According to collectors, all years for these final “Christmas” bottles are scarce. This suggests that Southwestern continued to use its bottles until they completely wore out.

By at least the early 1930s, the typical manufacturer’s mark on Coca-Cola bottles was located on the “skirt” of the bottle along with a four-digit code surrounding the mark. Empirical evidence suggests that initially the last two digits were the date code and the first two a mold number. For example, a 14 © 36 mark would mean a mold number of 14, a manufacture by Chattanooga Glass Co., and a date of 1936. In 1951, the date code moved to the first two digits, and the manufacturer’s mark migrated to the base of the bottle. Hence, a bottle marked 58-01 was made in 1958 with mold number 01 (Porter 1996:7; also see Section IV, Coca-Cola dating).

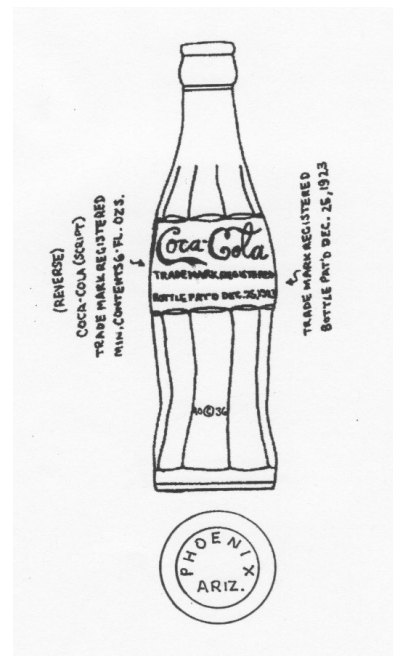


Figure 2-21 – Final “Christmas” Coke Variation – Phoenix – 1934-1937



## Hobble-Skirt Coca-Cola Bottles - Patented D - 105529

Coca-Cola's third hobble-skirt bottle type (marked BOTTLE PAT. D - 105529) was used only in Phoenix (beginning about 1939) as the Globe plant had become a victim of the Depression by that time. The basal markings are almost identical to the earlier CHATT bottles (see above), and the dates on the skirts range from 1939 to 1948. The bottles are all embossed on the "skirt" with Chattanooga's Circle-C mark (Figure 2-22). Unlike the earlier bottles, these are all very common. Munsey (1972:63) places the initial use of the D105529 bottles in 1937, and Pollard (1993:45) adds an end date of 1951. Kendall (1978:7) is in close agreement this time with a range of 1938 to 1951. Both the 1923 and D105529 bottles marked with city names of other former Southwestern plants (e.g. Deming, Las Cruces, Douglas) are found, but these were almost certainly only used after Southwestern ceased operations in those areas and was replaced by other companies.

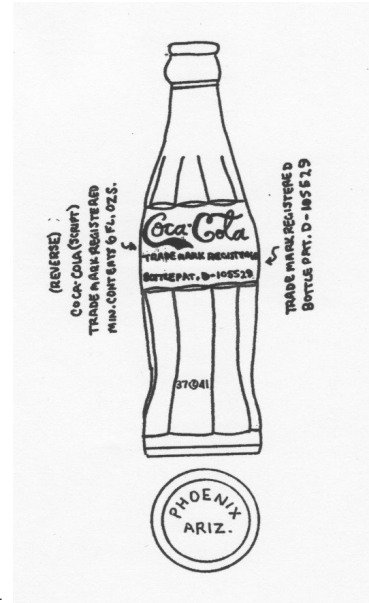


Figure 2-22 – The Final Style of Coke Bottle Used in Phoenix – 1939-1948

## Evolution of the Six-Panel Bottle Used by Southwestern

Houck & Dieter, El Paso, Texas

One of the most consistent bottle styles used by Southwestern was a six-panel bottle. The style actually had its origin in El Paso, Texas, where it was used by Houck & Dieter, a local liquor dealer, beer distributor, and El Paso's oldest soft drink bottler. The firm of Houck & Dieter began bottling soft drinks in El Paso in 1881 and continued to do so until it merged with Purity Bottling & Mfg. Co. in 1912 to form Empire Bottling Works. About 1906, Houck & Dieter first used a mouth-blown six-panel bottle. Each of the six panels was actually a plate mold with the mold lines concealed into the bottle design. This was one of the prototypes of the specialty (or proprietary) bottles to follow (for a discussion of this type of bottle, see Lockhart 2000 of Paul & Parmalee 1973:25-28). Embossed on four of the panels was HOUCK &

DIETER / COMPANY / EL PASO, / TEXAS. The bottles were colorless but solarize to a purple or even a lavender hue, and the base was embossed HOUCK & DIETER (Figure 2-23). These were used until the merger with Purity in 1912, and a large quantity of both the six-panel bottles and the Purity bottles was discarded in the Chamizal dump (see Lockhart & Olzsewski 1995:45 for a history of the dump and Lockhart 1997a; 2000 for a history of Houck & Dieter).



Figure 2-23 – 6-Panel Bottle – Houck & Dieter – 1900-1912

Empire Bottling Works and Empire Products Corp.

Although Empire Bottling Works briefly used an interim bottle, the firm quickly adopted the six-panel form (see Lockhart 2003 for another



Figure 2-24 – Mouth-Blown Empire Six-Panel Bottle – ca. 1912-1913

discussion of the evolution of the six-panel bottle and Lockhart 1997b; 2000 for a history of Empire). Like their predecessors, these bottles were colorless, solarizing to purple or amethyst (but not lavender), and the panels (plates) were embossed EMPIRE / BOTTLING WORKS / EL PASO, / TEXAS. See Table 2-3 for an overview of the Houck & Dieter and Empire six-panel bottles.

The first variation of this bottle was also mouth blown (Figures 2-24 & 2-25), and these were used during the first two years (1912-1913). About 1913, Empire used a machine-made version of the same bottle and probably ordered it twice (Figure 2-26). The aqua bottles were embossed OS 1012 on the heel beneath one of the blank panels, but a colorless variation may have had no heelmark.<sup>1</sup> As discussed in the Coke bottle section



Figure 2-25 – Close-up of Side Seam and Finish – Mouth-Blown Bottle

<sup>1</sup> Unfortunately, information on the colorless variant of this bottle is very limited. When Lockhart examined the colorless variation, he was very new to bottle identification and may not have noticed important markings on the heel.

Table 2-3 – Six-Panel Bottles Used by Houck & Dieter and Empire Companies (ca. 1906-1929)

Distinguishing Characteristics	Heelmarks	Basemarks	Date
Six-panel; colorless (amethyst); mouth blown HOUCK & DIETER	None	HOUCK & DIETER	ca. 1906 to 1912
Six-panel; colorless (amethyst); mouth blown EMPIRE / BOTTLING WORKS	None	EMPIRE	1912 to ca. 1913
Six-panel; colorless; machine made EMPIRE / BOTTLING WORKS	None	EMPIRE	ca. 1913
Six-panel; aqua; machine made EMPIRE / BOTTLING WORKS	OS 1012	EMPIRE	ca. 1913
Six-panel; aqua; 7 ½ oz; telephone No.; EMPIRE / BOTTLING WORKS	OS 1012	EMPIRE	ca. 1914
Six-panel; aqua; 6 ½ oz; telephone No.; EMPIRE / BOTTLING WORKS	17 S 3, 18 S 1, 18 S 3, 21 S 2	EMPIRE	1917 to 1921
Six-panel; aqua; 6 ½ oz; telephone No.; EMPIRE / REGISTERED	3303 29	1 / EMPIRE / I-in-a-diamond	1929
Six-panel; aqua; 6 ½ oz; telephone No.; EMPIRE / BEVERAGES	3301 29	EMPIRE / I-in-a-diamond	1929
Six-panel; aqua; 6 ½ oz; telephone No.; EMPIRE / BEVERAGES	{S-in-a-star} 29	EMPIRE	1929

(and Section III), the mark was used by the Okmulgee plant of the Graham Glass Co. All of the embossed Empire bottles were marked EMPIRE on the base.

