

Knox Glass Bottle Co.

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Growing from the Marienville Glass Co., founded by Roy Underwood in 1914, the Knox Glass Bottle Co. developed into a combine of multiple factories scattered throughout the United States. Underwood's brother, Chester, founded a Southern unit, beginning in Mississippi in 1932. Chester became the president of the corporation upon his brother's death in 1951 but was ejected from office by the other stockholders the following year. Chester left the firm and started the Underwood Glass Co. in 1956 – the same year his former company renamed itself the Knox Glass Co., Inc. Knox became a subsidiary of Hunt Foods in 1965.

One of the authors (Lockhart 2004) wrote his first study about glass marks of the Knox conglomerate, identifying the T-in-a-keystone mark as the logo used by the Knox plant in Palestine, Texas. That led to an e-mail from David Whitten (Bill Lockhart, Bill Lindsey, and Carol Serr were already in contact) that culminated in the formation of the Bottle Research Group.

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History

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

Roy Underwood was the power behind the Knox Glass Bottle Co. Born on July 27, 1887, he began his career in glass as a boy at the Crescent Glass Bottle Co. and soon learned glass blowing. He organized the Marienville Glass Co. in 1914. Just three years later, in 1917, he moved to Knox, Pennsylvania, and organized the Knox Glass Bottle Co. (*Glass Industry* 1951a:562; *Knox News* 1951a:1-2; Toulouse 1971:293). 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.

According to the January 19, 1927, edition of the *Pittsburgh Daily Post* Knox increased its capital stock from \$140,000 to \$1,000,000, specifically to purchase the Eden Glass Co. on January 8, 1927 (Figure 1). 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 trademark.

In 1929, Knox joined with Frank O’Neill of the O’Neill Machine Co., Toledo, Ohio, to manufacture the Knox-O’Neill machine (Figure 2). 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



Figure 2 – Knox-O’Neill ad (*American Glass Review* 1929)

Knox, Pennsylvania, factory (*American Glass Review* 1929b:15; *Glass Industry* 1929b:251). The company was exporting bottles to South America and Australia by 1930 (*American Glass Review* 1930b:14). By at least 1935, the firm was known as Knox Glass Associates, Inc. (Figure 3).

Roy’s younger brother, Chester, joined the Knox management and eventually began a southern

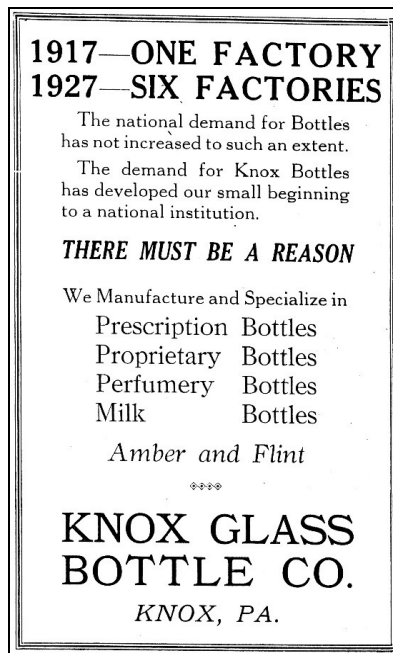


Figure 1 – Knox 1928 ad (*American Glass Review* 1928)

feeder” (*Glass Industry* 1929a:18). 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

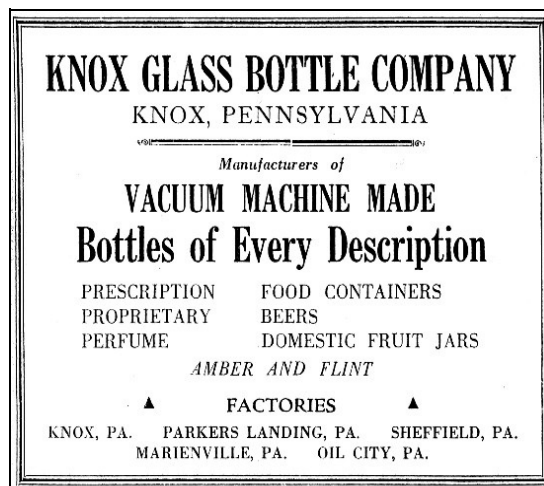


Figure 3 – Knox 1934 ad (*American Glass Review* 1928)

expansion of the company, beginning with the Knox Glass Bottle Co. 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 (*Glass Industry* 1951b:568; Toulouse 1971:271-272). 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 Co. in New Orleans, Louisiana, in 1956 (Toulouse 1971:294, 297; Underwood interview).

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 Corp. acquired the ten remaining Knox-organization plants in 1968 (Toulouse 1971:297). See Table 1 for the list of factories.

Factories

Insofar as possible, we have addressed the individual factories in chronological order.

Marienville Glass Co., (1914-1968)

Roy Underwood established the Marienville Glass Co. in 1914 (*Knox News* 1951b:6). Although the plant burned in early 1922, it was completely rebuilt by February 1923 (*Glass Worker* 1923:9). Marienville was originally unrelated to Knox, even though Underwood was the president of both corporations. Underwood made the position of Knox toward Marienville clear in 1925:

The Knox Glass Bottle Company, Knox, Pa., is not connected in any way with the Marienville Glass Company which has been widely reported as having been taken over by the former concern. R.R. Underwood of the Knox company states that while that company is not interested, he is personally interested and that it is quite possible that the Knox company will purchase a goodly portion of the Marienville company's output (*Glass Industry* 1925:136).

Table 1 - Knox Plants and Dates to the Knox Sale in 1968

Company	Location	Dates
Marienville Glass Company	Marienville, Pennsylvania	1914-1968
Knox Glass Bottle Co.	Knox, Pennsylvania	1917-1968
Wightman Bottle & Glass Mfg. Co.	Parker's Landing, Pennsylvania	1921-1968
Eden Glass Co.	Knox, Pennsylvania	1925-1928
Pennsylvania Bottle Co.	Sheffield, Pennsylvania	1927-1952
Oil City Glass Bottle Co.	Oil City, Pennsylvania	1930-1952
Knox Glass Bottle Co. of Mississippi	Jackson, Mississippi	1932-1968
Metro Glass Bottle Co.	Jersey City, New Jersey	1935-1949
Knox Canada, Ltd.	Oshawa, Ontario	1939-1940
Knox Glass Bottle Co. of Mississippi	Palestine, Texas	1941-1985
Lincoln Glass Bottle Co.	Lincoln, Illinois	1942-1952
Seaboard Glass Bottle Co.	Pittsburgh, Pennsylvania	1943-1947
Denver Glass Bottle Co.	Denver, Colorado	1943-1951
Midwest Glass Co.	Gas City, Indiana	1951-1968
Knox Glass Co.	Danielson, Connecticut	1958-1968
Knox Glass Co.	Atlanta, Georgia	1961-1968
Knox Glass Co.	Baltimore, Maryland	1961-1968

By 1926, all four Knox affiliates (Knox, Marienville, Wightman, and Eden) used Lynch machines with Miller feeders and were gradually phasing out hand shops (*American Glass Review* 1926:15). In 1927, Marienville made “flint prescriptions, vials, patent, proprietary, liquors, and flasks” at one continuous tank with three rings. The list was amended to include amber glass the following year, although the products remained constant (*American Glass Review* 1927:139; 1928:141). The Marienville Glass Co. became officially affiliated with Knox in 1929 (*Ceramic Age* 1933c:119).

A series of explosions followed by a fire, destroyed the Marienville factory (for the fourth time) on June 2, 1930. Rebuilding began almost immediately (*McKean County Miner* 1930:6), with the new plant expanded to two continuous tanks with six rings. In 1932, the factory added fruit jars. With the repeal of Prohibition, the plant converted primarily to the production of beer bottles in April 1933. Marienville was intended to handle the bulk of beer bottle orders for Knox. The factory increased to eight rings in 1935 and made “flint and amber, proprietary, beers, liquors and specialties.” By 1942, the plant used ten rings and noted “8 feeders. Machine” in 1944 (*American Glass Review* 1930a:92; 1932:75-76; 1935:88; 1942:103; 1944:103; *Ceramic Age* 1933c:119; *New Castle News* 1933:2; *McKean County Democrat* 1933). The operation cut back to a single furnace in 1947 and was producing wine bottles, glass jugs and wide-mouth containers in 1954 (Toulouse 1971:295; Oil City Derrick 1955). The firm remained open until the 1968 sale of Knox.

