

THE MILK ROUTE

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MILK BOTTLE PRODUCTION AT THE KNOX GLASS BOTTLE CO.

by Bill Lockhart, Pete Schulz, Carol Serr, and Bill Lindsey

History

Knox Glass Bottle Co. (1917-1968) – Overview

Roy Underwood was the power behind the Knox Glass Bottle Company. Born on July 27, 1887, he began his career in glass as a boy at the Crescent Glass Bottle Company and soon learned glass blowing. He organized the Marienville Glass Company in 1914. Just three years later, in 1917, he moved to Knox, Pennsylvania, and organized the Knox Glass Bottle Company. Early on, Knox had several "affiliates," the earliest of which were the Wightman Bottle & Glass Mfg. Co., the Knox plant, Marienville, and the Eden Glass Co. Later, Knox purchased existing plants and built new ones.

Toulouse (1971:294) suggested that it was "generally assumed that in most of [the additional factories] local money was teamed with Roy R. Underwood's management and promotion ability in exchange for stock." Apparently, this exchange of stock eventually resulted in complete Knox takeovers. Having "Glass Bottle Co." as part of the name almost became a Knox trade mark.

In 1929, Knox joined with Frank O'Neill of the O'Neill Machine Co., Toledo, Ohio, to manufacture the Knox-O'Neill machine. The Glass Industry noted that "the new machine is said to incorporate all the advantages of suction feed and do away with many of the disadvantages of the gob feeder." By October, the Knox-O'Neill Glass Co. had sold 95 of the machines to the Carr-Lowrey Glass Co., Whitall-Tatum Co., Owens-Illinois Glass Co., and used two itself at the Knox, Pennsylvania, factory. By at least 1935, the company was known as Knox Glass Associates, Inc.

Roy's younger brother, Chester, joined the Knox management and eventually began a southern expansion of the company, beginning with the Knox Glass Bottle Company of Mississippi at Jackson in 1932. Chester opened a second southern plant at Palestine, Texas, in 1941. After Roy's death on October 16, 1951, Chester took over the operation

of Knox. However, he found himself in a difficult position. The company was in financial trouble, and he began selling off some of the Knox plants to retain solvency. The other stockholders executed a proxy raid and ejected Chester from power. Along with his sons, Dick and Jack, Chester started the Underwood Glass Company in New Orleans, Louisiana, in 1956.

In 1956, Knox Bottle was renamed the Knox Glass Co., Inc., and divided into northern and southern sections (Toulouse 1971:297). Knox officially became a subsidiary of Hunt Foods & Industries, Inc., on October 15, 1965 (Modern Brewery Age 1965:3). The Glass Container Corporation acquired the ten remaining Knox-organization plants in 1968.

Milk Bottle Production

Four factories were listed as producing milk bottles (or jars) during the same period. The main plant at Knox, Pennsylvania (1917-1968), made milk bottles by at least 1927 (*American Glass Review* 1927:137), although that is the earliest edition we have had access to, so production may have commenced earlier. Around 1929, the Wightman Bottle & Glass Mfg. Co. at Parker (formerly Parker's Landing), Pennsylvania (1921-1952), also began making milk bottles, but we know nothing more about production at that plant.

When the Sheffield Glass Bottle Co. went bankrupt in 1926, it opened the door for Knox to purchase the plant.

Knox called the Sheffield, Pennsylvania, plant the Pennsylvania Bottle Co. and operated it from 1926 to 1952. Sheffield made milk bottles by machine at least as early as 1927. When the Jackson, Mississippi, factory opened in 1932, it, too, made milk bottles, although only for a short period.

Knox decided to sell the milk bottle production rights to the Thatcher Mfg. Co. in 1932. Thatcher purchased the rights to milk bottle production, Knox milk bottle machines, and the use of the Knox K9 logo.