About a year later (ca. 1914), the company ordered bottles to be in compliance with the Gould Amendment to the Pure Food and Drug Act of 1906. The Gould Amendment stated that beginning on March 3, 1913, all bottles were required to be marked with volume information. Voluntary compliance extended for 18 months (until September 3, 1914) when enforcement of the law began. This gave bottlers time to exhaust their remaining supply of unlabeled bottles. The new bottle, aqua in color, was embossed CONTENTS 7½ FL.OZ. on one of the previously blank panels and TELEPHONE No. 3165 on the other. The remaining four panels retained the



Figure 2-26 – Close-up of Side Seam and Finish – Machine-Made Bottle

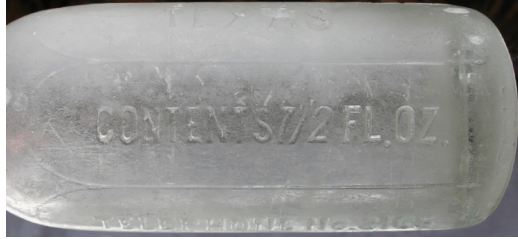


Figure 2-27 – Empire’s 7 ½-Ounce Variation – ca. 1914



Figure 2-28 – Closeup of ½ Engraver’s Error

same embossing as the previous bottles (Figure 2-27). A close look shows that the engraver made an error and added the “1” as an afterthought (Figure 2-28). The only example we have seen was embossed OS 1012 on the heel at the base of the CONTENTS panel (Figure 2-29). This is the same model number used on the previous bottle without the phone number and contents panels.

An unexplained hiatus in Empire six-panel bottles occurred from ca. 1914 until the next known bottle used in 1917. It is possible that generic, paper-labeled bottles were used during this period or that we simply have not found other six-panel bottles. An interim bottle was also used during the period. These interim containers were cylindrical with a round plate mold identifying the company and the seven-ounce capacity of the bottle. These may even have been the only bottles used during the period.



Figure 2-29 – OS1012 Mark on Heel



Figure 2-30 – Empire Bottling Works 6 ½-Ounce Variation – 1917-1921

The next change occurred in 1917 with a reduction in size to a 6½-ounce bottle (Figure 2-30). Aside from the volume numerals, the embossing remained the same as the 7½-ounce, six-panel variation. This variation was used until about 1922, and it obviously inspired the six-panel bottle used by Southwestern (see below). At least four different mold marks appear on the heels of these bottles, consistently embossed at the base of the TELEPHONE No. panel. The earliest mark is 17 S 3, a mark commonly used by the American Bottle Co. from 1916 until about 1923 and more

rarely used until 1929 (Lockhart et al. 2007).<sup>2</sup> The first two digits are a date code; the letter indicates the Streator, Illinois, plant (an N equals the Newport, Ohio, plant); and the final digit is a mold number. The other five known date codes are 18 S 1, 18 S 3, 20 S 2, 21 S 1, and 21 S 2, indicating manufacturing dates of 1918 and 1921 (Figure 2-31). It is possible that a 1916 example will eventually be found.



Figure 2-31 – The 20 S 2 Mark used by the American Bottle Co. – 1917-1921

As odd as it may seem, by 1920, the company applied paper labels over the embossing on the six-panel bottles. Advertisements like the one in the *El Paso Herald* (7/3/1920) announced “Fruit Thrills from Electric Mills” in orange, lemon, lime, and grape flavors. The ads clearly

show the six-panel bottle with a paper label affixed (Figure 2-32). Such applications were occasionally practiced by patent medicine companies after the 1906 Food and Drug Act (White 1974:60), so some soda bottlers may have adapted to the idea when paper labels became especially popular in the early 1920s.

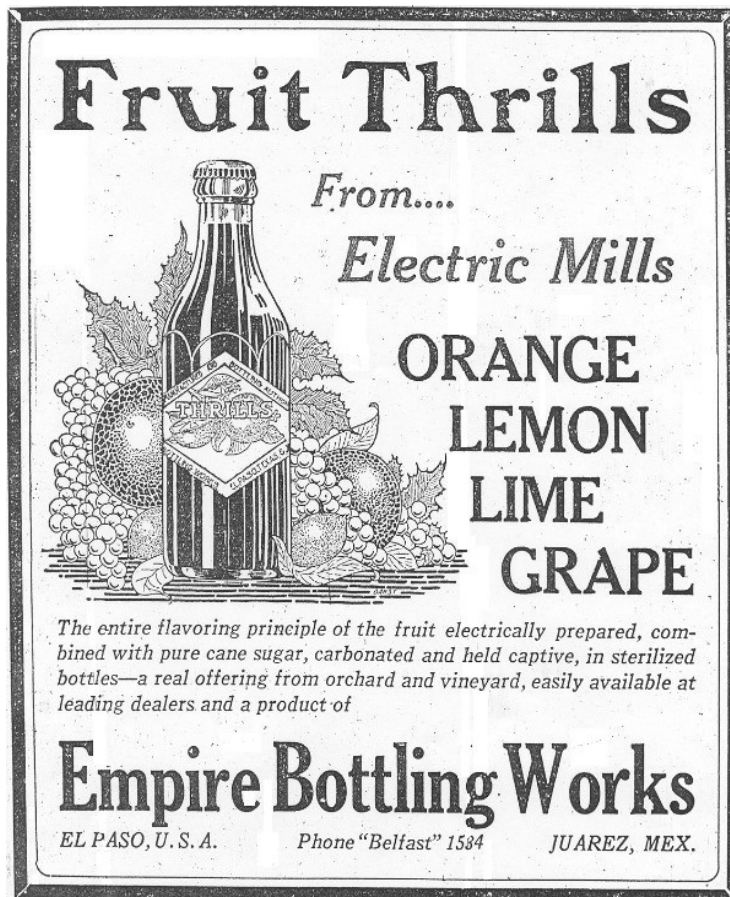


Figure 2-32 – Empire Add for Six-Panel Bottle with Paper Label – *El Paso Herald* (7/3/1920)

At this point, another gap appears in our empirical data. We have found no six-panel bottles that date between 1922 and 1928. With the addition of Edmondson B. Link to the company in late 1922 or early 1923, the name was changed to Empire-Link Industries, and this required numerous adjustments. A general trend in the El Paso soft drink industry during this time was a shift to generic bottles with paper labels. It is

<sup>2</sup>Toulouse did not quite illustrate the mark correctly. He showed the mark as S<sub>17</sub>. In reality, all examples we have found (several dozen) have used the 17 S {number} configuration.

very likely that Empire only used such bottles until 1929.