Knox Glass Bottle Co., Knox, Pennsylvania (1917-1968)

On March 10, 1917, the *Warren Mirror* announced the formation of a new corporation with a capital of \$35,000. With W.I. McDowell as president and Roy R. Underwood as secretary and general manager, the Knox Glass Bottle Co. in Knox, Pennsylvania, was expected to begin blowing glass on June 1 (Figure 4). The plant began with a single four-ring tank that serviced “eight hand blow shops” making prescription ware (*Glass Industry* 1942:93; *Glass Worker* 1917:1). Underwood was to retain his position until 1935 and actually ran the company (Toulouse 1971:298).



Figure 4 – Knox plant 1919 (eBay)

According to the *Knox News* (1951b:6), the company built a second plant in the city of Knox in 1922, although this may actually refer to the Eden Glass Co. (see below).¹ We have not

¹ The stockholders of Eden voted to subsume the plant to Knox on December 22, 1926. In the days prior to computers, word processing, and photocopies, when all books were assembled from hand-written notes, this “22” may have been where Toulouse picked up his “1922” date for the second plant.

found that date referenced by any other source. As noted above, Knox and its affiliates used Lynch machines by 1926 (*American Glass Review* 1926:15).

In 1927, the Knox Glass Bottle Co. was only listed in Knox, Pennsylvania. The Knox plant made “prescriptions and vials” at that point on a single continuous tank. By the following year, the plant had added another tank and listed milk bottles. A 1928 ad noted that Knox specialized in prescription, proprietary, perfumery, and milk bottles in amber and flint glass. It also noted that Knox had grown from one to six factories since 1917, while “the national demand for bottles has not increased to such an extent. The demand for Knox Bottles has developed our small beginning into a national institution. There must be a reason” (*American Glass Review* 1927:137; 1928:138-139).

In 1929, Knox No. 1 added two O’Neill machines and specialized in prescription bottles, while Knox No. 2 (both in Knox, Pennsylvania) made miscellaneous bottles (*Oil City Derrick* 1929a:1). At the same time, the listing for Knox plants in general was enlarged to “prescription and proprietary ware; flint and amber beverages; packers and preservers; bottle specialties; milk jars” in 1929. The same listing continued until at least 1936. By 1942, milk bottles had been dropped from the list, but the plant had added carbonated beverages. Fruit jars became a new listing in 1943 (*American Glass Review* 1929a:100; 1936:93; 1943:102).

After a three-year shutdown, Underwood opened a new plant on a fresh site at Knox shortly before his death in 1951. Tank capacity was 130 tons, and production was estimated at seven carloads per day. Among the machines were two Knox W. D. machines. On the first full day of operation, “four ounce peroxide bottles, pint wine flasks and quart black bottles were augmented by pint juice bottles and tavern-style no-deposit beer bottles” (*Oil City Blizzard* 1951). The operation closed again, the following year, but even as the company was eliminating other plants, expansion at Knox continued with the erection of a large new warehouse and eleven new batch silos for storage of raw materials. After a nine-month shutdown, the new facilities opened in early 1953. In 1954, the Knox facility was still concentrating on amber ware, producing beer, liquor, bleach and pharmaceutical bottles (*Oil City Derrick* 1953a; 1953b; 1955). One of the Knox locations put in a new unit for making emerald green glass in 1958 (*Food Packer* 1958:37).

Wightman Bottle & Glass Mfg. Co., Parker's Landing, PA (1921-1952)

Knox Glass Bottle Co. of Parker, Parker, Pennsylvania (1952-1968)

The Wightman Bottle & Glass Co. of Parker's Landing, Pennsylvania, became a Knox affiliate in 1921, although the plant retained its name and identity (Cole 2003; *Knox News* 1951b:6). Thomas Wightman teamed up with Frederick Lorenz to form Lorenz & Wighmant ca. 1851, and Wightman acquired the business in 1873. For the early history, see the sections on the Lorenz Family Glass Firms and the Wightman Glass Houses. Like the other Knox affiliates, Wightman used Lynch machines by 1926 (*American Glass Review* 1926:15). A 1927 ad (*American Glass Review* 1927:136) listed both Wightman and Marienville as "affiliated companies." The ad also claimed that Knox made "Just Good Bottles."

The Parker's Landing plant burned in June 1929, and the company became "financially strained." Underwood bought the remains and rebuilt the factory as a Knox unit, still retaining the Wightman name (Toulouse 1971:295). The new factory included a \$150,000 tank that doubled the output of the unit, and the plant was expected to resume production ca. December 15, 1929 (*American Glass Review* 1929c:13; *Titusville Herald* 1929:1). Under Knox, the plant made amber glass bottles and milk bottles (*Olean Herald* 1929:8). The Knox decision to sell the milk production to the Thatcher Mfg. Co. in 1932 required a change of product at the Wightman plant (*Oil City Derrick* 1932:11). Unfortunately, we have not discovered the new products. After the 1952 reorganization, the plant was renamed the Knox Glass Bottle Co. of Parker. Knox built an addition to the factory in 1956 (Goldinger & Fetters [1999]:58).

Eden Glass Co., Knox, Pennsylvania (1925-1927)

In 1925, the Eden Glass Co., a Knox affiliate, opened at Knox, Pennsylvania, adjacent to the original Knox plant. The plant originally operated "two Lynch machines each with a Wm. J. Miller feeder and five hand shops." This was the full production capability for the continuous tank (*American Glass Review* 1926:15). The plant was built primarily for the manufacture of "laboratory and amber glass" (*Glass Worker* 1925:12). On December 22, 1926, the stockholders voted "to transfer all property and assets of the company to the Knox Glass Bottle company" effective January 1, 1927 (*Oil City Derrick* 1926:11). Thereafter, it was usually impossible to distinguish the original Eden and Knox plants in reports on the company's operations in the city.

Pennsylvania Bottle Co., Sheffield, Pennsylvania (1926-1952)

Underwood next opened the Pennsylvania Bottle Co. at Sheffield, Pennsylvania, in 1926 replacing the former, bankrupt, Sheffield Glass Bottle Co. (see the Other S section). Fire had destroyed the older factory on January 29, but Knox began construction of the new one on February 17. The Simplex Engineering Co. completed the new installation in time to light the first fire on April 20, 1926, and the plant began production on May 17. The renewed operation used a single tank to supply six O'Neill feeders and automatic machines (*Glass Industry* 1926:181). Sheffield Glass had consisted of three plants, at Sheffield and Wilcox, both in Pennsylvania, and Columbus, Ohio. Knox immediately closed the Columbus plant after the purchase (*Warren Mirror* 1928:5).

The plant did not appear in the 1927 *Glass Factory Year Book*, but it was listed with R.R. Underwood as president in the 1928 edition, making “prescription ware, flint beverages, packers and preservers, milk jars, bottle specialties” by machine at one continuous tank with five rings. By 1931, the plant was up to six rings. The listing continued to be the same until at least 1936 (*American Glass Review* 1927:137; 1928:94; 1931:88). In 1932, however, milk bottle production ceased, when Knox sold that portion of the business to the Thatcher Mfg. Co. (*Oil City Derrick* 1932:11).

In 1933, the Sheffield plant pioneered “colored inscriptions” on prescription bottles (*Ceramic Age* 1933a:86). Although the process was never popular for prescriptions, the Owens-Illinois Glass Co. named the method Applied Color Lettering the following year, and it became the standard for labeling soda and milk bottles. Knox closed the decorating plant in 1935, transferring the work to the Oil City unit. The factory was reopened in May 1937² (*McKean County Democrat* 1935a:3; *Williamsport Gazette and Bulletin* 1937:2).