Knox reentered the milk bottle arena, probably about 1942. It is typical for sales agreements to include a specific time during which the seller will

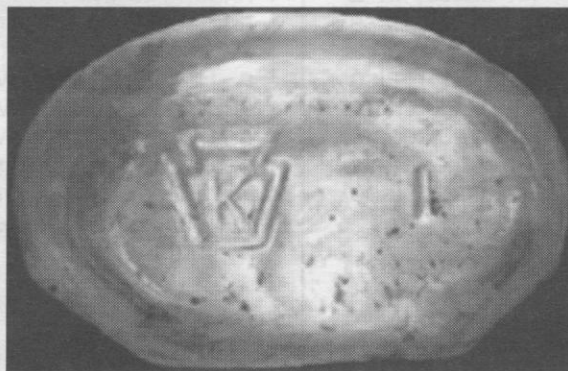


Figure 1 – Knox K-in-a-Keystone Mark (eBay)



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not make, use, or distribute the same products in competition with the buyer. A ten-year period is a fairly typical agreement. Although we have not found historical evidence for the exact returning date, empirical evidence (see below) suggests that Knox was again making milk bottles by at least 1944. Manufacture continued until at least 1966.

Containers and Marks

Three other Knox plants were in business during the initial period, but it is unlikely that any of them made milk bottles. Therefore, the only manufacturer's marks we could expect would be from one of the four plants mentioned above. Knox used a keystone outline enclosing a letter as its logo, and each plant had its own specific initial, although they were not all intuitively obvious. The K-in-a-keystone mark was not adopted by the main plant, at Knox, Pennsylvania, until 1932, so it is unlikely that any of the other plants used marks prior to that time. However, it is possible that some plants used a keystone mark on milk bottles during 1932.

The main plant used a K-in-a-keystone mark (Figure 1), and the Wightman affiliate used the letter "P" in their mark. A "J" in a keystone identified the plant at Jackson (Figure 2). The situation at Sheffield was a bit more complex. The plant apparently used the U-in-a-keystone mark beginning in 1930 or 1932, then switched to a mark with "LP" (in italics) in a keystone in 1940 (Figure 3), when the Lummis Glass Co. became the sole distributor for the Pennsylvania Glass Co. (Sheffield). Toulouse (1971:335) also suggested that Sheffield used the "LP" in block letters during the same time period, but this makes no sense, if Lummis was the sole distributor. In any event, this was after the end of milk bottle production (see

Lockhart et al. 2008 for more discussion). Although it is possible that marks exist on milk bottles made by one or more of these plants, we have not actually seen any or found them recorded anywhere.

K9

Giarde (1980:118-119) appears to be the first one to discuss the K9 mark in print. He suggested a date range for K9 marks from the 1920s to the late 1930s. Giarde attempted to explain the marks but finally concluded, "In the final analysis it can only be said that K9 milk bottles should be attributed to Thatcher. Beyond that the K9 will remain a mystery until some researcher finds the answer." That answer has arrived.

A complicating piece of evidence is the listing of the mark as belonging to the Knox Glass Bottle Co. in the 1928 Massachusetts Bulletin (Schadlich and Schadlich 1989). Blodget (2006:8) also identified "K9" in the Massachusetts seal as the mark identifying Knox. The earliest listing we have found for milk bottle production by Knox was 1927 (*American Glass Review* 1927:137), although such manufacture may have begun earlier in the 1920s.

The resolution of these apparently conflicting lines of evidence is fairly simple. In December, 1932, Thatcher "purchased bottle machines, molds and name-plates, certain Hartford Empire licenses relating to the manufacture and sale of milk bottles, and good-will, etc., of Knox Glass Bottle Co., of Knox, Pa.". Bottles exhibiting both the K9 designation and a Thatcher mark were clearly made by Thatcher after 1932. Bottles with an embossed K9 but lacking any Thatcher mark were presumably made by Knox before the Thatcher purchase.