Figure 2-33 – Illinois Glass Co. Mark on Empire Bottle

The company again renamed itself as the Empire Products Corp. in late 1924 or early 1925 and apparently continued to use the generic, paper-labeled bottles. In 1929, the firm returned to the older, six-panel design. Instead of applying the more cumbersome Empire Products Corp. name, however, Empire simply replaced the BOTTLING WORKS panel with one marked REGISTERED. Unlike the six-panel bottles that preceded it, the next bottle was colorless and was embossed on the base with I / EMPIRE / I-in-a-diamond (Figure 2-33). The bottle was also

embossed on the heel with 3303 29 at the base of the TEXAS panel. The I-in-a-diamond mark was used by the Illinois Glass Co. from 1915 to 1929 when the company merged with the Owens Glass Co. late in the year, and the “29” is a date code for 1929 (Lockhart et al. 2005a:55-56).

Empire ordered a final bottle that same year (1929). On this bottle, the panel previously marked REGISTERED was changed to BEVERAGES, and it was embossed with S-in-a-Star | 29 below the BEVERAGES panel (Figure 2-34). The Southern Star manufacturer’s mark was used by the Southern Glass Co. of Vernon, California, between 1926 and 1931 (see Section III). The “29” is a date code for 1929. When Empire changed to a larger, specialty style bottle (also called proprietary bottles) in 1930, these, too, were marked EMPIRE BEVERAGES.



Figure 2-34 – Southern Star Mark on Empire Bottle

### “House Brands” and Bottles Offered by Southwestern

Prior to 1960, the Coca-Cola parent company disdained the use of flavors, although it allowed local franchises to bottle and sell any flavors they pleased. Local bottlers typically used their own labels prior to the general switch to nationally franchised brands about 1930 or slightly later. Coca-Cola introduced Fanta and Sprite, followed by the diet drink, Tab in 1960 and added Fresca to the line in 1966.

Although colas were fairly new to the Southwest, fruit flavors were well established by the time Southwestern opened its doors. By at least 1900, bottlers had begun switching from unflavored soda and mineral waters to fruit flavors. These rapidly became an established favorite

and were the staple product of most Southwestern bottlers in the early 20<sup>th</sup> century. This affected the entry of a bottler into a franchise agreement with Coca-Cola.

Most companies entered into a Coca-Cola franchise agreement under one of two circumstances. Often, these firms were established bottlers who added Coca-Cola to an already-existing product line. El Paso's Magnolia Bottling Co. (see discussion in Part I) was one of these. When Hope Smith established Magnolia in late 1907 or early 1908, he first bottled his own brand, which he called Hope's. Hope's flavors came in "Grape, Cherry, Lemon, Sarsaparilla, Cream Orangeade, Root Beer, Strawberry, etc." (*El Paso Herald* 6/9/1920 7:1). When Smith added Coca-Cola to the line in 1911, he continued bottling Hope's flavors until his decision to put all of the plant's energy into a single product (Coca-Cola, of course) in 1936.

Other bottlers began their operations with a Coca-Cola franchise. These dealers either instigated their own line of fruit flavors to compliment their franchised cola, entered into franchise agreements with already established national or regional companies, or used a combination of both. Southwestern implemented its own flavors and later chose the combination option.

Empirical evidence suggests that Southwestern had established its own flavors from the start of the operation (see bottle descriptions below), but historical citations naming brands used by the company are unavailable prior to 1919. An ad in the *Las Cruces Citizen* (5/17/1919) is the first we have found that noted flavors offered by Southwestern: "Coca-Cola, Root Beer, Ginger Ale and Sodas of Quality." Aside from Coke, these were almost certainly Southwestern's "house brand," but the name, if any existed, was never revealed.

### Deming Coca-Cola Bottling Works

Bottles from Southwestern's "house brand," however, were clearly marked, and underwent several transformations. Although some confusion still exists (see below), one of the first flavor bottles, like the earliest Coca-Cola bottles, was modeled after those used by the Deming Coca-Cola Bottling Works in 1916. Gardner's original Deming plant (the Coca-Cola Bottling Works) used a bottle embossed "COCA-COLA BOTTLING WORKS (arch) / DEMING, N. MEX. / CONTENTS 6½ FL. OZ. (both horizontal)" in a "tombstone" shape. The heel was



Figure 2-35 – Deming Coca-Cola Bottling Works Flavor Bottle – 1916 [Keith Austin Collection]



embossed OS 1102, a mark used by the Okmulgee, Oklahoma, plant of the Graham Glass Co. (Figure 2-35)

### Debate About the Earliest “House Brand” Bottles

Two bottle styles were apparently used during Southwestern’s first year. Both designs were based on earlier bottles used by Gardner, one the Deming flavor bottle, the other from the Empire Bottling Works. We will probably never know the story behind the choice of two styles, but there is a plausible explanation. The initial two plants seem to have been in Deming and Las Cruces in 1916 (with Douglas following in early 1917). It is possible that each plant ordered its initial bottles separately. The Deming plant thus may have ordered bottles (both Coca-Cola and flavor) patterned after the original Deming Coca-Cola Bottling Works containers; whereas, Las Cruces may have favored the Empire configuration.

Alternative explanations are possible, of course, and these include the simultaneous use of different styles in a business with multiple outlets. Gardner and L. H Phillips, superintendent of Southwestern, may have disagreed about the initial style and selected two (or more) branches as a test market. If so, they selected neither (see the plate mold bottle below) but returned to the six-panel style later.

Assuming the first explanation suggested above is correct, Deming’s initial house brand bottle appears to have been patterned after Gardner’s Deming Coca-Cola Bottling Works flavor bottle. This style was embossed on the front of the bottle in a large oval shape, although, like the Deming bottle, it was *not* in a plate mold. This shape may have grown out of the Deming tombstone bottle with an extra, inverted arch added at the bottom because there was now too much information to be contained in the tombstone shape. On this bottle, SOUTHWESTERN was in a downward arch, followed by COCA-COLA / BOTTLING COMPANY (both horizontal) and NEW MEXICO - ARIZONA in an upward arch. The front heel was embossed CONTENTS 6 ½ FL. OZ. with OS 1218 P on the back heel (Figure 2-36). Like all the pre-1920 codes on Graham bottles, the “18” was not a date code. It is likely that the four-digit number was a catalog code to identify the specific bottle style or was an order number. As discussed in the Coca-Cola section, the “P” was a date code. Graham used letters as date codes (in this case “P” – the 16<sup>th</sup> letter of the alphabet – equals

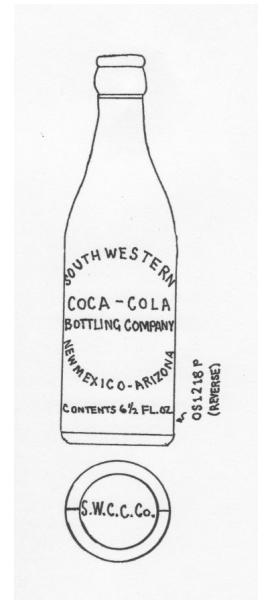


Figure 2-36 – The Initial Flavor Bottle, Deming Plant – 1916



1916). These bottles were made in both colorless and light aqua variations. Both are very rare.