By 1942, the plant had seven rings and was making “flint glass wide mouth and narrow mouth food packers and preservers ware, liquor ware, beer bottles, ammonia bottles, private

² There is a bit of confusion here. The *Democrat* stated that the Sheffield plant would continue production “as long as the present glass furnace holds out,” likely one or two weeks. The *Gazette and Bulletin*, however, noted that the factory had been idle since 1932. This probably means that the decorating plant was a separate unit from the factory.

mould work” (*American Glass Review* 1942:106). In 1951, in the face of a sharp curtailment of orders due to unstable business conditions, Knox laid off about 100 workers and shipped three of the plant’s seven machines to the new acquisition in Gas City. The following year, the name was changed to the Knox Glass Bottle Co. of Sheffield, but the factory closed in 1953 (*Warren Times-Mirror* 1951; Toulouse 1971:295, 333-334, 532). This was probably another plant sold in the unpopular 1952 decision by Chester Underwood.

Pennsylvania Bottle Co., Wilcox, Pennsylvania (1927-ca. 1932)

When Knox moved into the Wilcox plant in June 1927, the factory was already set up to make amber bottles and “a miscellaneous line of drugware” (*Oil City Derrick* 1927a:3). The plant used three O’Neill feeders and automatic machines (*Glass Industry* 1926:181). However, a disastrous fire destroyed the unit on July 25, 1927. The plant was almost new, having been rebuilt by the Sheffield Glass Bottle Co. after an earlier fire in 1925. Knox again rebuilt the factory in 1928 (*Oil City Derrick* 1927b:1; *Warren Mirror* 1927:12; *Warren Tribune* 1928:5).

The *Warren Times-Mirror* reported on June 27, 1932, that the plant had a leak in the tank. Even though workers sprayed the leak with cold water to congeal the glass into a temporary plug, the paper warned that the tank would have to be rebuilt soon. It is likely that Knox closed the Wilcox plant rather than rebuilding the tank. We have found no reference to the closure, but the city was not listed in ads after 1932.

Oil City Glass Bottle Co., Oil City, Pennsylvania (1930-1952)

The Oil City Glass Bottle Co. at Oil City, Pennsylvania, was built in 1930, and this is an excellent example of Roy Underwood’s use of local capital to enlarge production by building new factories. In December 1929, Underwood met with local businessmen at Oil City and created a new corporation with a capital stock of \$100,000. Underwood and his Knox associates would only own 20% of the stock, while the remaining 80% was controlled by local people. A single tank of 25 to 30 ton capacity, operating two Knox-O’Neill suction machines, was expected to begin production on May 1, 1930 (*American Glass Review* 1930b:14; *Oil City Derrick* 1929a:1-3).

The Oil City and Jackson plants were known as the “Depression Factories” because of their construction in the early years of the Great Depression (*Glass Industry* 1942:93). W.K. Rolland, a local investor, described why Knox chose Oil City as a site. He noted that for Knox, this was “merely a step in an expansion program they have outlined for several years ahead.” The location was chosen because “Oil City has a very satisfactory labor situation: excellent transportation facilities . . . excellent power facilities . . . low industrial rates on power . . . a friendly cooperative spirit towards incoming industries (*Oil City Derrick* 1929b:1).

The Oil City plant made “flint prescription and proprietary ware” at one continuous tank with three machines in 1931. The factory added another machine in 1933 and two more by 1942 for a total of six (*American Glass Review* 1930a:93; 1931:87; 1933:69; 1942:104-105). Knox closed the plant in 1948 but reopened it with a larger furnace supporting “three Knox W-D machines, one Lynch 10 machine and one five section Hartford-Empire I.S. Machine” (*Warren Times-Mirror* 1949:2). Oil City was one of the branches sold in Chester Underwood’s 1952 decision. The now independent factory renamed itself the Oil City Glass Co. (*Oil City Blizzard* 1952; Toulouse 1971:298). See the section on Symbols for a discussion of the new firm (the logo was an oil derrick).

Knox Glass Bottle Co. of Mississippi, Jackson, Mississippi (1932-1968)

Chester Underwood searched the South for a good location for a new Knox plant. He fell in love with Jackson, Mississippi, and rebuilt the former Dixie Glass Mfg. Co. plant there in 1932 (see the section on the Dixie Glass Co. for more information). The factory added two new machines in 1933 (*Ceramic Age* 1933b:119; *Glass Industry* 1942:93; Toulouse 1971:296, 298). This was the first plant built “under the Underwood aegis alone.” Chester moved to Jackson and operated the Southern plants until he became president of Knox upon his brother’s death in 1951 (Toulouse 1971:296, 271-272).

In 1934, the Knox Glass Bottle Co. of Mississippi made “bottles and containers, milk jars” at one continuous tank. The list was amended to “packers and preservers ware, bottle specialties, private mold work” in 1935, and the list remained the same until at least 1936. By 1942, the list had changed to “prescription and proprietary ware, packers and preservers, flint beverages, fruit jars, bottle specialties; private mould work.” The factory was credited with

liquor, wine and pharmaceutical bottles, as well as wide mouth and miscellaneous ware in 1954 (*American Glass Review* 1934:95; 1935:87; 1942:102; Oil City Derrick 1955). The plant was part of the 1968 sale to the Glass Container Corp.

Metro Glass Bottle Co., Jersey City, New Jersey (1935-1949)

The Metro Bottle Co., a jobber, opened at Jersey City, New Jersey, in 1916 and began operating a small hand plant in 1931. Knox bought the company and built a new factory in 1935. Knox sent several Marienville employees to Jersey City in early October to help the new plant get off to a good start (*McKean County Democrat* 1935b:2).

This was a typical Underwood organization. Roy Underwood worked with Emanuel M. Turner, the main backer of Metro, to form the Metro Glass Bottle Co., a Knox affiliate. Using local financing, the new corporation built a new plant with one continuous tank and four machines. In 1939, the plant was enlarged to two tanks. Local interests, backing Turner, purchased the plant back from Knox in 1949, added a third tank in 1950, and a fourth by 1957 (*Glass Industry* 1942:93; Toulouse 1971:296, 298, 342-343). By 1942, Metro made a “general line of wide mouth and narrow neck containers, including beers and liquors. Flint and Amber,” still at two continuous tanks (*American Glass Review* 1942:104). For more information, see the listing for Metro in the Other M section.

Canadian Knox Glass Co., Ltd., Oshawa, Ontario (1939-1940)

Underwood announced plans for the Canadian Knox Glass Co., Ltd., at Oshawa, Ontario, in April 1939 (*Glass Packer* 1939:237). Knox had actually obtained a federal charter on February 1, 1939, and rented buildings to establish the Knox presence in Canada. The new plant made a number of wine, soda, vinegar, sauce, and mayonnaise bottles, but the Dominion Glass Co. purchased the property on May 14, 1940, for \$618,270. Dominion continued to sell the existing stock of bottles until 1942 (King 1987:151, 156). Whether the company used a mark is unknown. See the section on the Dominion Glass Co. for more information.

Knox Glass Bottle Co. of Mississippi, Palestine, Texas (1941-1968)

In 1942, a reporter for the *Glass Industry* noted: “On a plot of ground that at this time last year was a cotton field, now stands a modern Knox Glass Bottle Company plant.” The Palestine, Texas, factory – a second “Southern Knox” plant, commissioned by Chester Underwood – opened on July 5, 1941, after only 95 days of construction. The latest Knox addition sported a 90-ton furnace, fired by natural gas. The eighth in the sequence of Knox plants, Palestine’s furnace supplied “four Lynch 10 machines, a Lynch JP machine, and a Lynch JPM machine through six forehearths and feeders.” The unit produced containers for “soft drinks, beverages, foods, cosmetics, pharmaceuticals, chemicals, extracts, wines and liquors, fruit, and, in fact, glass containers of every description” in 1942 and reportedly was making liquor, wine and pharmaceutical bottles, as well as miscellaneous and wide-mouth containers, twelve years later (*Glass Industry* 1942:91-93; *Oil City Derrick* 1955).

The Palestine plant broke ground in June 1957 to build a special factory for making amber glass (*Food Packer* 1958:37). A.W. Wishart (1959:109) noted that the new amber furnace had the potential to increase production at the plant by about 40%. Eventually, the factory provided jobs for almost 500 local citizens and became the town’s most important industry and one of the few glass houses ever built in Texas.