The "K" in the mark clearly indicated Knox, but the number "9" is less obvious. Although this line of inquiry has yet to be fully researched, about

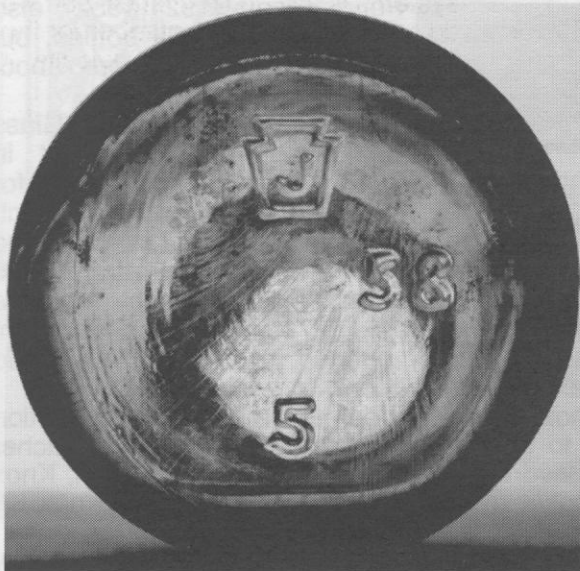


Figure 2 – Knox J-in-a-Keystone Mark (Lockhart)



Figure 3 – Knox LP-in-a-Keystone Mark (David Whitten)



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1913, a numbering system for milk bottle manufacturers was set in place. This was probably not an official federal government notation, but it was used consistently by virtually all milk bottle manufacturers. Although Massachusetts was probably the earliest state to use the seal system, it required only the initials or logo of the glass house. In 1913, both Maine and Wisconsin mandated the use of individual numbers to identify each manufacturer who wished to sell milk bottles within those states (Public Laws of Maine 1913:78-79; *Stevens Point Journal* 1913:1). Both states and those that followed were obviously agreeable to having each glass house use the same number that it used in other states.

The number "1," for example, was assigned to the Lockport Glass Co. and was consistently used by that company in conjunction with the LGCo mark. Fidelity Glass Co. marked its bottles FID2 until the Atlantic Bottle Co. purchased the company and began using a mark of ABC2. This system continued in sequential order to at least 52 (the L52 mark used by Lamb Glass Co.). The number "9" assigned to Knox may have reflected a sense of humor (K9 = canine).

Some manufacturers adopted the numerical system wholeheartedly, making the number an integral part of its logo. The Essex Glass Co. (E4) and Lamb Glass Co. (L52), for example, used the number in the logo as long as they remained in business. Others, like the Thatcher Mfg. Co. placed it on a separate part of the bottle from its logo.

As noted above, the State of Massachusetts was probably the first to require bottle manufacturers selling milk containers to dairies within its jurisdiction to emboss a "seal" on each bottle. In late 1909, Massachusetts closed its former system (instituted June 6, 1900), where each dairy had to bring its milk bottles to a local "sealer" – who then certified that each bottle contained the proper amount of liquid. The new system required manufacturers to post a bond to guarantee that each milk bottle they produced for the



Figure 4 – Massachusetts K9 Seal
(Milk Dealer 1934)



Figure 5 – Maine K9 Seal (eBay)

state had the correct volume. Initially, embossed seals could be placed on various parts of the bottle, but, in 1918, the state mandated that all seals would be embossed on the shoulder in the form of "MASS / {letter or letter and number} / SEAL" (Schadlich & Schadlich 1984:4-5). The specific embossed "seal" used by Knox contained the "K9" designation (Figure 4). Massachusetts eliminated the system in 1947 (Schadlich ca. 1990).

Other states also adopted the seal system. Maine, as noted above, began using seals in 1913 and continued the seal system until 1947 (Public Laws of Maine 1947:295-296). At this point, we do not know when Knox joined the system, but the firm used a "MAINE / K9 / SEAL" on the shoulders of milk bottles (Figure 5). Rhode Island used a similar system, but that study is in its infancy, and we have yet to see a K9 mark in a Rhode Island seal. Both Wisconsin and Minnesota used slightly different systems, although both initially used seals similar to those of the New England states. Minnesota soon mandated a triangle with the company number at the apex, followed by a horizontal line, then the letters "MINN." The MINN Triangle initially appeared on the shoulder but eventually migrated to the heel of the bottle. Wisconsin quickly settled for the word "SEALED" at the bottle's heel. Our studies of those two systems is also in its infancy, and we do not know the Knox number for the Minn Triangle, although, logically, it was "9."