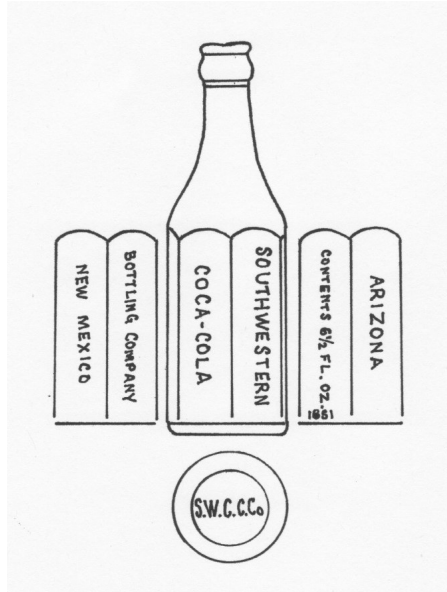


Figure 2-37 – The Initial Flavor Bottle, Las Cruces Plant – 1916 (also used until 1920)

The initial flavor bottle used by the Las Cruces plant, then, was a revitalized copy of Empire’s six-panel bottle. The aqua bottle was embossed “SOUTHWESTERN / COCA-COLA / BOTTLING COMPANY / NEW MEXICO / ARIZONA / CONTENTS 6½ FL. OZ. At the base of the CONTENTS panel was an embossed mold mark, 16 S 1 or 16 S 3 (Figure 2-37). The base was marked S.W.C.C.Co., as were all the six-panel variations except the final one. As discussed above, this mark was used by the Streator plant of the American Bottle Co. The date code indicates the bottle was also made in 1916 (Lockhart et al. 2007). See Table 2-4 for an overview of Southwestern’s six-panel bottles and a single one used during the post-Southwestern period.

#### “House Brand” Plate Mold Bottles

In 1917, a new design was adopted. This was a twin of the second Coca-Cola bottle used by Southwestern – minus the script Coca-Cola mark on the shoulder – and was a companion bottle to it. Aqua in color, the front body contained a circular plate mold with SOUTHWESTERN / COCA-COLA / BOTTLING CO. / NEW MEXICO - ARIZONA embossed in two lines around the circle (Figure 2-38). The heel was embossed 17 S 1 or 17 S 6, the mark of the Streator plant of the American Bottle Co. (see section III, Manufacturer’s Marks, for a more in-depth discussion of the code). In some of these bottles, the code is very indistinct, and some are colorless. Aqua bottles are scarce, and the colorless ones are very rare.

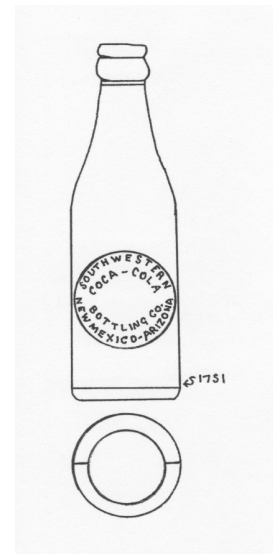


Figure 2-38 – Plate Mold Flavor Bottle – 1917

Table 2-4 – House Brand Flavor Bottles, New Mexico Era and Beyond (1917-1929)

Distinguishing Characteristics	Heelmarks	Basemarks	Date
Six-panel; aqua; straight sides	16 S 1 or 16 S 3	S.W.C.C.Co	1916
Oval front embossing; contents just above heel	OS 1218 P (back)	S.W.C.C.Co.	ca. 1917
Front embossing in plate mold on front	17 S 1	None	1917
Six panel; aqua; straight sides	18 S 1; 18 S 4; 19 S 3, 20 S 2, or 20 S 3	S.W.C.C.Co	1918 to 1920
Six panel; aqua; straight sides	OS 249 S	S.W.C.C.Co	ca. 1919
Six panel; aqua; straight sides	OS 249G 20 or OS 249G 23	S.W.C.C.Co	1920 or 1923
Six panel; colorless; straight sides	3650 A ROOT 23	S.W.C.C.Co	1923
Six panel; very pale aqua; tapered	6-2	S.W.C.C.Co	1926
Six panel; colorless (amethyst); tapered	6-1	Southern Star / S.W.C.C.Co.	1926
Six panel; colorless; tapered; 7 on crown	7-2 , 8-1, or 8-2 and IPG in a triangle	S / CCBCO / W	1927, 1928
Six-panel; aqua; tapered; NEW MEXICO COCA-COLA BOTTLING COMPANY	4143E G29	N.M.C.C.B.CO	1929

### Six-Panel Bottles

In 1918, Southwestern returned to the six-panel bottle. The aqua bottle was embossed SOUTHWESTERN / COCA-COLA / BOTTLING COMPANY / NEW MEXICO / ARIZONA / CONTENTS 6½ FL. OZ. At the base of the CONTENTS panel was an embossed mold mark, 18 S 1 ,18 S 4 or 19 S 3. The final order from this company was marked 20 S 2 (Figure 2-37).

Although it does not quite fit into an intuitive sequence, a bottle from the Okmulgee, Oklahoma, plant of the Graham Glass Co. was ordered in 1919. The bottles are marked OS 249S at the heel. In the Graham letter date code scheme (discussed above and in Section III), the “S” equals 1919 (Figure 2-39).

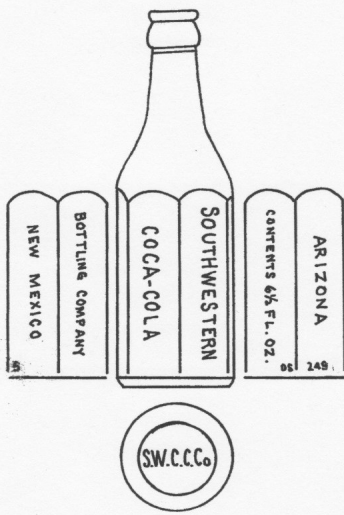


Figure 2-39 – Six-Panel Bottle Made by the Okmulgee Plant of Okmulgee Bottle – 1920 and the Graham Glass Co. – 1919

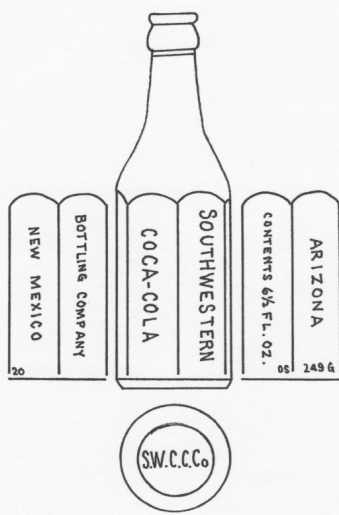


Figure 2-40 – Another

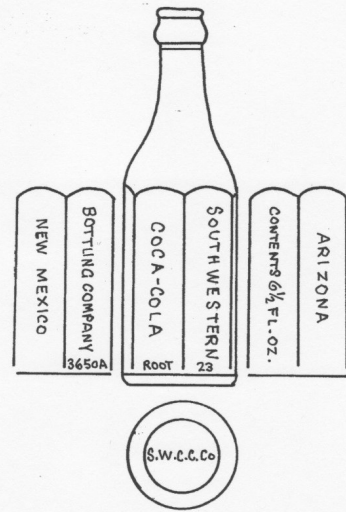


Figure 2-41 – Six-Panel Bottle Made by Root Glass Co. – 1923

Another six-panel bottle was ordered from Okmulgee in 1920. These scarce bottles are embossed OS 249G 20 on the heel (Figure 2-40). Another order followed in 1923 (OS 249G 23). This made two orders in 1920, probably one early in the year and one later. A second order for a six-panel bottle was also placed during 1923, this time made by the Root Glass Co. and marked 3650A ROOT 23 (Figure 2-41). The Root Glass Co. used the ROOT mark from 1901 to 1932 (Toulouse 1971:445). We have found no bottles with evidence of manufacture in 1921 or 1922, suggesting that the double orders in 1920 and 1923 covered the need during those years. Another hiatus occurred during the 1924-1925 period.