Lincoln Glass Bottle Co., Lincoln, Illinois (1942-1952)

Knox incorporated the Lincoln Glass Bottle Co. in May 1941 and built the factory at Lincoln, Illinois, on October 21, 1942. The branch used a single continuous tank with five machines to make amber beer bottles for Anheuser Busch and was open from 1942 until 1952 when it was sold to the Obear-Nester Glass Co., East St. Louis, Illinois (*American Glass Review* 1943:174; *Bloomington Patagraph* 5/29/1941; *Glass Industry* 1942:93; *Oil City Derrick* 1942:10; Toulouse 1971:296, 298; Underwood interview).

Seaboard Glass Bottle Co., Pittsburgh, Pennsylvania (1943-1947)

Knox purchased the J.T. & A. Hamilton Co. on February 1, 1943, and renamed it the Seaboard Glass Bottle Co. Knox retained J.T. Hamilton as an officer. See the section on the

Hamilton Glass Houses for more information. The plant had two continuous tanks with modern forming machines. The factory was already equipped to make perfume and cosmetic bottles, as well as milk containers. Although Seaboard was a separate corporation, the entire output of the plant was sold through Knox. The company operated the factory until 1947 and tore it down (*American Glass Review* 1943:104-105; 1944:169-170; *Oil City Derrick* 1943:2; Toulouse 1971:290-291, 296, 298; 455).

Denver Glass Bottle Co., Denver, Colorado (1946-1951)

The Denver plant opened at 35th and Wazee Streets on May 12, 1946. The factory made amber and colorless bottles and jars in sizes ranging from ½-ounce to 32-ounce containers. A second plant was being contemplated while the first was still being constructed (*Glass Industry* 1926:351; *Rocky Mountain News* March 12, 1948). Despite all the fanfare, the plant closed on December 10, 1951 (Toulouse 1971:296, 298).

Midwest Glass Co., Gas City, Indiana (1951-1968)

The Midwest Glass Co., Gas City, Indiana (formerly the Slick Glass Co.), became part of Knox in 1951 and remained until the sale to the Glass Container Corp. in 1968 (Toulouse 1971:296, 298).

Dover Glass Bottle Co., Dover, Delaware (1951)

At the time of Roy Underwood's death in 1951, a plant in Dover, Delaware, was reported as being under construction (*Glass Industry* 1951a:562). We have found no other record of the factory, and work was probably discontinued in Chester Underwood's downsizing in 1952.

Knox Glass Co., Danielson, Connecticut (1958-1968)

This was the first plant built during the second surge of Knox expansion. The company completed the initial plant at Danielson, Connecticut, in March 1958 to produce a "broad line" of flint glass containers (*Food Packer* 1958:37; Wishart 1959:109). Using a unique three-handled shovel, Ray Rich, chairman and president of Knox, was joined by the governor of

Connecticut and a labor leader to break ground for the new Danielson, Connecticut, warehouse in August 1964 (*American Brewer* 1964:40).

Knox Glass Co., Atlanta, Georgia (1961-1968)

Knox opened a new plant in Atlanta, Georgia, in 1961 (Simson 1962:64; Toulouse 1971:298). Plans for the factory included two furnaces intended for flint and amber glass. Future projections, however, included an increase in capacity to produce Georgia Green (for Coke bottles) and emerald green glass (*Glass Industry* 1960b:156). We have not discovered how completely the plans were actually implemented.

Knox Glass Co., Baltimore, Maryland (1959-1968)

Knox acquired the Buck Glass Co., Baltimore, Maryland, in 1959³ and renamed the plant as its own (*Glass Industry* 1960a:68). See the section on Buck Glass for more information.

Containers and Marks

Rather than inserting logos under the headings of each factory, we have listed the Keystone logos below in alphabetical order after the more global marks and ones not in keystones.

Knox Fruit Jars

Roller (1983:186) noted that “Knox sold their fruit jar making rights to Ball Brothers Co. on March 23, 1933, but they were probably forced to relinquish those rights after a 1940s anti-trust trial.” The actual government suit began in December 1939, but the final judgement was not rendered until 1947 (see the section on Ball Brothers for more information). The “Knox” logo appeared on fruit jars in at least three formats – plus a fourth made only at the Palestine, Texas plant.

³ Toulouse (1971:298) erroneously placed the date of acquisition at 1961.

Knox Mason (ca. 1930-1933)

Roller (1983:186) submitted a jar embossed “Knox / Mason (both cursive)” made during the 1930s. He called the jars “very scarce” only in quart size. He did not discuss the seal. Creswick (1987:79) illustrated these round jars with bead seals and also dated them ca. 1930s (Figure 5). Roller (2011:284) added that there were two different seals:

1. Bead seal with zinc screw cap with opal (milk glass) liner
2. Top seal with metal lid and screw band

The Roller editors continued to use the 1930s date and continued to note the scarcity, but they added pint sizes. Although Roller did not follow this through, the dates and information suggest a manufacture between 1930 and 1933, when Knox sold the jar rights to Ball. The Marienville factory was the only one we have found that was listed for making fruit jars – in 1932.



Figure 5 – Knox Mason (Creswick 1987b:79)

KNOX Keystone-K MASON (ca. 1942-1950s)

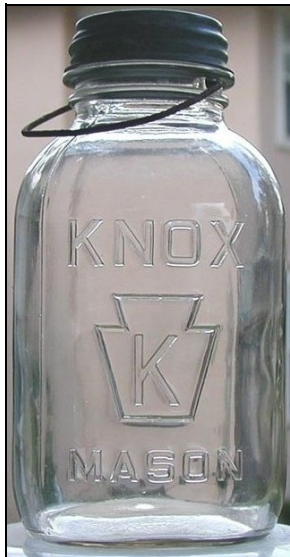


Figure 6 – Keystone-K Mason (eBay)

Toulouse (1969:178) described and illustrated a round jar that was embossed “KNOX / {K in a keystone} / MASON,” made between 1924 and 1951 (Figure 6). He also noted a “rounded square” variation. He seemed unaware of the other two formats. Roller (1983:186) discussed the jar but only in a rounded-square shape. He noticed that the jars were made with two finishes: 1) top seal with a with a glass or metal insert and screw band; 2) bead seal with a zinc screw cap. Roller noted two lids: 1) “KNOX” embossed on a glass insert (Figure 7); and 2) “K” (in a keystone) / KNOX MASON” in red or black letters on a metal insert (Figure 8) and dated these jars 1930s-1940s.



Figure 7 – Glass insert (eBay)

Creswick (1987:79) noted three slight variations of the jar, all with bead seals:

1. Square with rounded corners (Figure 9).
2. Same as No. 1 but with a reverse “N” in “KNOX” (see Figure 9)
3. Same as No. 1 but with “J in a Keystone” on the base



Figure 8 – Metal insert (eBay)

Creswick agreed with Roller on the lids and dates. The Roller revision (2011:285) agreed with the details above but listed a total of four possible lids:

1. KNOX - glass insert
2. Same as #1 but embossed on underside (Figure 10)
3. “K” (in a keystone) / KNOX MASON” in red or black letters on a metal insert and dated these jars 1930s-1940s

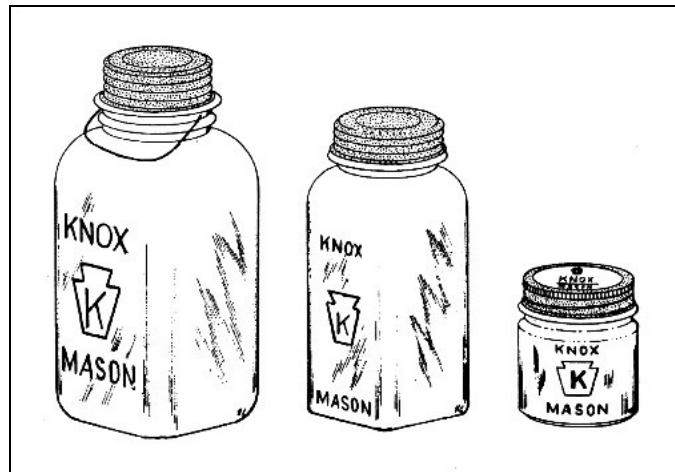


Figure 9 – Keystone-K Masons (Creswick 1987b:79)

4. Knox (cursive) / {K in a dual-lined keystone} MASON / FITS ALL STANDARD JARS in black lettering on gold-lacquered metal lid



Figure 10 – Underside embossing (eBay)

North American Glass included a photo of a lid to fit the bead seal that was entirely metal and embossed on the top “Knox” with an underlining tail extending from the “x” (Figure 11).