The mark is also embossed on the heels of milk bottles, with and without the Massachusetts seal. These have been reported in K9, K-9, and K.9 configurations. A more unusual configuration is "SEALED / K9" in a circular plate mold on the shoulder (Figure 6). We have not discovered a specific reason for this usage; it may have been an early seal for almost any state that required seals. [Most of the foregoing discussion was originally published in Lockhart et al. 2007a:60-61.]

K-14 and the Keystone Mark

We have discovered several bottles

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Figure 6 – Sealed K9 (eBay)

that did not fit the old Knox pattern but have embossed keystone marks. On the oldest of these, the heel is embossed “SEALED K-14,” and the base is marked with “44” to the right of a keystone with no letter inside (Figure 7). The symbol does not appear to have had a letter peened out. It is completely unscarred. The bottle shape is typical for 1944, round with a long neck (not one of the squat bottles), made by a press-and-blow machine (ejection of valve mark on the base). A similarly marked bottle on eBay had a “43” date code.

The number “14” was given to the J.T.&A. Hamilton Co., in business in Pittsburgh from 1879 to 1943. The plant made milk bottles by at least 1904 but sold the dairy container side of the business (including the number) to the Thatcher Mfg. Co. in 1920. Thatcher had acquired both plants long before 1944, so the use of “K” and “14” in combination does not make intuitive sense.

However, it is possible that Knox applied to “seal” states for a new number and received the defunct “14” that had not been in use since 1920. A period of more than 20 years. The number would only have been used for a few years; the “seal” systems were abandoned by all the participating states in 1947 (Owens-Illinois records). Thus, later bottles do not have the “K-14” mark.

Another bottle is embossed “SEALED {K in a keystone} D” on the heel and “25 / 57” (1957) on the base. The K in a keystone makes the identification of this one certain. Another is embossed “SEALED {empty keystone} NU” on the heel and “25 / 65” (1965) on the base. This keystone is identical with the one on the 1944 bottle, with no signs that a letter was removed as an afterthought. The final bottle we have found is embossed “SEALED {K in a keystone} D” on the heel and “25 / 66” (1966) on the base. The base numbers on these three bottles are all set up as

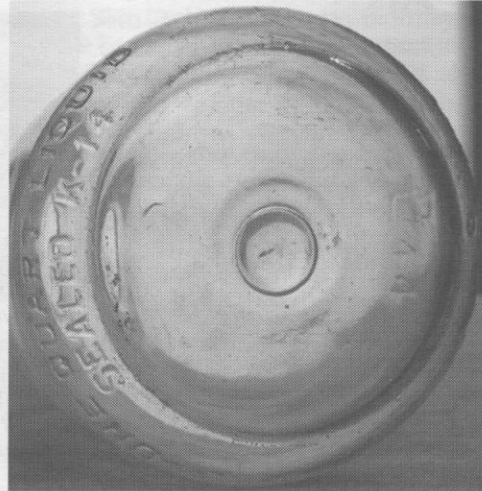


Figure 7 – Sealed K-14 with Empty Keystone (Lockhart)

a block (i.e., “25” directly above the date code). The “25” may be a Knox code by that time for milk bottles.

Discussion and Conclusions

Knox initially appears to have had a very short episode as a milk bottle producer. Although we have not discovered the exact date when production began, Knox certainly made milk bottles by 1927 and had probably begun earlier in the 1920s. It is quite clear that Knox relinquished its dairy container business in 1932, when it sold everything connected with that type of production to the Thatcher Mfg. Co.

The K9 mark appears to have been the only logo that Knox used during this period to identify its milk bottles. While the possibility exists that one or more factories used the keystone symbol on milk bottles, it is unlikely. Thus, a “K9” mark without an accompanying Thatcher logo will indicate a Knox bottle. A Thatcher mark, of course, identifies the bottle as made by Thatcher, and those should have a date code – a standard practice by Thatcher.

Although the beginning date is unclear, by at least 1944, Knox was back into milk bottle production, this time using either empty keystone marks or the same K in a keystone that identified other Knox products. A K-14 heelmark apparently filled the numerical requirement for the “seal” states until the seal system was abandoned in 1947. Knox continued to make milk bottles until at least 1966, probably later.

Please address any comments to:

Bill Lockhart
1313 14th St., Apt. 21
Alamogordo, NM 88310
575-439-8158

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