Marks on the next three variations of the six-panel bottle are somewhat puzzling. All use the same style of mold number, but one has no company logo, and the other two were made by separate companies. Two were almost certainly made in 1926, and both are configured slightly differently from their predecessors. Both are considered rare to very rare. These bottles taper slightly from the heel to the shoulder. The earlier bottles were straight sided. One of the two was a very pale aqua in color (almost colorless) and was embossed 6-2 on the heel of the ARIZONA panel (Figure 2-42).

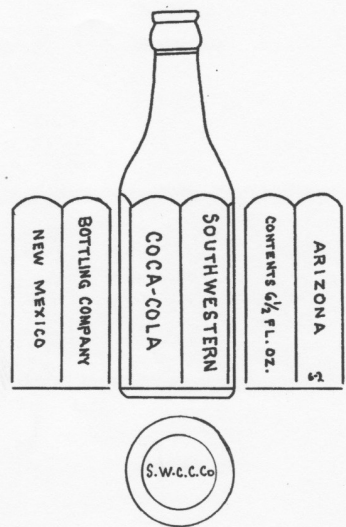


Figure 2-42 – Six-Panel Bottle, no Maker's Mark – 1926

The second 1926 variation was similarly marked with 6-1 on the heel of the same panel, but the base of the bottle is also embossed with the Southern Star mark used by the Southern Glass Co. from 1926-1931 (see Section III, Manufacturer's Marks). The 6-2 bottle was probably also been made by Southern but did not contain the company logo. This Southern Glass Co. variation is unusual in that it is solarized amethyst in color, an indicator that the glass mixture contained manganese dioxide (Figure 2-43). Manganese was generally used to decolor glass from the early 1880s until the general use of automatic bottle machines about 1920. Use of manganese is soft-drink bottles, however, did not begin until the mid-1890s. Although some manganese-decolored bottles are known as late as 1933, they were almost all hand blown (see Lockhart 2006c for a discussion on the use of manganese as a glass decolorant). A machine-made bottle decolorated with manganese, especially as late as 1926, is very unusual, although Miller has discovered examples of manganese-decolored bottles from seven Arizona companies that date between 1926 and 1928, all produced by Southern and bearing the S-in-a-Star manufacturer's mark.

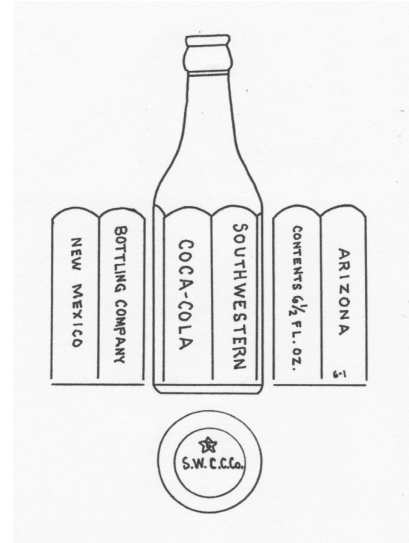


Figure 2-43 – Six-Panel Bottle Made by Southern Glass Co. – 1926

As noted in the Coca-Cola bottle section above and discussed in Section III, the Southern Glass Co. began using year-month date codes in 1926. Thus the 6-1 mark equals January 1926, while the 6-2 code indicates the bottle was made in February of the same year. The double order may have been to make up for the lack of bottle procurement during 1924 and 1925.

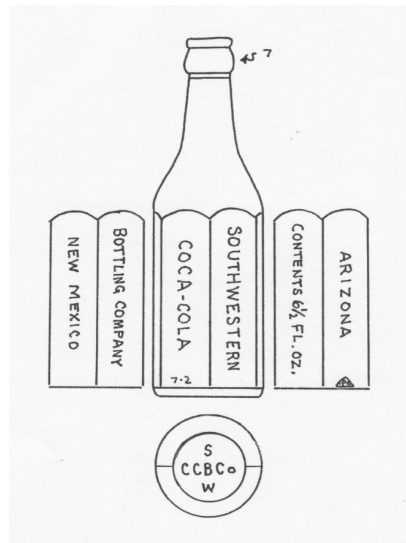


Figure 2-44 – Six-Panel Bottle Made by Illinois Pacific Glass Corp. – 1927

The final bottle known to be in the six-panel series from Southwestern contains the IPG-in-a-triangle mark used by the Illinois Pacific Glass Corp. from 1926 to 1930 (Lockhart et al. 2005b). Unlike its predecessors, this bottle is very common. The logo appears at the heel of the ARIZONA panel with a 7-2 at the heel of the COCA-COLA panel. An additional “7” is embossed on the crown finish (Figure 2-44). Each “7” is a date code for 1927 (see discussion in Manufacturer's Marks, Section III). The basal embossing changed with this variation to a cross-

shaped configuration with CCBCo aligned horizontally with an “S” above and a “W” below. These bottles were colorless. Although the company continued in business for two more years, no other “house brand” bottles are known. A single, final variation was used by Southwestern’s successor in New Mexico.

#### New Mexico Coca-Cola Bottling Co. – the Last of the Six-Panel Bottles

The final chapter on the six-panel bottle was written by Southwestern’s successor in New Mexico. In late August of 1929, John A. Echols bought all three existing branches of Southwestern Coca-Cola Bottling Co. and renamed the company as the New Mexico Coca-Cola Bottling Co. His first flavor bottle was another variation of the six-panel container. The bottle was aqua in color and was embossed NEW MEXICO/COCA-COLA/BOTTLING COMPANY / LAS CRUCES / DEMING / CONTENTS 6½ FL. OZ. in the six panels (Figures 2-45). The heel was embossed 4143E G29, the mark of the Evansville, Illinois, plant of the Graham Glass Co.

But this was the last. By 1930, Echols turned to Big Chief bottles for his flavor line. Deming and Las Cruces soon evolved into separate plants, with the Deming company serving Silver City. Each company began selling different brands: Deming remaining with Big Chief, and Las Cruces bottled a brand called Yucca. The six-panel bottle line was at an end.



Figure 2-45 – Six-Panel Bottle Used by the New Mexico Coca-Cola Bottling Co. – 1930

#### House Brand Bottles from the Phoenix Plant

After 1928, the Globe operation discontinued flavors in embossed bottles. If Globe continued to bottle flavors, it must have used generic bottles with paper labels, although no existing information suggests such ongoing flavors. The Phoenix plant, however, continued to bottle its own flavor line. These seven-ounce bottles were taller and thinner than their predecessors and heralded a distinct change in the remaining flagship plant in Arizona. Each bottle had 24 embossed ribs extending from the heel to the neck with a rectangular plate mold near the center of the body. This center labeling area was embossed PROPERTY OF / COCA-COLA / BOTTLING CO. / MIN. CONT. 7 FL. OZ.