Figure 11 – Metal lid (North American Glass)

Although Roller dated these jars 1940s-1950s, the earlier reference to the anti-trust suit between 1943 and

1947 is probably relevant here. Although the final ruling was not handed down until 1947, glass factory listings for 1942 and 1943 show fruit jar production at both Knox and Jackson plants.

Manufacture of the jars likely continued through the 1950s. If eBay auctions show the trend, these were produced in *much* greater quantities than either of the other two types (or the Texas Mason).

As shown in North American Glass photos, these jars were also offered in miniature form as salt and pepper shakers (Figure 12). The side embossing was identical to the larger jars, but the lid and plastic shaker insert were made for Knox. The black plastic lid was embossed with a large “f” with “ram / ree-flow” beside it (Fram Free-Flow) and “U.S. PATENT / No. 2342932.” Joseph C. Fram and Hubert W. Mitcheltree applied for the patent for a “Condiment Holder” on January 15, 1942, and received the patent on February 29, 1944 – setting 1944 as the first year the shakers could have been produced. As the patent was not assigned to any firm, Fram and Mitcheltree apparently marketed their products themselves.



Figure 12 – Keystone-K shaker (North American Glass)

Knox Genuine MASON (late 1940s-early 1950s)

Roller (1983:186) illustrated and discussed a round jar embossed “Knox (upwardly slanted in a circle) / Genuine (upwardly slanted) / MASON” and dated it ca. 1940s or 1950s. Creswick (1987:79) illustrated this jar in a square format with a bead seal and dated the jars ca. 1950s (Figure 13). The Roller update (2011:284) was essentially the same, but it agreed with Creswick that the jars were made in the square format but noted a top-seal format. Inserts were of two types: 1) glass, embossed “KNOX” (underlined); and 2) Keystone-K KNOX MASON in red or black letters on a metal insert. These may only have been made during the late 1940s or early 1950s. They appear to be uncommon. We have not found a photo of one.

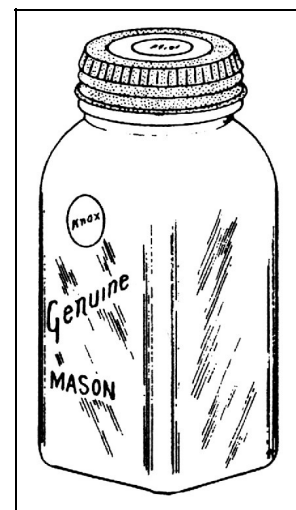


Figure 13 – Genuine Mason (Creswick 1987b:79)

Texas Mason (1940s)



Figure 14 – Texas Mason base (eBay)



Figure 16 – Texas Mason shaker (North American Glass)

Roller (1983:351) also included a Mason jar embossed “TEXAS / {map of Texas} / MASON” on a rounded-square jar with a shoulder seal. The base of the jar was embossed “MADE / IN / TEXAS / BY / TEXANS” (Figure 14). The lid was gold lacquered with “TEXAS MASON” and a map of Texas in red. The jar was made at the Knox plant in Palestine, Texas, but Roller declined to include a date. He also noted that “miniature TEXAS MASON salt & pepper shaker jars have been reported.” Creswick (1987:129) illustrated the jar and dated it ca. 1948-1949 only (Figure 15). Photos from North American Glass show that the reports of the miniature shakers were correct (Figure 16). The side was embossed the same as the larger jar and topped with a shaker insert and white plastic lid. For information on the lid and patent, the Knox Keystone-K Mason section above.

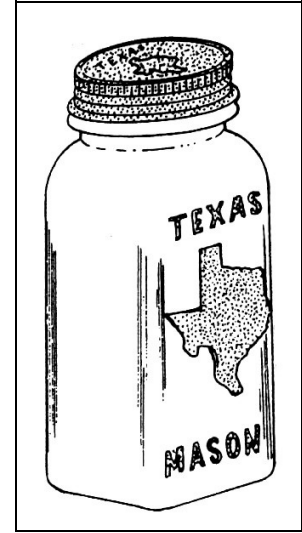


Figure 15 – Texas Mason (Creswick 1987b:129)

HOM-PAK (1943-1947)

The HOM-PAK was used by the Seaboard Glass Bottle Co., the Knox factory at Pittsburgh, on jars from 1943 to 1947 (Figure 17). HOM-PAK was used in conjunction with the S-in-a-keystone mark (described below). The jar had previously been made by J.A. & T. Hamilton during 1942 and 1943 with bases embossed with the Triangle-H logo (Figure 18). Knox acquired the logo when it purchased the form Knox facility and renamed it the Seaboard Glass Bottle Co. For more

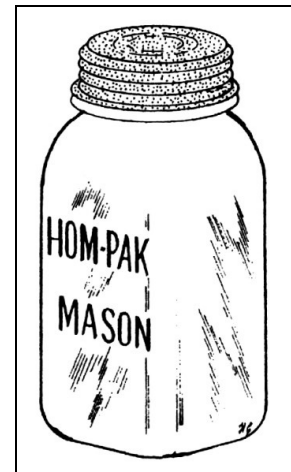


Figure 17 – Hom-Pac (Creswick 1987b:64)

information about Hom-Pak, see Toulouse (1969:154), Roller (1983:157; 2011:243), Creswick (1987:64), and/or the section on the Hamiltons in the “H” volume.

Knox Prescription Bottles

K + number



Figure 19 – K 2



Figure 21 – K 8 & Knoxall bases

When Nate Briggs began collecting a large number of common, colorless, machine-made bottles (most notably prescription bottles), we were able to assess a larger sample of these bottles than we had previously seen. The base codes – K 1, K 2, K 3, etc. – rose to at least 10, although numbers were repeated on different sizes. For example, there could be a K 6 mark on three-ounce, four-ounce, and six-ounce bottles. We have cataloged the code on three different prescription bottles styles, although there could be others. We have not seen this mark on any other style of bottles (Figures 19 & 20).

We originally (and incorrectly) assessed these marks as belonging to the Kearns Glass Co. However, a close comparison between bottles with the K + number mark, those with the Keystone-K logo, and some embossed Knoxall (cursive) showed identical matches (Figures 21 & 22). In addition, some prescription bottles with Keystone-K logos also have a number in the same position (Figure 23). This empirical demonstration clearly indicates that the Knox Glass Bottle Co.



Figure 18 – Hom-Pac (eBay)



Figure 20 – K 24



Figure 22 – K 8 & Knoxall bases

used the K + number code. The use of the code probably began with the founding of the plant at Knox, Pennsylvania, in 1917 and may have continued as late as 1952, when the firm universally adopted the Keystone-K logo (see below).



Figure 23 – Keystone-K base

Knoxall (1918-1930s on glass)

R.R. Underwood of the Knox Glass Bottle Co. received Trademark No. 188,175 for the term “Knoxall”

on August 19, 1924, claiming a first use on January 1, 1918. Knox

renewed the trade mark on August 19, 1944. A photo from Nate Briggs led us to explore the trade mark, embossed on the bases of prescription bottles in cursive (Figure 24). Each bottle had a gently sloped shoulder and reinforced prescription finish (Figure 25). Most bases (but not all) also had a single-digit number above or below “Knoxall” – and a few were also embossed with the Keystone-K, Keystone-D, or Keystone-S logo in addition to “Knoxall” (Figure 26).



Figure 24 – Knoxall bases



Figure 25 – Knoxall bottles

Knox apparently produced the Knoxall brand from ca. 1917 to the 1950s in bottles embossed with or without graduations. The finishes could be reinforced prescription of continuous-thread any time after ca. 1925 or so.

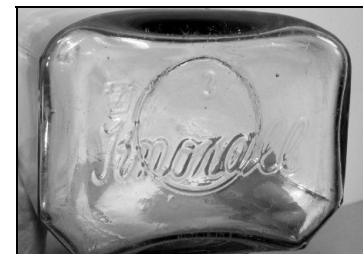


Figure 26 – Knoxall-Keystone base (eBay)

Earlier bottles would only have had the prescriptions finishes. Variations in the baseplates, however, have allowed us to create an approximate chronology for the bottles. See Table 1.

A most interesting feature about some of these bottles is the machine scar on the base (see Figure 24). In every example we have seen, the scar was reminiscent of the Owens machine scars with feathering along one edge – although the scars tended to be smaller, *not* overlapping onto the heel as was common with Owens scars on many bottles. The scar was apparently produced by the 1929 Knox-O’Neill suction machine. See Lockhart (2013) for more information about Frank O’Neill and his machines. See Table 2 for a probable chronology of Knoxall bottles.

Table 2 – Knoxall Bottle Base Variations

Basemark	Factory	Dates
K + number	Knox or Marienville	1917-1920s
Keystone-K (no Knoxall)	Knox plant	1920s
Knoxall, Keystone-K	Knox plant	1920s
Knoxall, no logo, suction scar	Various	1929-early 1930s
Knoxall, no logo, regular machine scar	Various	early 1930s-1943
Knoxall, Keystone-S	Seaboard Glass Co.	1943-1947
Knoxall, Keystone-D	Denver plant	1947-1952

Keystone Marks

Although a few Keystone marks were used by glass houses outside of the Knox firm, we have listed all that we have discovered – except the various “empty” keystone marks that appear on Mason fruit jars. See the Mason Mfg. Co. section of more on the fruit jar logos. A list of keystone marks is presented in Table 3.

Table 3 - Known Keystone Manufacturer's Marks and Dates Used

Mark	Company	Location	Dates
D	Denver Glass Bottle Co.	Denver, CO.	1946-1951
F	C. L. Flaccus Glass Co. (not Knox)	Pittsburgh, PA	ca. 1914-ca. 1920
J	Knox Glass Bottle Co. of Mississippi	Jackson, MS	1932-1952
K	Knox Glass Bottle Co.	Knox, PA	1932-1968
L	Lincoln Glass Bottle Co.	Lincoln, IL	1942-1952
LP	Pennsylvania Bottle Co.	Wilcox, PA	1940-1952
M	Metro Glass Bottle Co.	Jersey City, NJ	1935-1949
N	Newborn Glass Co. (not Knox)	Royersford, PA	ca. 1920-ca. 1925
O	Oil City Glass Co.	Oil City, PA	1930-1952
P	Wightman Bottle & Glass Co.*	Parkers Landing, PA	1929-1952
P	Honesdale Cut Glass Co.**	Honesdale, PA	1864-1937
R	C. F. Rumpp & Sons (not Knox)**	Philadelphia, PA	1892-?
R	Helen and Phil Rosso, Wholesale Glass Dealers, Inc. (not Knox)**	Internet	1969-present
S	Seaboard Glass Bottle Co.	Pittsburgh, PA	1943-1947
T	Knox Glass Bottle Co. of Mississippi	Palestine, TX	1941-1952
U	Pennsylvania Bottle Co.	Sheffield, PA	1930-1952
W	Westmoreland Glass Co. (not Knox)	Grapeville, PA	1910-1986

* The Wightman family had been in the glass business since at least 1841, but the plant did not become a Knox affiliate until 1921. The factory was wholly owned by Knox in 1929.

** These are tableware marks.

D in a Keystone (1946-1952)

Some soft drink bottles are embossed on the bases with D in a keystone. In our sample, both the “D” and the keystone were a bit cruder than those on most Knox bottles, and the “D” bottles lacked the typical three-part code used by Knox (Figure 27). According to Jack Underwood, the bottles were probably made by the Denver plant, which opened in 1946. According to Toulouse (1971:298), Knox closed the plant in 1951. At least some local packers used bottles made at the Denver plant.



Figure 27 – Keystone-D

F in a Keystone (ca. 1914-at least 1920)

F in a Keystone, used by the C.L. Flaccus Glass Co., was unrelated to the Knox factories, and this is addressed in Lockhart et al (2007b:41) and the Flaccus section.

J in a Keystone (1932-1952)

The Knox Glass Bottle Co., Jackson, Mississippi, used the J-in-a-keystone mark from its inception in 1932 (Toulouse 1971:271) until 1952, when Chester Underwood was ousted, and all plants switched to K in a keystone (Figure 28).



Figure 28 – Keystone-J

J in a Circle (ca. 1932-1933)

Robert Wagner, Hazelhurst, Mississippi, reported a bottle used by the Hazelhurst Bottling Works during the ca. 1936-1938 period. The base was embossed with the K-in-a-keystone mark typical of Knox but it also had a J-in-a-circle mark beside the keystone (Figure 29). Jack Underwood suggested that the initial molds used by the Jackson, Mississippi, plant were probably sent down from the main Knox plant with the K-in-a-keystone mark already on them. Engravers at the Jackson branch probably added



Figure 29 – Circle-J (eBay)

the J-in-a-circle mark to distinguish their new plant. It is also likely that new baseplates with J in a keystone were substituted for those from the main plant as soon as possible (or when the old molds wore out), so the J-in-a-circle mark combined with the K-in-a-keystone mark was probably only used during the first year or so, 1932-1933.

Hull-Walski and Ayres (1989:108) illustrated a base from a bottle of Mexi-Pep that was embossed “{K in a keystone} / {J in a circle} 1 4.” A second Mexi-Pep base was made by the Three Rivers Glass Co. and had a “31” (1931) date code. This supports the probable use of the Circle-J mark by Knox in 1932.

K in a Keystone (Knox, Pennsylvania: 1932-1968; all surviving plants ca. 1952-1968)

Peterson (1968:49) claimed that the K-in-a-keystone mark was first used by Knox Glass in 1932 (Figure 30). Toulouse (1971:293) dated the mark 1924 to 1968 and added that it was later the “general mark for all Knox plants.” Neither author cited the source for his information, but Peterson used trade mark data from the U.S. Patent Office. It is therefore likely that the use of the mark began in 1932.⁴ The mark was certainly used until the sale to the Glass Container Corp.



Figure 30 – Keystone-K (eBay)

Toulouse did not mention any manufacturer’s mark for the Marienville Glass Co.; however, a 1964 table of glass trademarks compiled by Owens-Illinois noted that Marienville used the K-in-a-keystone mark after it became part of Knox (Berge 1980:83). In her earliest table of manufacturer’s marks, Jones (1965:[22]) noted the K-in-a-keystone mark as being used by the Marienville plant. Unfortunately, she did not name her source, and it may have been the same table.

⁴ This makes it highly likely that none of the Knox keystone marks were used until 1932. However, this only affects marks used by the Oil City, Wightman, and Pennsylvania Bottle Co. plants, all currently dated beginning 1930. All others were already dated at 1932 or later. Pending further research, we have not changed dates on the three factories in this article.

However, we have some historical/empirical evidence that suggests Marienville did *not* use a mark, at least prior to the 1952 reorganization. In April 1933, Knox converted Marienville into a beer bottle production center. We have seen very few (if any) beer bottles with the K-in-a-keystone mark. This suggests that bottles produced at Marienville were unmarked.

No specific marks are known for the plants at Danielson, Connecticut (built in 1959) and Atlanta, Georgia (built in 1961) or for the former Buck Glass Co, Baltimore, Maryland, that joined Knox in 1961. It is virtually certain that all of them only used the K-in-a-keystone mark that was apparently mandated to all Knox plants about 1952.

L in a Keystone (1942-1952)

The L-in-a-keystone mark was used by the Lincoln Glass Bottle Co., a Knox plant established in Lincoln, Illinois, in 1942 (Figure 31). The company used the mark until the ousting of Chester Underwood in 1952 (Underwood interview).



Figure 31 – Keystone-L

LP in a Keystone (1940-1952)

Toulouse (1971:335) noted that LP in a keystone was used by the Pennsylvania Bottle Co., Sheffield and Wilcox, Pennsylvania, from 1940 to 1952. The initials stand for both Lummis and Pennsylvania (see next entry). Pennsylvania Glass made the bottles, and Lummis was the distributor. However, Pennsylvania Glass may have vended some of its own bottles prior to the 1952 reorganization. Although the Pennsylvania Bottle Co. began in 1927, there was no reason for the “L” until Lummis was organized in 1940. Toulouse (1971:506) also stated that the Pennsylvania Bottle Co. used the U-in-a-keystone mark. We have not seen or heard of actual examples of the block LP-in-a-keystone mark. It seems likely that the plant used the “U” mark for bottles not distributed by Lummis (see next entry).