The Phoenix plant used three variations of this bottle between 1931 and 1934. It is difficult to date these because the bottle maker, Chattanooga Glass Co., did not use date codes on any containers except hobble-skirt Coke bottles. We have assigned approximate dates based on scarcity of bottles and stylistic changes (see illustrations). The bottles were used between 1931 and 1934 (Figure 2-46). The earliest variation is rare, but the later two are common and very common. The Phoenix house brands are summarized in Table 2-5.

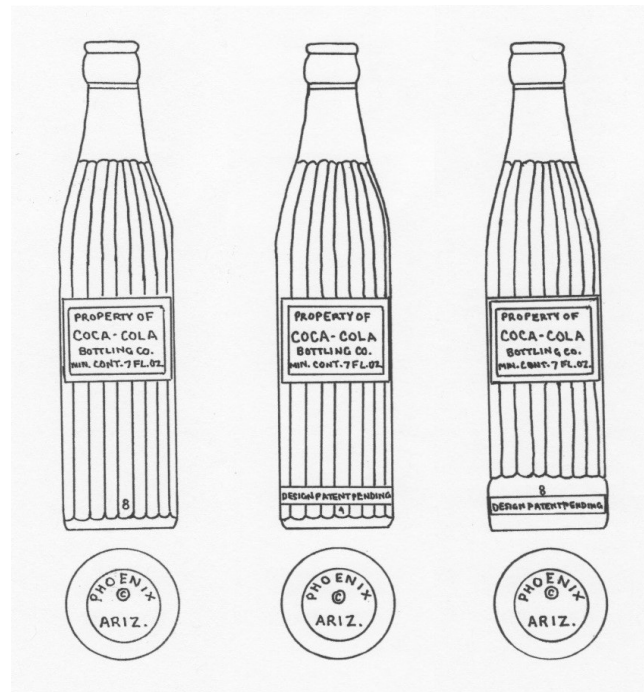


Figure 2-46 – The Three Phoenix Flavor Bottles – ca. 1931-ca. 1934

Like many Coca-Cola franchises, Southwestern discontinued flavor bottling altogether during the 1930s to devote its energy to the production of Coke. This may have been because of pressure from the parent company, but the discontinuance may have been caused by excessive local competition. At least nine other bottlers offered such national brands as Vess Dry, Whistle, Whizz, Barq’s Root Beer, Delaware Punch, Dr. Pepper, Nehi Flavors, Gimme, and Seven-Up. In addition, bottlers in nearby Mesa and Tempe bottled their own flavors.

Table 2-5 – Phoenix House Brand Flavor Bottles (ca. 1931-ca. 1934)

Distinguishing Characteristics	Heelmarks	Basemarks	Date
Ribs extend to heel; no heel labeling area	4 or 8 on one rib	PHOENIX (arch) / © / ARIZ. (horiz.)	ca. 1931
Ribs extend to heel; labeling area just above heel	4 on one rib below labeling area	PHOENIX (arch) / © / ARIZ. (horiz.)	ca. 1932
Ribs extend to thick labeling area at heel	2, 5, or 8 above labeling area	PHOENIX (arch) / © / ARIZ. (horiz.)	ca. 1933 to 1934

## National Franchises Bottled by Southwestern

The Las Cruces branch sold out to the Cruces Candy and Bottling Co. in 1921 but re-obtained the franchise for that city in 1923. Along with Coca-Cola, Southwestern also seems to have added all the brands formerly bottled by “Cruces.” Southwestern’s reincarnation advertised Coca-Cola along with “Delaware Punch – Cherry Blossoms, Orange, Lemon and Lime Squeeze, Cactus Brand Ginger Ale, Rainier Near Beer” (*Las Cruces Citizen* 7/14/1923).

The National Fruit Flavor Co. of New Orleans, Louisiana, franchised Orange Squeeze and other Squeeze flavors at least as early as 1919 (Geary 2003:7). A search on eBay showed Applied Color Label (ACL) Squeeze bottles still made as late as 1959, and the Bates family (1992a:S-25 to S-26) included dates as late as 1963. The Handbook of Texas notes that in 1924, the state contained “three Orange Squeeze plants” (Dunagan 2002), suggesting that the franchises were not moving west very rapidly. The first Southwestern plants in Las Cruces may have offered the drink as early as 1919. It was certainly in place by at least 1920. By 1929, the same Squeeze brands were instead carried by the Voiers Brothers, a bottling outfit in Deming, New Mexico (*Deming Graphic* 6/24/1929). It is likely that the Voiers picked up the brand shortly after the Las Cruces branch of Southwestern discontinued the Squeeze flavors to join the rest of the conglomerate in offering the Crush products. An ad for Orange Squeeze (*Las Cruces Citizen* 1/20/1923) showed a generic bottle with a paper label (Figure 2-47). Bates and his family (1992b) give several examples of embossed Squeeze bottles, some with the name in a diamond. It is unknown which format was actually used in Las Cruces, but none of them were marked with the Southwestern name.

Delaware Punch was introduced in 1915 by the Delaware Punch Co. of America, San Antonio, Texas (Riley 1958:262, 287). The drink is currently a product of the Coca-Cola Co. Voiers Brothers in Deming also carried Delaware Punch by 1929, and they may have adopted all the flavor brands cast aside by Southwestern. Delaware Punch was offered in 10-ounce,



Figure 2-47 – Orange Squeeze Ad – *Las Cruces Citizen* (9/16/1922)

embossed, specialty (proprietary) bottles with a punch bowl on the front labeling area and the base. The Delaware Punch logo (with punch bowl) was first used in 1914 but was registered as a trademark on November 30, 1917. The most recent owner of the brand was the Delaware Punch Co., San Antonio, Texas (O'Dell 2004).

Although Riley (1958:262) lists Cherry Blossoms as being introduced in 1913, the name was used at least as early as 1909 (see below). Currently, we have been unable to find the termination date for the drink or the company that made it. However, it was no longer listed by Riley (1958:286) in 1957. Ads from the *Las Cruces Citizen* (e.g. 7/24/1920), showed Cherry Blossoms in a generic bottle with a diamond-shaped paper label and crown cap (Figure 2-48). Bates and his family (1992b:Sections B & C) showed two other variations of the paper label, both in the diamond shape favored by the company. The Cherry Blossoms trademark was first used in 1909 and registered on April 4, 1922, by the Cherry Blossom Mfg. Co., an Iowa corporation located at Newton, Iowa. The last known owner of the brand was the Hurty-Peck & Co, Indianapolis, Indiana (O'Dell 2004).

The *Deming Graphic* (7/22/1924) bragged that the Deming branch carried “Ward’s orange, lemon and lime crushes, old monk punch, cherry blossoms, old mission ginger ale, strawberry, root beer, cream and Rainier beverages.” Old Monk was a grape drink sold by Empire Bottling Works of El Paso, Texas, and Ward’s later became known as just Orange Crush and even more recently simply as Crush. Ranier was one of Prohibition’s non-alcoholic near beers. Although the flavors were not listed, the *Silver City Enterprise* (4/18/1924) advertised all of the same brands in Silver City. It is likely that the Las Cruces plant also carried the same products by this time.