LP in a Keystone (1940-1952)

The Lummis Glass Co. of New York, New York, certainly used the LP-in-a-keystone mark from 1940 to 1952, although the letters were in italics (Figure 32). However, Lummis was



Figure 32 – Keystone-LP (David Whitten)

a distributor for the Pennsylvania Bottle Co. and not an actual manufacturer (Figure 33). The bottles, themselves, were made by the Pennsylvania Glass Co. Lummis remained in business for at least three years after the Pennsylvania Bottle Co. closed in 1952 (Toulouse 1971:335). Lummis advertised itself as “sole distributors for Pennsylvania Bottle Company,” suggesting that the manufacturer, itself, had no need of the block-letter mark (*American Glass Review* 1942:109).

LG in a Keystone

Although we have discovered no historical reference to a Keystone-LG logo, we have seen two examples embossed on bottle bases. Both have the “LG” in italics with the “G” nestled in the crook of the “L” (Figure 34). These must have been used during the 1949-1952 period after the closure of the Pennsylvania Glass Co.

M in a Keystone (1935-1949)

The Metro Glass Bottle Co. used the M-in-a-keystone mark from its inception in 1935, until Knox sold the plant in 1949 (Figure 35). After 1949, the plant used an “M” in a horizontally elongated hexagon (Toulouse 1971:342).

METRO EASI-PAK MASON (1943-1949)

Toulouse (1969:103) noted two jars. The first was embossed “METRO / EASI-PAK (both upwardly slanted italics)

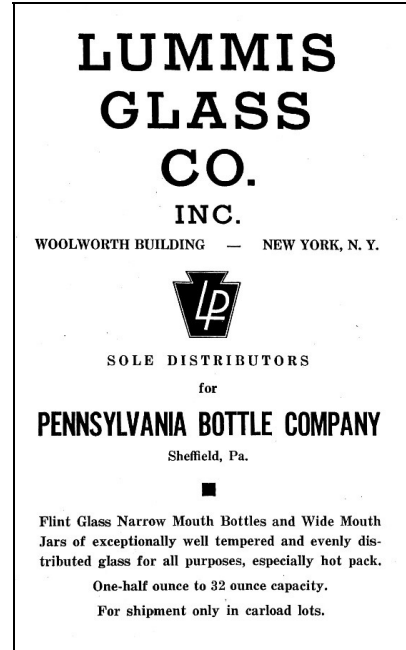


Figure 33 – Lummis Glass Co. ad (*American Glass Review* 1942:109)



Figure 34 – Keystone-LG



Figure 35 – Keystone-M



Figure 36 – Easi-Pak lid (eBay)

/ mason (horizontal)” on the front. He dated the bottle “Circa 1942-49 only, according to Metro Glass.” The second was embossed “METRO (outlined letters) / EASY PAK” – but he added no date.

Roller (1983:250; 2011:374) only discussed the first jar (EASI-PAK), noting that Metro Glass Containers, Inc.

registered their METRO EASI-PAK trademark on January 4, 1944, claiming first use on March 16, 1943. This is the only use of the name “Metro Glass Containers, Inc.” we have found. Roller listed two lids: 1) glass insert embossed “METRO / EASI-PAK / mason” (Figure 36); and 2) “GENERAL CAPS COPYRIGHT 1937 BY GENERAL CAN CO. CHICAGO, ILLINOIS” in black on a metal lid Creswick (1987:95), too, only listed the EASI-PAK variation, suggesting 1942-1946 as the date range.



Figure 37 – Easi-Pak jars (eBay)

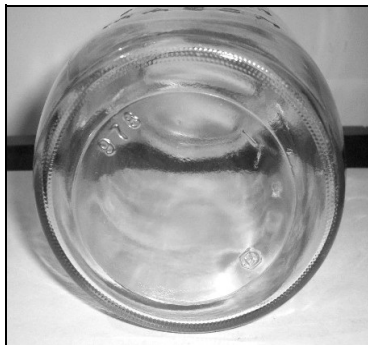


Figure 38 – Easi-Pak base (eBay)

Sellers on eBay showed two different embossing formats. The earliest jars embossed “METRO (thick letters) / *EASI-PAK* (italics) / MASON (thick letters),” were almost certainly made at the Metro plant between 1943 and 1949). The later jars were embossed “EASI-PAK / MASON” in much smaller, thinner letters with a Keystone-K logo on the base. These were made by Knox from 1949 to probably the 1950s (Figures 37 & 38).

N in a Keystone (ca. 1920-ca. 1925)

Another mark unrelated to Knox, the N in a Keystone was used by the Newborn Glass Co. See the Other N section for more details.

O in a Keystone (1930-1952)

According to Toulouse (1971:398-399), the Oil City Glass Bottle Co. used an O-in-a-keystone mark from its inception in 1930 until the company became independent of Knox in 1952 and used an “oil derrick” as a logo on bottle bases (Figure 39). However, the only marks we have seen that could fit into this category actually appear to be the letter “D” under close examination. Of course, the possibility of the “O” mark remains.

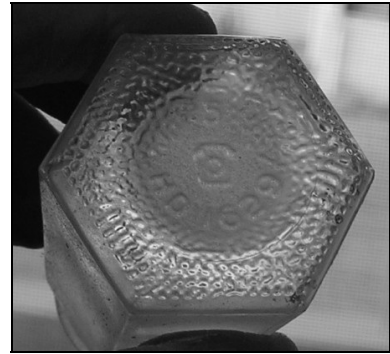


Figure 39 – Keystone-O

P in a Keystone (1930-1952)

Toulouse (1971:293) noted that the P-in-a-keystone mark was used by the Wightman plant, Pittsburgh, from 1930 to 1952. Since Wightman became a Knox acquisition in 1929, and Knox rebuilt the plant, 1930 is a likely year for the mark to have begun use. It was used until the 1952 reorganization.

Pullin (1986:257) claimed the P-in-a-keystone mark was also used by the Honesdale Cut Glass Co., Honesdale, Pennsylvania, in business from 1864 to 1937 (Figure 40). Honesdale applied the mark to cut glass ca. 1916. The mark could have been used by both companies; the use by Wightman was much later.

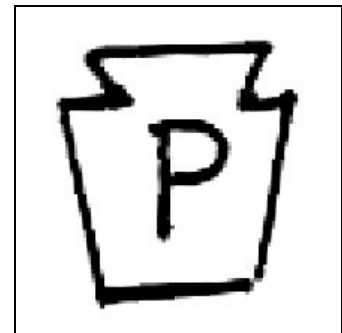


Figure 40 – Keystone-P (Pullin 1986:257)

Barbe & Reed (2003:40-48) described the Honesdale Anthracite Glass Works (1849-1856), followed by the Honesdale Glass Works (1856-1902), both in Honesdale, Pennsylvania. The plants made bottles, jars, rolling pins, and other glass products. Barbe & Reed did not mention any marks.

R in a Keystone (ca. 1892) (1969-present)

We discovered a glass rooster marked with an “R” in a keystone. The mark on that product does not fit any of the possible Knox companies, nor were tableware or decorative glass

a primary function of any Knox plant. According to Peterson (1968:20) and Pullin (1986:275), the R-in-a-keystone mark was registered in 1892 for tableware by C.F. Rump & Sons, Philadelphia, Pennsylvania (Figure 41). A more recent user of the mark is Helen and Phil Russo, Wholesale Glass Dealers, Inc. The couple, located in Southern Pennsylvania, have been wholesaling hen-on-nest glass dishes since 1969. They contract with various glass companies to manufacture the pieces under the Russo keystone trademark (Russo & Russo 2004; 2005).

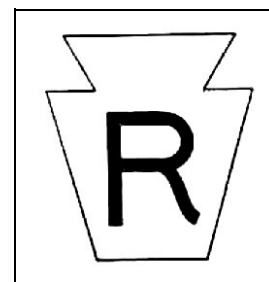


Figure 41 – Keystone-R (Peterson 1968:20)

S in a Keystone (1943-1947)

The Seaboard Glass Bottle Co., Pittsburgh, Pennsylvania, used the S-in-a-keystone mark from the date Knox purchased it from J.T. & A. Hamilton (1943) to the factory's closure in 1947 (Figure 42).