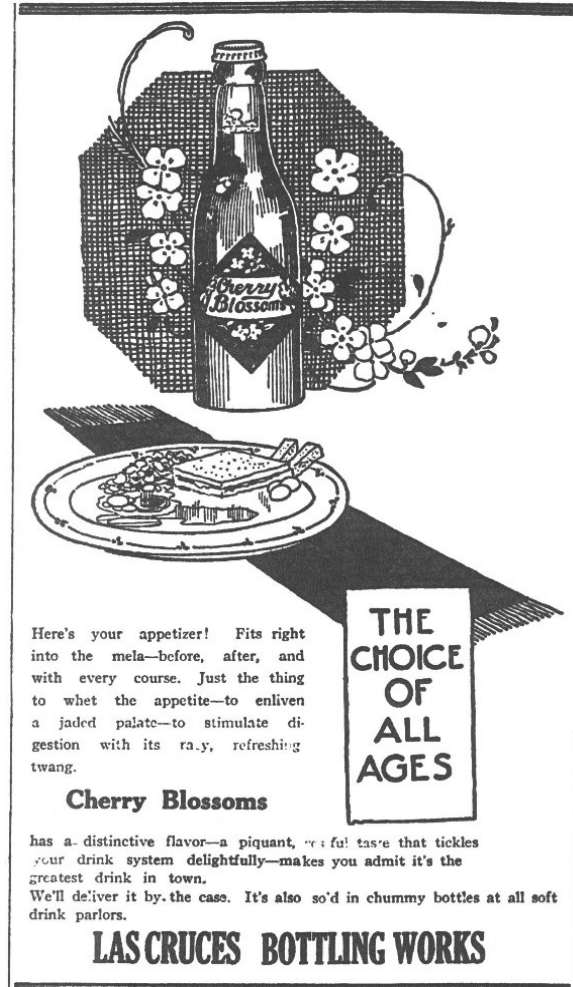


Figure 2-48 – Cherry Blossoms – *Las Cruces Citizen* (7/24/1920)



Old Monk may have been offered in a generic container or contained in a house brand bottle, and it was highly likely that Ranier, as most of the near beers of the age, appeared in a 12-ounce, amber bottle with a paper label. Except in unusual circumstances when labels are preserved (e.g., see Herskovitz 1978:5-6; Lockhart & Olszewski 1994:40-42), dating of paper label bottles is of little use to archaeologists, so it is unlikely that examples of Cherry Blossoms, Old Monk, or Ranier will surface in excavations.

All the branches seem to have had at least several brands (if not all) in common, although ginger ales, in particular, seem to have been bottled at the whim of the individual plant. In 1926, the Mesa distribution center advertised Old Monk and Arizona Dry Ginger Ale. A 1927 listing in the Arizona State Directory shows the Globe plant carrying “Coca-Cola, Old Monk Punch, Arizona Dry Ginger Ale, Orange, Lemon, Lime and Chocolate Crush.” The ginger ale brand may be time related but is more likely linked to the local area. The flavor line, however, remained fairly constant at the various locations. Table 2-6 summarizes the nationally franchised brand bottles used by Southwestern.

Table 2-6 – Franchised Flavor Bottles (ca. 1924-1927)

Distinguishing Characteristics	Heelmarks	Basemarks	Date
Tall, thin, colorless bottle (probably Old Mission)	None	S.W.C.C.Co	ca. 1924
Tall, thin, colorless bottle emb. OLD / MISSION / TRADE MARK at shoulder	None	10 / S.W.C.C.Co / OZ.	ca. 1924
ORANGE CRUSH krinkly, colorless	6, 8, 9, or 10 (front)	SWCCCO	ca. 1924
ORANGE CRUSH Co, krinkly, colorless	None	S.W.C.C.CO	ca. 1925
ORANGE CRUSH Co, krinkly, colorless (amethyst)	None	Southern Star / S.W.C.C.CO	1926
ORANGE CRUSH Co, krinkly, colorless	IPG in a triangle 7-2	S / WCCOC / W	1927

## Old Mission Ginger Ale Bottles

For at least a short time, Southwestern sold Old Mission Ginger Ale in distinctive bottles. These tall, ten-ounce bottles were embossed with OLD / MISSION / TRADEMARK on the shoulder and SWCCCo on the base. They almost certainly bore a paper label on the central body area. A very similar bottle bore the Southwestern initials on the base but had no other markings. Because of their sizes and shapes, both probably contained Old Mission Ginger Ale (Figure 2-49). The brand was probably adopted in 1924 but likely only lasted for a year or so. It is impossible to tell which bottle style was used first, although, beginning in 1920, the area newspapers almost exclusively showed generic, paper-labeled bottles in their ads. Thus, the unembossed bottle was probably the earlier one, although both were probably replaced by 1926 or 1927. Collectors note that the bottles are very rare, indicating that Southwestern probably either sold very few of these or continued bottling the product until the existing stock wore out or broke.

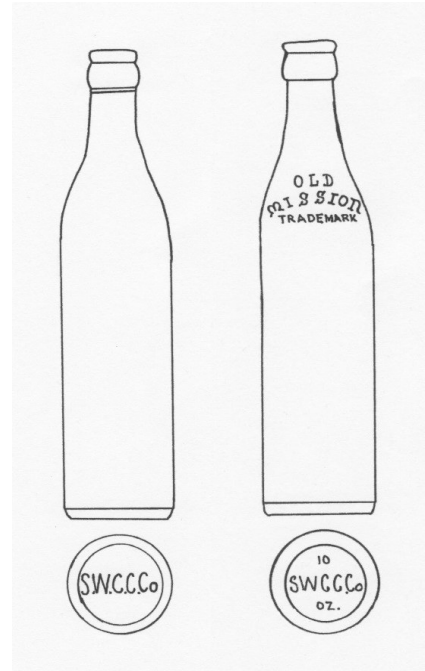


Figure 2-49 – Old Mission Ginger Ale Bottles – 1924-1925

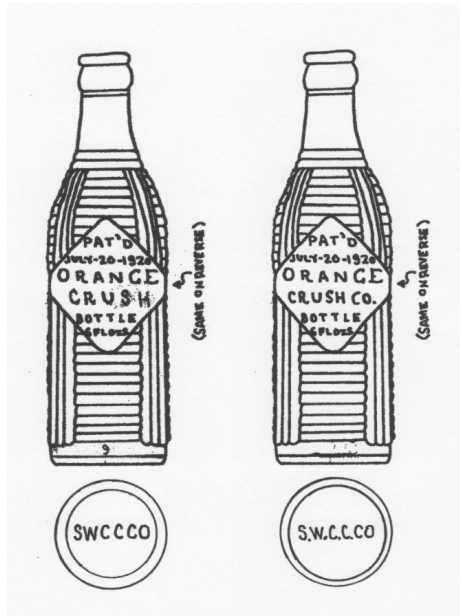


Figure 2-50 – Orange Crush Bottles – ca. 1924-1925

## Orange Crush Bottles

The Orange Crush line also seems to have been adopted about 1924, but it continued in use until about the end of the New Mexico and most of the Arizona plants in 1929. Although Orange Crush came in many different bottle types and two colors (colorless and amber), Southwestern only used one type (see Rossman 2001; 2002). However, four slight variations of the colorless, PAT'D / JULY 20, 1920, bottle were used by the company. The first two were probably bought in 1924 and 1925, respectively, although it is difficult to determine their precise order. Both are colorless with essentially the same design but show slight differences. The one most likely to

have been made in 1924 had ORANGE / CRUSH as the central letters in its logo with a “9” embossed at the front heel and SWCCCO on the base (note that both the logo and basal embossing had undergone a change in all three of the following styles). The second variation (probably 1925) had ORANGE / CRUSH Co. (note the addition of Co.) as the logo, no embossing at the heel, and S.W.C.C.CO on the base (Figure 2-50). We have ranked this bottle as probably second because the final two containers both also included the “Co.” on the front label.