Figure 42 – Keystone-S

T in a Keystone (1941-1952)

Both Jimmy Odom and Jack Underwood confirmed that the Palestine, Texas, plant used the T-in-a-keystone manufacturer's mark on soda bottles and jars made at the factory (Figure 43). The "T" in the keystone probably stood for Texas, since the "P" was already in use by the Wightman Bottle & Glass Co., at Parker's Landing, Pennsylvania. The T-in-a-keystone mark was used by the Palestine plant from 1941 until 1952, when the entire Knox system adopted the K-in-a-keystone mark.



Figure 43 – Keystone-T

U in a Keystone (1930-1952)

Toulouse (1971:293) noted that this was the mark of the Sheffield, Pennsylvania, plant, used from 1929 to 1953, although the plant was more likely sold in 1952. The early date is also probably a year early. If the K-in-a-keystone was not adopted until 1932, it is unlikely that any other keystone marks were used by Knox plants prior to that time.

This is a more probable initial mark for the plant than the block LP in a keystone (see LP in a Keystone above) and may have been used until 1952. Unfortunately, Toulouse failed to explain his reasons for assigning this mark to Sheffield. The obvious connection is to Underwood, but it seems he would have used the mark on one of his more prominent plants. We have been unable to find a single example.

W in a Keystone (ca. 1910-late 1920s)

Unrelated to Knox, this mark was described by Peterson (1968:24) and Pullin (1986:33) as used by the Westmoreland Glass Co., Grapeville, Pennsylvania, in 1910 (Figure 44).” Hawkins (2009:515) agreed with the date – although the firm only made tableware.

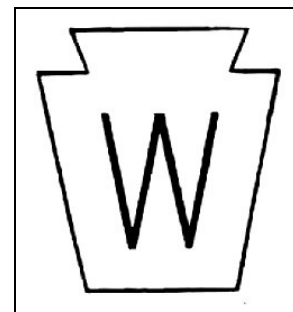


Figure 44 – Keystone-W
(Peterson 1968:24)

K9, K-9, or K.9

The State of Massachusetts required bottle manufacturers selling milk containers to dairies within its jurisdiction to emboss a “seal” on each bottle from 1909 to 1947. This replaced the system used during the preceding decade whereby the state had required each *dairy* to have a “seal” etched on its bottles. The specific embossed “seal” used by Knox contained the “K9” designation.

Marks of K9, K-9, or K.9 are found on bottles, both with or without a Thatcher mark. These bottles lack date codes, although Giarde (1980:118-119) suggested a date range 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 arrived in Lockhart et al. 2008.

Both Toulouse (1971:172-173) and Giarde (1980:145-146) attempted to explain the “national” numbering system that appeared mostly on milk bottle heels (sometimes bases). The system actually began at New York in 1910, when the state assigned a specific number to each milk bottle producer and required its use on all glass dairy containers sold within the state (*Orange County Times-Press*, 9/5/1910). Many Eastern states followed suit, and the system

became de facto nationally by ca. 1914. Most firms used the number in conjunction with its logo or initials, so Knox became K9.

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.” (*Oil City Derrick* 1932:11). Bottles exhibiting both the K9



Figure 45 – MASS K9 Seal (eBay)

designation and a Thatcher mark were therefore made by Thatcher after 1932. Bottles with an embossed K9 but lacking any Thatcher mark were almost certainly made by Knox before the Thatcher purchase.



Figure 46 – Sealed K9 (eBay)

These marks are found in at least three locations and configurations on milk bottles. “K9” is found on Massachusetts shoulder seals only in the “MASS / K9 / SEAL” format, a configuration officially adopted in 1918, although it was used by at least 1914 (Figure 45). The mark is also embossed on the heels of milk bottles, with and without the Massachusetts seal. A more unusual configuration is “SEALED / K9” in a circular plate mold on the shoulder (Figure 46). We have not discovered a specific reason for this usage. [Most of the foregoing discussion was originally published in Lockhart et al. 2007a:60-61.]

K-14

When Knox purchased the Seaboard Glass Co. of Pittsburgh in 1943, it reentered the milk bottle field. Since Knox sold the older K9 mark to Thatcher in 1932, it needed a new number and used a K-14 heelmark in conjunction with the Seaboard Keystone-S basemark or, occasionally, an “empty” keystone logo (Figures 47 & 48). These bottles appear to be



Figure 47 – K-14 & Keystone S

uncommon, so Knox likely again ceased milk bottle production within a decade or less. We have assigned a date of 1943 to ca. 1950, but the end date is arbitrary.

Knox Codes

Jack Underwood explained the components of the Knox system of mold numbers on bottle bases. The numbers were embossed in three sections: a two-digit numeral followed by a dash; a single, capital letter followed by another dash; and a final one- or two-digit numeral (e.g. 54-B-10). The first two-digits identify the “number for the set of molds”; the letter represents the type of container (B = Beverages); and the final two numerals signify the capacity of the container (e.g. 10 = 10 ounces). Even if the first two digits seem to denote a year (as in the 54 example from an El Paso soft drink bottle), it is coincidental rather than a date code.



Figure 48 – Empty Keystone

Other two-digit codes appear to be date codes – but are not. Some bottles with the J-in-a-keystone mark, for example, appear have a date code to the right of the manufacturer’s marks during the 1950s or 1960s (such as A53, A57, or 67). Since the Jackson, Mississippi, plant, like the rest of Knox, adopted the K-in-a-keystone mark in 1952, these codes in conjunction with the “J” mark are obviously not date codes. We have not yet deciphered their meanings.

Liquor Codes

As noted in numerous other sections, the federal government required all manufacturers of liquor bottles to emboss a specific code set on the bases and/or heels of their bottles and flasks in 1934. The feds assigned each glass house with a specific one- to three-digit number, and the system remained in place until 1964. An example of a Knox liquor base was embossed “D-334 / 133 64 / Keystone logo” (Figure 49). The “D” number represented the distiller that would fill the bottle. The code assigned to Knox was 133, and 64 was the year code. Interestingly, both examples we



Figure 49 – Liquor codes (Rick Reanier)

have been sent had a keystone logo with no internal letter. This likely means that both bases were made in the same mold.

Discussion and Conclusions

The history of Knox is very straightforward, showing the development of a conglomerate and its eventual decline and sale. Roy Underwood was undoubtedly a giant of the glass industry and a tremendous success. The company's marks are common on bottles throughout the United States, except the West Coast.

The choice of letters to insert in the keystone is generally fairly obvious, although inconsistent. Most letters reflect the name of the plant (M for Metro, S for Seaboard) or the city of operation (J for Jackson, P for Parker's Landing), although sometimes both the city and plant names were identical (K for Knox, L for Lincoln). However, the T for the Palestine plant likely indicated Texas. The LP for both Lummis and the Pennsylvania Glass Co., while different, is also pretty obvious.

However the use of LP, *LP*, and U – all for the Sheffield, Pennsylvania, plant – requires a bit of discussion and speculation. Since the Lummis Glass Co., a jobber, distributed products for Sheffield, the italicized *LP* in a keystone makes sense. The block LP is more difficult to justify, and it may not exist. First, if Lummis distributed the Sheffield glass, why would the company need a second mark? If it *did* use another mark – presumably for products it distributed for itself, why include the “L” for Lummis. An entirely separate mark would seem more appropriate.

According to Toulouse – who did not explain the reason for his assertion – the letter “U” in the keystone was a third mark connected to the Sheffield factory. The connection to Roy Underwood is both obvious and uncharacteristic. If Underwood wished to display his ego in that fashion, why would he not have selected the original Marienville plant or the one at Knox, the flagship factory for the firm? The series of marks for Sheffield just does not make sense. At this point, we have been unable to find an actual example of either the block LP in a keystone or the U in a keystone. It is possible that the “U” mark was only used by Sheffield from its inception until the introduction of Lummis in 1940.

The K + number prescription bottles were a bit more difficult to assess. However, as noted above, empirical evidence overwhelmingly supports the Knox Glass Bottle Co. as the user of the K + number basecodes. The probable chronology is also supported by empirical and historical evidence, although several of the dates somewhat arbitrary.

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