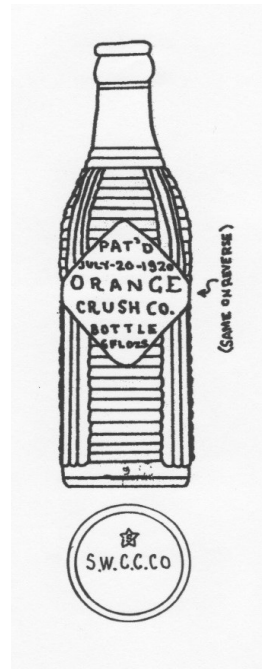


Figure 2-51 – Orange Crush – 1926

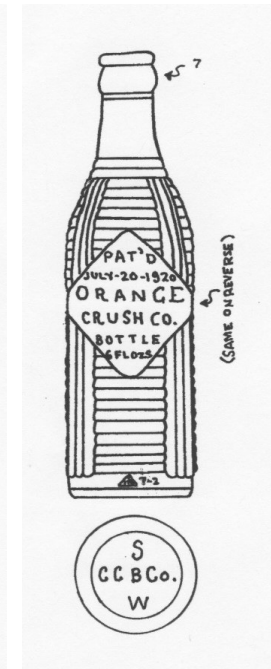


Figure 2-52 – Orange Crush – 1927

The remaining two variations continued the ORANGE CRUSH Co. logo but contain dateable markings. A solarized amethyst Orange Crush bottle was embossed on the base with the Southern Star mark used by the Southern Glass Co. as well as the same S.W.C.C.CO embossing used on the previous Orange Crush bottle (Figure 2-51). Two other bottles made by Southern (Coca-Cola and the house brand) were also used, suggesting that all should be dated to the same period. Since the house bottle contains a probably date mark (6-1), all three bottles were probably bought in 1926. The final bottle has a slight straw color and was made by the Illinois Pacific Glass Corp. (Figure 2-52). It is marked with the IPG-in-a-Triangle mark at the heel with 7-2 to the left and a “7” embossed on the finish. This indicates that this container, like the similarly-marked house brand bottle, was made in

1927. Also, like the house brand bottle, the container has the Southwestern initials in a cross-shaped arrangement (S / C C B Co. / W). All four bottles were probably used until the supply ran out and were certainly discontinued with the collapse of the New Mexico and Southern Arizona business in 1929. The earlier two are scarce, and the latter two are very rare.

### Arizona Dry Ginger Ale

Arizona Dry Ginger Ale was advertised by in 1926 by the Mesa outlet of the Phoenix branch. The bottles in the ads appear to be 12-ounce generic containers with paper labels on the front body and neck/shoulder area. We know little about this brand. It may have only been used for a couple of years or may have been offered by the Phoenix branch for its entire tenure.

## Old Heidelberg

Made by Blatz, Old Heidelberg was a near-beer or cereal beverage (during Prohibition) at the time it was offered by the Phoenix branch of Southwestern. It was a regular beer both before and after Prohibition. The brew was offered by Southwestern at least during 1928 and may have been sold until the end of Prohibition. However, it is likely that the drink was only sold for a short time. Near-beer sales had dropped so dramatically by 1924 that most breweries stopped making them. By 1928, the demand must have been low.

**Have a Drink --**  
Of course, no doubt about it, -- IF

**ARIZONA DRY**  
**PALE GINGER ALE**  
IS USED

SMOOTH AS SILK AND  
A WONDERFUL MIXER

IT GIVES JUST EXACTLY THE DESIRED  
BLEND WHEN YOU ARE ENTERTAINING

**--pure**

GET IT TODAY  
AT YOUR DEALERS

Adds Life and Sparkle to the Party

GUARANTEED BY  
**Southwestern** *Coca-Cola* **Bottling Co.**  
Phone 6746 547 West Jefferson




Figure 2-53 – Arizona Dry Ginger Ale – *Arizona Gazette* (10/5/1927)

## Bottle Bases

As with local Coca-Cola bottles (cf. Lockhart 2000, chapter 8b; Pollard 1993:46-47), both Coca-Cola and flavor bottles from Southwestern may be roughly dated when only the base remains. Pale blue bases embossed with either S. W. C. C. or S. W. C. C. Co. came from Coca-Cola hobble-skirt bottles and were only used in the late teens and early 1920s (ca. 1918-1925). Aqua and colorless bases marked S. W. C. C. or S. W. C. C. Co. but no manufacturer's mark may be dated 1916 to ca. 1926. Bases marked 1 / S. W. C. C., 2 / S. W. C. C. or 4 / S. W. C. C. were found on Coca-Cola bottles from the early to mid-1920s, and a colorless base embossed 10 / S. W. C. Co. / OZ. was only used between 1924 and ca. 1925. The S-in-a-star embossment accompanied by S. W. C. Co. was made ca. 1926, and the S / CCBCo / W (cross-shaped) mark was only found on the final styles made in 1927 and certainly not used beyond 1929. Many of the bases contain scars or off-center, circular mold seams that are characteristic of automatic bottling machines.

## Conclusion

Individual local/regional dating of Southwestern Coca-Cola bottles suggests a somewhat different picture than the more common method of national dating. The use of the 1915-patented bottle seems to have begun in the area about 1918 rather than the 1916 or 1917 suggested by the national dates and seems to have been discontinued in 1928, somewhat supporting Kendall's end date of 1930 but disagreeing with Pollard's choice of 1923. National daters place the use of the 1923-patented bottle beginning in 1924 or 1926 and ending in 1937 or 1938. Our research suggests that Southwestern used the 1923 bottle from about 1928 to 1938, although all bottles were used until they wore out. This easily falls within the realm of suggested dates by any of the three sources. The final type of bottle (D105529) used by the Phoenix plant (the only one remaining by that time) from about 1939 to 1948 falls comfortably within the national range of 1937 (or 1938) to 1951.

The variations in the "house brand" flavor bottles create a very finely dateable set of artifacts for use by historical archaeologists. Most of the bottles follow a use pattern that suggests an annual reorder. Usually, when two variations bear the same date code (i.e., 1923 on Coke bottles), we have not discovered bottles for the previous or following year. In other words, the orders even out at approximately one-year intervals. We suggest that historical archaeologists in conjunction with local bottle collectors can devise highly user-friendly bottle chronologies for local bottles, especially in regards to returnable bottles. In addition, bottle bases, often the only diagnostic artifacts found in some excavations or levels, can be used in local contexts to provide good dates.

Finally, mold numbers, heretofore mostly overlooked by historical archaeologists, may be useful dating tools when used in conjunction with existing data. It is important to note that this dating method is still in its infancy and should be used carefully. In our study, some mold numbers appeared consistently within known use periods for the bottles in question, although other numbers are undecipherable.

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